
HOW TO WIN LAND DEVELOPMENT ISSUES

A Citizens Guide To Preserving & Enhancing Quality
of Life in Developing Areas Through Responsible
Growth Management

By Richard D. Klein

COMMUNITY & ENVIRONMENTAL DEFENSE SERVICES

24 Greenshire Lane
Owings Mills, Maryland 21117
410-654-3021

E-mail: info@ceds.org
Web Page: www.ceds.org

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DEDICATION

This book is dedicated to the countless citizen activists, nonprofit board members, planning board members, and local elected officials who have given so much to protect all of us from poorly managed growth. Without their sacrifice many of our most important quality of life preservation programs would not exist, including Responsibly Managed Growth.

This book is a compilation of the many hard lessons won by veteran activists. It is the author's hope that the advice provided herein will allow newcomers to achieve even greater success in preserving and enhancing quality of life for all.

HOW THIS BOOK CAN HELP YOU WIN LAND DEVELOPMENT ISSUES

As president of Community & Environmental Defense Services (CEDS), I help several hundred groups each year with development related concerns. Most of the time we win, but not always. With this book I hope to bring the success rate closer to 100% by explaining what does and does not work.

The types of land development activity addressed in this book include highways, shopping centers, housing projects, golf courses, marinas, superstores, landfills, mining, and a host of other activities which may harm the environment or neighborhood quality of life. Suggestions are also provided for going beyond a specific development site and winning the adoption of *Responsibly Managed Growth* principles throughout a town, city or county. Since we assist citizens throughout the nation with both levels of advocacy, the advice provided in this book is applicable to all 50 states.

This book starts off with *The Easy Solution* for winning land development issues. For most projects no further effort is necessary. Frequently the easy solution costs nothing more than a few hours of your time.

In those cases where the easy solution is not enough, I explain how to get the public support needed to win by expanding a campaign into the regulatory, legal and political arenas.

In addition to the suggestions offered in this book, our advice is available by calling 410-654-3021 or sending an e-mail to help@ceds.org. If you are seeking to preserve a neighborhood or the environment from development impacts, then we will not charge for advice unless research is required. Other forms of CEDS assistance are described in *How CEDS Can Help* at the end of this book.

THE SECRETS OF SUCCESS

I began my career as a community and environmental advocate in 1969. Over the past 38 years I have learned that the secret of successfully preserving communities and the environment from poorly planned growth can be summarized in eight words:

Aggressively pursue smart solutions to your core concerns.

Following is an introductory description of the three components of this secret. The remainder of this book expands upon this description

CORE CONCERNs

These are the impacts which pose the greatest threat to your quality of life. Core concerns are the potential impacts which prompted you to spend your time and money grappling with a development project. Examples of core concerns may include:

- an unacceptably large increase in traffic on your residential street;
- overcrowding at the schools serving your community; or
- the loss of a forest or stream you treasure.

You may be wondering why I find it necessary to urge you to focus on your core issues. Well, the reason is simple. It is easier to find a solution to a few core concerns when compared to a long list of issues. Also, it is not uncommon for folks to focus on the issue most likely to defeat a bad development project as opposed to those they are really concerned about.

While stopping a project cures all ills, this is also the most difficult and expensive way of dealing with development concerns. Most of the time we can find ways of designing the impacts out of a project that allows the developer to get a good part of what they want. This type of approach, known as a *Equitable* solution, is much easier to achieve than stopping a project. However, there are some projects which are so poorly conceived and so fatally flawed that the impacts simply cannot be designed away and stopping the project is the only reasonable option. There are also developers who refuse to negotiate with citizens even when it is the responsible and reasonable thing to do.

To help callers identify their core concerns I ask them to describe each issue one by one. I offer possible Equitable solutions for each concern and ask them to assume for the moment that the solution will fully resolve the concern. I then ask “If you came to believe that the solution resolved this specific concern, would you still oppose the project?” If the answer is “no” then we’ve identified all of the core concerns. If the answer is yes then the process continues until all the core concerns have been identified.

Frequently, new core concerns emerge as one delves deeper into a proposed development project. A couple of years ago we had clients concerned about a project placing new houses ridiculously close to their rural homes. At first, this intrusion upon privacy was their one and only core concern. However, a quick CEDS review of project plans revealed that the septic systems serving the

proposed homes were located upslope of our clients' wells. Further CEDS research showed that conditions in the area were conducive to contamination of our clients' wells by the proposed septic systems. For some of our clients, the well-contamination issue became the primary core concern. Fortunately, a smart solution was not only found but fully implemented for both the well protection and privacy concern.

SMART SOLUTIONS

A *Smart Solution* is that which fully resolves each of your core concerns in a way that is lasting and achieves this goal with the least effort and expense.

In general, a smart solution is that which has successfully resolved core concerns identical to your's in cases very similar to the one threatening your quality of life. But no two cases are ever identical in every respect. There is always a need to tailor the solution to the characteristics unique to your situation.

In most cases, there are a dozen or more possible smart solutions for each core concern and all but a few will prove unsatisfactory because:

- long-term reliability is unacceptably low;
- it is unlikely you can convince a final decision-maker to implement the solution; and/or
- the resources required to win implementation of the solution exceed those available to you.

At the beginning of a case it is seldom obvious which of the dozen or more solutions is the smartest. Only thorough research can separate smart solutions from those which merely sound good, but will ultimately fail. This brings us to the purpose of this book, which is how to research:

- long-term solution reliability;
- the likelihood of winning final decision-maker support; and
- getting the resources needed to win implementation.

If your case is simple, then the required research may involve little more than that described in Chapter 1 - *The Easy Solution*. However, as case complexity increases, so does the amount of required research. In Part III of this book, and in *Chapter 35: Researching Strategy Options* in particular, you will learn how to carry out this research or how to find someone who can do the research for you.

AGGRESSIVELY PURSUE

The three greatest obstacles to finding and implementing smart solutions are: time, time, and time. I strongly urge you to complete all the *Easy Solution* steps given in Chapter 1 **now**, without delay. And if the easy solution steps fail to yield an iron-clad victory, then immediately launch into the appropriate strategy options presented in Part III.

I beg you **not** to blithely accept assurances from government officials, the applicant, or others that all of your concerns will be resolved. Instead, I urge you to keep pushing until you have a legally

binding-agreement with the applicant, a cast-in-concrete permit condition, or some other action which locks current and future property owners into fully resolving your concerns. And even when you believe a good solution is locked in-place keep monitoring the project to verify that the solution is being fully implemented. Always keep other options open should the applicant or a regulatory agency fails in some crucial implementation step.

So if the three greatest obstacles to implementing smart solutions are time, time, and time, the three best ways to circumvent these obstacles are to: ***hustle, hustle, and hustle.***

You have no idea how frustrating it is when someone calls about a perfectly winnable issue, but tells me they have waited until a week before the big hearing to organize their case. Even more frustrating are those situations where citizens save their resources to appeal an adverse decision should they lose at the big hearing. I then have the sad task of explaining that an appeal is based upon the record made ***at the big hearing.*** Since they didn't have an attorney and they didn't put on an expert witness during the big hearing they failed to get appealable (winnable) issues into the record. Thus they are now left with no smart solutions; just the dumb expensive ones.

But the situation most frustrating of all is where citizens thought the applicant was negotiating in good faith only to learn that the applicant never intended to resolve citizen concerns. Instead, the applicant hoped to lull citizens into a comfortable place so they would not oppose the project at the big hearing, thus allowing the project to sail through to full and final approval.

The key to winning adoption of smart solutions to your core concerns is to aggressively pursue all the steps in [Chapter 1 - The Easy Solution](#), then go on to the other chapters. Whenever you run into an obstacle, seek a way around it because

...there's always a way around any obstacle.

If you are stymied, then give me a call at 410-654-3021 and we'll work through the problem together.

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INTRODUCTION

The purpose of this book is to help you preserve quality of life in your home, your neighborhood, your town, or region from the effects of poorly managed growth. Additionally, I explain how you can enhance quality of life through the benefits offered by development. This book will help you achieve these goals by providing an understanding of the technical aspects of growth management as well as the political and legal factors which determine how growth will be managed. It is my hope that in the end you will have the ability to:

- look at your neighborhood and envision various possible growth scenarios,
- assess how each might affect quality of life for you and your neighbors,
- identify solutions for each negative impact as well as opportunities to enhance quality of life, then
- organize your neighbors so you can win the support of those who will decide how this growth is managed.

My career as a community and environmental advocate began in the early 1970s when I launched a successful campaign to preserve what had been an essential element of my quality of life - a beautiful stream valley which I'd enjoyed from the age of seven. Over the past 30+ years it has been my good fortune to play a role in many other successes, though I've also experienced some regrettable loses. In this book I have sought to explain what approaches works and how to avoid mistakes.

This book sets forth the approach I use as Community & Environmental Defense Services (CEDS) president to help more than a hundred citizen groups each year win quality of life preservation campaigns waged throughout the United States. This approach is allowing about 75% of our clients to win their campaigns. This success rate goes for the groups who take our free advice and run with the campaign on their own as well as those who retain CEDS to manage a portion of all of their effort.

My role in CEDS is that of a strategist and facilitator. After learning of our clients' concerns I:

- gather together and review all the information available on the project of concern;
- confirm the validity of our clients' concerns;
- identify other potential impacts;
- get the perspective of various government officials having authority over the project as well as the applicant and other possible decision-makers;
- formulate an initial strategy for resolving our clients' concerns;

- consult with attorneys, engineers, and other professionals within the CEDS network to verify the likelihood of potential impacts and the soundness of the initial strategy;
- share the results of this research with our clients and lay out the strategy which offers the greatest likelihood of swiftly and inexpensively resolving their concerns; then
- assist in executing the strategy through to completion.

In Chapter 1, *The Easy Solution*, I explain how you can do this same research without hiring a group like CEDS. Subsequent chapters expand upon the steps that make up the *Easy Solution*. After reading Chapter 1 and other portions of this book relevant to your quality of life issues, you will doubtless have lots of questions. Please feel free to give me a call at 410-654-3021 to kick these questions around. Advice by phone is available free of charge to citizens concerned about development projects. We can even do a half- to one-hour strategy session with you and your allies. If you wish I can also describe the costs associated with having CEDS carry out the research for you.

You'll see no tables, figures or other graphics in this book. My goal was to keep this book all text so it could be easily downloaded via the internet. I also wanted to keep the book small enough so the entire text could fit in the memory of most computers. That way if you don't see what you're looking for in the table of contents, you can search the text for specific information using keywords or phrases. To do this just click the Find icon (binoculars) or select Find from the drop-down edit menu in the Adobe Reader window. Type in a keyword or phrase (with quotes) then hit enter. You will then go to each part of this book where the keyword or phrase appears.

Throughout this book you will see colored text. If you click on this text you will go to a website or document providing additional information on the topic addressed in the preceding text.

This book touches on a wide range of subjects and disciplines: land use law, traffic engineering, planning, environmental science, and many more. Please keep in mind that I, the author, am not a lawyer, traffic engineer, or planner, though some might argue that I qualify as an environmental scientist, at least in the field of aquatic resources. Since starting CEDS in 1987, I've attempted to acquire a basic understanding of the many disciplines related to land development and its potential effects upon communities and the environment. My goal is to serve as someone who can take an overall view of a development project, analyze project plans for numerous potential impacts, identify those impacts most likely to occur, then help you form an initial strategy for resolving significant, adverse effects while also seizing upon opportunities to enhance your quality of life. I then turn to professionals with more specialized expertise to verify that a particular impact will occur and to assess the viability of possible technical, political, and legal strategies. I urge you to do the same.

Rather than getting this book published, I opted to post it on the CEDS website (www.ceds.org) so it can be easily updated. In fact, not a month goes by when I don't add some new bit of information which I've just come across and found useful. Please let me know if you feel any portion of this book could be improved. Just e-mail me at rklein@ceds.org or give me a call at 410-654-3021.

Because this book is intended to serve citizen activists throughout the United States, it is chock full of generalizations. Please keep in that as with all generalizations, there are exceptions. If you are uncertain whether the project of concern to you fits a generalization, then please contact me at 410-654-3021 or rklein@ceds.org. Usually we can answer most questions for free. However, if research is required to answer a question then we'll let you know before doing any work.

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Chapter 1: The Easy Solution

The *Easy Solution*.

Sounds good doesn't it?

Well, it not only sounds good but it really is easy and it works more often than not. And the *Easy Solution* is made even easier with our assistance.

If at any point you are uncertain how to carry out a specific step in the easy solution, just contact me at: 410-654-3021 or Rklein@ceds.org. Our advice is available free of charge by phone to citizens seeking to preserve their neighborhood or the environment. But it is easier to answer specific questions, so please try carrying out the following steps before contacting me. You also have the option of hiring us to carry out this research for you. For further detail on this option visit:

<http://www.ceds.org/strategy.html>

The purpose of the easy solution is to:

- get an accurate understanding of the proposed development project,
- identify obvious project impacts, and
- resolve each impact through actions that require relatively little time and expense.

In those situations where the easy solution does not get you to victory, there are many other options available; they just take a bit more time and expense to pursue. Following are the steps involved in the easy solution.

STEP 1: VERIFY WHAT HAS BEEN PROPOSED

I get a number of calls from folks who have heard rumors about a development project and the harm it will do. Yet they have not seen project plans or any other documents. So they cannot say whether the impacts are myth or reality. My advice is obvious:

Make arrangements with the local planning and zoning office to review project plans.

The plans will show the reality of what the applicant has in mind. Rumor may have it that a hundred homes are going to be built along your dead-end street, yet when you look at actual project plans you see only ten new houses proposed, or maybe a thousand. Either way, looking at the plans will allow you to base your actions on fact, not rumor.

Take the time to carefully study the plans and other documents in local files. It usually takes about 10- to 20-minutes of simply looking at each sheet of plans to fully understand what is being proposed. So, again, do not rush this step.

At the end of this chapter you will find the *CEDS Quality of Life Impact Review Checklist*. The checklist provides general criteria for assessing how well a project has been planned and designed. View it as a first-step assessment of how the project may impact your quality of life and, more importantly, how the benefits could be increased while minimizing adverse effects.

Note each concern you have regarding the project along with anything which is not clear. Discuss both with staff in the next step of the easy solution.

Note also the applicant's name and contact information. You may need this information to pursue subsequent steps in the easy solution. Request a copy of all the documents submitted thus far, including agency comments and all other paper in the file. These materials will be extremely valuable as you pursue various options for resolving your concerns. Bring along a checkbook since you will likely be charged for copies.

STEP 2: DISCUSS YOUR CONCERNS WITH STAFF

In large towns or densely populated counties there will usually be a whole department overseeing the development review process along with other aspects of growth management. Normally, each project is assigned to a staff planner or reviewer. In small towns the planning department may consist of one staff person. They may even farm out project reviews to outside consultants.

If you still have concerns after reviewing the plans, meet with the staff person overseeing the project. Go into this meeting with a positive, open attitude. In other words, assume the staff person will be cooperative, which most are. Also, given their training and years of experience, staff's understanding of the technical and legal aspects of development issues is probably superior to yours. So listen with an open mind if they disagree about the likelihood of an impact or which solution is the best. Be sure to ask enough questions so you fully understand why the staff person believes impact is unlikely or why a particular solution will or will not work. But you should also seek another opinion if you have doubts.

Begin the meeting by describing the impacts of concern to you, the basis for each concern, and ask if each impact is likely to be resolved through the development review process. Following are possible outcomes of this discussion and how you might proceed with each.

If You Are Told Resolution Will Happen

The staff person agrees that your concerns are valid but you also learn that specific requirements will be imposed to resolve each impact. In some situations it will be obvious how a solution works and that it will be very reliable. If this is not the case, then ask for details and consider researching the solution further. Advice on how to conduct this research is provided in Part I of this book. If your

research shows that a solution is not as good as it first sounded, then share your findings with staff and ask what steps might be taken to increase effectiveness and long-term reliability of the solution.

If You Are Told Resolution Is Not Possible

In this scenario staff agrees that an impact is likely, but they feel a solution is either not available or they lack the authority to require the applicant to implement the most effective solution.

Rare is the situation where a solution isn't available. If nothing else, stopping the project would prevent the impact. But the impact would have to be severe, with no other recourse, before government could say no without fear of having their denial overturned by the courts.

Try asking staff to speculate about possible technical solutions. If this fails to produce results then go to Part I of this book to begin your own research. If you find a solution you like then try talking with staff again.

If staff feel they lack the authority to resolve your concerns, then ask if someone else in their agency (or another unit of government) may have the necessary authority. Contact these other officials as you continue your pursuit of an easy solution.

If You Are Told An Impact Is Unlikely

If staff believes an impact is unlikely yet you are not convinced this is so, then go to Part I of this book for advice on confirming or refuting the belief of staff. If you decide staff is right that impacts are unlikely then you've resolved your concerns. If you find evidence supporting your concerns then share this information with staff to see if they agree.

Ask About The Project Status, Comments & Appeals

Ask staff for a description of the review process and where the project stands in the process. Ask when opportunities for public comment will be coming up and if there's anything special you need to do to make comments. For example, do you need to attend a hearing or get written comments in before a specific date? Also, ask about your right to appeal if project approvals are granted before your concerns are fully resolved. Go over questions such as filing deadlines and format as well as other specifics for preserving your right to appeal. Ask that your name be added to an interested parties list, if one exists. Finally, ask what section of local law pertains to your concerns and if any guidance documents exist to help applicant's comply with relevant laws. Reading these laws and documents will increase your understanding of the process and how to resolve your concerns.

Additional advice on working with staff is provided in Part III of this book.

STEP 3: LOOK FOR EQUITABLE SOLUTIONS

For most development projects an Equitable Solution is available. This is a solution which designs away most negative effects while allowing the applicant to get much of what they want. Frequently, it is obvious what changes would reduce or eliminate project impacts. But, occasionally, a project

is so poorly conceived that there is just no way to reduce impacts to a tolerable level. For these projects skip to Step 4.

Following is an example of a possible Equitable Solutions. Let's say a development company wants to build more homes along your dead-end neighborhood street. You are concerned that this will reduce pedestrian safety as well as increase air pollution and noise. Possible Equitable Solutions might include:

- limiting development so the total number of homes does not exceed 60 to 100, which as shown in Part I is the maximum desirable for most residential streets;¹
- allow a reasonable increase in the number of new homes but only if speed humps and other traffic calming measures are installed to slow down all vehicles, which may make conditions even better than they are now; or
- support the applicant in finding another, safer point of access to their site.

All three of these examples might allow both you and the applicant to get much of what you want.

For obvious reason, it is far easier to get an Equitable Solution adopted compared to one which forces dramatic changes to a project. You will find the applicant and government officials far more receptive if you have identified something close to an Equitable Solution for each of your concerns. However, even if you fail to find a truly Equitable Solution you will still find your local elected representative more willing to help if you can demonstrate that: a) you tried to find an equitable way of resolving impacts, b) you fairly considered obvious possibilities, and c) but none would reduce project impacts to a reasonable level.

Additional suggestions for possible win-win solutions are provided throughout this book. The thing to keep in mind is that there are *always* options available for resolving your concerns. The closer these options are to an Equitable Solution, the easier success will come.

STEP 4: DEFEATING A FATALLY-FLAWED PROJECT

Some projects are so poorly conceived or the site is so uniquely sensitive that negative impacts simply cannot be reduced to a reasonable level. It is very unlikely that the *Easy Solution* will nix these projects, however we have had several cases involving a fatally-flawed project was where the applicant seemed to just drop it after we began asking the *Easy Solution* questions. In less modest moments I flatter myself into believing that the mere fact that CEDS, with our impressive track record and nationwide network, started researching a project caused the applicant to withdraw. In most cases we never know why a project suddenly seems to enter limbo.

¹ See the section of this book on traffic impacts and neighborhood streets for further detail.

Guidance on how to defeat a fatally-flawed project will be found in *Chapter 35: Researching Strategy Options* of this book.

STEP 5: REQUEST THE SUPPORT OF YOUR ELECTED REPRESENTATIVES

For the most part land use decisions are made at the local level; the level of the borough, town, city, or county. In many of these local jurisdictions the town council, city commissioners, or county supervisors serve as the key land use decision-making body. These elected officials approve individual development projects as well as rezoning requests and land use plans along with all other major growth management issues. Where the council or commissioners are not final decision-makers, they still have substantial influence and can help you resolve your concerns. This makes your local elected representative a potentially powerful ally.

If you were unsuccessful in resolving your concerns through staff then request a meeting with a member of the local decision-making body. The member to meet with depends upon whether they are elected by district or at-large. If the former, then request a meeting with the official representing your district. If elected at-large, then seek a meeting with the decision-maker who has the best reputation for helping citizens. Local citizen advocacy groups can tell you who this decision-maker may be. To locate these groups go the [CEDS website](#)², click on *Links To Others Who Can Help*, then scroll down to your state.

Generally, you will find decision-makers more open and helpful if you make it clear that your goal is to resolve specific concerns; not to stop a project. Ideally you will have an Equitable Solution or two in mind. However, if you believe a project is so severely flawed that it should not be built, then make the basis for your position clear.

If staff felt your concerns would be resolved, but you are not convinced, then describe your uncertainty to the decision-maker. Assuming the decision-maker finds your arguments compelling, ask them to use their influence to press for adoption of your preferred solution.

If staff felt they lacked the authority to implement your preferred solution, then ask the decision-maker to get an opinion from the local jurisdiction's legal staff. If it turns out the legal authority is lacking then ask the decision-maker to either:

- approach the applicant with a request that they implement the solution voluntarily or
- introduce a bill which, if enacted, would provide local government with the necessary authority.

If the decision-maker feels none of these approaches is workable, then try posing an open-ended question along the lines of...

² www.ceds.org

if you lived next to this site and shared my concerns, what would you do?

Frequently this question will elicit more creative and constructive discussion than would otherwise occur.

If you feel you have an Equitable Solution then contact the applicant directly. Ask for an opportunity to meet with them in hopes of getting the applicant to adopt your win-win solution. If the solution costs the applicant little then there is a good chance they will go for it. If not then you have lots of other options.

If the applicant does agree to resolve your concerns, then explore options for turning this agreement into a firm, enforceable guarantee. For further detail on this topic see Part III of this book.

WHEN THE EASY SOLUTION DOES NOT WORK

If your discussions with planning staff, the applicant, and elected officials did not produce the results you were looking for, then it's time to escalate the effort into a full campaign. Chapter 35 of this book explains how to research more aggressive strategy options.

If you have been told that your concerns are unfounded or your solution will not work, then the next Part I of this book will explain how to document the validity of your concerns and how to find workable solutions. Once you can prove your concerns are real and you have a viable solution in hand you will probably need to rely on the growth management process to win adoption of your preferred solution. Part II of this book explains how *The Growth Management Process* works. Finally, Part III begins will advice on researching the many strategy options frequently available to citizens and how to select that most likely to bring about a successful outcome for the least amount of time and money. In addition, Part III explains how to get the resources (volunteers, dollars, and political clout) essential to victory. Part III also goes into considerable detail on how to negotiate with the applicant in hopes of convincing them to adopt your solution. Suggestions are also provided for lobbying final decision-makers or initiating legal action if negotiations with the applicant fail to produce victory. If decision-makers feel they lack the legal authority to implement your solution, and your lawyer agrees, then Chapter 41 explains how to *Change The Law*. The last strategy option focuses on ways to preserve the site.

As I offered at the beginning of this chapter, if at any point you are uncertain how to carry out a specific step in the easy solution, just contact me at: 410-654-3021 or Rklein@ceds.org. Our advice is available free of charge by phone to citizens seeking to preserve their neighborhood or the environment. But it is easier to answer specific questions, so please try carrying out the following steps before contacting me. You also have the option of hiring us to carry out this research for you. For further detail on this option visit:

<http://www.ceds.org/strategy.html>

CEDS QUALITY OF LIFE IMPACT REVIEW CHECKLIST

Project: _____ **Date:** _____ **Evaluated By:** _____

All development projects should preserve quality of life for existing and future residents and, whenever possible, make quality of life better. The purpose of this checklist is to screen a proposed development project for quality of life effects. This checklist poses questions regarding the quality of life factors most commonly affected by development. The questions are worded so that a “*yes*” indicates that the project will preserve quality of life with respect to the specific factor. A “*no*” indicates a possible adverse quality of life effect. Use a “*?*” where you are uncertain about the quality of life effect. If you believe a quality of life factor is not applicable to a project, then place an “*NA*” in the *Initial Finding* column. Generally, the more questions answered with a “*yes*”, the more likely it is that a project will preserve quality of life. Since this checklist poses relatively simplistic questions, all findings must be considered tentative and should be verified through detailed analysis, especially for quality of life factors of particular concern to area residents. Further detail on the factors presented below is given in the CEDS book: *How To Win Land Development Issues*, available free for download at: www.ceds.org

INITIAL FINDING	QUALITY OF LIFE FACTOR
OVERALL QUALITY OF LIFE IMPACT	
After completing this checklist, consider the following question: <i>Has this project been designed in a way that preserves existing quality of life for nearby residents?</i> In other words, do the “Yes’s” greatly outnumber the “No’s.”	
	Does the project design include any of the features presented at the end of this checklist for <i>enhancing</i> existing quality of life?
AFFORDABLE HOUSING	
	If a paucity of affordable housing exists in the area, then will the project increase the supply of housing within the rental or purchase means of low- to moderate-income families?
AGRICULTURE	
	Are proposed homes adequately buffered from working farms?
	Will project residents be able to easily pass farm vehicles on roads which both are likely to use at the same time?
	Does a program exist to educate new residents about the odors, noise, and other realities of living in an area dominated by working farms?
	Are working farm owners protected from frivolous nuisance actions by new residents?
	If prime-productive soils are located on the site, then has the project been designed so these soils can still be farmed?
	If steep slopes, highly-erodible soils, or wetland (hydric) soils are currently being farmed on the site, then do project plans show that these areas will be allowed to revert to a natural condition?

INITIAL FINDING	QUALITY OF LIFE FACTOR
	AIR QUALITY
	Can the area accommodate the additional vehicle emissions due to the project without exceeding air quality standards?
	Will the project reduce auto emissions by making it possible to walk or bicycle to work, school, or shopping?
	Is the project in an area served by mass transit or slated for bus or rail services?
	Does the project include design provisions facilitating mass transit or car-pooling?
	COMPATIBILITY
	Does the project comply with height restrictions?
	Does the project comply with limits on lot coverage and percent impervious area?
	If commercial, does the project meet floor-to-area (FAR) limits?
	Are potentially incompatible uses adequately buffered?
	CRIME
	Does the project design incorporate appropriate Crime Prevention Through Environmental Design features?
	With the project, will law enforcement capabilities remain adequate?
	ENVIRONMENT
	<p>Check the box next to each of the following sensitive environmental features located on the site or sufficiently nearby to be within the zone of potential project impact:</p> <input type="checkbox"/> Wetlands <input type="checkbox"/> Spring or seep <input type="checkbox"/> Stream or river <input type="checkbox"/> Pond or lake <input type="checkbox"/> Steep Slopes <input type="checkbox"/> Highly-erodible soils <input type="checkbox"/> Floodplain <input type="checkbox"/> Important fishery or wildlife habitat <input type="checkbox"/> Rare, threatened or endangered species habitat <input type="checkbox"/> Forest <input type="checkbox"/> Prairie <input type="checkbox"/> Wellhead protection area <input type="checkbox"/> Other
	Do project plans accurately depict sensitive environmental features present on or near the site?
	Do project plans show preservation of each of the sensitive environmental features noted above, including an adequate buffer?
	If all sensitive environmental features are NOT protected, then do plans show the road and building layout which is the least harmful to each feature?
	<p>Are all wells at least 200 feet from proposed septic systems? (NOTE: Contamination will not necessarily occur just because a well is within 200 feet of a septic system. However, a “NO” to this question does flag the need for detailed analysis.)</p>
	Will the project cause the density of septic systems to exceed one per six acres in shellfish harvesting watersheds or areas draining to other bacteria-sensitive waters?
	If the project is in the watershed of a highly-sensitive wetland or stream, then will watershed impervious area remain below 4%?

INITIAL FINDING	QUALITY OF LIFE FACTOR
	Will all runoff from impervious surfaces drain to a stormwater filter or infiltration measure?
	Do stormwater ponds and storm drain outfalls discharge into a stream channel or other areas where erosion will not occur?
	Are large impervious surfaces (buildings, parking lots, etc.) adjoining wetlands served by stormwater management measures designed to maintain groundwater recharge?
	ENVIRONMENTAL JUSTICE
	If a minority or low-income community exists in the project impact zone, then has the project been designed to prevent undue impact to the community?
	FIRE
	Has the project been designed to prevent a lowering of the ISO Public Protection Classification, which is a rating of fire suppression capabilities of the local fire department?
	Will local water pressure remain above the minimum required for fire suppression in areas served by public water?
	HISTORIC PLACES
	Will the project be compatible with a historic district?
	Will the project be compatible with any structures or sites with historic or archaeological significance within the zone of impact?
	LIGHT TRESPASS-POLLUTION
	Is it <i>unlikely</i> nearby residents will suffer glare from lights or loss of their night sky view?
	NOISE
	Has the project been designed to prevent an undue amount of noise at nearby homes, schools, and other sensitive sites?
	PARKS & RECREATION
	If playgrounds, sports fields, and other park-recreation facilities are approaching or over capacity in your area, then will the project increase the supply of these facilities?
	PUBLIC WATER & SEWER
	If the project is to be served by public water and/or sewer then is it within the area slated for service in the local water and sewer plan, master plan, etc?
	If the project is to be served by public sewer then are collection system overflows or other sewage releases rare?
	If the project is to be served by public sewer then will it carry sewage to a wastewater treatment plant which is in compliance with pollution discharge limits?
	PROPERTY OWNERSHIP
	Do plans show that the project will not intrude onto property owned by others or easements?

INITIAL FINDING	QUALITY OF LIFE FACTOR
	PROPERTY VALUE
	Is the project free of uses likely to have an adverse effect on the value of nearby homes?
	SCHOOLS
	Will the number of students at schools serving the site remain below design capacity based upon enrollment projections?
	If the project involves a new school then is it designed at a neighborhood scale as dictated by <i>Responsibly Managed Growth</i> principles?
	TRAFFIC
	Is sight distance sufficient at intersection(s) for safe turns based upon the following 10-second rule: Does it take at least ten seconds from the moment you first see approaching vehicles until they reach the intersection?
	Will the gap between vehicles at main intersection(s) remain adequate for safe turning movements?
	Will the degree of traffic congestion (level of service or LOS) remain within the acceptable range (LOS: A to D) at nearby intersections?
	If the project is in an area served by a single road, then will the road be adequate to allow evacuation during an emergency with the traffic added by the project?
	Has the project been designed to prevent an undue increase in traffic, especially trucks, on residential streets?
	If it is situated along a scenic road, then has the project been designed so scenic views are preserved?
	If the project involves a new road into areas slated for low-density development, then has zoning been adjusted to ensure growth will occur at rural densities?
EXAMPLES OF QUALITY OF LIFE ENHANCEMENT MEASURES	
	Will the project reduce through traffic on an existing residential street or make the street safer with traffic calming measures?
	Will the project reduce congestion or improve turning-movement safety at an intersection?
	Will the project reduce over-crowding at area schools?
	Will the project increase the amount of forest on the site or convert cropland on highly-erodible soils/steep slopes to forest?
	Will the project divert runoff from existing impervious areas to more effective stormwater management facilities?
	Will the project result in a net increase in the per capita supply of park and recreation facilities?
	Will the project result in an improvement of the views along scenic roads?
	Will the project restore a historic structure or enhance the integrity of a historic place?
	Will the project increase walking and bicycling opportunities for area residents?

INITIAL FINDING	QUALITY OF LIFE FACTOR
	Will the project increase the value of nearby homes by mitigating an existing factor negatively affecting property value?
	Will the project bring about a net increase in the percentage of housing affordable by low- to moderate-income families?
	Will the project improve the Public Protection Classification of the local fire department?
Comments:	

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PART I: IDENTIFYING & RESOLVING QUALITY OF LIFE ISSUES

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Chapter 2: The Basic Approach to Identifying & Resolving Quality of Life Issues

INTRODUCTION

Why are you concerned about a proposed development project? Invariably the answer comes down to this:

I believe the project threatens my quality of life.

What is meant by *quality of life*?

In the context of a neighborhood, say mine, it is all those factors which make life enjoyable. Its living on a street where traffic volume and speed does not cause excessive noise nor make the street unsafe for my young nieces, pedestrians, bicyclists, and others. Its also having schools which are not overcrowded and provide all children with a good education. There's a park within walking distance where my seven-year old niece, Juliana, and I can go each day to see how much higher she can swing. The local stream is sufficiently clean that I need not worry about Juliana and her friends getting sick from splashing around after frogs and fish. There's also a small store within walking distance and transit services are available for longer trips. Crime rates are low, housing is available which most can afford so my neighborhood contains a wide mix of folks and they all have jobs which pay at least a living wage. And on and on the list might go. But you get the idea.

Growth can affect all the preceding quality of life factors for the better or worse.

In this Part of the book I will describe:

- A. How to determine if a project will affect a specific quality of life factor;
- B. Methods for resolving negative effects; and
- C. How proposed development might enhance quality of life by correcting an existing problem.

The end result of these three steps should be your *preferred solution*.

IDENTIFY YOUR DESIRED OUTCOME & PREFERRED SOLUTION

What is it that you hope to achieve?

Usually it will be to prevent a potential quality of life impact or to use proposed development to resolve an existing quality of life issue. In either case, what you hope to achieve is your *desired outcome*.

There are usually many ways of achieving a desired outcome. Some are highly effective but only work under very specific conditions. Others work almost everywhere but are only moderately

effective. And there are always a few approaches touted as being the best but rarely producing the desired results.

The guidance provided in this Part of this book is intended to help you identify the approach which will most reliably achieve your desired outcome. I refer to this approach as the *preferred solution*. To illustrate this point I offer the following example of three possible solutions for achieving a specific desired outcome.

The Malcolm E. King Nature Center adjoins a wetland supporting an unusually diverse assemblage of birds, mammals, and plants. Many of the children from nearby Kingstown come to the wetland on class trips to learn about ecology. A large number of Kingstown residents visit the Center to hike, picnic, or bird-watch. In short, the wetland is an essential quality of life element for many Kingstown residents.

It was thought that the entire watershed of the wetland was owned by the nature center and therefore secure from development. But this was not the case and a proposal has been submitted to the Kingstown Planning Commission to develop a portion of the wetland watershed. The applicant claims they will use highly-effective environmental protection measures which will preserve the wetland ecosystem.

Using the guidance provided in Part I of this book, you and other wetland preservation advocates research all the options for safeguarding the ecosystem, including the applicant's proposed measures. Your research shows the following:

Solution A: The measures proposed by the applicant are indeed highly-effective when first installed, but require a level of maintenance that is difficult to guarantee over a period of years much less decades;

Solution B: Sensitive wetlands, such as that at the nature center, will usually (but not always) thrive if there are no more than one house for every eight-acres in the watershed. The proposed project would result in one house for every three acres. Solution B consists of reducing the number of proposed houses so the one-per-eight-acre threshold is not exceeded; and

Solution C: The most reliable way of safeguarding the health of a wetland is to preserve the entire watershed in a natural condition. But this may mean purchasing the development site from the applicant which could be quite expensive.

Since your *desired outcome* is protection of the wetland, your *preferred solution* would likely be purchase of the development site so the entire watershed can be preserved in a natural condition. In reality, under the right conditions all three solutions could preserve the wetland. Because of this, I urge you to avoid becoming wedded to a specific solution. Instead, focus on achieving your desired outcome while exploring many potential solutions for achieving this goal. After all, does it really

matter what solution is used to achieve your desired outcome? Of course, not. The only thing which is important is that the solution reliably and completely achieves the outcome.

To illustrate this point I'll again turn to the nature center wetland. While purchasing the development site may be the most reliable solution it may not be viable because of a variety of factors. For example, the town might lack the funds to purchase the site. Or, the funds might be there but the applicant refuses to sell and the town is reluctant to use their powers of eminent domain to force a sale.

The research recommended in this Part of the book should allow you to identify several possible solutions. In *Chapter 35: Researching Strategy Options*, I will explain how to determine which solution offers the greatest probability of success. Of course, this research will allow you to focus in on your ***preferred solution***.

IDENTIFYING & RESEARCHING QUALITY OF LIFE ISSUES

If you have specific concerns, such as the wetland issued presented above, then go to the chapter pertaining to the issue. There you will find a description of the conditions under which each impact becomes significant and the technical approaches which usually resolve the impact. You will also find advice for going beyond the pages of this book for a more detailed analysis of issues and solutions.

If you are not certain how a development proposal may impact quality of life then consider searching for existing similar projects. Ideally the existing project should be located next to a neighborhood resembling yours while having as many other similarities as possible. If you find similar projects then the following steps may allow you to identify impacts which escape notice otherwise.

1. Talk to nearby, long-time residents to learn what the reality is of living next to the similar project. You may find your worse fears are unfounded or that the project makes life unpleasant in a way you never envisioned. Consider the following questions:
 - a. If the existing project has not caused a particular concern, then is this due to some specific factor such as a corrective measure applied to the existing project? If it is then obviously this same measure should be applied to the project of concern to you.
 - b. If the impact has not occurred then is this due to some condition unique to the existing project? If yes, then is this condition present in your situation?
2. Talk with citizen activists who have participated in campaigns involving similar projects. These folks may have conducted extensive research into project impacts and solutions. The results of this research would be extremely valuable to your efforts. To locate these groups go to the

[CEDS website](http://www.ceds.org)³, click on the *State-By-State Resources* button, then scroll down to your state. The groups listed for your state may know of local organizations or activists who have dealt with similar projects.

3. Contact government officials who may have received complaints about the existing project. For example, most complaints regarding visual impacts, noise and other disturbances would go to the local zoning office. Complaints about sewage, odors, or pests would have been handled by the local health department or environmental agency. Crime complaints would of course go to the local police. Elected officials may have also received complaints, particularly officials representing the district where the existing use is located.
4. Search the internet for newspaper articles or other information about project impacts.
5. Talk to local newspaper reporters and their editors about any stories they ran on the project.
6. If you are concerned about aquatic resource impacts then consider using the volunteer monitoring techniques described later in this Part of the book to assess how the existing use has affected nearby waters.

In addition to these research steps you can also read through the remaining chapters in this part of the book to determine if the project meets any of the criteria for significant impact.

There are a class of projects known as *LULUs*. The preceding research approach is particularly useful for identifying the impacts caused by these Locally Unwanted Land Uses. Examples of LULUs include landfills, prisons, factories, superstores, and a host of other uses which society needs but may not make for the most pleasant neighbor.

The vast majority of development proposals move through the permitting-approval process with relatively little citizen opposition. Those which tend to generate intense conflict involve development of a nature never envisioned by nearby residents. The usual scenario begins with a vacant tract of land next to a neighborhood. Adjoining residents always figured the tract would be developed, but anticipated more homes like their own or some other compatible use. Instead a LULU is proposed for the site.

I urge you to resist the understandable temptation to immediately launch a campaign to kill the LULU. Instead, go through the research suggested in this Part of the book to document impacts and search for solutions. If you make a genuine, concerted effort to find ways of designing adverse effects out of the LULU but fail, then it will be easier to convince decision-makers that the site next to your neighborhood is the wrong place for the LULU.

³ www.ceds.org

WILL A SOLUTION REALLY WORK

At first a solution may seem quite effective and reliable. But is this truly the case?

Generally, the more complicated, expensive and maintenance-intensive a solution, the less reliable it is. To illustrate, consider a situation where a development project threatens a highly-sensitive aquatic resource. Two obvious solutions would be:

- protect the resource by preserving all the land area (the watershed) crucial to its survival in a natural, undeveloped state; or
- allow watershed development but require the use of ample buffers and other highly-effective environmental protection measures.

Obviously preserving the watershed is the most reliable solution, but it may also be the most difficult to win. Getting the applicant or a permitting agency to agree to good protection measures is easier to achieve but requires a well-managed inspection and maintenance program. Unless inspection and maintenance will be very good for many years, the measures may fail and the resource will be lost.

One of the best ways to judge solution effectiveness is much the same as that proposed above for identifying impacts; examine similar projects where the solution was employed. For instance, if you are concerned about the effectiveness of a noise barrier, then visit a project resembling that of concern to you where an identical (or similar) barrier was installed. Listen for yourself during peak noise periods (rush hour). Talk to nearby residents to about how effective they find the barrier and to learn of any undesirable effects which may not be obvious from your brief visit.

Additionally, talk with people who have studied and worked with a particular solution. For example, a mechanical or acoustical engineer will likely have studied a variety of noise barriers and can tell you which are the most effective. To find the engineer you might look in the yellow pages for consultants or search university directories to see if you can locate a faculty member with the required expertise. Local or state government agencies may also have an acoustics expert on staff.

When you contact an expert keep in mind that their bias may affect their opinion regarding a solution. For example, an acoustical engineer spending most of their time servicing the development industry may have an opinion different from that of a university researcher. In some respects the industry consultant's opinion may be based on far more practical experience, whereas the professor may be more objective given that they do not rely on the development industry for their income.

Once you have found an effective solution, implementation must be guaranteed. The guarantee must be something more than the promise of the applicant or a government official. The guarantee could take the form of an enforceable permit condition or a binding agreement between the applicant and you (assuming you have the resources to enforce the agreement). Like solutions, the effectiveness

of guarantees can be researched. Following are some of the many possible research questions to consider.

- Does the applicant or government agency have a history of honoring or ignoring commitments?
- Does your attorney feel a guarantee is enforceable?
- Have similar guarantees worked with similar projects?
- Was the solution actually implemented and is it still working properly?
- What is your recourse if the guarantee fails and do you have the ability (funds) to pursue the recourse?

VERIFY SITE CONDITIONS

An accurate understanding of site conditions is crucial to determining what impacts may occur as well as selecting the right solution. Compare the applicant's description of conditions on and off the site with what actually exists. These conditions are usually depicted on project plans and supporting documents, such as wetland delineation reports, traffic impact studies, and so forth.

Verifying site conditions requires access to the site. But seek permission before entering onto a proposed development site. Besides being illegal and unethical, trespassing could bias final decision makers against you. So request the owner's permission to walk the site. If the owner refuses permission, then lobby local elected officials to arrange a public tour of the site. It would be unreasonable for either the official or owner to refuse such a tour. If you still cannot get onto the site then seek access to adjoining lands. Much of the site may be visible from adjoining properties. Also, if you can prove that a sensitive feature exists on adjacent properties then this may prompt regulatory agencies to more thoroughly examine the development site for the same feature.

Following is a list of the items to check when verifying site conditions. Further detail on these items is provided in specific sections of this book.

1. Verify site acreage and boundary lengths by comparison with other maps.
2. Ask adjoining property owners if they agree with the applicant's depiction of common boundaries.
3. Are natural features, such as wetlands, streams, forests, rock outcrops, topography, and steep slopes accurately depicted?
4. If soils are shown on project plans do they correspond to those shown in the local soil survey, which can be viewed in libraries or obtained through the local office of the [Natural Resources Conservation Service](#)⁴?

⁴ <http://www.nrcs.usda.gov/contact/>

5. Are septic systems or other development activities proposed in areas where soil survey conditions are moderately- or severely-limited for these activities? Keep in mind though that data from actual on-site analyses is usually more accurate than soil survey information.
6. Are existing homes, other buildings, wells, septic systems, roads, powerlines, etc. accurately shown for both on-site and off-site areas?

In addition to these existing conditions, compare proposed buildings, roads and other structures with height limits, setbacks, and other requirements set forth in local zoning, subdivision and development regulations. Detail on finding these regulations and assessing compliance is provided in Part II.

The remainder of this Part of the book addresses specific quality of life issues potentially affected by land development - what they are, how each may be affected by growth, and technical approaches for minimizing the negative effects and enhancing the positive. Most of these issues can get quite complex. In the following pages I have sought to provide enough information so you can understand the issue and determine if it a cause for concern in your circumstances. Where further detail is necessary and the volume of information exceeds the limits of this book, I've attempted to provide a blue-colored link to sources of additional detail.

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Chapter 3: Affordable Housing

Every community should have a supply of housing sufficient so that those over the entire spectrum of income can find a place to purchase or rent. At a minimum, there should be sufficient housing priced so that the community's teachers, police, and other equally underpaid but highly-valued individuals can afford to live where they work. Programs should also be in place to create an opportunity for the most impoverished community residents to achieve the goal of home ownership.

The U.S. Department of Housing & Urban Development (HUD) defines affordable housing as that which requires no more than 30% of average annual household income.⁵ When housing cost exceeds 30% of household income those living in the home have difficulty meeting other needs, such as food, transportation, and health care. HUD estimates that 12 million renter and homeowner households pay more than 50% of their income for housing. HUD also found that a one-income family earning minimum wage cannot afford the rent for a two-bedroom apartment **anywhere** in the United States.

In the report *America's Neighbors: The Affordable Housing Crisis and the People it Affects*⁶ the National Low Income Housing Coalition (NLIHC) points out that most statistics underestimate the number of Americans suffering from the affordable housing crisis. This is because the counts are restricted to number of **households** with housing difficulties, not the number of **individuals**. According to the NLIHC report, 95 million Americans - a third of the U.S. population - had housing affordability problems (high cost burden, overcrowding, poor housing quality, or homelessness) in 2001. In fact, 78% of all people with an income below \$50,000 per year had housing problems. About 24% of the U.S. population meets the definition of low-income: *an annual income at or less than 80% of the median for their area*.

Two-thirds of our low-income neighbors have housing problems. Extremely low income people are defined as those with 30% of the median income for the area in which they live. Of the nation's extremely low-income residents, 78% suffer housing affordability problems. Children make up 29% of all low-income people, but 32% of those who are low income and suffering from housing problems are children. Seniors account for 23% of low income residents but only 18% of the low-income population with housing problems.

So what is the solution?

In a paper entitled *Growth Management, Smart Growth, and Affordable Housing*⁷, Anthony Downs, a senior fellow at the Brookings Institution, identified two basic strategies for expanding the supply

⁵ See <http://www.hud.gov/offices/cpd/affordablehousing/index.cfm>

⁶ This report is available for download at: <http://www.nlihc.org/pubs/index.htm#65million>

⁷ This paper can be viewed at: http://www.brookings.edu/views/speeches/downs/20030529_downs.htm

of affordable housing. The first strategy seeks to raise income so the poor can afford decent housing. Federal programs intended to achieve this goal include the Earned Income Tax Credit and housing subsidies such as Section 8. The second strategy seeks to reduce the cost of housing by:

- making mortgages and other financing more available or cheaper;
- reduce the cost of creating new housing, without unduly sacrificing quality, by modifying building codes, reducing development review time, and building at higher density to reduce land cost; and
- reduce the size and quality of housing

A number of local governments have enacted programs to increase the supply of affordable housing. One of the earliest and best is the Moderately Priced Dwelling Unit (MPDU) program administered by Montgomery County, Maryland.⁸ The Montgomery County MPDU program started in 1974 and requires that 12.5% to 15% of all new homes in subdivisions of 50 units or more be moderately priced. These units are then made available for purchase to renters and first-time home buyers who meet certain income requirements. The MPDUs are currently selling for \$85,000 for a two-bedroom condominium to \$135,000 for a three-bedroom detached house with a basement and garage. When contrasted with the average selling price of \$212,000 and \$364,000 for, respectively, a new townhouse and single-family detached home in Montgomery County, the MPDUs are within the range of affordability for many more people. To offset the impact to the developer, subdivisions with MPDUs receive a bonus density of up to 22%. In other words, if zoning normally allows 100 units on a given site, then up to 122 units can be built if the project includes MPDUs.

Occasionally folks will call CEDS with concerns about a proposed affordable housing project. The list of concerns usually include adverse effects on the value of nearby properties, increased crime, or compatibility issues such as increased through-traffic on residential streets. As will be seen from the following review of relevant scientific research, while these concerns may have some basis in fact, the effects are by no means consistent and each project should be evaluated on its own merits. In those situations where a negative effect is possible, a variety of measures are usually available for resolving the impact.

The Habitat for Humanity website contains a review of eleven studies on the relationship between affordable housing and the value of nearby homes.⁹ All of these studies found no significant effect. The National Association of Realtors website contains a *Field Guide to Effects of Low Income*

⁸ For further detail on the Montgomery County, MD MPDU program visit: http://www.montgomerycountymd.gov/dhctmpl.asp?url=/Content/DHCA/housing/housing_P/mpdu.asp

⁹ See the Habitat for Humanity review of affordable housing-property value studies at: <http://www.habitat.org/how/propertyvalues.html>

*Housing on Surrounding Property Values*¹⁰, which is actually a collection of papers and articles on the topic. In *A Review of Existing Research on the Effects of Federally Assisted Housing Programs on Neighboring Residential Property Values*¹¹ the author found that the effect of low income housing can be positive or negative depending upon several variables, such as the value of homes in the surrounding area, the density of low-income housing units created within the area, and the proximity of the low-income units to existing households. University of Wisconsin researchers concluded that low-income housing only has a negative effect on property value when they are built in areas of concentrated poverty.¹²

Mobile homes are becoming an increasingly common means of achieving affordable housing goals. Two studies documented a negative relationship between proximity to mobile home parks and the value of single-family detached homes. The first study, *A Housing Price Model with Endogenous Externality Location: A Study of Mobile Home Parks*¹³, was conducted in Louisiana and showed that as the distance between a single-family detached home and a MHP increases from 0.0- to 0.27-miles the value of the single-family detached home will increase by up to 12%. The second study, *The Impact of Manufactured Housing on Adjacent Residential Property Values: A GIS Approach Based on Three North Carolina Counties*, indicated that mobile home parks exert a negative effect on single-family detached home value out to a distance of 1,800 feet (0.34 miles). However, these studies also indicated that the negative effect could be offset by design changes which caused mobile homes to more closely resemble “site-built” homes.

Early experiments in creating affordable housing occasionally resulted in increased crime and other problems. Foremost among these failed experiments were the housing projects of the inner city. These projects created pockets of poverty where a lack of jobs, access to good schools, and a plethora of other problems led to hopelessness and high crime rates. Today, most affordable housing projects strive to disperse homes for moderate- to low-income people throughout a community and strive for locating housing near jobs and public transportation. The potential for crime can be further

¹⁰ To view the *Field Guide to Effects of Low Income Housing on Surrounding Property Values* go to: <http://www.realtor.org/libweb.nsf/pages/fg504>

¹¹ To view the report *A Review of Existing Research on the Effects of Federally Assisted Housing Programs on Neighboring Residential Property Values* go to: [\\$FILE/galsterreport2.pdf](http://www.realtor.org/Research.nsf/files/galsterreport2.pdf)

¹² The University of Wisconsin study can be downloaded from the National Association of Realtors website at: http://www.novoco.com/Research_Center/uw_study.pdf

¹³ Munneke and Slawson, *A Housing Price Model with Endogenous Externality Location: A Study of Mobile Home Parks*, *Journal of Real Estate Finance and Economics*, 19:2, 113±131 (1999)

¹⁴ Wubneh and Shen, *The Impact of Manufactured Housing on Adjacent Residential Property Values*, *Review of Urban Regional Development Studies*, Vol. 16 Issue 1 Page 56 March 2004

reduced through techniques such as Crime Prevention Through Environment Design (CPTED), which is described in the chapter on *Crime*.

Chapter 4: Air Quality

According to the U.S. Environmental Protection Agency (EPA) nearly half of all Americans live in areas with air that is unhealthy.¹⁵ Vehicle emissions are the greatest single source of development-induced air pollution. A recent study showed that air pollution accounted for 6% of all European deaths and half of these were attributable to pollution from vehicles.¹⁶ But some development projects, such as power plants and asphalt plants, can release significant air pollution from sources that are not related to transportation.

For most development projects, vehicle emissions will be the greatest source of air pollution. *Trip Generation Rates*, published by the Institute for Transportation Engineers¹⁷, shows that each new home adds an average of ten vehicle trips a day to local roads. As traffic volume increases regional air quality may decline. For example, traffic-generated air pollution has raised the cancer risk in the Los Angeles area to 1:650.¹⁸ Traditionally, a cancer risk greater than one in a million has been cause for concern.

Several studies have shown that those living near high-volume highways are particularly at risk. Denver researchers studied households located near a highway carrying 20,000 vehicles per day (vpd) and high-current carrying capacity power lines. The researchers found that children living in homes near high-volume highways and high-current powerlines were eight times more likely to develop leukemia when compared with the general population.¹⁹ In San Francisco researchers examined the relationship between the respiratory health of children attending ten schools, air pollution levels at each school, and proximity to major highways.²⁰ The researchers found attending schools within 500 feet of a major highway were significantly more likely to suffer from respiratory disorders. Researchers in the Netherlands found reduced lung function and increased respiratory

¹⁵ For further detail visit <http://www.epa.gov/air/aqrnd01/>

¹⁶ Kunzli, N., R. Kaiser, S. Medina, M. Studnicka, O. Chanel, P. Filliger, M. Herry, F. Horak Jr., V. Puybonnieux-Texler, P. Qwuenel, J. Schneider, R. Seethaler, J-C Vergnaud and H. Sommer, 2000. Public-health impact of outdoor and traffic-related air pollution: a European assessment. *The Lancer* 356:795-801.

¹⁷ For further information visit <http://www.ite.org/>

¹⁸ See the Multiple Air Toxics Exposure Study (MATES-II) conducted for the South Coast Air Basin (Basin), which is available for download at: <http://www.aqmd.gov/matesiif/matestoc.htm>

¹⁹ Pearson et al. (2000). "Distance-weighted traffic density in proximity to a home is a risk factor for leukemia and other childhood cancers." *Journal of Air and Waste Management Association* 50:175-180.

²⁰ Kim, J.J., S. Smorodinsky, M. Lipsett, B.C. Singer, A.T. Hodgson, and B. Ostro, 2004. Traffic-related air pollution near busy roads. *Am J Respir Crit Care Med* Vol 170, pp. 520-526. Available for download at: <http://eetd.lbl.gov/ied/pdf/LBNL-55586.pdf>

symptoms among children living within 900 feet of high-volume highways.²¹ It appears that the emissions from trucks and other diesel-powered vehicles are particularly damaging to health, especially for respiratory conditions.²²

Determine if your area meets federal air quality standards.²³ Two federal laws impose restrictions upon highway improvements and growth in nonattainment areas - the Intermodal Surface Transportation Efficiency Act (ISTEA) and the Clean Air Act Amendments (CAAA) of 1990. ISTEA restricts the use of federal funds for new single-occupancy vehicle highway lanes unless the improvements are needed to relieve traffic congestion. The CAAA also require local governments in nonattainment areas to consider the impact of zoning and other land use decisions upon air quality.

Before a new highway is built or an existing road is expanded, a thorough analysis should be made of potential air quality impacts. If the project will significantly increase health risk then all reasonable alternatives should be considered. Examples of these alternatives include improving mass transit, encouraging car-pooling, and reducing highway speed limit from 65- to 55-mph (which cuts air pollution by 15%). Unfortunately, it is rare that I've read an environmental impact statement (EIS) for a highway project which fully addresses health effects and alternatives to building more roads. Fortunately, the environmental community has won some recent court cases which may reverse this pattern.

Poor air quality also reduces visibility. In the east visibility is a third (15-30 miles) of what it was 400 years ago. In the west one can see half as far today (60-90 miles) as in pre-colonial times.²⁴ Scientists say its mostly sulfur which obscures visibility. The sulfur is emitted from coal-burning power plants, smelters, refineries and other sources. The particulates from our cars also contribute to haze.

Environmentalists have succeeded in constraining or defeating proposed power plants and other major emission sources based upon the effect on visibility, particularly when the view of or from national parks, monuments, and other vistas would be harmed. However, in 2002 efforts to reduce sulfur emissions and other forms of air pollution suffered a major setback when the Bush

²¹ Brunekreef B; Janssen NA; de Hartog J; Harssema H; Knape M; van Vliet P. (1997). "Air pollution from truck traffic and lung function in children living near motorways." *Epidemiology*. 8(3):298-303.

²² Lin S., Munsie J.P., Hwang S.-A., Fitzgerald E., and Cayo M.R. (2002). Childhood Asthma Hospitalization and Residential Exposure to State Route Traffic. *Environmental Research*, Section A, Vol. 88, pp. 73-81.

²³ Information on nonattainment areas may be viewed at: <http://www.epa.gov/oar/oaqps/greenbk/> To learn of pollution sources in your area visit the Environmental Defense Fund Scorecard site: <http://www.scorecard.org/>

²⁴ For further detail on the effect of haze visit <http://www.hazecam.net/default.htm>

administration announced that it was allowing power plants and related sources to dump more pollution into the air by weakening a part of the Clean Air Act called *New Source Review*.²⁵

The result of this weakening will be increases in the air pollution that has been linked to asthma, heart disease and premature death, as well as reduced visibility. Nevertheless, New Source Review still provides environmental advocates with one of the best opportunities to ensure that proposed emission sources take all reasonable steps to preserve air quality.

Air pollution can become water pollution. In fact a substantial portion of the pollution washed by stormwater from impervious surfaces (see *Aquatic Resources section*) and settling upon the surface of lakes and tidal waters originates as material released into the atmosphere. One study found a correlation between traffic volume in the vicinity of lakes and the concentration in lake sediments of a group of suspected carcinogens known as polycyclic aromatic hydrocarbons (PAH).²⁶

Further detail on vehicle emissions and corrective measures will be found in the chapter on traffic.

²⁵ For further information on New Source Review visit <http://www.epa.gov/ttn/nsr/>

²⁶ Van Metre, P., B. Mahler and E. Furlong. 2000. Urban sprawl leaves its PAH signature. *Environmental Science Technology*. 34(19): 4064-4070.

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Chapter 5: Aquatic Resources

Aquatic resources include wetlands, streams, lakes, rivers, springs, seeps, ponds, and groundwater. Existing and newly created development has damaged the quality of nearly 35,000 miles of streams and rivers in the United States, which makes it the fourth leading cause of impaired waterways.²⁷ For lakes and wetlands development is the third leading cause of degradation and comes in as the second most significant cause of impaired coastal waters.²⁸

HOW DEVELOPMENT IMPACTS AQUATIC RESOURCES

Beginning with a study I published in 1979²⁹, a number of researchers throughout the United States and Canada have found a consistent relationship between watershed development and the health of aquatic systems.³⁰ Most researchers use *percent impervious area* to quantify the degree of watershed development. An impervious surface is any material which prevents precipitation from soaking into the soil and includes rooftops, parking lots, streets, sidewalks, and so forth. A *watershed* is defined as all the land area draining to a specific point. The perimeter of a watershed is formed by hilltops, ridgelines and other highpoints. When rain falls upon the ridgeline it flows (or is shed) to a specific water body or waterway.

Wetlands begin exhibiting signs of adverse effect when watershed imperviousness exceeds 2% to 4% or about one house for every eight- to ten-acres of watershed area.³¹ Streams supporting trout, salmon, and other coldwater species do best when watershed imperviousness is less than 4%.³² Warmwater streams and rivers begin exhibiting signs of adverse effect when watershed

²⁷ See 2000 National Water Quality Inventory available for download at: <http://www.epa.gov/305b/2000report/>

²⁸ Ibid.

²⁹ Klein, R.D., 1979. Urbanization and stream quality impairment. *Water Resources Bulletin* 15(4):948-963.

³⁰ These studies are summarized in several of the reports which can be downloaded from the waterways page of the CEDS website: <http://www.ceds.org/publications.html>

³¹ Hicks, A.L. and J.S. Larson. 1997. Aquatic invertebrates as an index for estimating the impacts of urbanization on freshwater wetlands. The Environmental Institute, University of Amherst, MA. Report submitted to U.S. Environmental Protection Agency, Corvallis, OR. Reinelt, L.E. and R.R. Horner, 1991. Urban storm water impacts on the hydrology and water quality of palustrine wetlands in the Puget Sound region. In: *Puget Sound Research '91 Proceedings*, Puget Sound Water Quality Authority, Vol. 1, pp. 33-42.

³² Boward, D., P. Kayzak, S. Stanko, M. Hurd, and A. Prochaska, 1999. *From the mountains to the Sea: The state of Maryland's freshwater streams*. Maryland Department of Natural Resources, Tawes State Office Building, Annapolis, MD 21401. Steedman, R.J. 1988. Modification and assessment of an index of biotic integrity to quantify stream quality in southern Ontario. *Canadian Journal of Fisheries & Aquatic*

imperviousness exceeds 8% (about one house/two acres).³³ Lakes begin showing signs of excessive nutrient input when watershed imperviousness is in the range of 10%.³⁴ A relationship also exists between the health of tidal waters and watershed development, though the threshold of impact is not clearly defined. A number of studies have also found a relationship between the density of septic systems in a watershed and aquatic resource quality (*see the section of this chapter on Septic Systems*).

The causes of development-induced aquatic resource degradation can be summarized as follows:

- physical destruction of aquatic habitat through actions such as filling of wetlands, altering stream channel, dredging waterways, etc.;
- release of eroded soil (sediment pollution) during the construction phase;
- increased runoff volume which accelerates channel erosion and exacerbates flooding;
- a decrease in the amount of precipitation soaking into the soil and recharging groundwater systems, which reduces the dry-weather inflow to wetlands, streams, lakes, wells and other aquatic resources;
- elevating water temperature through actions such as the removal of streamside shading vegetation, heated runoff from sun-baked impervious surfaces, and the heating of runoff while it drains out of stormwater ponds during the summer; and
- increasing the quantity of nutrients, toxics and other pollutants released into the aquatic environment.

In addition to these ecosystem impacts, watershed development can damage structures located along streams and other waterways. Converting a forest to homes on quarter-acre lots could increase the frequency and severity of flooding by a hundred fold.³⁵ In other words, floodwater volumes seen only once every century might recur annually following watershed development. Any homes or other structures located along the affected waterways would be subject to more frequent inundation and damage.

Sciences 45:492-501. May, C. R. Horner, J. Karr, B. Mar, and E. Welch. 1997. Effects of Urbanization on Small Streams In the Puget Sound Lowland Ecoregion. *Watershed Protection Techniques*, 2(4): 483-494.

³³ Shaver, E., J. Maxted, G. Curtis, and D. Carter. 1994. Watershed protection using an integrated approach. Delaware Department of Natural Resources and Environmental Control. Booth D.B. and C.R. Jackson. 1994. Urbanization of aquatic systems - degradation thresholds and the limits of mitigation. *Proceedings Annual Summer Symposium of the American Water Resources Association - Effects of Human-Induced Changes on Hydrologic Systems*, pp 425-434.

³⁴ See the Center for Watershed Protection *Watershed Vulnerability Analysis* which is available for download from http://www.cwp.org/Vulnerability_Analysis.pdf

³⁵ The hundred-fold increase in flooding due to conversion of a forest to quart-acre lots is based upon the procedures set forth in SCS, 1986. Urban hydrology for small watersheds. Technical Release 55, U.S. Soil Conservation Service, Post Office Box 2890, Washington, D.C. 20013.

The increased flooding associated with watershed development also accelerates the pace of stream channel erosion. In fact, converting a forest watershed to suburban-urban uses can cause the channel draining the watershed to widen by two- to eight-fold through erosion.³⁶ Accelerated channel erosion results in habitat destruction, the release of sediment into downstream waters, and may jeopardize streamside structures.

PREVENTING AQUATIC RESOURCE IMPACTS

There are a number of *Best Management Practices* (BMPs) for reducing the impact of impervious surfaces upon aquatic systems. Examples of BMPs include:

- limiting watershed imperviousness;
- buffers to prevent direct physical damage to streams and wetlands; and
- ponds or filters to remove pollutants from runoff.

Not all BMPs are equally effective in preventing aquatic resource degradation.³⁷ Limiting watershed imperviousness is the most effective BMP. Ponds, filters and other structural practices can fail.

Watershed imperviousness can be limited through a variety of measures.³⁸ Examples would include reducing street width or lowering the number and size of parking spaces required for new development. Local governments have also set caps on how much imperviousness may be created within sensitive watersheds.³⁹ If a proposed development project would cause imperviousness to exceed the cap then it cannot be approved. There is also research showing that it is not enough just to cap impervious area; a minimum percentage of a watershed must also be preserved as forest.⁴⁰

³⁶ Klein, R.D., 1979. Urbanization and stream quality impairment. *Water Resources Bulletin* 15(4):948-963.

³⁷ Further detail on BMPs can be found in the CEDS factsheets *Buffers for Stream, Lake & Wetland Protection* and *How Much Development is Too Much for Streams, Rivers, Lakes, Tidal Waters & Wetlands*. These factsheets are available for download from our website (<http://www.ceds.org/>) along with various reports illustrating how to assess the aquatic resource impact of a proposed development project.

³⁸ See *Better Site Design: A Handbook for Changing Development Rules in Your Community* for a long list of measures for reducing impervious area. The handbook can be ordered from the Center for Watershed Protection <http://www.cwp.org/index.html>

³⁹ For examples of impervious area caps see the Montgomery County, MD Special Protection Areas website: <http://www.montgomerycountymd.gov/siteHead.asp?page=mc/services/dep/index.html> and the Chesapeake Bay Critical Areas website: <http://www.dnr.state.md.us/criticalarea/guidancepubs/impervioussurfaces.html>

⁴⁰ For an example of the research showing the importance of forest cover in maintaining urban stream quality see: Booth, D.B., 2000. Forest Cover, Impervious-Surface Area, and the Mitigation of Urbanization Impacts in King County, Washington. Center for Urban Water Resources Management, Department of

But a limit on impervious area is in conflict with the Smart Growth principle of concentrating development rather than allowing it to sprawl over the countryside. Impervious area caps are usually applied only to resources which are highly valued and very sensitive. Examples would include waters:

- supporting rare, threatened or endangered species;
- supporting fish or shellfish considered important for commercial or recreational reasons;
- where fragile habitats such as bogs are present;
- serving as sources for drinking water supply;
- uniquely high quality waters,
- where existing homes or other structures are subject to flooding and could be placed in jeopardy by increased watershed development;
- where restoration programs are anticipated or underway; and
- where a further increase in stress could cause the resource to no longer support beneficial uses such as rivers, lakes or tidal waters considered moderately or highly enriched with nutrients (*mesotrophic* or *eutrophic*).

Information on the sensitivity of aquatic resources in your area can be obtained from the U.S. Environmental Protection Agency's [Surf Your Watershed website](http://www.epa.gov/surf/)⁴¹. Additional information can be obtained from local and state government agencies, such as those overseeing natural resources, fisheries, wildlife, natural heritage (rare, threatened and endangered species), environmental protection, floodplain management, planning and zoning, and water quality management.

If little information is available for the aquatic resources of concern to you, then consider gathering your own data. On the [EPA Volunteer Monitoring website](http://www.epa.gov/owow/monitoring/volunteer/)⁴² you will find publications explaining how to assess the health of streams, lakes, wetlands and estuaries. You will also find a directory of local and state programs which may provide training and equipment for volunteer monitoring.

To the extent possible, all development projects should utilize highly-effective BMPs, which would consist of:

- preventing direct physical damage to aquatic habitat by maintaining a buffer of at least 75 to 100 feet along the perimeter of all wetlands, seeps, springs, streams, rivers, lakes and ponds;

Civil and Environmental Engineering, University of Washington, Seattle, WA 98195-2700. Available for download at: <http://depts.washington.edu/cuwrn/research/forest.pdf>

⁴¹ <http://www.epa.gov/surf/>

⁴² <http://www.epa.gov/owow/monitoring/volunteer/>

- buffers should be expanded to include any steep slopes or highly-erodible soils adjoining the aquatic resource;⁴³
- prior to clearing a site perimeter sediment control measures, such as silt-fence, must be installed along the downslope edge;
- for large sites, clearance should be phased to limit the amount of soil exposed to erosive forces;
- all disturbed soils should be brought up to rough grade within two weeks then treated with a temporary stabilization measure such as straw mulching and seeding with grass;
- all disturbed soil should also drain to sediment trapping measures such as settling ponds and silt fence, but these measures only remove half of the eroded soil suspended in runoff while stabilization measures reduce erosion by 90% or more;
- an effective enforcement program must be in place to ensure that erosion and sediment control measures are installed and maintained properly;⁴⁴
- once construction is completed a minimum of 90% of all runoff from impervious surfaces should flow to a filtering device, such as bioretention, which preferably allows filtered runoff to recharge the water table through infiltration;⁴⁵
- ponds can cause runoff to heat to 85 °F and should not be permitted in watersheds supporting trout and other temperature-sensitive species;⁴⁶ and
- a program must be in place to ensure that each stormwater management measure will be inspected at least once a year with prompt attention paid to any maintenance needs.

Fully evaluating the aquatic resource impact of a development project requires more detail than provided above. On the [CEDS website](#)⁴⁷ you will find examples of how to conduct the thorough analysis needed to determine if a project will adversely effect sensitive wetlands, streams, and other resources.

⁴³ A steep slope can be anywhere from 15% to 25% (rising 15-25 vertically for each 100 feet of horizontal distance) and highly-erodible soils are usually defined by the Soil Conservation District-Natural Resources Conservation Service.

⁴⁴ Some of the components of an effective enforcement program are: each full-time inspector is responsible for no more than 100-200 active construction sites and serves primarily as a technical advisor but is backed up by a program with history of swiftly and aggressively prosecuting flagrant violators.

⁴⁵ For an illustration of stormwater filters view the *Maryland Stormwater Design Manual* at: http://www.mde.state.md.us/Programs/WaterPrograms/SedimentandStormwater/stormwater_design/index.asp

⁴⁶ Bahr, R.P., 1996. A temperature study of discharges from three extended detention/wetland stormwater management basins in Maryland. Chesapeake Biological Laboratory, University of Maryland, Solomons, MD 20688. Galli, J., 1990. Thermal impacts associated with urbanization and stormwater management best practices. Department of Environmental Programs, Metropolitan Washington Council of Governments, 777 North Capitol Street, N.E., Washington, D.C. 20002. (202) 962-3200

⁴⁷ www.ceds.org

SPECIFIC AQUATIC RESOURCE ISSUES

Following are suggestions for resolving concerns about specific aquatic resource impacts or development types.

Fish Migration Barriers

Will the project involve the construction of a road across any stream, creek, river, or other waterway? If so then closely examine project plans for any indication that the crossing will create a barrier to the movement of fish or other aquatic organisms. For example, if the applicant has proposed the use of a pipe or box culvert, then a barrier may be formed. Both culvert types may replace the natural stream bed with one composed of steel or concrete. But this alone does not necessarily result in a migration barrier. If the steel or concrete will be exposed at the stream bed elevation, then future scour and erosion may result in a water drop which then bars upstream migration. Generally, bridges and bottomless arches do not result in migration barriers. Dams and similar structures obviously have a strong likelihood of blocking fish migrations. Talk with State fishery biologists whenever you believe a project may create a barrier to fish migrations.

Golf Courses

Construction of a golf course may disturb a hundred acres of land. Few uses cause as much land disturbance. Thus the potential exists for considerable soil erosion and sediment pollution during golf course construction. Once the course is completed aquatic resources may be impacted through leaching of fertilizers and pesticides. A golf course can require a quarter-million gallons a day of irrigation water during the 20-month grow-in period. If this water is drawn from wells or waterways then substantial resource impact may occur.

Over the past decade institutions such as the U.S. Golf Association have had considerable success in reducing the adverse effects of golf courses. Today there are even “organic” golf courses.

If you are concerned about a proposed golf course, then compare the project with the recommendations contained in the CEDS publications *Golf Courses & the Aquatic Environment* and *Protecting the Aquatic Environment from the Effects of Golf Courses*, both of which can be downloaded from our [website](http://www.ceds.org)⁴⁸.

Highways

New roads and highways can cause many of the aquatic resource impacts described above for impervious areas. In addition a highway can introduce other threats, such as hazardous material spills resulting from accidents. Of particular concern are common substances such as the methyl tertiary butyl ether (MTBE) added to gasoline. MTBE is highly mobile and can contaminate

⁴⁸ www.ceds.org

groundwater when present at an extremely low concentration. One gallon of MTBE treated gasoline can contaminate four million gallons of drinking water.⁴⁹ On the [CEDS website](#)⁵⁰ you will find examples of how to assess and resolve the impact of a proposed highway, including hazardous material spills.

Landfills

A landfill is used to store waste materials such as household garbage which is not being recycled, flyash from coal-fired power plants, industrial waste, and so forth. A landfill can impact the environment through the loss of groundwater recharge caused by impermeable liners or caps, construction phase sediment pollution, the release of the highly-contaminated leachate which forms as water passes through decomposing waste, from the release of volatile contaminants to the atmosphere, and from the trucks traveling to and from the facility. For further information see the publications on the [CEDS website](#) pertaining to landfills and other solid waste facilities.

Marinas

Boating facilities such as marinas and launching ramps can impact an aquatic resource through boat wake induced shore erosion, resuspension of bottom sediments by boat propellers, the release of highly-toxic anti-fouling coatings from boat hulls and treated timbers, discharge of sewage from vessels, toxic runoff from boat repair and maintenance areas, and all the other impacts associated with impervious surfaces. These impacts tend to be particularly severe when a small tidal creek is involved. Recommendations for assessing the impacts of a marina, boat launching ramp, pier, slip, or any other boating facility are provided in the [CEDS website](#) publication *The Effects of Marinas & Boating Activity Upon Tidal Waterways*.

Mining

Hard rock mining, coal mines, sand and gravel quarrying, and other forms of mineral extraction can cause a host of impacts. All can damage nearby waterways through erosion and sediment pollution, changes in ground and surface water flows, physical destruction of aquatic habitat, and increased truck traffic. Additional impacts may come from the release of toxic materials such as the acidity and metals from some forms of coal mining. Mineral processing with the use of water can impact aquatic resources due to turbidity or stream flow depletion. One of the best sources of information for mining impacts is the [Earthworks website](#)⁵¹.

⁴⁹ Kiner, N.E. 2001. Fate, Transport and Remediation of MTBE. Civil/Environmental Engineering, University of New Hampshire, Durham, NH. Available online at: <http://www.asce.org/pdf/kinnertestimony.pdf>

⁵⁰ www.ceds.org

⁵¹ <http://www.mineralpolicy.org/ewa/index.cfm>

Public Water Supply

If a project will rely upon water obtained from a public or community supply, then determine if the source can accommodate additional users. For example, if the water is drawn from a lake or river then determine how much more can be consumed without adversely affecting aquatic life or recreational uses, such as boating.⁵² Your state natural resources agency may have information on minimum flows for fishery and boating needs.

Contact the agency which administers the public water supply to find out how much capacity remains. The local fire marshal office may also have information on the adequacy of the supply for fire fighting needs. Contact the state environmental protection or public health agency to learn the results of recent inspections of the supply.⁵³ Ask if monitoring results show that the supply meets the minimum standards for protection of public health. If either the quantity or quality of the supply is questionable then perhaps additional users should not be added until the deficiencies are resolved.

Septic Systems

In rural areas, on-site sewage disposal systems are used to manage the relatively small volume of wastewater generated in homes and businesses. Typically, sewage flows first to a septic tank where grease and solids are removed. The partially treated wastewater is then released into the soil where additional pollution removal may occur.

In most areas, approval from the local health department is required before a septic system may be constructed. To receive approval the applicant must demonstrate that soils meet minimum criteria such as water percolation rate and depth to water table or bedrock. An indication of soil suitability for septic systems can be gained by referring to the appropriate soil survey.⁵⁴ Frequently, minimum separation distances must be met between wells, streams, property lines and so forth. Unfortunately, compliance with these criteria do not always resolve water quality concerns. Following is a description of situations where septic systems may create problems. Development projects utilizing septic systems should be closely scrutinized for compliance with local-state regulatory requirements as well as the conditions described below.

⁵² The Instream Flow Incremental Methodology provides an approach for determining how much water must remain in a stream, river or other resource to support various uses. Detail on IFIM can be found at: <http://www.mesc.usgs.gov/products/software/ifim/fim.asp>

⁵³ Compliance information for community water systems can also be viewed at: <http://www.epa.gov/enviro/html/water.html#SDWIS>

⁵⁴ Check with the local Soil Conservation District or Natural Resources Conservation Service office for soil survey information. To locate your local SCD or NRCS office visit: <http://www.nrcs.usda.gov/contact/> A copy of the soil survey may also be found in a local public library.

Septic systems can adversely affect water quality through the release of disease-causing organisms and nitrogen. In fact septic systems are the second leading cause of groundwater contamination in the United States.⁵⁵

A number of researchers have found a positive relationship between septic system density and groundwater contamination.⁵⁶ In general, well water will be protected from nitrate contamination if the density of homes served by septic systems averages no less than one per acre. In North Carolina researchers found a relationship between bacteria levels and the density of septic systems in areas draining to tidal waters from which oysters and other shellfish are harvested. When septic system density was more intense than one per six acres of watershed area, bacteria levels exceeded that deemed safe for shellfish harvesting.⁵⁷

If a well screened at shallow depth is located within 200 feet downgradient of a septic system then contamination becomes more likely.⁵⁸ By shallow depth I mean a well where the casing ends at a depth of 60 feet or less (from the ground surface) and is not separated from the surface by a layer of clay or some other impermeable barrier.⁵⁹ Deeper wells may also be at risk if placed in coarse soils or where bedrock lies close to the point where septic system effluent is released into the ground. In both situations contaminant removal may be minimal.

Septic systems are relatively ineffective at removing nitrogen. In fact, an average of 90% of the nitrogen released into a septic tank is discharged to the soils beneath the drain field. A home served by a conventional septic system releases 27 pounds of nitrogen per year to the aquatic environment.⁶⁰ That's more nitrogen than released from an acre of cropfield and nine times the

⁵⁵ See *2000 National Water Quality Inventory* available for download at: <http://www.epa.gov/305b/2000report/>

⁵⁶ See *On-site sewage disposal - influence of system densities on water quality* for a review of these studies. This review is available for download at: <http://pasture.ecn.purdue.edu/~epados/septics/septic/density.htm>

⁵⁷ Duda, A.M. and K.D. Cromartie. 1982. *Coastal Pollution from Septic Tank Drainfields*. Journal of the Environmental Engineering Division ASCE. 108:1265-1279.

⁵⁸ Ibid and Ford, K.L., J.H. Schott, and T.J. Keefe, 1980. Mountain residential development minimum well protective distances well water quality. *Journal of Environmental Health* 43(3):130-133.

⁵⁹ Tuthill, A., D.B. Meikle and M.C.R. Alavanja, 1998. Coliform bacteria and nitrate contamination of wells in major soils of Frederick, Maryland.. *Environmental Health*, April 1998, p. 16-20.

⁶⁰ Maizel, M.S., G. Muehlbach, P. Baynham, J. Zoerkler, D. Monds, T. Livari, P. Welle, J. Robbin, and J. Wiles, 1997. *The Potential for Nutrient Loadings from Septic Systems to Ground and Surface Water Resources and the Chesapeake Bay*, published by the USEPA Chesapeake Bay Program, 410 Severn Avenue, Annapolis, MD 21403, April 1997.

forest release rate.⁶¹ Increasing the number of homes served by septic systems can cause a significant impact to lakes, estuaries or other waters considered threatened or impaired by nitrogen. Septic systems can be upgraded with filters and other measures which will reduce nitrogen loads by 50%.⁶²

Wastewater Treatment Plants

If a project will connect to an existing sewerline, then take a look at the treatment plant which receives the wastewater carried by the sewer. If the plant is near or over capacity, then further connections to the sewer should not be allowed. Contact your state environmental protection agency to learn how frequently the plant violates pollution discharge limits.⁶³ If the plant has been cited for *significant noncompliance* then find out why. Further connections should be postponed until the cause(s) of noncompliance is corrected.

Using the volunteer monitoring techniques described above, examine the waterway which receives the effluent from the plant. Look for indications that the discharge is harming water quality.

If the applicant is proposing to construct a new wastewater treatment plant, then request an opportunity to review the application and other materials submitted to your state environmental protection agency. Determine if the proposed pollution discharge limits will adequately protect the receiving waters. Be certain to investigate any wetland permits the applicant must obtain to construct the plant or sewage collection system. If the applicant owns/operates existing treatment facilities, then find out how well these plants are run. Examine the effects of several existing plants that use the same treatment processes as the proposed plant.

Contact the agency responsible for maintaining the sewerline which will carry wastewater from the project site to the treatment plant. Find out how often sewage overflows occur, how close the line is to capacity, and the results of the latest inspection of the sewer. If the line is near or over capacity then further connections should be postponed until capacity is increased. If overflows have occurred during the last five years, determine why. If the causative factors have not been resolved, then, again, further connections should be postponed until repairs are made.

If you have difficulty getting information about sewer condition or you would like to verify what you have learned, then walk along a mile or so of the line downstream of the proposed

⁶¹ Chesapeake Bay Program Watershed Model Application To Calculate Bay Nutrient Loadings, U.S. Environmental Protection Agency, 410 Severn Avenue, Annapolis, MD 21403.

⁶² Ibid.

⁶³ The US EPA maintains a website through which you can view compliance information for existing pollution discharges: <http://www.epa.gov/enviro/html/water.html#PCS>

development site. Look for any point where sewage, appearing as a gray to black liquid, is seeping from the sewer or adjoining stream banks. At each manhole look for toilet paper, tampons, condoms, and other material indicating a recent sewage overflow. Talk to those who live near sewage pumping stations to learn how often overflows occur.

Wells

If the project will rely upon wells, then assess the ability of groundwater aquifers to accommodate additional water use without impacting existing users, depleting the flow to nearby wetlands or streams, or causing saltwater intrusion. Request an opportunity to review the results of any aquifer tests conducted on the site along with well logs and pumping tests for individual wells. Contact the state and [U.S. Geological Survey](#)⁶⁴ for the history of well yield in the area. If historically yields have been poor, then adding additional groundwater users may aggravate the problem.

Also see the CEDS webpages

[Protecting Wetlands, Streams, Lakes, Tidal Waters & Wells from the Impacts of Land Development](#)

[Exposed Soil = Pollution](#)

[Brook Trout & Watershed Development](#)

[Flooding & Watershed Development](#)

[Making Pollution Laws Work](#)

[Watershed Audits](#)

⁶⁴ <http://www.usgs.gov/>

Chapter 6: Bicycling

Imagine being able to walk out your front door, get on a bicycle and commute to work, run an errand, or just get some exercise. Impossible? Of course not. In fact, 40% of all trips made by car are two miles or less. Slightly more than half of us live within five miles of work. And just ten miles separates three-fourths of us from home and our place of employment. Obviously, all these destinations are bikable; some are walkable too.

Unfortunately our nearly single-minded approach to roadway design makes bicycle commuting difficult - if not down right dangerous - for far too many Americans. But there are many examples of communities which have made a conscious choice to create a more bicycle friendly environment. For example, the residents of Davis, California have reshaped their community in ways which allow 20% to 25% of all vehicle trips to be made by bicycle. In Groningen, Holland the bicycle commute rate is 50%. But in the U.S., only 1.7% of us commute by bicycle. In this section I will review the benefits of bicycling, the conditions needed to foster this mode of transportation, how to create a plan for improving bicycling in your community, and how to examine proposed development projects for opportunities to preserve and enhance cycling facilities.

BENEFITS OF BICYCLING

When compared to cars and SUV's, getting around by bicycle dramatically reduces air and water pollution, noise, and pedestrian injury while improving the physical and mental health of the cyclist.

No other transportation mode converts energy to locomotion as efficiently as a bicycle. If one compares the calories burned while cycling to gasoline-powered vehicles, then the cyclist gets 1,000 miles per gallon.⁶⁵ This means that bicycling generates far less pollution. For example, if you commute five miles daily by car then you emit more than a hundred pounds of pollution per year into the atmosphere.⁶⁶ With a bicycle, the emission rate is virtually zero.

According to California-based Culture Change, for each meter of width, a bikeway can carry twice as many people as a road designed for passenger cars.⁶⁷ This means half as much loss of forest, wetlands, farms and other resources for accommodating transportation needs. It also means half as much impervious area. In the section on aquatic resource impacts, I explained how

⁶⁵ The Hard Way, Outside magazine, January 2000. Available for viewing at: <http://web.outsideonline.com/magazine/200001/200001hardway3.html>

⁶⁶ See University of California at Santa Barbara Transportation Alternatives Program website at: <http://www.tps.ucsb.edu/bicycle.html>

⁶⁷ Fact Sheet #2: A Positive Alternative - Environmental Restoration and Economic Revival. Culture Change, P.O. Box 4347, Arcata, CA 95518 USA. Available for download at: <http://www.culturechange.org/factsheet2.html>

increasing impervious area translates into a direct and proportional impact to the quality of streams, lakes and other waterways. For parking lots the reduction in impervious area is far greater. Twelve bicycles can fit into the space needed to park a single car.

As will be seen in the traffic chapter, cars and other vehicles generate substantial noise which can lower property value and harm public health. A bicycle, of course, is silent. The traffic chapter of this book also shows how unsafe our roadways have become, particularly as traffic volume increases on residential streets. Bicycles poses far less of a threat to pedestrians and other vehicles.

The health benefits of bicycling are, of course, substantial. Commuting by bicycling burns nearly 500 calories per hour. Employers who encourage bicycle commuting report fewer sick days, lower health care claims, and productivity increases. Regular bicycling can cut the likelihood of heart disease in half.

THE NEEDS OF BICYCLISTS

Safety is the paramount issue when considering the needs of bicyclists. In 1999, 750 bicyclists were killed and another 51,000 were injured by cars and trucks in the United States. As traffic volume and speed increases bicycling becomes increasingly difficult along a roadway, especially those lacking a wide, dedicated bike lane. In *Bicycle Facility Selection: A Comparison of Approaches* a procedure is presented for assessing the need for bicycle facilities based upon volume and speed.⁶⁸ This procedure indicates that conditions for bicyclists are generally good when:

- road lane width is at least nine feet;
- most cars and other vehicles are traveling at a speed of less than 30 mph, and
- traffic volume does not exceed 1,000 vehicles per day (vpd), which is equivalent to the traffic generated by about a hundred homes..

When speed and volume rises above 30 mph and 2,000-3,000 vpd than a bike lane is needed to keep cycling a safe, enjoyable experience along a road. Above 35 mph or 3,000 vpd than a bike lane separated from traffic is needed.

PLANNING FOR BICYCLING

In Groningen, Holland, where 50% of the population commutes to work on bicycles, there are 10,000 miles of bike paths. In New York state, which is three times the size of Holland, there are

⁶⁸ *Bicycle Facility Selection: A Comparison of Approaches* is available for download from the University of North Carolina Highway Safety Research Center website: <http://www.bicyclinginfo.org/pdf/bikeguide.pdf>

just 250 miles of bike paths.⁶⁹ Davis, California has come to be known as the bicycle capital of the U.S. Davis has earned this reputation because of the excellent bicycle planning and implementation advocated by its citizens. Over time, any community can do the same. Each development project offers a vital opportunity to create another segment of bicycle infrastructure. But to function efficiently infrastructure development must be guided by an overall plan.

The primary source of bicycle infrastructure funding is the federal Transportation Equity Act for the 21st Century (TEA-21), which replaced the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. TEA-21 provided \$3- to \$4-billion for bicycling infrastructure planning and improvements for the period of 1998 to 2004. TEA-21 is now up for reauthorization as TEA-3. One of the best sources of information on bicycle facility planning is the [Bicycle Friendly Community](#)⁷⁰ program sponsored by the League of American Bicyclists. Other valuable information sources include: [Community Assessment Tools](#) developed by the National Center for Bicycling & Walking⁷¹ and the [Rails-to-Trails Conservancy](#)⁷²

SPECIFIC DEVELOPMENT PROJECTS & BICYCLING OPPORTUNITIES

Does a proposed development site adjoin an abandoned railway? Does the site contain an old road favored by mountain cyclists? Will the project take place along a road frequented by cyclists? If the answer is yes to any of these questions then the project may offer an opportunity to preserve and enhance bicycling opportunities. And, of course, there are a number of other possible scenarios in which development might improve a network of bike paths.

Each new development project can provide a valuable opportunity to improve bike trails and other low-impact transportation modes. An excellent guide on this topic is the Florida *Bicycle Facilities Planning and Design Handbook*.⁷³ The Florida handbook can help you evaluate the soundness of proposed bike trails or to develop your own proposal for incorporating bicycling facilities into project plans.

⁶⁹ The Hard Way, Outside magazine, January 2000. Available for viewing at: <http://web.outsideonline.com/magazine/200001/200001hardway3.html>

⁷⁰ For more information on the Bicycle Friendly Community Program, contact the League of American Bicyclists at: 202-822-1333; info@bicyclefriendlycommunity.org; League of American Bicyclists, 1612 K St. NW, Suite 800, Washington, DC 20006; <http://www.bicyclefriendlycommunity.org/index.htm>

⁷¹ The National Center for Bicycling & Walking can be contacted at: 1506 21st Street NW, Suite 200 Washington, DC 20036, 202.463.6622, info@bikewalk.org, <http://www.bikewalk.org>

⁷² Rails-to-Trails Conservancy, 1100 17th Street, 10th Floor, NW, Washington, D.C. 20036, (202) 331-9696, greenways@transact.org, <http://www.trailsandgreenways.org>

⁷³ The *Bicycle Facilities Planning and Design Handbook*, published by the Florida Department of Transportation and available for download at: http://www11.myflorida.com/Safety/ped_bike/handbooks_and_research/April%202000%20update.pdf

The applicant should be encouraged to modify their plans to incorporate these opportunities. The encouragement could take the form of changes to local zoning and subdivision regulations requiring bike path improvements. A system could also be established through which the applicant receives benefits, such as increased or bonus density, in exchange for bike path improvements.

Local governments routinely scrutinize proposed development projects for traffic impacts. Rarely though are impacts to bicycling considered. The publication previously mentioned, *Bicycle Facility Selection: A Comparison of Approaches*, presents a procedure for assessing the suitability of a road for bicycling.⁷⁴ The procedures set forth in the publication can also be used to assess how the traffic generated by a proposed development project will impact bicycling along affected roads.

Traffic engineers routinely assess the impact of proposed development projects on congestion using a procedure known as Level Of Service or LOS. This procedure is explained in detail in the section of this book on traffic. LOS ranges from A to F, with A being free flowing traffic with virtually no delay while F is grid lock. Generally an LOS of C is considered acceptable for rural roads and D is okay for urban conditions.

In *Bicycle Facility Selection* a level of service procedure is also employed. To illustrate how this procedure might be applied to an existing road adjoining a proposed development site, let's say the road has two lanes, each 11-feet in width. These are the "travel" lanes or the lanes in which cars, trucks, and buses travel within. Let's say a bikelane five feet in width adjoins both sides of the road and is separated from the travel lanes by a painted stripe.

If most of the car and truck traffic travels at a speed of 30 mph and the volume is about 2,000 vpd (equivalent to the traffic generated by 200 homes), then the procedures presented in *Bicycle Facility Selection* says that the bicycling LOS is B. If a proposed development project adds another 700 houses and increases traffic volume from 2,000 vpd to 9,000 vpd then LOS drops to D. However, if the applicant agreed to add separated bike lanes to both sides of the road, along the entire length affected by the increased traffic volume, then LOS would remain at B.

Again, this sort of analysis is seldom practiced when a development project may impact roads with heavy bicycle use. This does not mean such an analysis should not become common place; just that you should expect resistance from conventionally-minded development-review officials.

⁷⁴ *Bicycle Facility Selection: A Comparison of Approaches* is available for download from the University of North Carolina Highway Safety Research Center website: <http://www.bicyclinginfo.org/pdf/bikeguide.pdf>

Chapter 7: Community Atmosphere

No, this section is not more on air quality, but the atmosphere of a neighborhood, a main street, a town, a valley, and a host of other locales people regard as special. At times “atmosphere” can be a difficult quality to define. For example, many small town residents cherish the atmosphere of their locale. But these same residents may have difficulty saying by how much the area could grow before losing its small town atmosphere. If instead residents are asked what it is about the town they like then you’ll hear answers such as: friendly people, little traffic congestion, frequently meet friends and other acquaintances while shopping, good service and friendly staff at local businesses, low taxes, and so forth.

Neighborhood atmosphere is important of course, not just in a small town. Neighborhoods within a large city can have their own unique atmosphere. Some people value neighborhoods that are close to restaurants, theaters, museums, or other attractions. Other neighborhoods may have an atmosphere attributable more to those who live there than what’s nearby, such as blocks where most residents are artists or work at a nearby hospital. Other neighborhoods are dominated by people from a particular ethnic, cultural or religious background. In neighborhoods of moderately priced homes young families may dominate. In the evening you’ll see lots of people out with strollers or walking older kids to a tot lot.

It’s not just residential areas which have a unique atmosphere. A commercial area may possess this quality as well. The best example is a historic main street. For many towns, main street was the primary commercial area for much of the town’s history. Local government was located in a town hall and a courthouse situated on main street. Most of the doctors, lawyers, accountants and other professionals had their offices on main street. And main street was where people went to shop and dine.

Preserving the atmosphere of a place in the face of rapid growth can be quite challenging. Building a shopping center or big box store on the outskirts of town may draw away many of those who used to shop on main street. The main street merchants must then adjust the goods and services they offer in hopes of filling niches missed by the new competitors.

While preserving atmosphere may be challenging, it’s not impossible. In fact you can find lots of success stories on websites such as the National Main Street Center of the National Trust for Historic Preservation: <http://www.mainstreet.org/>.

Preserving the atmosphere of a neighborhood, a small town, or any other place is a matter of shaping growth management policies and laws so building occurs at a pace and in a manner conducive to the atmosphere desired by local residents. The first step is to clearly define what it is that creates the atmosphere residents cherish, which is best done by talking directly with residents either through door-to-door or phone surveys, focus groups, or other processes such as the charrettes described in Part III. From these interactions one might learn that the key element

of neighborhood atmosphere is quiet and safe streets. If this is the case then traffic calming and other measures presented in the chapter on traffic may be sufficient to preserve neighborhood atmosphere. While there may not be much one can do to ensure that small town residents stay friendly, the growth management measurements covered in Part II could increase the likelihood of managing the rate of population increase along with the design and layout of new construction.

Chapter 8: Crime

In 2002, more than 23 million crime victimizations occurred in the United States.⁷⁵ Some estimates place the cost of crime to victims at \$250 to \$500 million per year in the United States.⁷⁶ As of 1999, U.S. annual expenditures for police, courts, and corrections totaled \$146 billion.⁷⁷ Suffice to say crime exerts a serious quality of life impact on far too many Americans.

But what does crime and development have to do with one another? Actually, quite a bit. As will be shown in the review of research below, if development substantially increases the volume of traffic on a residential street then crime rates may rise. New neighborhoods can be designed in ways that greatly increase the number of eyes watching public spaces, which is an extremely effective way of deterring crime. And if increases in population are not matched by an equivalent increase in the number of police officers, then response times may slow considerably.

The perception of rampant crime has a significant effect upon quality of life. It may discourage people from taking an evening jog or stroll through their community or cause parents to keep their children indoors. Ironically, while there seems to be a widespread perception that crime has been increasing, it has actually declined over the past decade. In 1994, 25% of all households experienced crime. The percentage has dropped steadily since then with 15% of households victimized as of 2002.⁷⁸

In some respects crime has become a hinderance to the implementation of Smart Growth measures. A study conducted in Phoenix, Arizona found that the perception of crime was a significant barrier to infill development. Conversely, many gated communities are built in remote, rural areas to avoid densely-populated areas thought to be crime ridden. The perception that high-density and multifamily housing are synonymous with high crime areas can make it difficult to build at densities where bus service and other mass transportation facilities become economical.

⁷⁵ *Criminal Victimization in the United States, 2002 Statistical Tables*, available for download at: <http://www.ojp.usdoj.gov/bjs/pub/pdf/cvus02.pdf>

⁷⁶ Social Factors Cause Crime, by Ed Rubenstein, in *Crime*, published by Greenhouse Press, Inc., San Diego, CA.

⁷⁷ Table 1.2, in *Sourcebook of criminal justice statistics Online* available for viewing at: <http://www.albany.edu/sourcebook/pdf/t12.pdf>

⁷⁸ Table 3.30 in *Sourcebook of criminal justice statistics Online* available for viewing at: <http://www.albany.edu/sourcebook/pdf/t330.pdf>

The causes of crime are complex and far beyond the scope of this book. But poverty, lack of educational and employment opportunities certainly play a major role. Of course there are many factors which reduce the rate of crime: police presence, probability of punishment, low unemployment rates, availability of affordable housing, access to good schools, and a host of other factors.

Growth management can play an important role in keeping crime rates low. Following is a brief, limited review of scientific research relevant to crime/growth-management relationships.

North Carolina University researchers looked at how street layout (accessibility) in Raleigh affected the rate of property crime (bicycle theft, auto theft, theft from autos, property theft, willful damage, and breaking-entering).⁷⁹ The researchers found that crime occurs more often in areas with easy road access, especially where commercial land uses dominate. Areas with cul-de-sacs, traffic calming, and other features inhibiting rapid vehicle movement tended to have a lower rate of crime. They also found that the risk of property crime increased as the number of homes on a street increased, which expands the opportunity to commit crime. The risk of property crime was lower on streets where most of the homes were owner-occupied.

The lower property crime rate on streets dominated by owner-occupied homes is likely due to several factors. It may be more likely that residents know their neighbors in areas where most homes are owner-occupied. This may foster a stronger sense of community which makes it more likely neighbors will look out for one another. In these communities strangers may stand out more distinctly and residents may be more likely to challenge and/or report suspicious activity. Also, property maintenance may be better in owner-occupied neighborhoods. Well-maintained properties sends a message that the owners care about their residences.

The link found in the Raleigh study between high housing density and elevated crime rates is not universal. Unfortunately, a common perception exists that high residential density equals a high rate of crime. This misperception motivates some local decision-makers to oppose multifamily housing and other higher density residential types. The relationship between housing density and crime was studied in the City of Irving, Texas, which is located adjacent to Dallas-Fort Worth.⁸⁰ The researchers found that high crime rates correlate better with socio-economic factors as opposed to housing density. Specifically, the researchers found:

“high crime rates tend to be associated with high poverty rate and unemployment rate, low education attainment, and large household size.”

⁷⁹ Exploring accessibility versus opportunity crime factors, *Sociation Today*, Vol 1, No. 1, available for viewing online at: <http://www.ncsociology.org/sociationtoday/raleigh.htm>

⁸⁰ See *The Real Picture of Land-Use Density and Crime: A GIS Application* available online at: <http://gis.esri.com/library/userconf/proc00/professional/papers/PAP508/p508.htm>

The Irving study also showed that some crimes tend to be particularly high with specific land use types. For example, auto theft rates were highest in commercial areas, especially at malls and other shopping centers. An area dominated by high-income residences and warehouses also had a high auto-theft rate. The researchers theorized that the combination of expensive cars, warehouse pickup trucks and low population density accounted for the high auto theft rate. Burglary rates were high in residential areas dominated by professionals with high-end homes, where there are relatively few people around during the weekday. Again, overall crime rates are not likely to be significantly higher in high density or multifamily dwellings unless area residents are among the more socio-economically disadvantaged.

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

In recent years Crime Prevention Through Environmental Design (CPTED) has arisen as a new approach to protecting homes, neighborhoods and businesses. CPTED consists of four complimentary strategies: Natural Surveillance, Natural Access Control, Territorial Reinforcement and Maintenance.

Natural surveillance consists of measures which make it harder for criminals to hide. In other words, to reach homes intruders must pass through areas where they are clearly visible to neighborhood residents. For example, walls are kept low or designed with openings so they provide poor hiding places. Through natural access control, visitors are discouraged from entering onto private areas through measures such as gateways, low walls, landscaping, sidewalks, and street design. Territorial reinforcement emphasizes where public and private spaces meet. The owners of private spaces are encouraged to exercise control over their area by challenging intruders. Good maintenance of a home or community spaces indicates that residents care and are more likely to notice and challenge intruders when compared to those who have allowed their surroundings to deteriorate.

CPTED does not eliminate crime within a neighborhood but it can dramatically reduce the likelihood of theft and other victimizations. One of the best guidance documents on CPTED is that developed by the Prince William County, Virginia police department⁸¹. Following are measures presented in the portion of the Prince William document pertaining to neighborhoods consisting of single-family detached homes.

- Reliance upon measures such as video cameras may create an unnecessary sense of fear among neighborhood residents. Instead consider the following measures which are just as effective and do not instill a sense that one lives in a high-crime area;
- Avoid landscaping that might create blind spots or hiding places.

⁸¹ *Crime Prevention Through Environmental Design: A guide to safe environments in Prince William County, Virginia* can be viewed at: <http://www.pwcgov.org/docLibrary/PDF/002035.pdf>

- Centrally locate open green spaces and recreational areas, so that they are visible from nearby homes and streets.
- Use pedestrian scale street lighting in high-pedestrian-traffic areas to help people recognize potential threats at night.
- Limit access without completely disconnecting the subdivision from adjacent subdivisions.
- Design streets to discourage cut-through or high-speed traffic.
- Install paving treatments, plantings and architectural design features, such as columned gateways, to guide visitors to desired entrances and away from private areas.
- Install walkways in locations safe for pedestrians, and keep them unobscured.
- Design lots, streets and homes to encourage interaction between neighbors.
- Accentuate entrances with the subdivision name, different paving materials, changes in street elevation and architectural and landscape design.
- Clearly identify homes with street address numbers that are a minimum of three-inches high and reflective at night.
- Define property lines with post and pillar fencing, gates and plantings to direct pedestrian traffic to only desired points of access.
- Maintain all common areas to very high standards, including entrances, esplanades and rights of ways.
- Enforce deed restrictions and covenants in addition to all county codes.

Following are recommendations from the Prince William County CPTED document for multifamily (townhouses/apartment) communities:

- Design buildings so that the exterior doors are visible to the street or neighbors.
- Use good lighting at all doors that open to the outside.
- Install windows on all four facades of buildings to allow for good visibility.
- Assign parking spaces to residents. Locate the spaces next to the residents' unit but do NOT mark with the unit number. This makes unauthorized parking easier to identify and less likely to happen.
- Designate visitor parking.
- Make parking areas visible from windows and doors.
- Adequately illuminate parking areas and pedestrian walkways.
- Position recreation areas - pools, tennis courts, club houses and playgrounds, to be visible from many of the units' windows and doors.
- Screen or conceal dumpsters, but avoid creating blind spots and hiding places.
- Build elevators and stairwells in locations that are clearly visible from doors and windows.
- Centrally locate elevators and stairwells where many users may observe them.
- Allow shrubbery to be no more than three-feet high for clear visibility in vulnerable areas.
- Locate buildings so that the windows and doors of one unit are visible from another.
- Construct elevators and stairwells to be open and well-lighted, not enclosed behind solid walls.

- Centrally locate playgrounds where they are clearly visible from units, but not directly next to parking lots or streets.
- Keep balcony railings and patio enclosures less than 42-inches high and avoid using opaque materials.
- Define entrances to the site and each parking lot with landscaping, architectural design or symbolic gateways.
- Block off dead-end spaces with fences or gates.
- Discourage loitering by nonresidents and enforce occupancy provisions.
- Use devices that automatically lock upon closing on common building entrances.
- Provide good illumination in hallways.
- Allow no more than four apartments to share the same entrance (individual entrances are recommended).
- Limit access to the building to only one or two points.
- Define property lines with low landscaping or decorative fencing.
- Accentuate building entrances with architectural elements, lighting and landscaping.
- Clearly identify all buildings and residential units using street numbers that are a minimum of three-inches high and well-lighted at night.
- Where possible, locate individually locking mailboxes next to the appropriate units.
- Maintain all common areas to very high standards, including entrances, esplanades and rights of way.
- Prune trees and shrubs back from windows, doors and walkways.
- Use and maintain exterior lighting.
- Strictly enforce rules regarding junk vehicles and inappropriate outdoor storage. Disregard of these issues will make a site appear uncared for and less secure.

The likelihood of crime will be substantially reduced if the provisions presented above are incorporated into the design of multifamily projects. Following is an illustration of the effectiveness of CPTED.

Sarasota, Florida officials experimented with a *Prevention Through Environmental Design* (CPTED) program.⁸² The pilot program focused on a neighborhood where 68% of the businesses had been victimized by crime. Between 1990 and 1996 CPTED measures were applied to the neighborhood and crime dropped by 40%. During this same period crime throughout Sarasota decreased by just 9%. Sarasota now requires that law enforcement officers and planners conduct an CPTED analysis as part of the process for reviewing each new development proposal.

INCREASING NEIGHBOR INTERACTION REDUCES CRIME

Measures which increase the interaction of residents and brings them out of their homes more often also reduces crime rates. For example, communities should be designed with

⁸² See *Design Techniques Reduce Crime Opportunity* available for viewing online at: <http://www.mrsc.org/subjects/planning/crimepre.aspx?r=1>

neighborhood level congregating areas, such as a playground, a picnic area, or just a commons where people can walk their dogs, hold flea markets, and so forth. Community gardens are another example of a neighborhood amenity which could increase interaction, especially in high-density areas where yard space is too small for a garden.

The Trust for Public Land (TPL), known more for preserving farms and forestlands, has become a major advocate of creating open space and recreation areas as an important crime prevention strategy. TPL's website (www.tpl.org) includes the following anecdotal evidence pointing to the importance of this approach:

"In Philadelphia, after police helped neighborhood volunteers clean up vacant lots and plant gardens, burglaries and thefts in the precinct dropped by 90%-from about 40 crimes each month before the cleanup to an average of only four per month. In the summertime, when Phoenix basketball courts and other recreation facilities are kept open until 2 A.M., police calls reporting juvenile crime drop by as much as 55%. But reports of crime go up again in the fall once gymnasiums go back to regular hours. Assistant Parks Director Dale Larsen says the activities-late-night swimming, volleyball, basketball, and dancing-are needed year round, but funding is not available. Compared to other crime-fighting measures, midnight recreation is a bargain. With 170,000 participants in Phoenix, the cost is 60 cents per youth."

FACILITIES PERCEIVED AS POSSIBLY INCREASING CRIME

Occasionally I'll receive a call from citizens concerned about how a proposed corrections facility, halfway house, or treatment center may affect crime rates in nearby areas. In the early 1990s I engaged the services of criminologists and other scientists to determine if these projects were likely to increase crime rates. What these experts seemed to consistently find was no clear cause for concern. For example, we had clients concerned about a juvenile reformatory proposed for construction about a quarter-mile from their neighborhood. It was similar to an existing reformatory. We spoke with people living near the existing facility to find out how it had affected their quality of life. Both new and long time residents said there had not been much affect at all. Several residents said they were aware of occasional escapes but the juveniles were desperate to get out of the area so they never stayed around long enough to cause a problem. We also engaged an expert on juvenile correction facilities who said the same thing about the existing facility and found the design of the proposed reformatory to be quite good.

If you feel that a proposed development project may result in an increase in crime, then I urge you to pursue the actions presented below. Should you find cause to believe that a crime increase is likely, then continue with the actions to identify steps for minimizing the effect.

1. Try to identify several existing facilities closely resembling the proposed project which are situated in areas resembling your neighborhood. Ideally the facilities should be identical in

terms of population, function, layout, proximity to neighborhoods resembling yours, and other relevant factors.

2. Talk with the community affairs or crime prevention officer for each police district in which the similar facility is located. Ask if the neighborhoods adjoining the facility have a rate of crime higher than neighborhoods located elsewhere.
3. If the rate of crime is substantially higher, then talk with the crime prevention officer about what steps can be taken, such as the CPTED steps listed above, to ensure that the proposed facility does not cause a similar crime increase in your neighborhood.
4. If you need to continue the research then contact your state university, colleges, security agencies, and similar institutions to learn if a criminologist or urban planner is on the faculty who has expertise relevant to your concerns. If you find such a professional, then ask their opinion on the impact of the proposed facility upon crime rates in your community. If the professional feels the project may cause an increase in crime, then ask what safeguards they would call for if the project were proposed for a site near their home.
5. When you feel you have identified effective methods for minimizing crime ask for a list of areas where each method has been successfully (and unsuccessfully) applied. Talk with community leaders in each area to gain their perspective on the effectiveness of the crime prevention method. If you find a solution you like then seek the support of the local police or sheriff's department and planning agency for the measure. If necessary, go to the section of this book on *Strategy Options* for additional ways of winning implementation of the solution.

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Chapter 9: Environmental Justice

In a detailed study of hazardous waste risks in Michigan, a researcher found that neighborhoods with low-value houses and low-levels of collective action were exposed to significantly greater risk.⁸³ The researcher felt his findings suggested “*that polluters consider these characteristics when making their siting decisions.*” In other words, impoverished neighborhoods where people tend not to organize against threats are more likely to become the location of hazardous waste sites.

The environmental justice movement arose out of precisely this type of discrimination. To find out how your community stacks up with respect to exposure to hazardous waste and other threats visit the Environmental Defense Fund [Scorecard website](#)⁸⁴.

Both the [Council on Environmental Quality](#)⁸⁵ (CEQ) and the [U.S. Environmental Protection Agency](#)⁸⁶ (EPA) have adopted guidance documents on preventing an environmental injustice through actions regulated under the National Environmental Policy Act (NEPA). Most other federal agencies have also developed environmental justice regulations and guidance documents, such as those on the [Federal Highway Administration’s EJ website](#).⁸⁷

Before any action can be taken which:

- involves the use of federal funds,
- requires a federal permit, or
- some other direct federal involvement

it must be screened for any factor which may cause undue impact to minorities or low-income populations. Specifically, a determination must be made of whether a significant minority or low-income population exists within the impact zone and, if so, whether the action would affect these people differently from the general population. If the analysis shows such an impact then all reasonable alternatives must be considered for resolving adverse effects.

⁸³ Neighborhood Demographics and the Distribution of Hazardous Waste Risks: An Instrumental Variables Estimation, by Ted Gayer, *Journal of Regulatory Economics*; 17(2):131-155, 2000

⁸⁴ <http://www.scorecard.org/>

⁸⁵ http://www.epa.gov/compliance/resources/policies/ej/ej_guidance_nepa_ceq1297.pdf

⁸⁶ http://www.epa.gov/compliance/resources/policies/ej/ej_guidance_nepa_epa0498.pdf

⁸⁷ <http://www.fhwa.dot.gov/environment/ej2.htm>

An excellent resource on the environmental justice aspects of roads, transit and related facilities is *Environmental Justice & Transportation: A Citizen's Handbook*⁸⁸ published by the University of California Institute of Transportation Studies. Another excellent resource is the [Environmental Justice Resource Center at Clark Atlanta University website](http://www.ejrc.cau.edu/Welcome.html).⁸⁹ A number of state agencies have also developed environmental justice programs.

⁸⁸ <http://www.its.berkeley.edu/publications/ejhandbook/ejhandbook.html>

⁸⁹ <http://www.ejrc.cau.edu/Welcome.html>

Chapter 10: Fire

Fire is the largest single cause of property loss in the nation. Over the past ten years, fire has caused \$120 billion in direct damages and much more in indirect losses. Furthermore, each year building fires injure more than 20,000 Americans and another 3,000 die in building fires.⁹⁰

Development can impact a community's ability to prevent fires in two principle ways. First, by placing homes, businesses, and other structures in fire-prone areas without adequate protection measures. Second, by stretching fire protection capabilities beyond reasonable limits.

FIRE-PRONE AREAS

According to statistics on the National Interagency Fire Center website, from 1960 to 2003 there were an average of 133,565 fires which burned an average of 4 million acres each year.⁹¹

Scientists at the U.S. Geological Survey and the U.S. Forest Service have developed a Fire Potential Index which shows that generally the portions of the nation west of the Mississippi are at the greatest risk, though Florida and a number of other eastern states are also at the higher end of the Fire Potential Index.⁹² The issue of wildfire and growth is compounded by the irony that the areas prone to wildfire are also where most people want to live. For example, only 2% of New Mexico lies in fire prone areas yet 80% of New Mexican households are located in these same areas.⁹³

The National Fire Protection Association has developed a *Wildland Fire Risk and Hazard Severity Assessment Form*.⁹⁴ The assessment can be applied to an individual home or a community. The assessment consists of eight categories of factors and 19 specific factors. The rating goes from low hazard to moderate hazard to high hazard to extreme hazard. The eight categories are:

⁹⁰ These statistics come from ISO which provides data services to property and casualty insurance companies. For further detail see the ISO website: http://www.iso.com/studies_analyses/ppc_program/index.html

⁹¹ For further detail visit the National Interagency Fire Center website at: <http://www.nifc.gov/stats/wildlandfirestats.html>

⁹² To view a map showing the Fire Potential Index throughout the nation see the USGS publication available for download at: <http://www.usgs.gov/themes/Wildfire/>

⁹³ *Risk doesn't deter growth in fire-prone areas*, USA Today (2/4/2004), available for viewing at: <http://www.usatoday.com/>

⁹⁴ The *Wildland Fire Risk and Hazard Severity Assessment Form* is contained in *NFPA 1144 Standard for Protection of Life and Property from Wildfire*, which can be ordered from the National Fire Protection Association website: <http://www.nfpa.org/>

- **Means of Access** addresses the likelihood that fire fighting personnel and their equipment can quickly reach a home or community. Specific factors include the number roads leading into and out of a community, road width, whether roads are passable all seasons of the year, the presence of places where large equipment can turn around, and the presence of street signs.
- **Vegetation** addresses the susceptibility of vegetation to fire and the amount of “defensible” space around each building in the community. Grasses and other light vegetation receive the lowest wildfire hazard severity rating with the highest rating going to dense brush, timber, hardwoods, and timber harvest residues (slash). The lowest wildfire hazard severity rating goes to communities where highly-combustible vegetation has been cleared within 100 feet of all buildings. The cleared area reduces the likelihood of fire spreading up to the house and it provides fire fighters with sufficient room to work.
- **Topography** - the steeper the slopes adjoining a home(s) the higher the wildfire hazard severity rating.
- **Additional Rating Factors** - increases the wildfire hazard severity rating if an area: a) has rough topography with steep canyons, b) a history of higher fire occurrence, c) is periodically exposed to severe fire weather and strong, dry winds, and d) how well buildings are separated, which plays a key role in determining the likelihood of fire spread.
- **Roofing Material** - is assigned to Class A, B, or C which are defined by the American Society of Testing Materials⁹⁵ (ASTM) as:

Class A roof coverings are not readily flammable, are effective against severe fire exposures, and do not carry or communicate (i.e., spread) fire.

Class B roof coverings are not readily flammable, are effective against moderate fire exposures, and do not readily carry or communicate fire.

Class C roof coverings are not readily flammable, are effective against light fire exposures, and do not readily carry or communicate fire.

A roof meeting the definition of Class A, usually tile or metal, receives the lowest wildfire hazard severity rating.

- **Existing Building Construction** - a building with noncombustible siding and deck receives the lowest wildland fire risk and hazard severity rating while one with wood siding

⁹⁵ For further detail, visit the ASTM website at: <http://www.astm.org/>

and a wood deck gets the highest rating. Also, a building set back at least 30 feet from slopes of 30% or more is rated safer than one where the separation is less than 30 feet. A slope of 30% rises or falls 30 feet for every 100 feet of horizontal distance.

- **Available Fire Protection** addresses the availability of water for fire fighting, proximity to fire stations, and sprinklers systems. The lowest wildland risk and hazard severity rating goes to communities where fire hydrants are present every 1,000 feet or less and each hydrant can produce a minimum of 500 gallons per minute. For communities lacking a system of fire hydrants the lowest risk and hazard severity rating is assigned where an offsite water source is capable of producing 250 gallons per minute (gpm) or more. Additionally, a higher risk and hazard rating occurs when a home or community is more than a half-mile from a fire station. Finally, structures fitted with a sprinkler system receive a lower risk and hazard rating.
- **Gas & Electric** - the lowest wildland fire risk and hazard severity rating is assigned when all of a community's gas and electric lines are below ground; the highest when both are above ground throughout the community.

A number of states and local jurisdictions have enacted laws requiring special protection measures for development in fire prone area. For example, California requires 30 feet of clearance around buildings in high risk areas along with a roof meeting Class C standards or better. Further detail is provided in the State of California *Fire Hazard Zoning Field Guide*, which can be viewed at: <http://osfm.fire.ca.gov/zoning.html>

A number of other states and localities throughout the United States have adopted measures to minimize the risk of wildfire to their residents. A search of measures in your area can be made using the *National Database of State & Local Wildfire Hazard Mitigation Programs*, sponsored by the U.S. Forest Service, accessible online at: <http://www.wildfireprograms.com/index.html>

FIRE PREVENTION CAPABILITIES

The quality of fire protection services has been rated for more than 45,000 fire service districts in the United States. The rating is called a *Public Protection Classification* (PPC) which is represented by a number ranging from 1 to 10, with 1 being the best quality and 10 equals very poor fire protection service.

The PPC rating is based upon the *Fire Suppression Rating Schedule* published by ISO.⁹⁶ The rating assigned to each fire district is based upon the quality of the following three broad categories of variables:

⁹⁶ Insurance Service Organization (ISO) which provides data services to property and casualty insurance companies. For further detail see the ISO website: http://www.iso.com/studies_analyses/ppc_program/index.html

- the fire alarm and communications system;
- fire department equipment, staffing, training, and distribution of companies; and
- the water supply system.

The *Rating Schedule* contains nearly 80 variables divided among these three categories. The values for each variable are entered into equations for computing the PPC rating for a fire district. To illustrate the simpler of PPC rating criteria, a fire district is assigned a rating of 10 if it lacks both:

- At least one piece of fire apparatus that has a pump with a rated capacity of 250 gallons per minute (gpm) or more under a pressure of 150 pounds per square inch (psi) and a water supply system capable of delivering 250 gpm or more for a period of 2 hours, plus consumption at the maximum daily rate at a fire location; AND
- At least one piece of fire apparatus that has a pump with a capacity of 50 gpm or more at 150 psi and at least a 300-gallon water tank.

So how do PPC rating equate to fire protection in the real world? Well, according to ISO, on average, homeowners in fire districts with the worst PPC rating had twice the losses of those residing in districts with the best PPC rating. Commercial fire losses are three times higher in the districts with the poorest PPC rating when compared to districts rated 1. At the end of year 2000, the PPC rating for 45,504 fire districts broke down as follows:

- 0.1% (42) of the fire districts had the best rating - 1;
- 3% of the districts had the worst rating - 10;
- 34% of the districts had the second worst rating - 9; and
- 23% were rated between 2 and 5⁹⁷.

Insurance companies use PPC ratings to compute fire insurance premiums. An analysis of the benefits of upgrading 839 rural Arkansas fire districts to PPC 7 showed that homeowners in these districts would save an average of \$235 per year per household through reduced property insurance premiums⁹⁸. PPC ratings can be even more significant for commercial insurance rates. A study of where new manufacturing plants located in Georgia in the late 1980s showed that of

⁹⁷ ISO's PPC Program: *Helping To Build Effective Fire-Protection Services*, available for viewing online at: http://www.iso.com/studies_analyses/ppc_program/index.html

⁹⁸ Ibid

11 variables, the fire protection rating exerted the greatest positive influence.⁹⁹ Plant owners rejected those counties with lower PPC ratings to avoid higher insurance rates.

A number of local governments require minimum levels of fire protection service for new development. Frequently, the requirements are part of an Adequate Public Facilities test. Usually the test is in the form of a minimum response time. For example, Prince George's County, MD uses a guideline of a minimum 5.25-minute travel time from the nearest fire station. Columbus, OH requires a four minute fire response time.¹⁰⁰

If a proposed development is beyond these minimum response times, then the applicant may be required to implement a number of mitigation measures. For instance, a sprinkler system may be required for each home or other building, though sprinklers do not substitute for fire apparatus and trained personnel. Instead, sprinklers can put out very small fires. Sprinklers also slow the progression of more intense fires so occupants can escape and to buy the additional time required for the arrival of fire apparatus. The applicant may also be required to take other steps. In rural areas of Prince George's County, MD officials may require the installation of a 30,000 gallon buried water supply tank along every 3,000 feet of roadway.

FIRE QUALITY OF LIFE PRESERVATION CHECKLIST

To minimize the impact of development on the quality of fire protection services in your community:

1. Determine if measures, such as an Adequate Public Facilities Ordinance, are in place to ensure that proposed development will not jeopardize the quality of fire protection services and that the proposed development will be adequately served by these services..
2. If proposed development would cause a decline in the *Public Protection Classification* (PPC) for your community then:
 - a. The developer(s) should be required to cover the cost of measures essential to maintaining the current PPC. Building permit issuance should be delayed until these measures are fully in place; or

⁹⁹ Assessing Development Potential in *Main Street Renewal: A Handbook* edited by Roger L. Kemp, McFarland & Company, Inc.

¹⁰⁰ For further detail on City of Columbus Adequate Public Facility for fire and other services see: <http://www.asu.edu/caed/proceedings97/derodes.html#ABOUTAUTHOR>

- b. If local government has plans to make the necessary upgrades in fire protection services, then building permit issuance should be delayed until these measures are fully in place; or
 - c. Development approval should be denied.
- 3. Development should not be allowed where individual homes or communities would be at a high hazard or extreme hazard from wildland fire.
- 4. Development regulations should require, at a minimum, the roofing materials, setback distances, minimum turnaround areas, and other safety measures specified by the National Fire Protection Association or by the State fire marshal, whichever standards provide the highest degree of protection.

For assistance with any of these quality of life preservation measures, contact Community & Environmental Defense Services at 410-654-3021 or help@ceds.org.

Chapter 11: Historic & Archaeological Resources

The 1966 National Historic Preservation Act set in motion many of our current programs to protect buildings, sites and other resources of historic or archaeological importance. Section 106 of the Act requires consideration of these resources whenever federal action may be involved. “Action” may include projects funded solely or in part by Federal dollars, such as a road built with funds from the Federal Highway Administration. Or it may include projects requiring Federal permits, like those issued for wetland impacts by the U.S. Army Corps of Engineers.

For a resource to benefit from Section 106 protection it must either be on or eligible for the National Register of Historic Places, which is compiled by the National Park Service (NPS). The NPS publication *How to Apply the National Register Criteria for Evaluation*¹⁰¹ presents the following considerations for including a resource on the National Register:

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or*
- B. That are associated with the lives of significant persons; or*
- C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or*
- D. That have yielded or may be likely to yield, information important in history or prehistory.*

Normally, a resource must have achieved significance more than 50 years ago to be considered for the Register. Other resources *NOT* normally considered for inclusion on the Register are:

cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative

¹⁰¹ How to Apply the National Register Criteria for Evaluation is available online at: <http://www.cr.nps.gov/nr/publications/bulletins/nrb15/>

*in nature... However, such properties **will qualify** if they are integral parts of districts that do meet the criteria or if they fall within the following categories:*

- a. A religious property deriving primary significance from architectural or artistic distinction or historical importance; or*
- b. A building or structure removed from its original location but which is primarily significant for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or*
- c. A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building associated with his or her productive life; or*
- d. A cemetery that derives its primary importance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or*
- e. A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or*
- f. A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or*
- g. A property achieving significance within the past 50 years if it is of exceptional importance.*

Once a project is placed on the Register, or deemed eligible, it may receive protection from a variety of possible *adverse effects*. An *adverse effect* is anything which would:

diminish the integrity of the property. Integrity is the ability of a property to convey its significance, based on its location, design, setting, materials, workmanship, feeling, and association.

Adverse effects can be direct or indirect. They include reasonably foreseeable impacts that may occur later in time, be farther removed in distance, or be cumulative. Typical examples of adverse effects are:

- 5. physical destruction or damage;*
- 6. alteration inconsistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties;*¹⁰²

¹⁰² The standards can be viewed at: <http://www2.cr.nps.gov/tps/secstan1.htm>

7. *relocation of the property;*
8. *change in the character of the property's use or setting;*
9. *introduction of incompatible visual, atmospheric, or audible elements*
10. *neglect and deterioration; and*
11. *transfer, lease, or sale out of Federal control without adequate preservation restrictions.*

Section 106 does not necessarily prohibit impacts to historic resources. Instead, it obligates federal agencies to consider all reasonable alternatives for reducing or eliminating adverse effects.

Many states and local governments have their own historic preservation program. To locate programs in your area go to the [NPS Heritage Preservation Services website](#).¹⁰³ These programs may provide further protection for resources on the National Register along with those which are locally significant

If you feel a project may threaten a historic resource then see if it is on the National Register or local listings. Determine if any of these resources are on the development site, adjacent to the site, or sufficiently close that the project might affect the historic feature. These listings may be obtained from the agencies located through [NPS Heritage Preservation Services website](#), the local planning office or a local/state historical society.

Review local records for indications that historic structures or native American sites may occur in the area affected by the project. These records may be available through a state historic preservation office, a local historical society or in the main branch of the local library. Make a note of all archaeologic and historic features found on the site and in the vicinity. Note the specific artifacts found at each site. Also make a note of the name, address, and phone number of the researcher(s) who inventoried each site. Call the researchers to get their thoughts on any significant features that may exist on the development site of concern to you. Ask for the name and number of other historic preservation experts the researcher knows who may be familiar with the site.

Most sites have never been examined by a qualified professional. If you can gain permission to enter the site then consider carrying out your own inventory for the features-artifacts found at other locations in the area. Of course if you come across artifacts you should leave them in-place, undisturbed, and take a few photos. Show the photos to the preservation experts identified above to get their opinion on significance. If they feel the objects could be significant then these experts will know the correct procedures for continuing the investigation.

¹⁰³ http://grants.cr.nps.gov/CLGs/CLG_Search.cfm

Talk to those who live near the site, particularly folks who have been in the area for a long time. Ask if they know of any factor which might make the site significant. Have they or their children ever found arrow-heads, bones, or other artifacts on the site? Do they recall any gravestones, old buildings, or other features? Did anyone famous or important ever live on or visit the site?

Discuss the results of the preceding actions with the researchers identified above. You should also discuss anything significant with local and state historic organization staff or volunteers. If any of these people believe the findings are significant, then ask what authority exists for preserving features which are important from a historic or archaeologic perspective. Ask how preservation measures are initiated.

Talk with the property owner about the features. See if the owner is willing to preserve the features voluntarily. If so, then ask them to enter into a binding agreement that extends to all future owners. Regardless of the outcome of this discussion proceed with the actions listed in the next paragraphs. These actions will put you in a better position if the owner has second thoughts. If a third party is involved, such as a development company, then have a similar discussion with the company CEO.

Try to locate activists who have led campaigns to preserve historic or archaeologic features. The experience these folks have acquired could be crucial to winning your campaign. These activists can be found by contacting local or state historical societies, Native American organizations, or the National Trust for Historic Preservation¹⁰⁴ (202) 588-6000. CEDS may also be able to put you in touch with veteran activists.

Review local, state, and federal laws which may provide protection for historic or archaeologic features. See if these laws can be interpreted in a way that provides the level of protection required for the features of concern to you.

Locate several attorneys who have experience with preservation law. Ask if the law provides the protection you are seeking. If the attorney says yes, then meet with the government officials responsible for applying the law to the site in question. See if they will agree to apply the law as you wish. If they say yes, then go to *Legal Action*, in Part III, to ensure that the law is properly applied.

If it appears that current law does not provide adequate protection for the features, then go to Part III of this book and read through the section *Land Preservation* and *Change the Law*.

¹⁰⁴ Visit the National Trust for Historic Preservation online at: <http://www.nationaltrust.org/>

Chapter 12: Light Trespass

Outdoor lighting is most often an issue when new development causes glare into homes, especially bedrooms, or when rural development reduces the darkness of the sky. Both impacts are known as light trespass or light pollution. Both are also easily avoided and are correctable.

Following are a couple of calls typical of those received by CEDS about light trespass.

I've owned my home for ten years. A new shopping center was just completed nearby. My bedroom is on the side of the house facing the shopping center. To sleep I need to cover my bedroom windows with heavy drapes, yet the light still gets in. During the warmer months I sleep with my windows open; something I really enjoyed. Now I can't do that. I guess I'll need to run the air-conditioning all summer long and board my windows so the light can't get in.

A new housing project was just completed next to my rural home. All my new neighbors seem to have an endless budget for flood lights. And all the floodlights seem to be pointed at my bedroom window. Also, I used to love sitting outside on clear nights to watch the sky. Now there's so much glare that I have to focus on a much smaller portion of the sky to see any stars at all.

The level of illumination causing these complaints and other forms of light trespass may not be measurable on most luminance (light) meters, yet you can read by it and it'll keep you awake, despite drawing curtains or even heavy drapes over windows. But light trespass, including the two examples given above, can be prevented by using lighting fixtures that are properly shielded and adjusted. In fact, a number of local governments around the country have adopted laws requiring that shielding and light adjustment meet specific standards for minimizing light trespass.

Both examples cited above - the shopping center and new residents - were likely using unshielded, poorly aimed lighting fixtures. Everyone would be better off if well shielded and properly aimed lighting was used. The shopping center could be well lighted using less energy. The new residents could illuminate sidewalks and driveways yet enjoy one of the principle benefits of a rural lifestyle - great views of the night sky. And existing residents could continue to enjoy their homes.

Shielding consists of lighting fixture designs which direct light to where it is needed while minimizing the amount of light trespassing into areas where it becomes a nuisance. The old globe style street lamps were poorly shielded. Some of the light illuminated the street and sidewalk, but much of it went into the sky and nearby houses. Newer hooded lights are far more efficient and greatly minimize light trespass.

According to the International Dark-Sky Association (IDA) shielding may consist of reflectors, refractors, louvers, or baffles. These shielding measures make it possible to direct light where it is needed. IDA recommends full cutoff fixtures, which is defined as:

there is no light emitted above the horizontal (no up going light). There should also be not much light (generally < 4%) at angles greater than 75 degrees above the vertical. Such light causes a lot of glare.

For floodlights, IDA recommends that:

If floodlights must be used, they should always have top and side shielding, and be pointed at least 45 ° below the horizontal.

Light trespass can also be minimized through the use of timers and motion sensors to keep lights on only as long as they are actually needed.

The IDA website has a page where you can see numerous examples of well shielded lighting fixtures. This webpage appears at: <http://www.darksky.org/fixtures/fixtures.html> Also, a model ordinance for minimizing light trespass can be found on the following IDA webpage: <http://www.darksky.org/ordsregs/odl-reg.html>

Additional information on light trespass can be found on both the IDA website and the Illuminating Engineering Society of North America (IESNA) website: www.iesna.org. IESNA is the recognized technical authority on lighting.

Chapter 13: Neighborhood Conservation

In the context of this book, neighborhood conservation is intended to preserve those aspects of a residential area from development impacts threatening quality of life. The broader definition of neighborhood conservation includes measures to address problems which have little to do with growth, such as street lighting, crime, and so forth; although one might argue that development has an indirect effect on these issues.

Neighborhood conservation begins by defining what it is about a block or street which residents wish to conserve and enhance. The best way to do this is to talk directly with the residents either through neighborhood meetings, door-to-door surveys, focus groups, charrettes¹⁰⁵, and so forth. In the context of potential development impacts, the neighborhood conservation process should look at questions such as:

- Are there vacant parcels of land adjoining the neighborhood which could be developed? If there are, then who owns parcel and what are their plans? Would they be interested in permanently preserving the parcel? If not would they be willing to commit to limiting development to uses compatible with the neighborhood? If not what uses would current zoning allow on the parcel and if any of these uses are incompatible can zoning or other laws be changed to resolve the conflict?
- Are there any dead-end (cul-de-sac) streets which might be extended to serve more homes or connected to other roads? If yes, how would this affect traffic volume, speed, noise levels, property value, and most importantly, pedestrian safety? If an undue threat may exist how can the neighborhood ensure that the cul-de-sac is not extended or that it is limited in ways that preserve quality of life?
- Is there already a problem with traffic volume, speed, noise levels, property value, and most importantly, pedestrian safety? If yes, then could the calming measures presented below in the traffic section be used to resolve the problem?
- Do neighborhood children play in a nearby stream or other waters? Would further watershed development cause the waters to exceed any of the thresholds described above under Aquatic Resources? Could development improve water quality by eliminating an existing pollution source? Does the local government currently require the use of highly-effective water quality protection measures?
- Are existing park and recreation facilities adequate to meet neighborhood needs? If not, then could development of nearby parcels include an excess of new facilities so the existing deficit

¹⁰⁵ See the discussion of charrette in Part III.

is resolved while providing for the needs of new residents? Or, would development simply increase overcrowding at existing facilities?

Obviously there are many other questions neighborhood residents might raise as they consider the potential implications of nearby development. The earlier these questions are addressed, the better. It is vastly less difficult and expensive to find a solution before a development plan is submitted for a vacant parcel or a road extension is proposed.

Chapter 14: Noise

Sound becomes noise when it detracts from your quality of life. Traffic is the most common cause of noise resulting from development. But a neighborhood may also be disturbed by noise from a variety of other sources:

- cheering and public address systems at nearby sporting events;
- blasting and crushing operations at a mining site;
- aircraft noise, especially near airports;
- back-up beepers and clanging metal during trash collection; and
- a wide variety of other sources.

Sound is the result of a fluctuation in pressure transmitted as a wave through the air (or any other elastic medium, including water).¹⁰⁶ Both the pitch and loudness of noise may be disturbing. Noise is measured in units known as decibels (dB). The decibel scale begins at zero, which is lowest sound level we can perceive. The decibel scale is logarithmic. For example, going from zero to 10 decibels equates to a ten-fold increase in acoustic energy while an increase of 20 decibels translates to a 100-fold increase in sound energy. However, we perceive each 10-fold increase in decibel levels as a doubling of loudness. The Acoustic Wizard¹⁰⁷ website gives the following examples of dB levels for various sounds:

- 0 dB the faintest sound we can hear;
- 30 dB a quiet library or in a quiet location in the country;
- 45 dB typical office space or ambience in the city at night;
- 60 dB a restaurant at lunch time;
- 70 dB the sound of a car passing on the street;
- 80 dB loud music played at home;
- 90 dB the sound of a truck passing on the street;
- 100 dB the sound of a rock band;
- 115 dB limit of sound permitted in industry; and
- 120 dB deafening .

¹⁰⁶ In drafting the description of noise, the author borrowed heavily from Appendix N, of the City of Hayward (CA) General Plan which provides one of the best explanations of this issue I've come across. This document can be viewed at: <http://www.hayward-ca.gov/>

¹⁰⁷ Visit the Acoustic Wizard website at: http://www.rtagroup.com.au/wizard/definition_acoustics.html

In the context of its disturbing aspects, sound is usually reported in the A-weighted decibel (dBA) scale, which gives greater weight to the frequencies we are most sensitive to. The noise level in a library might be 30 dBA while an air conditioner emits 60 dBA. Quiet human speech has a volume of 55 dBA while normal speech occurs at 65 dBA.

Sound levels can vary considerably, even during a very short period of time, which is why sound is usually reported as *Equivalent sound pressure level* or *Leq* for short. *Leq* is an average of the acoustical energy measured over a given period of time. The period may be an hour which is represented by *Leq(1hr)*. Acoustical energy might also be expressed as the sound pressure exceeded for a given period. For example, *L1* is the sound pressure level exceeded 1% of the time during a given period of measurement.

With respect to neighborhood quality of life, the Day/Night Average Sound level, or *Ldn*, is another important unit of measure. In a residential neighborhood sound is most disturbing in the evening and at night when most of us wish to sleep. *Ldn* is a measure of the cumulative noise a neighborhood is exposed to with greater weight given to nighttime noise, occurring say from 10:00 pm to 7:00 am. *Ldn* is typically computed by adding a decibel “penalty” to nighttime noise measures. For example, if a neighborhood has a daytime-evening (7:00 am to 10:00 pm) dBA of 60 and the nighttime dBA is 50, then 10 dBA might be added to the nighttime measurement for an *Ldn* value of 60 dBA.

The Federal Highway Administration (FHWA) has adopted noise standards for interstates and other roads. A number of states and local jurisdictions also have noise standards. For example, a source generating noise cannot cause the sound level inside a nearby home to exceed 45 dBA if the noise is steady or 55 dBA for fluctuating sound levels. Sleep can be disturbed above these levels. Exterior noise levels in residential areas may be limited to an *Ldn* of 55 dB. Noise at the exterior of a home may be perceived inside the home as 12 - 17 dBA lower if the windows are open and 20 dBA lower when windows are closed.

FHWA standards, along with those adopted by many state and local governments, require the use of barriers and other measures to reduce impacts sufficiently to preserve quality of life in residential areas and other noise-sensitive locations. Sound barriers, such as the walls constructed along highways, can reduce noise by 10-15 dBA.¹⁰⁸ A forest measuring 200 feet in depth reduces noise by 10 dBA. For a measure to reduce noise it must intercept the line of sight from the source, say a truck traveling along a highway, and the receptor, like a bedroom window. Also, no any gaps or holes should be present in the barrier which will allow noise to “leak” through.

¹⁰⁸ Highway Traffic Noise - FHWA, available online at: <http://www.fhwa.dot.gov/environment/htnoise.htm>

As stated earlier in this section, traffic is the most common source of noise associated with development. Traffic volume, speed, and vehicle type all affect noise levels. At 2,000 vehicles per hour (vph) traffic noise will sound twice as loud as at 200 vph.¹⁰⁹ Traffic moving at 65 mph will sound twice as loud as at 30 mph. And one truck traveling at 55 mph will sound as loud as 28 cars moving at the same speed.¹¹⁰

Traffic noise can have a significant effect on . A home located adjacent to a major highway may sell for 8% to 10% less when compared to one located along a quiet neighborhood street.¹¹¹ Heavy truck traffic lowers at a rate 150 times greater than cars. This is because at 50 feet heavy trucks emit noise at 90 dBA while car traffic produces noise at a level of 50 dBA.¹¹² An increase in heavy truck traffic may also cause damage to nearby homes due to vibrations transmitted through the earth. While some truck traffic is essential on neighborhood streets (e.g. refuse collection, delivery trucks, and fire engines) an excessive increase in trucks passing through a neighborhood could lower and overall quality of life.

Many local governments restrict activities generating excessive noise to those time when they are least disturbing. For example, Montgomery County, Maryland restricts trash collection to the hours of 7:00 a.m. through 9:00 p.m. at commercial, industrial, and other nonresidential sites located within 500 feet of homes.¹¹³ This regulation was prompted by trash collections as early as 4:00 a.m. at businesses located next to residences. The sound of back-up beepers and dumpster banging was extremely disturbing to nearby residents. The regulation was originally proposed to apply to nonresidential uses within 1,000 feet of a home.¹¹⁴

Noise impact is one of the elements commonly addressed in an environmental impact statement (EIS) for highway projects. Also, some jurisdictions will require an applicant to prepare a noise impact analysis for certain types of development projects, such as a mining operation, a landfill or a sports facility. A noise analysis may also be required for residential projects constructed near existing noise sources.

¹⁰⁹ Highway Traffic Noise - FHWA, available online at: <http://www.fhwa.dot.gov/environment/htnoise.htm>

¹¹⁰ Ibid.

¹¹¹ Highway noise and by J.P. Nelson, *Journal of Transport Economics & Policy*, May 1982, p. 117-138.

¹¹² Residential noise damage costs caused by motor vehicles by D. Haling and H. Cohen, *Transportation Research Records*, Issue 1559, p. 84-95.

¹¹³ See Section 48-21(b) of the Montgomery County, MD Code, which can be viewed online at: http://www.amlegal.com/montgomery_county_md/

¹¹⁴ Montgomery's Trash Pickup Debate, by Judith Valente, The Washington Post, Apr 20, 1978

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Chapter 15: Odor

Development projects which may create odor problems include landfills, transfer stations, livestock confinement operations, and various processing and manufacturing plants. There are also facilities common to many development projects which may be the source of odor such as sewerlines and treatment plants.

Usually odor problems can be controlled. Many activities which formerly caused problems can now be conducted within a large building where negative air pressure and filters are used to prevent offsite odor impacts. For activities which cannot be conducted in doors, other measures are available for reducing odor problems.

For example, hydrogen sulfide can be released from landfills accepting construction and demolition (C&D) waste. This gas, which has the odor of rotten eggs, comes from the decomposition of gypsum (calcium sulfate) wallboard in the wet, organically rich environment of an unlined C&D landfill. Quality of life has been impaired by hydrogen sulfide in homes located up to three miles away from a C&D landfill.¹¹⁵ This and other impacts have caused to decline by 10% within a mile of a C&D facility. But the likelihood of hydrogen sulfide formation can be reduced by excluding wallboard from the landfill. Less reliable solutions would include preventing water from entering the landfill by installing an impermeable cap-liner system or segregating wallboard from wood and other organic material.

If you identify a potential solution, then look for similar facilities where the solution has been applied. Visit the facility to see if you can detect offensive odors. Talk with long time residents to get their take on odor control effectiveness.

¹¹⁵ See the reports on landfills available for download from the [CEDS website](#).

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Chapter 16: Open Space Preservation

If you look at a land use map of the United States then you see that most of the nation is open space - farms, forest, desert, mountains, prairie, wetlands, lakes, and so forth.¹¹⁶ But this is not true for the urban-suburban areas where most of us live. And the pace at which growth is gobbling up our open space is accelerating. In the 1980s we were losing 1.2 million acres of rural land a year, which increased to an annual loss of 2.2 million acres in the 1990s.¹¹⁷

Preserving open space does not mean stopping growth, just growing smarter. In most cases a community can accommodate anticipated growth by concentrating new homes and businesses in a way that minimizes loss of open space and actually reaps more benefits, such as lower taxes. But before getting into *Smart Growth* techniques perhaps it would be helpful to review the benefits of open space, which include:

- much of our food comes from farms'
- farming is an important part of our economy;
- open space is frequently the source of our cleanest drinking water;
- trees and other open space vegetation improve the quality of our air;
- our highest quality waters are associated with undisturbed open space (e.g. forests); and
- open space recreation areas have been shown to reduce urban crime; and
- urban open space also provides residents with limited mobility an opportunity to enjoy and learn of the natural world.

In 1982, 44% of the United States was farmland.¹¹⁸ In 1997, the figure dropped to 41%. According to a study by the American Farmland Trust, we are losing our best, most productive agricultural lands at a rate 30% faster than other open space.¹¹⁹ Most alarming is that 83% of our fruits and vegetables and 63 percent of our dairy products, come from farms in urban-influenced areas.¹²⁰ Conversion of these farmlands to suburbia is pushing agriculture onto marginal lands where, generally, more fertilizers, pesticides, and irrigation is needed and where soil erosion rates

¹¹⁶ To view a map of United States land use visit:

<http://www.epa.gov/ceisweb1/ceishome/atlas/nationalatlas/landusecover.htm>

¹¹⁷ The rate of rural land conversion was obtained from the U.S. Natural Resources Conservation Service website: <http://www.farmlandinfo.org/>

¹¹⁸ Based on data available on the American Farmland Trust website at: <http://www.farmlandinfo.org/fic/census/1997usa.html>

¹¹⁹ See *Farming on the Edge* at: <http://www.farmland.org/farmingontheedge/index.htm>

¹²⁰ Ibid.

may be higher. So our food is coming at a higher cost in terms of dollars and environmental impact.

The Trust for Public Land (TPL) documented the financial benefits of land preservation in their report *The Economic Benefits of Parks & Open Space*.¹²¹ A number of studies have put a dollar value on the water quality benefits of preserving open space. For example, the TPL report described a proposal to develop a 16,000-acre area of open space known as Sterling Forest. The forest provided drinking water for two million New York and New Jersey residents. An analysis showed that a \$160 million treatment facility would be needed to remove the drinking water contaminants resulting from development of Sterling Forest. Instead, an effort lead by TPL and the Open Space Institute raised \$55 million to preserve 90% of the forest and eliminate the need for a new treatment plant - a savings of \$105 million!

OPEN SPACE PRESERVATION TECHNIQUES

The best way to preserve open space is to concentrate growth within and adjacent to existing towns, cities and other population centers. This is the essence of *Smart Growth*. And this approach to growth management truly is smart. Consider the cost of providing public services to a new home at the edge of town compared to one built a mile or two out of town. It would be far more expensive to extend water and sewerlines to the rural home, it would take longer to reach the home by school bus and by emergency service vehicles. All this adds up to more tax dollars to provide services for the rural home when compared to one built at the edge of town.¹²²

Following are the *Smart Growth* techniques for guiding development to existing population centers. One of the best sources for further detail on many of these techniques is the American Farmland Trust Farmland Information Library <http://www.farmlandinfo.org/> Another great resource is *Getting to Smart Growth: 100 Policies for Implementation* which is available for download from the Plannersweb at: <http://www.smartgrowth.org/pdf/gettoss.pdf>

Acquisition

Occasionally a tract of land is considered so important that some government or private entity will purchase it. But acquisition of proposed development sites is rare. Acquisition funds are usually quite limited and lands targeted for development are frequently more expensive to acquire. It may cost two- to ten-times as much to acquire a development site compared to other lands. Nevertheless, over the past decade citizen success in winning acquisition of development sites has become more common. For further detail see *Land Preservation* in Part III of this book.

¹²¹ To view the report *The Economic Benefits of Parks & Open Space* and the many other resources available from The Trust for Public Land visit: www.landvote.org

¹²² For further detail see the Sierra Club report *Sprawl Costs Us All* available for download at: <http://www.sierraclub.org/sprawl/report00/sprawl.pdf>

Clustering

One way to reduce loss of open space is to require clustering of rural development projects. In other words, rather than allowing, say, 20 five-acre lots on a 100-acre tract of land, the homes must be clustered on 20 one-acre lots, thereby preserving 80% of the site as open space.

Clustering is not the most effective way to preserve working farms. For a farm to remain viable, a minimum acreage is needed so fields can still be worked economically. Clustering can fragment agricultural land in a way that renders the remainder unsuitable for family farming. Some local governments also give a bonus density for clustered projects. For example, if the unclustered density is one house per five acres then the clustered density might be one per four.

In the previous discussion of septic systems mention was made of the relationship between water quality and septic system density. Care must be taken to ensure that clustering does not result in a concentration of septic systems in areas where water quality may be threatened, such as near existing homes served by shallow wells or waters that are sensitive to nutrients and bacteria.

Conservation Easements

If a property owner wishes to preserve their land but they don't want to give up title, then granting a conservation easement is one option. The owner signs an agreement in which they give up the right to develop their property, usually in exchange for a reduction in taxes. The agreement may be for a specific period, such as 10 to 25 years, or in perpetuity. The agreement will usually name a third party to enforce the terms. Frequently, a land trust is involved in conservation easements. To learn of land trusts in your area visit the Land Trust Alliance website at: <http://www.lta.org/>

Designated Growth Area

The idea behind this *Smart Growth* tool is to designate areas where growth will be concentrated and other areas to remain rural. On the west coast designated growth areas are established with Urban Growth Boundaries. In Maryland they are called Priority Funding Areas. Regardless of the terminology used, they grew out of water and sewer service areas.

Good designated growth areas call for densities of at least four housing units per acre, while no more than one unit per 20 acres is permitted in rural areas. The boundary is usually established through the master plan or comprehensive land use planning process and implemented through zoning. Normally, sufficient land is included within the designated growth area to accommodate anticipated development needs for the next 20 years.

Discourage New Roads

Growth tends to follow the construction of new roads. This is because people prefer to live where traffic congestion is minimal, so extending a road into undeveloped areas can dramatically accelerate the pace of growth. This phenomenon is called *induced growth*. Smart growth principles dictate that public funds previously used to extend roads into rural areas be used

instead to improve transportation within existing developed areas.¹²³ If a road must pass through a rural area, and the intent is not to accelerate growth, then measures must be in place to ensure that sprawl will not follow. These measures may include downzoning, TDRs or PDRs, and so forth. But even with these measures, extending a new road into a rural area can lead to tremendous pressure on local decision-makers to allow development. For example, imagine a situation in which a major employer proposes to move to your area, but only if they can upzone a site along the new road. And, oh by the way, could they also get another large chunk of land upzoned for residential development to house their employees?

Forests Conservation

If you can gain access to the site, then look for any factors which may cause existing forest to be of unique importance. Look for *old-growth forest* (more than 150 years old), trees that are unusually large, or forests that support unique wildlife populations. Some local jurisdictions and states have mandated the protection of existing forests.¹²⁴ If such a mandate exists in your area, then determine if the project fully complies with a strict interpretation of forest conservation requirements. If forest conservation is not mandated in your area, then consider lobbying for the enactment of such a law (*See Change the Law in Part III of this book*).

Limited Development Venture

The purpose of this option is to do just enough development on a site to cover the cost of acquisition and other expenses. For example, let's say a hundred acre farm could be developed as 20 five-acre lots under current zoning. If we clustered the 20 houses on one-acre lots then 80% of the site could be saved. But maybe we only need to sell five houses to generate the income needed to cover site acquisition and development costs. If the five lots are an acre each then the remaining 95% of the site could be preserved in a natural state. To learn more about how a limited development venture might work in your area contact the [American Farmland Trust](#), the [Land Trust Alliance](#), or [The Trust for Public Land](#).

Public Subsidies

One study showed that each new home costs taxpayers \$20,000 to \$30,000.¹²⁵ About half of this is for schools and the rest is for water, sewer, roads, and other public services. In the past, tax dollars would be used to cover much of the cost for the new schools, roads, sewers, and other services necessitated by rural development. Under *Smart Growth* public subsidies are only used to foster more compact development - a minimum of four or five housing units per acre. This

¹²³ For further detail on how road construction accelerates loss of open space see the TPL report *Taking the High Road*, which is available for download at http://www.tpl.org/tier3_cd.cfm?content_item_id=10863&folder_id=175

¹²⁴ For an example of a State mandated forest conservation program implemented at the local level view: <http://dnrweb.dnr.state.md.us/download/forests/fca.pdf>

¹²⁵ *Better Not Bigger* by Eben Fodor, New Society Publishers.

provides a strong disincentive to rural sprawl and encourages development within or next to existing towns and other population centers. If a developer wishes to create a new bit of rural sprawl, then they must pick-up the cost - not the taxpayers.

Purchase or Transfer of Development Rights

PDRs and TDRs are two closely related approaches for preserving open space. Through PDRs a government agency purchases the development rights associated with a tract of land. The amount paid is usually the difference between the appraised value if sold to a development company minus the value of the land if it were sold to a farmer. The source of government funds used to purchase development rights may come from general revenue or specialized taxes, such as on the transfer of land. About 400,000 acres of land have been preserved in the United States through PDRs.¹²⁶

Through TDRs developers are either encouraged or required to purchase development rights from owners of rural land. The development right is then transferred to a parcel within a designated growth area. Some jurisdictions allow increased (bonus) density when TDRs are used. Fifty local jurisdictions (counties-towns) in 17 states have enacted TDR programs.¹²⁷ Nearly 90,000 acres have been protected nationally, though half of the preserved acres are in Montgomery County, Maryland.¹²⁸ TDRs work best when development activity is high and their use is mandatory. But care must be taken to protect existing residents within designated growth areas (receiving zones) from the impact of excessive growth - allowing development to outstrip public services.

Right-To-Farm Programs

A key to preserving rural lands is to help farmers keep suitable lands in production. If residential development sprawls into farming areas then conflicts build. Newcomers complain about odors and noise as well as getting stuck behind slow moving farm equipment. A number of jurisdictions have enacted right-to-farm laws which protect farmers from complaints or lawsuits regarding normal agricultural practices.¹²⁹

Zoning

Through zoning local government regulates what uses may be made of a parcel of land. The intent is to protect adjoining property owners from incompatible uses and to increase the

¹²⁶ The acreage of lands protected through PDRs is based upon a factsheet prepared by 1000 of Minnesota and available for viewing at: <http://www.1000farm.org/lctools4.htm>

¹²⁷ See the American Farmlands Trust factsheet on TDRs at: <http://www.farmlandinfo.org/>

¹²⁸ Ibid.

¹²⁹ For further detail see the American Farmlands Trust Right-To-Farm factsheet available for download at: <http://www.farmlandinfo.org/>

likelihood that a community grows in a way which enhances overall quality of life. The zoning tools most important to open space preservation are density or minimum lot size. To preserve farmland, AFT suggests no more than one house per 20 acres, though some agricultural preservation zones in the west allow as little as one house per 640 acres (a square mile).

Zoning must be coupled with other measures to preserve working farms. For many agricultural operations, farm fields must be of a certain minimum acreage for the operation to remain viable. Downzoning farmland to one house per 20 acres could result in a transformation of the countryside from pasture and cropfields to expensive houses on big lots (McMansions). The most effective preservation programs make it possible for farmers to keep their land in production without unduly sacrificing the equity in their land.

For obvious reasons, a proposal to downzone land from, say, one house per acre to one per 20 acres will meet with considerable opposition from property owners and the real estate-development community. The likelihood of a successful downzoning effort increases if some form of compensation can be provided to property owners, such as reduced property taxes or cash payments through programs such as transfer or purchase of development rights (TDR or PDR).

PRESERVING A POTENTIAL DEVELOPMENT SITE

In the remainder of this chapter I will explain how to research preservation options for a farm, a vacant lot, or some other tract of land. But first allow me to explain a problem of timing with several of the preservation techniques described above.

It can take six-months to two-years to get a preservation technique in place at the local level. Unless the necessary legal authority is already established, several of these techniques may not be of much help where development of a site is imminent. The trouble will be that the law enacting the preservation technique will likely grandfather (exclude) any project which is already in the review process. However, you may succeed in structuring the law so it applies to all projects which have not yet reached the final stage of the process, usually building permit issuance. See *Chapter 41: Changing The Law* for further advice on winning the adoption of an open space preservation technique.

The purpose of the land preservation research is to determine:

- who owns the site;
- if the site has already been preserved;
- how likely it is that the site will be developed;
- what factors make the site attractive for preservation;
- what preservation options are most applicable to the site;

- how to find a solution which is attractive to the land owner; and
- how to negotiate with the owner.

Following is a description of how to carry-out this research.

Determine Who Owns The Property

In some states you can find out who owns property online. To see if this information is online for your area visit the home page for your town, county, or state and look for an assessor's office or an assessments and taxation office.

If ownership information is not online then visit the local land records office, which is usually in a town hall or a courthouse. There should be a set of maps at the office showing deed references - liber (book) and folio (page) numbers - for all the units of land in your local jurisdiction.

Ask the land records office staff to help you pull the deed for the property. To do this they will need the liber and folio number so be certain to write it down.

If the property is owned by a development or land speculation company then preservation is likely to be considerably more difficult and expensive. But don't give up. We have helped a number of groups around the country preserve sites already in the hands of developers.

Deed Restrictions That May Limit Development

The deed will tell you who currently owns the property, whom they purchased it from, the liber and folio number for the prior deed, how much was paid for the land, when the transaction occurred, the number of acres purchased, the boundaries of the tract as defined by metes and bounds, any restrictions (covenants) on the use of the property, rights-of-way, and other information. Occasionally, a deed will contain a covenant restricting use of the property, perhaps even precluding development. See if the deed contains anything like this. Look at prior deeds as well. However, finding such a restriction is not necessarily victory. The courts have overturned covenants that are too restrictive or have other legal shortcomings. If you find a restriction in the deed then get an opinion on how effectively it preserves the site from a good land use or title attorney. See *Chapter 40: Legal Action* for advice on finding attorneys.

Likelihood of Development

Ask the land records staff how you can determine if any easements or other agreements have been filed on the property. Perhaps the owner sold development rights through a PDR/TDR program or granted a conservation easement.

Next, visit the local planning and zoning office and:

- Check the applicable master plan to see what uses are called for on the site. Perhaps it is already slated for preservation or a major new road may be shown passing through the site. Either way, this information is critical to preservation.
- Take a look at other planning documents, such as those for transportation, historic resources, green space, and so forth. Do any of these plans single out the site for any reason?
- See what the water and sewer plan shows for the site. Does it already have public water and sewer service or is the site slated to receive service? The availability of public water and sewer will inflate the value of the property.

Find out what zoning applies to the site. If you are lucky zoning will limit development to a few houses on the property while a minimum of 80% of the site must be preserved as open space. If you are not so lucky then the site will be zoned for heavy industrial uses, which means it will be very expensive to purchase, difficult to rezone, and a number of not so pleasant uses could be made of the land.

Ask to speak with the planner familiar with development activity in the vicinity of the site. Inquire about any proposals made to develop the site. If there are active applications then learn where they stand in the process and go through the steps suggested in *Chapter 1: The Easy Solution*. If there are not any current applications but prior, inactive proposals are on file, then ask why they have not progressed further. There may be some aspect of the site which restricts development, such as a lack of adequate road access or soils which do not meet septic system requirements (won't perk). Ask if there are any requests to rezone the property. Also, ask if the property might already be preserved through easements or other mechanisms and how one would go about checking on this. Finally, ask the planner's advice on how they would proceed if they wanted to preserve the site or at least the most valued features on the property.

Factors Elevating the Need to Preserve the Site

The likelihood of preservation increases if you can show that the site is uniquely important or that developing the site would have unusually severe negative impacts.

Factors Contributing To Unique Importance: If you think the property might be valuable because of the plant or wildlife it supports then contact your state fish, wildlife, conservation, or natural resources agency to see if they have any data supporting the value. Begin with the unit of the agency overseeing threatened and endangered species. To locate this unit visit the following NatureServe website: <http://www.natureserve.org/visitLocal/> For further detail on this topic see *Chapter 26: Wildlife*.

If you feel the site is of historic significance then contact your local or state historic preservation officer (SHPO) for documentation. To locate the SHPO for your state visit the National Conference of State Historic Preservation Officers website at:

<http://www.ncshpo.org/stateinfolist/> For further detail on this topic see *Chapter 11: Historic & Archaeological Resources*.

Contact the local recreation and parks agency to ask if there is a deficit in the area. If there is a deficit then explore their interest in acquiring the site as a new park. For further detail see *Chapter 17: Parks & Recreation*.

Factors Contributing To Unusually Severe Impacts: If the site is composed of highly-erodible soils situated on steep slopes then sediment pollution may be unusually high during the construction phase. The severity of this impact would be accentuated if the site lies above a water supply reservoir. If the site lies in the viewshed of the most famous scenic vista in your area, then development may degrade the aesthetics, possibly costing the local economy revenue from tourists.

Seek Advice from Preservation Groups

Contact land preservation groups active in your area. Begin with national organizations such as:

- American Farmlands Trust www.farmland.org/
- Land Trust Alliance www.lta.org/;
- Nature Conservancy www.nature.org/;
- and The Trust for Public Land www.landvote.org

Numerous local land trusts exist throughout the nation. These organizations were formed to preserve lands ranging from a single parcel to those encompassing thousands of acres. To find a local land trust in your area visit the *Land Trust Alliance* website: <http://www.lta.org/>

As you make contact with land preservation organizations keep in mind that the most valuable thing each can provide is advice. If you were to call an organization and simply ask if they were interested in buying a tract of land, then most will give you a polite no. Instead, say you are looking for advice; not someone to champion the preservation effort for you.

Begin the request for advice with a brief description of the land you hope to save. Ask if there is someone who could give you guidance on preservation options and strategy. If you are linked with such an advisor then summarize what you want to accomplish, why you think the site is worthy of preservation, and ask what suggestions they have. If you peak their interest then they will ask for details. The advisor may even become sufficiently intrigued to serve as a mentor while you work through preservation strategy options.

Negotiating A Solution the Land Owner Finds Attractive

You should have a fairly clear idea of what preservation options are open to you after completing the research described above. Most options will go far more smoothly if you can win the

cooperation of the land owner. To do this you need to come up with preservation options the owner finds attractive. For example, most owners of working farms view their land as their retirement fund. When they can no longer work their farm they will sell the land and use the proceeds for their retirement. Many farmers hate the idea of selling their land for development, but feel they have little choice. An attractive solution would provide the farm owner with income comparable to what they might receive from a development company while preserving a portion or all of the land. Several potentially attractive options were presented earlier in this chapter, such as the *Purchase or Transfer of Development Rights*, sale of an *Agricultural Land Preservation Easement*, a *Limited Development Venture*, or *Acquisition*. Downzoning the property without compensation would not be very attractive to the land owner. It would also be difficult to achieve and ethically undesirable.

Once you have an attractive solution or two then look around for someone who has a good relationship with the land owner or someone whom the owner is likely to view with a bit less suspicion than a total stranger, such as you. Ask this person if they would be willing to request a meeting with the property owner. Land trust staff frequently have extensive experience making this initial contact and can offer valuable advice.

A word of caution is in order here. Early in your first conversation with the land owner ask if they have entered into an agreement to sell their property to someone else. If they have then consult with a good attorney before proceeding any further. Should the owner break the agreement because of your discussions, then you may be exposed to a lawsuit because of tortious interference.

Review the advice offered in *Chapter 37: Negotiate With The Applicant* for suggestions on how to make the discussions with the land owner go smoother. If the land owner feels your solution is not attractive enough, then use the suggestions in *Chapter 39: Lobbying Final Decision-Makers* to see if you can get government to kick in additional funds to make the offer more attractive. And, as always, please don't hesitate to contact me for advice at 410-654-3021 or Rklein@ceds.org. We've supported a number of successful land preservation efforts.

Chapter 17: Parks & Recreation

At one time planners assumed a community was adequately served if there were ten acres of park and recreation land for every thousand residents. Today a systems approach is used to compare the supply of park and recreation facilities with the demand for these facilities on the part of residents and other users. This approach is set forth in *Parks, Recreation, Open Space and Greenway Guidelines*, published by the National Recreation & Park Association (NRPA).¹³⁰

The NRPA systems approach is based on a *Level of Service* (LOS) analysis applied to each classification of park within a locality. Classifications set forth in the NRPA *Guidelines* include: mini-parks, neighborhood parks, school-parks, community parks, large urban parks, athletic complexes, natural area preserves, historic district parks, and greenways. LOS is determined by applying the following analysis to each applicable classification.

1. Determine the Recreation Activity Menu for each park classification. The Recreation Activity Menu (RAM) is the list of all recreation facilities, i.e. tennis courts, tot lots, picnic units, etc., which go into each park classification and for which a specific amount of space will be needed. The RAM determines the facilities space requirement for the LOS formula.
2. Determine Open Space Size Standards for each park classification for which LOS standards will apply.
3. Determine the Present Supply of these recreation activity choices.
4. Determine total Expressed Demand for these recreation activity choices.
5. Determine the Minimum Population Service Requirements for these recreation activity choices.
6. Determine the individual LOS for each park class.
7. Determine the collective LOS for the entire park and recreation system.

The preceding steps are intended to compare the park and recreation facilities desired by area residents with the existing supply. If the supply is inadequate then a strategic planning process is used for determining how to resolve the shortfall within constraints such as available funding. The NRPA guidelines also contain recommendations for proximity of some park classifications to residential areas. For example, a neighborhood park should be within a quarter- to half-mile of a residential area with no intervening non-residential streets which would impede travel by

¹³⁰ National Recreation & Park Association, 22377 Belmont Ridge Road, Ashburn, VA 20148, on the web at: www.nrpa.org

foot or bicycle. A neighborhood park ranges from five- to ten-acres and is designed for both passive (hiking, biking, picnicking) and active (tennis, soccer) recreation.

A town, city or county should use a process modeled after the NRPA guidelines to assess the impact of various possible growth scenarios on the supply and demand of park and recreation areas. Contact your local parks and recreation agency to see if such an assessment is available. The local master plan should contain a chapter or element setting forth the supply of park and recreation facilities contrasted with planned expansions and increased demand based upon anticipated future growth.

While the LOS approach works well for determining acres of parkland required for many recreational pursuits, it is not appropriate for assessing the need to preserve areas that are significant because of ecological, scenic, or other natural values. A number of states have adopted Statewide Comprehensive Outdoor Recreation Plans (SCORP). These plans tend to be the most thorough analysis of the need for additional parkland for hiking, bicycling, hunting, and other recreation pursuits requiring large areas of land. The SCORP for your state may provide sufficient information to assess the impact of growth scenarios on the supply and demand of these park areas.

Chapter 18: Poverty

At first it might not be obvious what connection, if any, exists between how we manage growth and poverty. But what if we were manage growth in ways that increased the number of jobs providing a living wage for those below the poverty line? Then what if we also manage growth to improve public transportation so the poor need not buy a car for commuting and shopping? We could also provide incentives for building affordable housing near the best places of work, the best schools, and other locations where the poor are provided with full and equal opportunities to improve their lot.

For the average American family transportation expenses are second only to housing. According to data presented in the Surface Transportation Policy Project report *Transportation Costs and the American Dream*¹³¹, 19.3¢ out of every dollar spent by a typical family goes to getting to work, shopping, and play by car. About half of the expense goes to buying a car; the other half for gasoline, insurance, maintenance, etc. Again, these figures are for the *average* American family. For the poorest 20% of the population, transportation costs are proportionally much higher. In fact for the poor getting around by car consumes 40¢ out of every dollar left after taxes. Where buses and other public transit are available, travel costs are reduced by at least 50%. Thus the more we can do to manage growth to reduce transportation cost, the more successful we will be in helping the poor achieve home ownership and other parts of the American dream.

One option for reducing transportation cost is to manage growth in ways that make buses and other public transit more viable and desirable. At one time it was generally believed that public transportation only became viable when residential density reached eight to ten units per acre.¹³² While it remains true that higher density increases the viability of transit, other factors such as street layout and land use mixture are also important.

In the past, housing for the poor would be concentrated, which led to the creation of pockets of poverty, especially when the pockets were far removed from jobs, good schools, and the other factors key to enabling the poor to improve their condition. It is far more effective to disperse low-income housing throughout a community, which increases the likelihood that the poor will live near good schools, good jobs, and good parks and other recreation facilities.¹³³

¹³¹ The report *Transportation Costs and the American Dream* can be downloaded from <http://www.transact.org/>

¹³² Boris Pushkarev and Jeffrey M. Zupan, *Public Transportation and Land Use Policy* (Bloomington: Indiana University Press, 1977).

¹³³ For further detail on how to increase the supply and benefits of affordable housing see *Affordable Housing and Smart Growth: Making the Connection* published by the Smart Growth Network and available for download at: <http://www.neighborhoodcoalition.org/pdfs/AH%20and%20SG.pdf>

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Chapter 19: Property Ownership

Is a proposed development project entirely located on land owned by the applicant? You might be surprised by how often the answer to this question is no or maybe. In fact, we encounter this issue frequently enough that verifying property ownership has become a standard part of our detailed review of proposed development projects.

ADVERSE POSSESSION

To understand how adverse possession works consider the following scenario. You bought your home 25 years ago. The previous owner showed you the property boundaries. You built a fence along these boundaries and you've had a garden in the northwest corner for the past 25 years. You then learn that the previous owner was wrong about the boundary and your fence and garden extends ten feet onto a proposed development site. Given these facts and the legal precedents established in your state, you may be able to lay claim to the ten feet through adverse possession. If you win then you become the owner of the additional ten feet. Again, adverse possession laws vary from state to state. So check with a good title attorney in your state should you wish to pursue an adverse possession claim.

COVENANTS, CONDITIONS & RESTRICTIONS

Some deeds contain restrictions on how a property may be used. From time to time I get a call from someone who just learned that the field next to their home is proposed for development, which they find surprising since they'd heard that the previous owner always wished the property to remain undeveloped. I urge the caller to look at the current and prior deed for any covenants, conditions, or restrictions (CC&Rs) limiting how the property can be used. Perhaps the prior owner included a condition in the deed requiring that the property remain forever wild.

If a proposed development site is part of a previously approved subdivision then you should take a look at the plat and other documents created through the subdivision process. Both the plat and supporting documents may contain CC&Rs not shown on the deed. The plat can usually be obtained in the same office where deeds are kept. Other documents would be in the records at the local planning and zoning office.

Finally, you should consider having a title search run on the property to identify any restrictions or encumbrances on the use of the property.

EMINENT DOMAIN

If government wishes to build a road or landfill on your property and you refuse to grant permission, then the agency may resort to eminent domain to take your property with just compensation at fair-market value.

Generally, government agencies will exhaust efforts to obtain property cooperatively or they will look for ways of modifying a project so the use of eminent domain is no longer necessary.

Citizens have blocked the use of eminent domain by showing that it is not needed for a “public” use, such as a new road. However, only a few state constitutions limit the exercise of eminent domain strictly to projects with public uses. Nevertheless, it is very unusual to see eminent domain used for a private development project. For example, in South Carolina eminent domain was used for redevelopment of a blighted, urban area. The proponents wanted part of the area to go to the state university (a public use) with the remainder going to private companies for industrial development. The courts approved the use of eminent domain for the university but not the private industrial project.¹³⁴

HOW TO OBTAIN A DEED

In most states, deeds are kept at the county seat (capital). The specific agency responsible for maintaining deeds and other property records may be called the land records office, the recorder’s office, the register’s office, etc.

To obtain a deed you will need the *Liber* and *folio* reference, which is latin for book (liber) and page (folio). The staff at the land records office can help you obtain the deed reference and explain how you can get a copy of the actual deed. They may direct you to a set of maps showing the boundaries of all property within the county. Within each property boundary you may see the liber and folio reference. If you just see a parcel number, like p. 6, then you will need to consult another reference to obtain the liber and folio reference.

In some states and localities property information is available online. In my home state of Maryland you can determine who owns a specific property online. A substantial amount of information about the property and the owner is also available through the internet. You can even view subdivision plats online.

INTRUSION ONTO YOUR PROPERTY

If your property adjoins a proposed development site and you believe a portion of the project extends onto your land, then the impact to your quality of life can be quite substantial. If you suspect that this might be the case then there are several steps you can take on your own.

1. If you have the deed for your property then look at the boundary description. If you lack the deed then see *How To Obtain A Deed* below. The boundary description usually starts with something like “Beginning at a point situated at the centerline of Main Street...”
2. If you are fortunate the boundary description will reference a distinctive landmark at the point where you believe the development site extends onto your property. The landmark might be an iron pin or stake, a large tree or rock, and so forth. If such a landmark exists then it should be a simple matter to determine who owns what.

¹³⁴ Edens v. City of Columbia, 228 S.C. 563, 91 S.E. 2d 280 (S.C. 1956)

3. In the absence of a landmark along the disputed boundary, then see if your deed references another distinctive point which is a specified distance from the point of contention. You may then resolve the dispute with a tape measure and a compass.

Keep in mind that the amateur survey techniques described above are just that. Boundary surveys require skill and the right equipment. For example, you need to know how to adjust compass readings for magnetic declination and how to adjust distance measurements for slope. Equipment such as a nylon tape and a Global Positioning System (GPS) may not be sufficient. Nylon tape measures stretch and most GPS units are not precise enough for boundary work.

You should view these initial steps as just that. If these simple steps indicate that the project site may extend onto your property then notify the applicant. If the applicant fails to provide you with satisfactory proof as to the boundary location, then contact review staff and ask that they direct the applicant to do so.

I also suggest determining if your property boundary was surveyed in the past. If you recently purchased your property then the boundary survey may be among the documents you received. If not then ask the title company or attorney who handled the property transfer. If your property was surveyed, then ask the surveyor to help you determine if the development project extends onto your land.

ROADS & RIGHT-OF-WAY

Occasionally, I receive a call from someone who just learn that a driveway or road is about to be built through their property, without their permission. Typically, those wishing to build the driveway or road will claim they have an easement or right-of-way through the caller's property. As a first step, I urge the caller to check their current deed, as well as prior deeds, for any language granting a right-of-way or easement. Of course, I also suggest that they ask those wishing to build the road to demonstrate why they believe the caller's permission is not required. We then share the documentation with a good title attorney in our network to learn what rights the caller has in the matter.

A right-of-way exists along many public roads. The right-of-way may extend ten- to fifty-feet beyond the shoulder of the road. When the road was built the right-of-way was set aside for future maintenance work or to add lanes to the road at some point in the future. If a right-of-way does not exist then the permission of adjoining property owners must be obtained to widen the road, or government must resort to the use of eminent domain to take the required property (with compensation at fair-market value). Right-of-ways and easements may be described in the deed for properties adjoining a road or the deed for the road bed.

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Chapter 20: Property Taxes

On average each of us pays \$783 per year in property taxes.¹³⁵ Property taxes are assessed in all 50 states and account for 73% of local government revenue. Property taxes pay for vital services such as schools, local road construction and maintenance, police, fire, and other emergency services, libraries, water and sewer, and a host of other services provided primarily by local government.

An increase in new home construction can cause property taxes to increase for several reasons. When people migrate from cities and suburbs to rural areas they frequently bring with them an expectation of receiving the same level of public services to which they are accustomed. They new residents begin lobbying local government to increase emergency services response time, expand libraries, and so forth. To meet this demand local government may be forced to raise property tax rates.

There are marked differences in the amount of tax revenue generated and consumed by various land uses. Most studies divide land uses into three categories when analyzing these *fiscal* impacts: farm/forest/open space, commercial/industrial and residential land. Generally, the cost of government services provided to residential areas exceeds the amount of tax revenue paid by home- and rental unit- owners. Commercial and rural lands pay more in taxes than occupants consumed in services; so both uses are a net generators of revenue. A review of 70 cost of government services studies showed that for each dollar of tax revenue generated the three land use categories consumed the following amounts in government services: residential \$1.15, commercial/industrial \$0.29, and farm/forest/open space \$0.37.¹³⁶

Jurisdictions where residential property taxes are lowest are generally those with a relatively large amount of commercial and industrial development within their boundaries. If the amount of new commercial/industrial development declines and new residential growth makes up an increasingly larger percentage of total building, then government may be forced to raise taxes to maintain services such as schools and police/fire protection at accustomed levels.

But an increase in commercial/industrial growth can also result in homeowners paying more in property taxes. A New Hampshire study showed that as commercial development increased

¹³⁵ Source: The Tax Foundation Special Report on State & Local Taxes available for download from <http://taxfoundation.org/sr106.pdf>

¹³⁶ The 70 studies were reviewed in *The Economic Costs of Development for Local Governments* available for download at: <http://www.forestry.uga.edu/warnell/pdf/cfb/EcCost.pdf>

relative to residential growth so did the amount of property tax paid by town residents.¹³⁷ The author theorized that as commercial development increases, house prices are driven up by the larger number of people competing for homes so they can live near their place of work. Since property tax bills are based upon the assessed value of a home, an increase in value raises the total amount of property taxes paid by the owner. While many homeowners might relish steadily increasing , the poor and those on fixed incomes may have more and more difficulty making ends meet as property taxes rise ever higher. Presumably, the impact of increasing housing demand could be prevented if new residential construction kept pace with commercial development.

IMPACT FEES

As an area continues to grow local government is forced to repeatedly raise property taxes to provide the infrastructure (schools, roads, water-sewer, etc.) essential to growth. Continuing property tax increases become unpopular very quickly. Local elected officials must choose between the third rail of another property tax increase, foregoing infrastructure expansion, or cutting back on other services.

Impact fees emerged in the 1970s as an alternative to these three undesirable choices. An impact fee is set at the cost to expand infrastructure to accommodate each new home. For example, Prince George's County, MD charges developers \$7,000 for each new suburban home and \$12,000 per rural home. This about covers the cost of expanding schools to accommodate the new students added by each home.

As of 2002, 22 states had passed the enabling legislation required to institute impact fees.¹³⁸ However, impact fees have met with a fair amount of resistance. Usually the resistance comes from those who wish to sell their land for development and the development companies who wish to acquire more land.

Opponents argue that impact fees stifle economic growth and reduce the supply of affordable housing. But an analysis prepared by the Brookings Institution Center on Urban and Metropolitan Policy showed impact fees have either a neutral or positive effect upon economic growth, as measured by new jobs added.¹³⁹ .

¹³⁷ See *Commercial Development and Its Effect on the Tax Rate*, by Kurt Gotthardt, which is available for download from the New Hampshire Office of Energy & Planning Reference Library website at: <http://nh.gov/oep/resource/library/referencelibrary/o/openspace/>

¹³⁸ See *Paying for Prosperity: Impact Fees and Job Growth*, The Brookings Institutional, available for viewing at: <http://www.brookings.edu/es/urban/publications/nelsonimpactfees.htm>

¹³⁹ See *Paying for Prosperity: Impact Fees and Job Growth*, The Brookings Institutional, available for viewing at: <http://www.brookings.edu/es/urban/publications/nelsonimpactfees.htm>

As stated previously, in the absence of impact fees local government may refrain from expanding the infrastructure required to accommodate new growth, especially if this means another property tax increase. Impact fees resolve this issue by providing a large portion of the additional funds required to expand infrastructure without increasing property taxes. The Brookings Institution analysis examined economic development (job growth) in the 67 counties of Florida. The authors found that impact fees either had no effect on job growth or the counties with impact fees added more jobs during the study period (1993-1999) when compared with areas lacking impact fees.

With respect to the effect of impact fees on housing affordability, the Brookings Institution report cited research showing that impact fees tend to reduce the amount paid by development companies to purchase land and about half the fee gets passed on to the home buyer. Of course, this does increase the cost of a new home but by making more land available for development in a more reliable fashion impact fees may increase the supply of housing and lower areawide housing prices.

PROPERTY TAX & SPRAWL

A number of researchers believe that the most widespread method of assessing taxes is in part responsible for sprawl. The problem stems from assessing land and buildings the same for property tax purposes. If land were taxed at a significantly higher rate than buildings, a strong incentive would exist to put as much density as possible on each acre. In urban areas the traditional approach to property taxes adds an unintended incentive to allow buildings to deteriorate. In other words, the more improvements one makes to an urban building, the higher the value of the building and the more taxes to be paid. Some localities have offset this effect by using a split-rate property tax in which buildings are assessed at a much lower rate than land. These localities have found that the split-rate tax acts as an incentive to compact infill development.¹⁴⁰

¹⁴⁰ Further detail on the split-rate tax is available at the Sustainable USA Org website:
<http://www.sustainableusa.org/>

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Chapter 21: Property Value

A development project may affect property value both positively and negatively. For example, one study showed that a stormwater pond which held a permanent pool of water increased the value of nearby homes by 4% to 23% whereas dry ponds, seen as unattractive, lowered property value by 4% to 10%.¹⁴¹ This same study showed preferences for living at the following locations, from most desired to least: next to a pond, adjacent to a natural area, on a cul-de-sac (dead-end) street, next to a golf course, then adjacent to a public park.

Homes located within 300 feet of water sell for up to 28% more than comparable homes located elsewhere.¹⁴² A study of homes with a view of Lake Erie showed a doubling of value (\$527,184 vs. \$285,518) when compared to similar homes without a lake view.¹⁴³ A development project intruding upon an existing lake view could lower the value of the homes suffering the intrusion.

If watershed development causes water quality to decline, than the value of properties with a view of the affected waters may decline as well. A study of 34 Maine lakes determined that a significant decline in lake water clarity resulted in a substantial decline in the value of lake-front property.¹⁴⁴ A one-meter improvement in the depth of clear water can increase property value by \$11 to \$200 per foot of linear lake frontage.

Trees also enhance property value. In *Landscaping and House Values: An Empirical Investigation*, the authors concluded:

*By and large, a positive tree cover differential between the property and its immediate neighborhood, provided it is not excessive, translates into a higher house value.*¹⁴⁵

¹⁴¹ Human and Amphibian Preferences for Dry and Wet Stormwater Pond Habitat, Technical Note #89 from *Watershed Protection Techniques*. 2(3):453-454

¹⁴² Economic Benefits of Urban Runoff Controls, Watershed 96, available online at: <http://epa.gov/owow/watershed/Proceed/frederck.html>

¹⁴³ Residential Real Estate Prices: A Room with a View, *Journal of Real Estate Research*, 23(1/2):129-137

¹⁴⁴ Water Quality Affects Property Prices: A Case Study of Selected Maine Lakes, by Holly J. Michael, Kevin J. Boyle, and Roy Bouchard, Maine Agricultural and Forest Experiment Station, University of Maine, 18 pp., 1996, available online at: http://www.umaine.edu/mafs/elec_pubs/mr398.pdf

¹⁴⁵ Landscaping and House Values: An Empirical Investigation, *Journal of Real Estate Research*, 23(1/2):139-161, 2002.

Projects perceived as undesirable, such as a landfill, can lower property value by 4% - 10% or more.¹⁴⁶ If a landfill were to contaminate the well serving a rural home and there were no other reasonable source of water, then property value could decline by 90%.¹⁴⁷ A study conducted in the vicinity of Baltimore, Maryland showed that a waste disposal facility affected property value up to four miles distant.¹⁴⁸ Another study conducted near Toledo, Ohio showed that a large toxic waste landfill lowered property value for a distance of 5.75 miles.¹⁴⁹ For each mile from the facility property value increased by \$14,200 out to a distance of 2.6 miles. Homes located adjacent to or within sight of high voltage powerlines sell for about 10% less than comparable houses located elsewhere.¹⁵⁰

There are also situations where a LULU, such as a landfill, has no effect on property value. A study of a San Fernando Valley landfill found no effect on the nearest residential community.¹⁵¹ But the community was separated from the landfill by a hill. Trucks traveling to the landfill did not pass through the community. In other words, community residents could not see, hear or smell the landfill. Hence, no adverse effect on property value.

Transportation facilities can also have a significant effect on property value. In Washington, D.C. apartment rent is highest next to metro stations and declines by 2.5% for every tenth mile removed from a station. The metro station effect extends at least a half-mile out.¹⁵² Philadelphia researchers found that apartment value declines by about 3% per block as the distance increased

¹⁴⁶ The Impact of Landfills on Residential Property Values, *Journal of Real Estate Research* 7(3): 297-314, 1992. Special Appraisal to Determine the Potential Impact of the Cross Roads Trail Rubble Landfill on Property Values of the Surrounding Community, prepared by BLR Real Estate Appraisal, 2316 Franklins Choice Court, Fallston, MD 21047, 1991.

¹⁴⁷ Appraisal on the property known as 2910 Dublin Road, Street, MD 21154, prepared by BLR Real Estate Appraisal, 2316 Franklins Choice Court, Fallston, MD 21047.

¹⁴⁸ The Benefits of Reducing Exposure to Waste Disposal Sites: A Hedonic Housing Value Approach, by Mark Thayer, Heidi Albers, and Morteza Rahmatian, *Journal of Real Estate Research* 7(3): 265-282, 1992.

¹⁴⁹ Economic Effects of Hazardous Chemical and Proposed Radioactive Waste, *Journal of Real Estate Research* 7(3): 283-296, 1992.

¹⁵⁰ High Voltage Power Lines: Do They Affect Residential Property Value?, *Journal of Real Estate Research* 7(3): 315-330, 1992.

¹⁵¹ Does A Landfill Bring Down Property Values?, *Waste Age*, August 1991.

¹⁵² Mass Transportation, Apartment Rent and Property Values, by John D. Benjamin and G. Stacy Sirmans, *Journal of Real Estate Research* 12(1): 1-8, 1996.

from two major roads.¹⁵³ The increased value of apartments located near major roads was attributed to the convenience of easy access to a thoroughfare.

Increased traffic volume can lower residential property value. A home located adjacent to a major highway may sell for 8% to 10% less when compared to a home located along a quiet neighborhood street.¹⁵⁴ The noise from heavy truck traffic lowers property value at a rate 150 times greater than cars. This is because at 50 feet heavy trucks emit noise at 90 dBA while car traffic produces noise at a level of 50 dBA.¹⁵⁵

Mobile homes are becoming an increasingly common means of achieving affordable housing goals. Two studies documented a negative relationship between proximity to mobile home parks and the value of single-family detached homes. The first study, *A Housing Price Model with Endogenous Externality Location: A Study of Mobile Home Parks*¹⁵⁶, was conducted in Louisiana and showed that as the distance between a single-family detached home and a MHP increases from 0.0- to 0.27-miles the value of the single-family detached home will increase by up to 12%. The second study, *The Impact of Manufactured Housing on Adjacent Residential Property Values: A GIS Approach Based on Three North Carolina Counties*¹⁵⁷, indicated that mobile home parks exert a negative effect on single-family detached home value out to a distance of 1,800 feet (0.34 miles). However, these studies also indicated that the negative effect could be offset by design changes which caused mobile homes to more closely resemble “site-built” homes.

Like many aspects of development, assessing potential effects on property value requires a fair level of expertise. The studies cited above can certainly give an indication of how a project may affect property value. But the findings from a study of a seemingly identical project is not always transferrable. This is why it is best to obtain the services of a qualified real estate appraisal professional. Nevertheless, if a development project threatens the value of your home then you can use the data presented above as a starting point for convincing decision-makers to take appropriate steps. The burden should be on the applicant to demonstrate why the property value effects may not be significant.

¹⁵³ Thoroughfares and Apartment Values, by Paul K. Asabere and Forrest E. Huffman, *Journal of Real Estate Research* 12(1): 9-6, 1996.

¹⁵⁴ Highway noise and property value by J.P. Nelson, *Journal of Transport Economics & Policy*, May 1982, p. 117-138.

¹⁵⁵ Residential noise damage costs caused by motor vehicles by D. Haling and H. Cohen, *Transportation Research Records*, Issue 1559, p. 84-95.

¹⁵⁶ Munneke and Slawson, *A Housing Price Model with Endogenous Externality Location: A Study of Mobile Home Parks*, *Journal of Real Estate Finance and Economics*, 19:2, 113±131 (1999)

¹⁵⁷ Wubneh and Shen, *The Impact of Manufactured Housing on Adjacent Residential Property Values*, *Review of Urban Regional Development Studies*, Vol. 16 Issue 1 Page 56 March 2004

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Chapter 22: Schools

Responsibly managed growth should preserve the quality of education in a developing area. In some cases growth can even enhance school quality. However, in far too many instances sprawl and other forms of poorly managed growth have become an obstacle to providing our children with a quality education. The obstacle takes the form of:

- causing school overcrowding;
- forcing students to change schools; and
- responsibly managed growth should ensure that the cost to expand school capacity to accommodate rising student enrollment is shared equitably by development interests and taxpayers.

Several studies have shown a general relationship between class size, school size and student achievement. These studies indicate that there is an optimum class size - at least for kindergarten through third grade - and an optimum school size. However, there is also reason to believe that a quality education can result even if these optimums are not met. Following is a brief review of the scientific evidence concerning class size, school size, and student achievement.

CLASS SIZE & STUDENT ACHIEVEMENT

As of the year 2016, USA class size averaged 15 students in public schools and 12.2 students for private schools.¹⁵⁸ According to a 2011 Brookings Institution report¹⁵⁹, 24 states require or actively promote a reduction in class size. However, changing the national class size average by just one student costs \$12 billion per year in just teacher salaries. One of the earliest studies of class size effects was the Tennessee Student Teacher Achievement Ratio (STAR) project¹⁶⁰ which began in 1985. Subsequent studies have followed the students into adulthood and documented the following benefits: 72% of STAR student graduated on time vs. 65% of other students; STAR students completed more advanced math and English courses in high school; Drop-out rates among STAR students was 19% vs. 23% for others; and more STAR students graduated with honors.

The authors of the Brookings report noted that while the most credible studies of class size and student performance do show an improvement with fewer students per teacher, the benefit is not

¹⁵⁸ *Digest of Education Statistics*. National Center for Education Statistics, available online at: http://nces.ed.gov/programs/digest/d10/tables/dt10_068.asp

¹⁵⁹ *Class Size: What Research Says and What it Means for State Policy*, Brookings Institution, available online at: http://www.brookings.edu/~/media/research/files/2011/5/11-class-size-whitehurst-chingos/0511_class_size_whitehurst_chingos.pdf

¹⁶⁰ See: https://www.princeton.edu/futureofchildren/publications/docs/05_02_08.pdf

uniform and, overall, it *may* be relatively small. The problem is that there are simply too few high quality studies to draw any firm conclusions about the benefits of class-size reduction. The research indicates students in the smaller classes performed at the same level as students with three more months of school. Class-size reduction has the greatest benefit for Kindergarten to Third Grade students from disadvantaged backgrounds. Other actions that result in expanding the number of highly effective teachers *may* be more beneficial. But there is some evidence indicating that a smaller class-size can contribute to better student performance when the teacher is less well prepared and effective. One study cited in the Brookings report noted that the following actions were more beneficial than class size reduction: computer-aided instruction, cross-age tutoring¹⁶¹, early childhood programs, and increases in per student instructional time. Given the tremendous investment in class-size reduction it would be unthinkable to abandon this investment and return to larger classes before the benefits have been thoroughly documented.

A 1997 survey revealed that 83% of teachers and 60% of school principals believed that class size should not exceed 17 students.¹⁶² The National Education Association recommends a class size of 15 students.¹⁶³ Several recent studies have shown that student performance improves significantly in smaller classes.¹⁶⁴ Class size reduction appears to be most effective when applied to “low-achieving students from impoverished socioeconomic backgrounds” in kindergarten through third grade (K-3).¹⁶⁵ The benefits of smaller early grade class size lasts at least into 7th and 8th grade.¹⁶⁶ The students from small K-3 classes may be 6- to 13-months ahead of other students in math, reading and science.¹⁶⁷ It is unclear though how small is small enough. In

¹⁶¹ *Cross-Age Tutoring: A Helping Hand Across the Grades*. Available online at: http://www.educationworld.com/a_curr/profdev/profdev084.shtml#sflash.VfMDmhN4.dpuf

¹⁶² *Class Size Reduction: Effects and Relative Costs*, by Lawrence Picus, ERIC Clearinghouse on Educational Management, 5207 University of Oregon, Eugene, OR 97403-5207, 800-438-8841. Available online at: http://eric.uoregon.edu/hot_topics/class_size.html

¹⁶³ See the National Education Association class size website at: <http://www.nea.org/classsize/>

¹⁶⁴ Ibid.

¹⁶⁵ *When does small class size help student achievement?*, ERIC Clearinghouse on Educational Management, 5207 University of Oregon, Eugene, OR 97403-5207, 800-438-8841. Available online at: http://eric.uoregon.edu/publications/policy_reports/class_size/student_achievement.html

¹⁶⁶ *Class Size Reduction: Effects and Relative Costs*, by Lawrence Picus, ERIC Clearinghouse on Educational Management, 5207 University of Oregon, Eugene, OR 97403-5207, 800-438-8841. Available online at: http://eric.uoregon.edu/hot_topics/class_size.html

¹⁶⁷ *Class Size Reduction*, National Education Association, 1201 16th Street, NW, Washington, D.C. 20036, June 2001. Available online at: <http://www.nea.org/classsize/>

Small Classes, Big Possibilities, Professor of Education Charles Achilles argues for a teacher to student ratio of 1:15.¹⁶⁸

SCHOOL SIZE & STUDENT ACHIEVEMENT

In urban and suburban areas high schools may have 2,000 to 3,000 students. There is research though which shows that the optimum size for a middle or high school is 600-900 students and 300-400 for elementary schools, particularly for students from low-income families.¹⁶⁹ In a 1996 paper, *School Size, School Climate and Student Performance*¹⁷⁰, Cotton cited the following attributes as accounting for the superiority of small schools:

- Everyone's participation is needed to populate the school's offices, teams, clubs, etc., so a far smaller percentage of students are overlooked or alienated.
- Adults and students in the school know and care about one another to a greater degree than is possible in large schools.
- Small schools have a higher rate of parent involvement.
- Students and staff generally have a stronger sense of personal efficacy in small schools.
- Students in small schools take more of the responsibility for their own learning; their learning activities are more often individualized, experiential, and relevant to the world outside of school; classes are generally smaller; and scheduling is much more flexible.
- Grouping and instructional strategies associated with higher student performance are more often implemented in small schools—team teaching, integrated curriculum, multi-age grouping (especially for elementary children), cooperative learning, and performance assessments.

Perhaps the best evidence supporting the benefits of small school size comes from the six-year experiment conducted thus far by New York City. In 2002, high school graduation rates averaged 35% citywide. Over the past five years the City has been transitioning from large high schools (2,000 - 3,000 students) to smaller schools (300 - 600 students). In June, 2007, the

¹⁶⁸ *Small Classes, Big Possibilities*, The School Administrator Web Edition, October 1997. Available online at: http://www.aasa.org/publications/sa/1997_10/achilles.htm

¹⁶⁹ *School Size*, ERIC Digest 113 July 1997, available online at: <http://eric.uoregon.edu/publications/digests/digest113.html> *School Size, School Climate, and Student Performance*, School Improvement Research Series, Northwest Regional Educational Laboratory, available online at: <http://www.nwrel.org/scpd/sirs/10/c020.html>

¹⁷⁰ Ibid.

graduation rate for the small schools averaged 73%. This is the second year in a row graduation rates have exceeded 70%.¹⁷¹

Of course small school size alone does not guarantee good student performance; it is but one of many factors. And there is also research to show that in some situations it may be possible to overcome the negative effects of large schools.¹⁷²

There is another major benefit of keeping school size small - **health**. Recent research has shown that our children are becoming obese at an alarming rate due to a combination of reduced exercise and poor diet.¹⁷³ One way of countering this trend is to encourage our children to walk more. Keeping schools small and oriented towards a community increases the likelihood that students can walk to school. In fact this is one of the *Smart Growth* principles advocated by the Smart Growth Network.¹⁷⁴

FREQUENT SCHOOL CHANGES & STUDENT ACHIEVEMENT

As the pace of residential development accelerates the local Board of Education may begin redrawing school service area boundaries shifting current students may be shifted to schools with excess capacity. I have heard reports of students living in the same house from kindergarten through fifth grade yet they attended three different elementary schools during the six-year period. A 1996 study showed that 40% of school changes were due solely to a family changing their residence while 42% were attributable solely to changes made by the school.¹⁷⁵

Several researchers have looked at the effect of frequent school changes. One study showed that 41% of third-graders who changed schools frequently were low-achievers compared to 26% of third-graders who never changed school.¹⁷⁶ Another study showed that 23% of children who

¹⁷¹ For further detail see *Chancellor Klein Announces That Preliminary June Graduation Rate of New Small Schools Tops 70% for Second Consecutive Year, Even as Many More New Small Schools Graduated Senior Classes at:* http://schools.nyc.gov/Administration/mediarelations/PressReleases/2006-2007/20070629_small_school_grad.htm

¹⁷² *Reducing the negative effects of large schools*, National Clearinghouse for Educational Facilities, available online at: <http://www.edfacilities.org/pubs/size.pdf>

¹⁷³ See *Study links community sprawl to fat; Density: Smart Growth group finds that people who don't live in compact cities are heavier than those who do* available at: <http://www.sgli.org/news8.29.03.html>

¹⁷⁴ See *Getting to Smart Growth: 100 Policies for Implementation* available from the Smart Growth Network at: <http://www.smartgrowth.org/pdf/gettosc.pdf>

¹⁷⁵ *Patterns of Urban Student Mobility And Local School Reform*, Center for Research on the Education of Students Placed At Risk, available online at: <http://www.csos.jhu.edu/crespar/techReports/Report5.pdf>

¹⁷⁶ *Highly Mobile Students Often Are Low Achievers*, School Reform News, available online at: <http://www.heartland.org/archives/education/jan02/mobility.htm>

changed schools frequently repeated a grade versus 12% of students who never changed schools, or did so infrequently.¹⁷⁷ However, if students only change schools once during their elementary years, then the negative effects will likely be modest and of short duration, particularly for more affluent students.¹⁷⁸ Growth should be managed to prevent schools even once.

PORTABLE CLASSROOMS

In a 1996 survey, 42% of the teachers interviewed said their ability to teach in a portable classroom was worse when compared to the main school building.¹⁷⁹ These structures are used to provide additional space at overcrowded schools. They usually begin as temporary structures, but all too frequently become permanent. If a school is experiencing a short-term increase in enrollment then portable classrooms make sense, particularly when compared to the cost of building a new school, but do not when the increase is more long lasting, particularly if they will cause enrollment to exceed the ranges recommended above for optimum school size.

ADEQUATE PUBLIC FACILITY ORDINANCES

Some local governments have enacted an Adequate Public Facility Ordinance (APFO) which prohibits the issuance of additional building permits when the affected schools are at capacity or soon will be. Actual trigger points range from 100% to 150% of capacity, which is usually based on 25-30 students per classroom. APFOs may also limit growth when other services are near capacity, such as roads, water, sewer, and emergency services. For an example of an APFO guidance document visit <http://www.mdp.state.md.us/info/download/Mmg14.PDF>

IMPACT FEES

It cost taxpayers an average of about \$10,000 to provide the school services necessitated by each new home. Impact fees are used to shift the burden for this added expense to the developer, who then, of course, passes the cost on to the home buyer. For example, Prince George's County, MD charges developers \$7,000 for each new suburban home and \$12,000 per rural home. This about covers the cost of expanding schools to accommodate the new students added by each home. For further information on this topic, see the discussion of *Impact Fees* under the Property Tax heading earlier in this Part of the book.

Also see the CEDS webpage
[Preventing Overcrowding & Other School Impacts of Development](#)

¹⁷⁷ *Student Mobility: Helping Children Cope With a Moving Experience*, Education World, available online at: http://www.education-world.com/a_curr/curr134.shtml

¹⁷⁸ *Student Stability Vs. Mobility*, School Administrator, available online at: http://www.aasa.org/publications/sa/2001_08/fowler-finn.htm

¹⁷⁹ *Teacher safety in portable classrooms*, BCTF Research Report, available online at: <http://www.bctf.bc.ca/ResearchReports/97wlc01/>

Chapter 23: Traffic

Perhaps no other aspect of growth management affects so many people as traffic. Surely none causes as much frustration.

When traffic is managed poorly we lose: time, wages, productivity, property value, the quiet and safety of our neighborhood streets, open space, our health, and our overall quality of life. But if there is a villain here it is, as Pogo said, the vast majority of us (76%) who commute to work alone in a car. Fortunately, there are a number of steps that can reduce the impact of traffic generated by existing and proposed development.

Following is a brief review of the impacts caused by traffic.

ACCIDENTS

According to the National Safety Council, motor vehicles were the leading cause of accidental death in the United States in 2001 (and have been for many years). Of the 98,000 U.S. accidental deaths in 2001, 43% were due to motor vehicles. For every person killed by a vehicle another 90 are injured.

In 2001 motor vehicles also accounted for 6,000 pedestrian deaths and 90,000 pedestrian injuries. Speed is a major factor determining whether a pedestrian will be killed or injured by an automobile. A person is nine times more likely to die if struck by a car traveling at 30 mph compared to 20 mph.¹⁸⁰ Other factors contributing to the high pedestrian accident rate on our streets include the inadequacy of sidewalks, bike lanes, and crossings.

As traffic volume and speed increase so does the accident rate. Of course, when volume builds to the point where delays become common, slower traffic results mostly in fender-bender type accidents as opposed to those causing death or severe injury.

A study conducted in Longmont, Colorado found a relationship between street width, sinuosity and accident rates.¹⁸¹ After reviewing 20,000 accident reports, the authors found that the safest residential street width was 24 feet (curb face to curb face), especially those with some curves. The highest accident rates occurred on streets 50 feet wide.

AIR QUALITY

In the section of this book on air quality, the pollution from cars and trucks was shown to be a considerable threat to public health. Particularly at risk are those living within a quarter-mile of a

¹⁸⁰ *Mean Streets 1998: Children at Risk*, by the Surface Transportation Policy Project. <http://www.transact.org>

¹⁸¹ The study, *Improving Traffic Safety: Reducing Deaths and Injuries through Safer Streets*, can be viewed online at: <http://www.transact.org/library/safetydecoder.asp>

high-volume road (one carrying more than 10,000-20,000 vpd) as well as those living near roads with a large amount of truck traffic.¹⁸² Of course vehicle noise also affects health and pedestrian safety is certainly a health issue.

CONGESTION

Each year the Texas Transportation Institute releases the *Urban Mobility Report*.¹⁸³ The latest report compared traffic conditions between 1982 and 1999 in the 75 largest metropolitan areas of the United States. The report shows that we are now spending four times longer in traffic congestion compared to how things were in 1982. The average commuter is delayed 62 hours a year by congestion. The cost of this delay comes to \$67.5 billion a year. The delay also wastes 5.7 billion gallons of gasoline annually and generates a lot of unnecessary air pollution.

The *Urban Mobility Report* states:

To keep congestion from growing between 1999 and 2000 would have required 1,780 new lane-miles of freeway and 2,590 new lane-miles of streets—OR—an average of 6.2 million additional new trips per day taken by either carpool or transit, or perhaps satisfied by some electronic means—OR operational improvements that allowed three percent more travel to be handled on the existing systems—OR—some combination of these actions. These events did not happen, and congestion increased.

In other words, to minimize the need for more roads we each need to drive alone less and ride bus/rail more, while advocating for improved transit.

NOISE

Traffic noise can interfere with sleep, conversation, and other neighborhood pursuits. About 2% of us are exposed to traffic noise at a level which affects our health.¹⁸⁴ Sound is measured in units known as decibels (dB) and highway noise is measured on an “A-weighted decibel” (dBA) scale. The noise level in a library might be 30 dBA while an air conditioner would emit 60 dBA. Quiet human speech has a volume of 55 dBA while normal speech occurs at 65 dBA.

¹⁸² Kim, J.J., S. Smorodinsky, M. Lipsett, B.C. Singer, A.T. Hodgson, and B. Ostro, 2004. Traffic-related air pollution near busy roads. *Am J Respir Crit Care Med* Vol 170, pp. 520-526. Available for download at: <http://eetd.lbl.gov/ied/pdf/LBNL-55586.pdf> Pearson et al. (2000). “Distance-weighted traffic density in proximity to a home is a risk factor for leukemia and other childhood cancers.” *Journal of Air and Waste Management Association* 50:175-180.

¹⁸³ For the 2003 Urban Mobility Report visit: <http://mobility.tamu.edu/ums/>

¹⁸⁴ U.S. Department of Transportation, Bureau of Transportation Statistics, *Transportation Statistics Annual Report*, available online at: <http://www.bts.gov/publications/tsar/2000/>

Traffic volume, speed, and vehicle type all affect noise levels. At 2,000 vehicles per hour (vph) traffic noise will sound twice as loud as at 200 vph.¹⁸⁵ Traffic moving at 65 mph will sound twice as loud as at 30 mph. And one truck traveling at 55 mph will sound as loud as 28 cars moving at the same speed.¹⁸⁶

Traffic noise can have a significant effect on property value. A home located adjacent to a major highway may sell for 8% to 10% less when compared to one located along a quiet neighborhood street.¹⁸⁷ Heavy truck traffic lowers property value at a rate 150 times greater than cars. This is because at 50 feet heavy trucks emit noise at 90 dBA while car traffic produces noise at a level of 50 dBA.¹⁸⁸ An increase in heavy truck traffic may also cause damage to nearby homes due to vibrations transmitted through the earth. While some truck traffic is essential on neighborhood streets (e.g. refuse collection, delivery trucks, and fire engines) an excessive increase in trucks passing through a neighborhood could lower property value and overall quality of life.

LOSS OF OPEN SPACE

In the section of this book on open space, I pointed out that building new roads into rural areas can accelerate the pace of sprawl. For example, an analysis of a proposal to widen I-93 in New Hampshire from four lanes to eight showed that this action would induce 20,000 to 100,000 acres of development which would not otherwise occur.¹⁸⁹

PREVENTING TRAFFIC IMPACTS

The best way to prevent traffic impacts is to upgrade transportation services so new residents and employees will rely upon bus, rail, car- or van-pools, and other modes that reduce driving alone. Following are traffic-impact minimization measures applicable to individual development projects:

- concentrate growth in areas served by buses, trains and other forms of mass transit;
- direct growth to sites within or adjacent to existing towns, cities or other population centers;
- discourage development necessitating the construction of new roads into rural areas;

¹⁸⁵ Highway Traffic Noise - FHWA, available online at: <http://www.fhwa.dot.gov/environment/htnoise.htm>

¹⁸⁶ Ibid.

¹⁸⁷ Highway noise and property value by J.P. Nelson, *Journal of Transport Economics & Policy*, May 1982, p. 117-138.

¹⁸⁸ Residential noise damage costs caused by motor vehicles by D. Haling and H. Cohen, *Transportation Research Records*, Issue 1559, p. 84-95.

¹⁸⁹ *Comments on Aquatic Resource Impacts: Draft Environmental Impact Statement Interstate 93 Improvements Salem to Manchester IM-IR-93-1(174)0, 10418-C*, prepared by Community & Environmental Defense Services, 8100 Greenspring Valley Road, Owings Mills, MD 21117., 410-654-3021.

- traffic should not be increased on neighborhood streets, especially truck traffic;
- new intersections should have adequate sight-distance and the gap between cars should allow for safe turns, otherwise traffic control devices should be employed;
- traffic should not be added to roads that are overly congested or where the accident rate is high; and
- new roads should only be built after all reasonable alternatives for minimizing single-occupancy vehicle use have been exhausted.

To implement these measures the following approaches should be considered for proposed development projects.

Measuring Congestion

Many local traffic review agencies rely upon the *Level Of Service* (LOS) approach for assessing the impact of proposed development projects on road congestion. The handbook on this topic is the *Highway Capacity Manual*¹⁹⁰ which presents a methodology for determining the amount of traffic a road can handle. For example, each lane of freeway can handle about 2,000 vehicles per hour (vph). But road capacity declines with narrowing lane width, increasing curves, hills, changes in road surface, and other factors. LOS is used to rate the degree of congestion based on a scale of A to F, with A being free-flowing traffic and no delay while F is essentially gridlock. Many traffic review agencies require a LOS of D or better on suburban-urban roads and C or better on rural roads.

Traffic congestion is usually worse at intersections. Therefore, most traffic impact studies focus on how a project will impact LOS at the nearest intersection(s). Unfortunately, analyzing LOS is highly specialized and requires the services of a traffic engineer or other qualified professional. However, if a signalized intersection is notorious for rush-hour delays, then there is a good chance it is operating at a failed level of service.

The LOS at unsignalized intersections is also evaluated using the procedures in the *Highway Capacity Manual*. Another guidance document, *Manual on Uniform Traffic Control Devices*.¹⁹¹, is used to determine if conditions at unsignalized intersections warrant the installation of traffic control devices. There are 12 warrants and include factors such as five more accidents a year at an intersection as well as the amount of delay, pedestrian volumes, presence of a school, and so forth. The table on the next page provides examples of the traffic generated by development.

¹⁹⁰ The *Highway Capacity Manual* is published by the Transportation Research Board: <http://trb.org/>

¹⁹¹ The *Manual on Uniform Traffic Control Devices* is available online at: <http://mutcd.fhwa.dot.gov/>

Neighborhood Streets

Most neighborhood streets can handle about 1,000 vpd or the traffic generated by about 100 houses.¹⁹² When traffic volume rises above this level than aggressive driving becomes more common and pedestrian safety declines. But for a small, secondary residential street even 700 vpd may be too high.¹⁹³

Land Use	Trips per Day per Unit
Single Family House	10 trips/day/home
Apartment Building	6.6 trips/day/dwelling unit
Mobile Home Park	4.8 trips/day/dwelling unit
Single Tenant Office Building	11.57 trips/day 1000 sq. ft.
Day Care Center	4.5 trips/day/student
Home Beauty Salon	42 trips/day/stylist

The data presented in this table was obtained from the [Maine Access Management Program](#).

Unfortunately, many traffic review agencies only look at Level Of Service (described elsewhere in this section) to determine whether a proposed development project will cause excessive impacts. The LOS approach allows higher traffic volumes than is desirable on most neighborhood streets.

Local governments throughout the nation have instituted Neighborhood Traffic Management Programs designed to keep traffic volume and speed at a reasonable level using a variety of calming measures. These measures include speed humps, narrowing street width, rumble strips, closing a street, and so forth. The intent is to slow down traffic or discourage through traffic to increase pedestrian safety and to reduce noise and air pollution. For further information on traffic calming visit the Institute for Transportation Engineers excellent website on this topic at: <http://www.ite.org/traffic/tcdevices.htm>

New Roads

Building new roads or adding lanes to existing streets is not necessarily a solution to traffic congestion. There is a phenomenon known as *induced traffic* where an increase in road capacity

¹⁹² See *Techniques and measurements for neighborhood traffic management planning*, available online at: http://www.ite.org/traffic/soartm/Appendix_C.pdf

¹⁹³ The Prince George's County, MD, Neighborhood Traffic Management Program uses 600 vpd as the desirable traffic volume for a minor secondary residential street (a 26-foot wide local access street).

causes people to drive more.¹⁹⁴ Folks who used to limit their driving because the roads were so crowded make more trips after congestion is relieved. In the section of this book on open space it was shown how extending new roads into rural areas can cause *induced growth*.

Before a new road is built it is crucial that a thorough analysis be made of how it will affect sprawl, public health and whether it really will solve existing traffic congestion. Furthermore, the analysis should also look at the benefits of using limited resources to expand transportation choices, such as bus, rail and other forms of mass transit.

To prevent excessive noise impacts, a new road (and other projects) should not be approved if it would increase truck traffic on residential streets. New roads should be located sufficiently far from homes to prevent noise from causing a significant quality of life impact. The Federal Highway Administration (FHWA) allows up to 72 dBA at the exterior of homes and 67 dBA at the exterior of picnic areas, recreational areas, playgrounds, active sport areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.¹⁹⁵ With an interstate highway the 67 dBA threshold may extend 100- to 600-feet out from the edge of pavement.¹⁹⁶

A number of states and local governments regulate activities which would cause residential noise levels to exceed 65 dBA during the day and 55 dBA at night. Those proposing activities which would exceed these thresholds should be required to take steps to resolve the impact. For example, noise barriers of earth, wood or concrete can reduce noise by 10-15 dBA.¹⁹⁷ A forest measuring 200 feet in depth can reduce noise by 10 dBA.¹⁹⁸

Parking

A new development project can impact quality of life if either too little or too much parking is provided. Too little and project residents/visitors may take up limited parking space on nearby residential streets. Too much parking creates more impervious area which increases aquatic resource impact.

¹⁹⁴ For further information on induced traffic visit the Sierra Club's congestion webpage at: <http://www.sierraclub.org/sprawl/transportation/congestion.asp>

¹⁹⁵ See 23 CFR Part 772, which can be viewed online at: <http://www.fhwa.dot.gov/hep/23cfr772.htm>

¹⁹⁶ Based upon environmental impact statements for the Tuscaloosa Bypass and I-93 in New Hampshire.

¹⁹⁷ Highway Traffic Noise - FHWA, available online at: <http://www.fhwa.dot.gov/environment/htnoise.htm>

¹⁹⁸ Ibid.

Parking requirements vary from land use to land use. For example, typically two parking spaces are needed for each single-family home while five spaces are usually provided for each 1,000 square feet of floor area in a shopping center.¹⁹⁹

Frequently, parking ratios are based upon peak use. For a shopping center the peak use period may last for only a few days a year - the Thanksgiving to Christmas shopping season. For the rest of the year the parking lot is only half full.

The *Better Site Design* handbook²⁰⁰ calls for adjusting parking requirements to minimize unneeded impervious area. Adjustments should take into consideration factors such as the availability of transit. Parking facilities can also be shared. I know of several churches with congregations much larger than available parking on the church grounds. The church leadership encourages parishioners to use a nearby park and ride lot for Sunday services. The church operates shuttle buses to get folks to and from the lot. Many parishioners actually come to prefer the shuttle approach. They get home more quickly.

A typical parking space is about 10 feet by 19 feet. Parking spaces make up about half of a parking lot. The rest of the lots is drive lanes, islands, and entrances. For each vehicle accommodated in a parking lot about 380 square feet of impervious area is created. This amount of impervious area would generate nearly 7,000 gallons a year of polluted runoff. For each space provided the impervious area would be sufficient to degrade four feet of a high-quality stream. Obviously, even effort must be made to minimize unneeded parking while ensuring that existing residents are not forced to compete for parking.

Sight-Distance

Imagine for a moment that you are leaving for work and sitting at the end of your driveway. You need to turn right so you look left. At what point can you first see cars approaching from the left? The length in feet between you and that point is the *sight-distance*. If the sight-distance is too short then there is a good chance you will get rear-ended some morning making that right-hand turn.

The “bible” on sight-distance (and manner other aspects of road design) is *A Policy on Geometric Design of Highways and Streets*, published by the American Association of State Highway and Transportation Officials (AASHTO).²⁰¹ There are several kinds of sight distance, but two most commonly occur in land use cases: *stopping* sight-distance and *intersection* sight-distance.

¹⁹⁹ These parking ratios were obtained from Table 6.1, in *Better Site Design*, by the [Center for Watershed Protection](#).

²⁰⁰ Ibid.

²⁰¹ For further information on this and other AASHTO publications visit <https://www.transportation.org/>

Stopping sight-distance is the length of roadway needed for a driver to recognize then react to a hazard ahead plus the distance required to bring the vehicle to a full stop. Intersection sight-distance is the length of unobstructed view required by the driver of a stopped vehicle to see approaching traffic and turn on to the intersecting road safely. Obviously, intersection sight distance varies depending upon the turning movement. A driver making a right turn requires less sight distance when compared to those making a left turn from a full stop.

Of the two, intersection sight distance is the greater. For example, at a design speed of 50 miles per hour (mph) stopping sight distance is 425 feet whereas for the same design speed intersection sight distance for right turns is 480 feet and 555 feet for a left-turn.²⁰²

Minimum sight-distance, both stopping and intersection, varies with the speed of approaching vehicles, presence of hills, road surface condition and other factors. One gross rule of thumb calls for 11 feet of intersection sight-distance for each mph of approaching vehicle speed. In other words, if vehicles approach an intersection at 40 mph then a minimum of 440-feet of sight-distance is required. Again, this is a very general rule of thumb and actual sight-distance is best determined by a qualified professional. However, this rule of thumb might be used to get a feeling as to whether you should bring in a traffic engineer.

One of the traffic engineers who frequently helps CEDS clients offered another rule-of-thumb: If ten seconds passes from the time you first see most (85%) approaching vehicles until the moment they reach your position, then sight-distance is probably okay. This rule-of-thumb makes sense if you consider that a car moving at 30 mph travels 440 feet in ten seconds. The minimum sight-distance required at 30 mph is 330 feet. At 60 mph the same car covers 880 feet in ten seconds and the minimum sight-distance is 660 feet.

Some jurisdictions base sight-distance on posted speed limit; others the 85th percentile speed (the 85th fastest moving vehicle). The approach based on 85th percentile speed makes more sense. Procedures will be found on the [CEDS website](http://www.ceds.org)²⁰³ for doing an unofficial citizen speed study.

Sight-distance is measured by stooping down at the point where a driver would be waiting to turn. Get your eye about 3.5-feet above the road surface. In other words, you are trying to get the view of a passenger car driver at an existing or proposed intersection. You then look for the point where you can first see vehicles approaching in both directions. With a tape measure you then determine the distance to each point. If you feel sight-distance may be inadequate then ask a qualified professional to verify your findings, including the speed of vehicles traveling on the road. But also make local traffic review staff aware of what you have found.

²⁰² These stopping and intersection sight distance values are from Exhibits 3-1, 9-55, and 9-58 in *A Policy on Geometric Design of Highways and Streets*.

²⁰³ www.ceds.org

Traditional Neighborhood Design

With this design approach higher density residential is located around a central commercial district fronting on an open space commons. The community is laid out on a grid pattern, which allows for more efficient mass transit, with neighborhood parks and retail spread throughout the project. In other words, it looks like the neighborhoods of old and is far more pedestrian friendly. You can walk or bicycle to many places, including to the bus or rail stop. Visit the Preservation Institute's Traditional Neighborhood Design website for further detail:

<http://www.preservenet.com/index.html>

Transit Oriented Development

The idea behind transit oriented development (TOD) is to concentrate a mixture of high-density residential and commercial land uses around locations served by mass transit services. The goal is to situate homes, retail shopping and offices within walking or bicycling distance of transit stops. Usually a rail transit station is the focal point (either light-rail or metro-style heavy rail), but TOD can also work with bus rapid transit. For further detail on Transit Oriented Development see the Brookings Institution report available online at:

<http://www.brook.edu/dybdocroot/es/urban/publications/belzertod.pdf>

Also see the CEDS webpages

[Traffic, Development & Neighborhood Quality of Life](#)

[Neighborhood Streets & Cut-Thru Traffic](#)

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Chapter 24: Visual Impacts

As shown in the property value chapter of this book, the view from a home can be a significant source of satisfaction for the owner and a crucial factor in resale value. The study of homes with a view of Lake Erie showed a doubling of value when compared to similar homes without a lake view.²⁰⁴ A development project which intruded upon the lake view would degrade quality of life for those residing in the home and lower the value of their property. If the obscuring land use were an objectionable one, such as a landfill or some other LULU, then the impact would be greater.

Visual buffers are frequently used to mitigate the aesthetic impact of incompatible land uses. The buffers are usually created through plantings, such as dense rows of evergreens along a site perimeter, but can also take the form of earthen berms, fencing and walls.

Visual buffering can also be achieved through careful selection of structure location, size, color and shape. On a large tract of land, a new office building might be hidden behind existing forest or tucked down in a valley. The height of smokestacks, towers, or a landfill might be reduced to minimize the number of homes from which the structure can be seen. Buildings can be made with wood siding or painted in earth tones so they are less visible. The normally straight edges of a landfill might be curved to appear more like a natural hill. Or visual impacts might be negated by changing building orientation. For example, development plans might show the rear of proposed houses facing the front of existing homes - a not very pleasant view. Besides visual buffers the new houses might simply be reversed so front of home faces front of home. In addition, a local jurisdiction might require a *residential transition area* between homes and incompatible land uses. The RTA might range from 50- to 150-feet in depth and buffer residences from noise, light and other visual impacts from the incompatible use.

Some jurisdictions require an applicant to conduct a viewshed analysis when the potential exists for affecting a large number of existing homes. The analysis is carried out by determining sightlines from each existing home or other locations, such as historic sites, where the proposed structure might create a visual impact.

The sightline analysis begins by referring to a topographic map to determine the elevation of the home. A line is then drawn on paper from the home to the highest point on the proposed structure to determine if it will be obscured by intervening trees, hills, or other landscape features. If the sightlines show a structure would be visible then the applicant must consider reasonable alternatives for reducing or eliminating the impact.

²⁰⁴ Residential Real Estate Prices: A Room with a View, Journal of Real Estate Research, 23(1 / 2):129-137.

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Chapter 25: Walking

Walking plays a critical role in our health, safety, and overall quality of life. No doubt you have heard of research showing an increasing trend in obesity, which has been attributed in part to our dependence upon cars. The lack of sidewalks, crosswalks, and other pedestrian safety measures has made walking to school unpleasant and dangerous for many of our children. Yet, walking for pleasure and recreation is **THE** most popular form of recreation in the country. Well designed development projects can do much to increase the safety of existing walking opportunities and to create new ones. But projects designed with little thought to this vital issue can make a bad situation worse and force more of us into cars.

WALKING & HEALTH

According to the National Institutes on Health²⁰⁵

Obesity in kids is now epidemic in the United States. The number of children who are overweight has doubled in the last two to three decades; currently one child in five is overweight.

This trend is attributed in part to fewer opportunities to walk. Many kids now live in communities designed for travel by car; not by foot or even bicycle. Sidewalks are nonexistent and street crossings are poorly designed for adults, much less children. In fact, parents identified the danger posed by traffic as the second leading reason for why they do not permit their children to walk to school.²⁰⁶

The lack of adequate facilities has made walking the most dangerous mode of travel as shown by the following excerpt from a 2004 report²⁰⁷ by the Surface Transportation Policy Project:

Although only 8.6 percent of all trips are made on foot, 11.4 percent of all traffic deaths are pedestrians. And while the 2001 fatality rate per 100 million miles traveled is 0.75 for public transit riders, 1.3 for drivers and their passengers, 7.3 for passengers of commercial airlines, the fatality rate for walkers is an astonishing 20.1 deaths per 100 million miles walked.

²⁰⁵ Childhood Obesity on the Rise: <http://www.nih.gov/news/WordonHealth/jun2002/childhoodobesity.htm>

²⁰⁶ See *The Decline in Walking & Bicycling* from the Safe Routes To School Project at: http://www.saferoutesinfo.org/guide/introduction/the_decline_of_walking_and_bicycling.cfm

²⁰⁷ See *Mean Streets: 2004* at: <http://www.transact.org/report.asp?id=235>

WALKING FOR RECREATION

Since 1994, the Recreation Roundtable²⁰⁸ has conducted an annual survey of outdoor recreational pursuits in America. The latest published survey (2003) showed that 46% of us participated in walking for fitness or recreation²⁰⁹. In 1995, *Walking for fitness/recreation* was first added to the survey. From 1995 on, more Americans have walked for fitness and recreation when compared to all other outdoor activities.

NEW DEVELOPMENT & WALKABILITY

Following is a summary of provisions that should be incorporated into a new development project to preserve - even enhance - existing opportunities to walk safely about a community.

Sidewalks

Research shows that sidewalks are the single most important physical feature for increasing the number of children who walk to school and the presence of a sidewalk reduces the likelihood of vehicle-caused injury by 88%.²¹⁰ Sidewalks should be five- or six-feet in width to allow two people to walk side-by-side. There should also be a buffer (separation) between the edge of the sidewalk and vehicle travel lanes. A narrow sidewalk abutting a road with lots of high-speed traffic can be intimidating to many.

Generally, every new development project should include sidewalks along at least one side of the roads within and on the perimeter of the site. The exception would be projects in rural areas where a new sidewalk would not connect with an existing one (either now or in the far future) or where traffic volume is so extremely low that a sidewalk would do little to add to safety or the number of walkers.

For further guidance on sidewalks visit the *Safe Routes To School* website:

<http://www.saferoutesinfo.org/guide/index.cfm>

and the Federal Highway Administration webpage on sidewalk design:

<http://www.fhwa.dot.gov/environment/sidewalk2/sidewalks204.htm#sid>

²⁰⁸ Recreation Roundtable: <http://www.funoutdoors.com/taxonomy/view/or/62>

²⁰⁹ The 2003 survey - *Outdoor Recreation In America 2003: Recreation's Benefits to Society Challenged by Trends* - can be viewed online at: http://www.funoutdoors.com/files/ROPER%20REPORT%202004_0.pdf

²¹⁰ See the Safe Routes To School webpage on sidewalks at: http://www.saferoutesinfo.org/guide/introduction/the_decline_of_walking_and_bicycling.cfm

Lighting

The presence of lights along a street can make a big difference in the perception of safety and the enjoyment of walking after dark. Lighting should be designed so the illumination is uniform with no dark spots. Of course, lighting should be designed to prevent the impacts described in the chapter of this book on light trespass.

Traffic Calming

Streets with a high-volume of traffic can be very difficult to cross, particularly when vehicles are going fast. *Traffic calming* measures, such as speed humps, can slow traffic down but are not appropriate for every street. The Institute for Transportation Engineers has an excellent website on Traffic Calming: <http://www.ite.org/traffic/tcdevices.htm>

An analysis of opportunities to improve pedestrian safety and walking opportunities with traffic calming measures should be made of every proposed development project. For example, would the placement of speed humps or a pedestrian refuge island make it easier for people to cross a busy intersection? If a project will increase through-traffic on a residential street then consideration should be given to measures for reducing and slowing traffic.

Neighborhood Commercial

With trends towards ever larger stores and shopping centers, opportunities to walk to shop are dwindling these days. Larger projects, such as Planned Unit Developments, should include retail stores designed to serve neighborhoods along with the means for those living within and nearby the project to walk and bicycle to these businesses. Land use plans, zoning regulations, and growth-related policies should encourage neighborhood-scale commercial projects over larger and distant projects that are only accessible by car.

Neighborhood Scale Schools

Keeping schools small and oriented towards a community increases the likelihood that students can walk to school. In fact this is one of the *Smart Growth* principles advocated by the Smart Growth Network.²¹¹

Walking To Work

The number of people who walk to work declined by 25% from 1990 to 2000.²¹² Projects should be encouraged which locate a mix of housing types near new places of employment. Of course, provisions for walking from residences to jobs or mass transit facilities must be included.

²¹¹ See *Getting to Smart Growth: 100 Policies for Implementation* available from the Smart Growth Network at: <http://www.smartgrowth.org/pdf/gettoss.pdf>

²¹² See *Mean Streets: 2004* at: <http://www.transact.org/report.asp?id=235>

Bicycling

See the chapter of this book on *Bicycling* for measures to compliment this form of recreation and travel.

Following are links to additional sources of information on improving walking opportunities:

[American Automobile Association Foundation for Traffic Safety](#)

[National Highway Transportation Safety Administration](#)

[Pedestrian Safety Guide and Countermeasure Selection System](#)

Chapter 26: Wildlife

Few experiences add as much to the enjoyment one derives from their home as watching a squirrel forage a lawn, a deer graze along a forest edge, or listening to the song of wood thrushes from a deep forest. With these benefits may also come human-wildlife conflicts, such as when that deer leaves the forest edge to browse your ornamental trees. Fortunately, biologists, planners and other professionals have learned a great deal about how to maintain healthy, diverse wildlife populations, while minimizing conflicts, as an area develops. However, there are some wildlife species which are so important and sensitive that their habitat must be preserved in a natural state.

PRINCIPLES OF HABITAT PROTECTION

A 1998, *Planning and Development for People and Wildlife*²¹³, presented 19 principles for shaping growth to minimize adverse effects on wildlife and wildlife-human conflicts. The principles were divided into three categories. First, seven operational principles for habitat protection.

Principle 1: Be willing to use rules of thumb based on scientific findings that may someday prove to be false.

Principle 2: Understand that complex environmental problems do not have a single scientific solution founded on "truth."

Principle 3: Begin all conservation plans with clearly stated, specific goals for wildlife protection. Identify what species are most important, and whether you are trying to make sure that some of the animals remain, or that many of the animals remain, or that the animals remain over a wide area of land.

Principle 4: Insist that the analysis used for setting conservation priorities can be understood by everyone who is affected by it.

Principle 5: Realize that all models are wrong, but some are useful.

Principle 6: Make plans adaptive by evaluating the consequences of actions. Learn by doing.

Principle 7: Seize opportunities to enhance wildlife habitat by intelligent design of developments.

Next, the author presented seven biological principles for habitat protection at the landscape scale.

²¹³ These principles are reprinted with the author's permission. The paper *Planning and Development for People and Wildlife* can be viewed online at: <http://www.planning.org/thecommissioner/19952003/spring98.htm>

Principle 1: Maintain large, intact patches of native vegetation by preventing fragmentation of those patches by development. If all other values of habitat are equal, larger patches of habitat should be protected in preference to smaller ones.

Principle 2: Establish priorities for species protection and protect habitats that constrain the distribution and abundance of those species.

Principle 3: Protect rare landscape elements. Guide development toward areas of landscape containing "common" features.

Principle 4: Maintain connections among wildlife habitats by identifying and protecting corridors for movement. Identify and protect small patches of vegetation that provide "stepping stones" among large, core patches described above.

Principle 5: Maintain significant ecological processes in protected areas. Examples of ecological processes include periodic fires, floods, and scattering of habitat materials by wind.

Principle 6: Contribute to the regional persistence of rare species by protecting some of their habitat locally. In other words, local communities need to "think regionally, and act locally."

Principle 7: Balance the opportunity for recreation by the public with the habitat needs of wildlife. Assure that some protected areas remain in private ownership not open to the public, in order to reduce intensity of use by recreationists. Regulate recreational use of protected habitat on public land to minimize impacts on sensitive species.

Finally, five biological principles for wildlife conservation at the site scale were presented:

Principle 1: Maintain buffers between areas dominated by human activities and core areas of wildlife habitat. Limit human activities to one or more buffer zones surrounding a core area, with more intense activities restricted to more distant zones. If people must pass through the core area on foot or bicycle, limit them to a well defined trail.

Principle 2: Facilitate wildlife movement across areas dominated by human activities. Provide alternatives to crossing busy roads, such as underpasses, especially during road construction. Minimize fencing types that inhibit the movement of wildlife species that are likely to occur in the area.

Principle 3: Minimize human contact with large native predators. Prevent wildlife from associating food with humans by exercising tight control over potential sources of nourishment such as garbage or food for domestic animals.

Principle 4: Control numbers of mid-sized predators, such as some pets and other species associated with human-dominated areas. Prevent domestic pets, especially dogs and cats,

from roaming freely. As an alternative provide designated areas where people can exercise or "run" their pets.

Principle 5: Mimic features of the natural local landscape in developed areas. Keep levels of disturbance to trees, the understory, and other structural features to a minimum during construction. Design house lots in a fashion consistent with local natural habitats-by using native vegetation, for instance.

Following is a brief discussion of the relationship between development and two categories of wildlife: birds and endangered species.

BIRDS

Everyone knows of endangered birds such as the bald eagle, though thankfully its not so endangered anymore. But there is a larger group of birds, known as *neotropical migrants*, which are declining. These are species winter in Mexico or further south and migrate north. About half the bird species nesting in North America are neotropical migrants. Researchers have found that many of these species are declining, particularly those of eastern deciduous forests.

The leading causes of the decline are the fragmentation of the eastern forests and those of Central and South America due to agriculture and development. It is thought that forest fragmentation harms these species by increasing predation and nest parasitism. Predators like raccoons and cowbirds are usually not very abundant in deep forests. But when large blocks of forest are fragmented their numbers increase along with the rate at which they decimate neotropical migrants through predation and nest parasitism.

How much forest do you need to preserve neotropical migrants? Well, what you need to *begin* preserving these species is forest interior. And forest interior does not start until one travels 300 feet in from the edge of a woodland. Blocks of forest 100 acres or larger begin to provide good habitat, provided they are not long and narrow. Obviously a 100-acre strip that is only 400 feet wide provides no usable forest interior.²¹⁴

If you can gain access to the site then identify all of the birds present, particularly those that are nesting. Do the same on areas adjoining the site. Be particularly watchful for any nests larger than a foot that are made mostly of sticks - not leaves - which may be used by large raptors or wading birds. If there is an unusually high abundance of *Forest Interior Dwelling* birds, then special protection measures may be warranted. Share your findings with ornithologists and ask if they feel your data indicates that the site supports uniquely important bird populations.

ENDANGERED SPECIES

²¹⁴ For further detail visit the Cornell University Birds in Forested Landscapes website at: <http://birds.cornell.edu/bfl/index.html>

The U.S. Fish & Wildlife Service (USFWS) is the official guardian of the nation's rare, threatened and endangered (RTE) species. But many states have their own lists of species which are RTE within their borders. Additionally, these states have *natural heritage* programs which monitor and conserve the State's RTE species.

To learn if RTEs occur on or near a proposed development site contact the natural heritage program for your state. Usually a natural heritage program is part of agencies such as natural resources, wildlife, fish and game, conservation, or environmental protection.²¹⁵

Natural heritage program staff may ask you to submit a written request for information on RTE species. In the letter ask not only if RTE species are known to occur on the site, but also on adjoining lands, and downstream along any waterways associated with the site. It is usually helpful to include a map showing the site location. The map should be reproduced from the U.S. Geological Survey topographic sheet for the area.²¹⁶

The presence of an RTE species on or near a site does not preclude development. What it will do is cause regulatory agencies to take a closer look at development activities which may affect the species. Frequently an RTE species can be protected with buffers and other BMPs. It is quite unusual for a species, like a snail darter or a spotted owl, to halt all development activity.

For the most part you'll find that the natural heritage program has not surveyed the specific site of concern to you for RTE species. If you can gain access to the site, then look for species found in similar habitat in the area. Also examine areas adjacent to and downstream of the site. If you think you have found an RTE then ***do not*** disturb it in any way. Instead, notify natural heritage program staff.

In addition to the natural heritage program contact all other organizations and institutions that may have information on endangered species and other important plant, fish, bird, or wildlife species. These organizations/institutions may include: birding clubs; botanical societies; college or university biology, zoology or ecology departments; nature center staff; the [U.S. Fish & Wildlife Service](#); state wildlife agency staff; personnel with parks or refuges located near the site; and environmental or conservation organizations.

If wildlife species of unique importance may be affected by site development then ask natural heritage or other wildlife agency staff to call for species protection. Ask the staff to describe what steps would be needed to fully protect the species, not just what may be politically acceptable.

²¹⁵ Visit the following U.S. Fish & Wildlife Service website for endangered species contacts in your area: <http://endangered.fws.gov/contacts.html>

²¹⁶ Topographic maps can be obtained from the U.S. Geological Survey by calling 1-800-USA-MAPS or visiting: <http://store.usgs.gov/>

Make certain development review staff are aware that the species are present and what the wildlife experts feel is needed to safeguard the resource.

PART II: RESOLVING YOUR CONCERNS THROUGH THE GROWTH MANAGEMENT PROCESS

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Chapter 27: An Introduction To The Growth Management Process

The purpose of Part II of this book is to explain how to resolve your concerns about a proposed development project through the growth management process. This chapter provides an introduction to how the process works with respect to a specific development project. An understanding of this process is crucial to determining which strategy options may provide your best path to victory. Subsequent chapters in this Part of the book will explain how to maximize the likelihood of resolving your concerns through each process.

PROCESS OVERVIEW

The goal of the process should be to manage growth in a way that preserves quality of life for existing and future residents while minimizing restrictions on the use of property. The process should begin with a master plan²¹⁷ drafted by a broad cross-section of residents, business owners, government officials and other interested parties working collaboratively. If done well, the plan will set forth a consensus view of how a town, city, county, or region should grow.

Zoning is the principle tool used to implement the goals and objectives set forth in the master plan. The local zoning ordinance²¹⁸ will group compatible uses together into *zoning districts*. The ordinance will set forth the purpose of each district along with criteria for determining which parcels of land should be assigned to each district. For each district the ordinance will also contain a list of uses permitted by right and by special exception permit, conditional use permit, or special use permit. The ordinance will limit the intensity of uses, such as number of houses per acre. Specific standards will be provided for ensuring compatibility between uses within the same district such as how far buildings should be set-back from streets, height restrictions, the percentage of a lot or site that can be covered by buildings, parking requirements, etc.

A set of zoning maps will be prepared that implement the overall land use plan set forth in the master plan. The maps will be designed to separate incompatible uses such as residential neighborhoods and industrial activities. Additionally, mapping will strive for other goals, such as locating the highest intensity of use where roads, sewers, and other infrastructure have excess capacity or increased in capacity are programmed.

²¹⁷ A master plan may be known as a comprehensive plan, general development plan, or by a variety of other titles.

²¹⁸ A zoning ordinance may also be known as the land use code, development regulations or other names. But in the context used above, zoning ordinance means that body of local law which sets forth zoning districts, criteria for establishing districts, the uses permitted within each district and performance standards.

A number of specific permits and approvals are needed prior to developing a tract of land. To obtain each permit-approval the applicant must demonstrate that the project meets various standards with respect to roads, water and sewage, schools, environmental protection, and a number of other factors.

As of 2002, there were more than 3,034 counties, 19,429 municipalities, and 16,504 towns in the United States.²¹⁹ Many of these local jurisdictions have land use and zoning authority. You would think that with so many jurisdictions there would be dramatic differences in how growth management works from town to town, county to county, and from state to state. In many ways though, land use regulation is remarkably consistent throughout the nation. This is because local zoning laws are enabled by State statutes which in turn derive authority from the U.S. Constitution. Because of this common basis you will likely find that the growth management process in your area strongly resembles the following generalized description.

DEVELOPMENT REVIEW

Most projects will go through development review steps similar to that described in this section. Some projects, particular larger ventures, will undergo further evaluations which are described in the following sections.

1. The process usually begins when the applicant (property owner and/or development company) has an initial, informal discussion with the local planning director, their staff, members of the local legislative body, and/or the chief executive. Through these discussions the applicant hopes to learn of likely obstacles to project approval.
2. The applicant submits a concept or sketch plan for review by planning staff who then draft comments to the local planning commission. The comments will focus on compliance with concept plan requirements set forth in the local zoning ordinance and other applicable regulations. If the ordinance requires a finding of consistency with the master plan, then staff comments will address this issue as well.
3. The planning commission will hold a hearing on the concept-sketch plan, but the purpose will not be to approve or disapprove. Instead, the commission will inform the applicant of y potential conflicts with zoning ordinance requirements and other relevant issues. Public notice is given of the hearing, though it may be limited to an announcement in the legal section of a local newspaper or a sign posted on the site. An opportunity for public comment is frequently provided during the hearing.
4. The applicant submits a more formal plan, which may be known as a site plan, development plan, preliminary plan, or by another title. For the purpose of this description, I'll call it the preliminary plan.

²¹⁹ U.S. Census Bureau, 2002 Census of Governments.

5. Staff will again generate comments to the planning commission on the preliminary plan. The comments address compliance with applicable regulations and any other relevant issues.
6. The planning commission holds a public hearing on the preliminary plan. This time the commission will be obligated to make one of three decisions on the plan: approval, approval with conditions, or disapproval. The commission may also table a decision to allow the applicant, staff, or the public additional time to address specific issues. Public notice is given of the hearing and the public is afforded an opportunity to comment during the hearing.
7. There will usually be a process for appealing the decision of the commission, which must be filed within a short period (10-30 days) following the date of the decision. The appeal will be heard by a local hearing board or officer, the local legislative body, or the state trial court acting in an appellate capacity.
8. A project will frequently come back before the planning commission in the form of a final plan. The issues the commission is required to consider are usually narrower than those at play during the preliminary plan stage. So *please* do not wait until the final plan stage to present your concerns to the commission. Instead, you need to discuss your issues with staff at the earliest opportunity after you become aware of the project then present your concerns and recommendation before the commission at both hearings.
9. Those aggrieved by the final plan decision may again have an opportunity to appeal.
10. Once final plan approval is granted the project will not come back before the planning commission. Instead, the remainder of the process will consist of staff review of more detailed plans for compliance with the requirements for various specific permits and other approvals. Of course, the more detailed plans must conform to the project depicted on the preliminary and final plans approved by the Planning Commission. If all goes well building permits will be issued along with other approvals such as a grading permit, a well and septic permit, etc.

In addition to the normal development review outlined above, a project may also be required to go through the following additional processes.

MASTER PLAN AMENDMENT

A master plan serves as a blueprint for how a local jurisdiction should grow. A good master plan will be designed to foster the growth scenario most effective in preserving and enhancing quality of life for current and future residents. An amendment should be required whenever a development project is proposed which would cause growth patterns to significantly diverge from that envisioned in the master plan. The quality of life implications of the project should be thoroughly studied in a process open to the public, particularly to those residents most directly affected. The goal of the amendment process should be to determine if the quality of life benefits of the project justify deviating from the growth scenario set forth in the master plan. If it will, then the plan should be amended. Planning

staff and the planning commission will coordinate the amendment process and make recommendations. The local legislative body is usually the final decision-maker on master plan amendments.

ANNEXATION

Annexation is a process used to expand the area of a town, city, or other jurisdiction. This act can be critical to providing a local jurisdiction with the increased tax base needed to fund essential programs. Frequently, the goal of those requesting annexation is to gain access to public water, sewer, and other infrastructure which allows development at densities greater than that possible with wells and onsite sewage disposal systems²²⁰. However, annexation has also been used to increase the profits derived from development by shifting a site from a jurisdiction with stringent quality of life protection measures to one with lesser restrictions. Proposed annexations should go through the same thorough and open review process applied to master plan amendments. In fact, if annexation of the subject property was not envisioned in the plan, a master plan amendment should be required as well. As with a master plan amendment, planning staff and the planning commission will coordinate the annexation process and make recommendations. The local legislative body is usually the final decision-maker on annexation requests.

ZONING TEXT AMENDMENT

When a new master plan is adopted or an amendment is made it is frequently necessary to modify the zoning ordinance to achieve the goals and objectives contained in the plan. If the required changes are minor, then this may be accomplished through a zoning text amendment as opposed to rewriting the entire ordinance. Additionally, a development company may request a zoning text amendment to allow a mix of uses or density not permitted by the present zoning ordinance. This should not be viewed as being bad. In fact, many zoning ordinances do not allow the use of innovative growth management techniques such as Traditional Neighborhood Design²²¹ or other *Smart Growth* and *New Urbanism* approaches. However, text amendments should be evaluated for cumulative impacts to quality of life. If the amendment has the potential to take growth in a direction differing from that set forth in the master plan, then it should be evaluated through the intensive scrutiny applied to a master plan amendment. Planning staff and the planning commission will usually coordinate the text amendment process and make recommendations. The local legislative body is usually the final decision-maker on zoning text amendments.

REZONING

Most local jurisdictions will have three processes for changing how land is zoned. First, zoning will frequently be adjusted when a new master plan is adopted. Second, during the ten to twelve years between master plan updates there will be a process where the need for zoning adjustments is studied

²²⁰ Onsite sewage disposal include septic systems, package sewage treatment plants, etc.

²²¹ Traditional neighborhood design provides a mix of housing types at relatively high densities with neighborhood scale retail commercial in a layout that facilitates travel by car, bicycle, or transit.

comprehensively. Third, a land owner may petition for a rezoning at anytime, though approval is usually granted only when it is found that the original zoning assignment was a result error or that various factors have changed to a degree which makes current zoning inappropriate. If a rezoning proposal has the potential to take growth in a direction differing from that set forth in the master plan, then it should be evaluated through the intensive scrutiny applied to a master plan amendment. Planning staff and the planning commission will coordinate the rezoning process and make recommendations. The local legislative body is usually the final decision-maker on rezoning requests.

PLANNED UNIT DEVELOPMENT

Many local zoning ordinances include Planned Unit Development (PUD) zoning districts. Within the PUD district greater flexibility is allowed with respect to mixes of uses and density. PUD districts are usually applied to larger tracts of land. Frequently the proposed site must be rezoned to allow the PUD. If the PUD has the potential to take growth in a direction differing from that set forth in the master plan, then it should be evaluated through the intensive scrutiny applied to a master plan amendment. Planning staff and the planning commission will coordinate the PUD process and make recommendations. If rezoning is involved then the local legislative body will usually be the final decision-maker on a PUD. Other wise, the Planning Commission or a planning director will be the final decision-maker.

SPECIAL EXCEPTION PERMIT, CONDITIONAL USE PERMIT, OR SPECIAL USE PERMIT

These three permits are very closely related. Most local zoning ordinances will list uses allowed *By-Right* along with those requiring a Special Exception Permit, a Conditional Use Permit, or a Special Use Permit. Uses requiring one of these permits are usually compatible with those allowed by-right within the same district, but it may be necessary to add conditions to achieve full compatibility. For example, a special exception permit, conditional use permit, or special use permit is frequently required to locate a church or other house of worship within a residential district. With day care and the many other activities taking place at churches, this use can result in quality of life impacts akin to those of retail commercial uses, like a neighborhood shopping center. Most local zoning ordinances will require a formal hearing on the permit to evaluate the potential for compatibility issues. Conditions may then be added to the permit to address issues such as buffering for visual and noise impacts, lighting restrictions, and so forth. If impacts rise to the point where they cannot be resolved with conditions then the permit may be denied. However, there may be a legal standard requiring a finding of *extraordinary impact*²²² in order for the denial to stand up on appeal. Planning staff will be responsible for studying applications for these three permits and will make a recommendation to the decision-making body, which is frequently a hearing board such as a Board of Appeals or Adjustments.

²²² The extraordinary impact test usually requires a finding that the impact of the proposed use at the proposed location will be significantly greater than if the same use were proposed for most other similarly zoned sites in the jurisdiction.

SPECIAL HEARING

When a project includes a use that is similar to, but not identical, to those allowed in a zoning district then a special hearing may be required to determine if the use is permitted. A special hearing before the planning commission, a hearing officer or board may also be required for certain uses that tend to be problematic.

VARIANCE

This last review process is by no means the least, especially with respect to the controversy it creates. A variance should be used rarely and only when absolutely necessary to allow the owner some reasonable use of their property. A variance is usually granted to allow a use which is otherwise prohibited by the zoning ordinance or to relax standards such as building setbacks and height limitations. Some jurisdictions grant variances so frequently that the intent of zoning ordinance is undermined by allowing incompatible uses in such close proximity that quality of life is degraded. Planning staff will study variance requests and make a recommendation. The final decision-maker on a variance request may be the planning director in the case of an *administrative* variance, but the final decision-maker should be a hearing board, a hearing officer, or the planning commission.

In the next chapter further background will be provided on the decision-makers introduced above.

Chapter 28: The Decision-Makers

For the most part, growth is regulated at the local level by the borough, town, city, or county government. A number of projects also require a permit or other approvals from state and federal agencies. There are a number of individual government officials and bodies (commissions, boards, etc.) who participate in determining whether various permits-approvals will be issued. Some make a recommendation while others render a decision which can then be appealed to another official or body. Collectively, I refer to both individual officials and bodies as *decision-makers*. The owner of property which has or could be proposed for development is, of course, another decision-maker. In addition there may be a development company which has an agreement to purchase the property from the owner if certain conditions are met. The development company is also a key decision-maker in determining what gets built on a site.

Throughout this book I will use the phrase *final decision-maker* to refer to that body or individual whose determines if a permit or approval will be granted. While there are usually a number of officials who influence decision-making there is one body who makes the final decision. Those aggrieved by this decision can then appeal, but the question becomes:

Did the final decision-maker adhere to applicable legal requirements?

The final growth management decision-maker at the local level is usually the planning board, at least for individual development projects. In some local jurisdictions the planning director or a hearing officer may serve as the final decision-maker on individual projects. The local legislative body is usually the final decision-maker on a master plan, an amendment to the plan, the zoning applied to individual properties, changes to zoning regulations, and other development-related legislative actions.

For most projects, the decision-making process begins with staff who review applicant submittals to determine compliance with applicable laws and policies. Staff report their findings to the head of their agency who then forwards findings and a recommendation to a final decision-maker, which is usually the local planning commission. The commission's decision may then be appealed to a local Board of Adjustments/Appeals or directly to the courts. The courts frequently do not hear any new evidence but instead review the record created at the hearing planning commission held on the project. Following is detail on each of the decision-makers.

PROPERTY OWNER

The owner of a potential or proposed development site may be an individual, a couple, a family, a corporation, etc. For advice on identifying the owner see *Determines Who Owns The Property* in Chapter 16 and *How To Obtain A Deed* in Chapter 19.

In areas with a hot housing market the owners of farms and other large tracts of developable land may be under considerable pressure to sell. Frequently, these owners have a desire to preserve their

property from development but rising property taxes, increasing difficulty in operating the farm, the need to get equity from the land for retirement or college tuition, all combine to make preservation very difficult. As explained in Chapter 16, under the heading *Preserving A Potential Development Site*, there are a number of options which may allow the owner to get substantial equity from the land while retaining the use and even ownership.

It's okay to contact an owner about their interest in preserving their property through easements and other mechanisms. But if you learn that the owner has a contract to sell their property to a development company or someone else, then ***stop the conversation immediately***. Otherwise, you could be exposed to a lawsuit for tortious interference, particularly if the owner subsequently breaks the contract.

DEVELOPMENT COMPANY

The company proposing to develop a site may own the property or the company may have a contract to purchase with the property owner. The contract will set a fixed or contingent price if certain milestones are reached in the permitting process. For example, the contract may state that if the proposal to develop the site receives preliminary plan approval then the sale will occur. The purchase price may be contingent upon the number of housing units or other development units which are approved. Generally, the contract is not recorded so those other than the parties to the agreement will have great difficulty obtaining the contract. I urge you not to even try. As stated above, do not do anything which could be construed as an attempt to interfere with a contract between a property owner and development company. This is one of the very few circumstances under which a citizen can be successfully sued in a development case. However, I strongly encourage you to contact the development company to negotiate a resolution of your concerns. Detailed advice on this topic is provided in *Chapter 37: Negotiate With The Applicant*.

STAFF

Most local jurisdictions have at least one staff member with expertise in planning and zoning. In the smallest jurisdiction staff may consist of a planner on contract who is consulted as needed. In other areas the local jurisdiction may rely upon planning staff assigned to a region who serve a number of towns or counties. Additionally, a Town engineer or public works staff will review a project for issues such as stormwater management, traffic and adequacy of public water and sewer services. Staff at the Board of Education may evaluate the adequacy of schools to serve the students generated by residential development projects. Health officials will review proposed well and septic systems. In rapidly developing jurisdictions, dozens of staff people may review and comment on specific aspects of each project.

PLANNING BOARD-COMMISSION

Most local jurisdictions have a planning board or a planning commission which considers everything from the master plan to plan amendments to new laws to zoning changes to specific development projects. Usually the planning board or commission is composed of individuals selected for their ability to represent community views and for their expertise. The best Boards are composed of

individuals representing the diversity of views within the community. In other words, the Board is balanced by those with backgrounds in economics, real estate, environmental management, school administration, and so forth as well as people who are parents, business owners, employees, etc.

Planning Board members are the unsung heroes of the growth management process. They are nearly always volunteers who donate their time attending meetings, reviewing issues at home, and educating themselves about how to manage growth more effectively.

Usually, Planning Board members are appointed by the local legislative body to serve for a specific number of years. Every year a portion of the Board members may be up for reappointment.

Frequently, the Planning Board is the final decision-maker on development projects. By *final decision-maker* I mean that the Board's decision is the final word for most development projects. While the courts may consider an appeal of a project approval, most jurisdictions obligate judges to presume that the Board's decision was correct.

The Board is responsible for ensuring that a project meets each of the specific zoning, subdivision, and other development regulations applicable to the project. Additionally, most local regulations require the Board to consider the cumulative effect of a project on public health, safety, or welfare, which is another way of saying the quality of life of nearby residents as well as the entire community. This is a responsibility which the board shares with no other decision-maker, save the applicant.

The role of the Planning Board varies from state to state and even locality to locality. In some jurisdictions the Planning Board may only make a recommendation on development projects with the local legislative body serving as the final decision-maker. In other jurisdictions a hearing officer or planning director may serve as the final decision-maker.

An appeal of a Planning Board decision may be heard by a hearing officer, a Board of Appeals, the local legislative body, or the courts.

I have had the opportunity to observe many Planning Boards across the nation. The best Boards are those which give citizens a clear sense that their concerns have been heard, fully considered, and that the Board has genuinely sought to resolve each concern falling within their purview. In other words, the best Boards respond every time a citizen raises a new concern. The response may be to explain why the concern is outside the Board's jurisdiction or to ask questions of the applicant or staff. These questions are designed to first verify the concern and then to seek a solution if the concern is found valid.

It has been my experience that when a Board operates in the manner described above we tend to get far more of the benefits of growth, with fewer negative consequences. And even when a Board makes a decision counter to that advocated by citizens, people come away from the hearing feeling they were treated fairly. I suspect that far fewer Board decisions are appealed when citizens feel they were heard

and fairly treated. In contrast, our clients invariably seek an appeal when a Board asks no questions and dismisses citizens concerns with little or no deliberation.

It is far easier for a Planning Board to operate in the preferred manner presented above if we citizens do our part by:

- not repeating concerns expressed by others;
- making an attempt to understand the issues the Board can and cannot consider by talking with staff before the hearing date;
- suggesting possible solutions (preferably win-win); and
- presenting concerns succinctly.

Further advice on presenting testimony is provided in *Chapter 40: Legal Action*.

OTHER COMMISSIONS

A number of states allow for the creation of boards or commissions focused on specific aspects of growth management, such as wetland protection, environmental issues in general, preservation of historic and other cultural resources, etc. Frequently, these boards serve in an advisory role to the planning commission. In other words, they make a recommendation which the planning commission is free to adopt or reject.

HEARING BOARD - HEARING OFFICER

Many local jurisdictions have a decision-making body known variously as the Board of Appeals, Board of Zoning Appeals, or Board of Adjustments. Generally, these Boards have the authority to hear an appeal of a decision by the Planning Commission and sometimes any land-use related decision made by any local official. The Board may also be the primary decision-maker on specific permits-approvals such as variances, special exceptions, conditional use permits, or special use permits. Those aggrieved by a decision of the Board may take an appeal to the local legislative body or to the trial court

In some localities a hearing officer or examiner serves in the role normally played by a planning commission or a hearing board.²²³ The hearing officer, who is usually an attorney, acts as an administrative law judge. A semi-formal legal proceeding may be convened before the hearing officer with attorneys representing: the applicant, citizens concerned about the project, and the local government.

²²³ For example of two jurisdictions (Baltimore Co., MD and King Co., WA) with hearing officers visit: http://www.baltimorecountyonline.info/Agencies/planning/welcome/zoning_commissioner.html or <http://www.metrokc.gov/mkcc/HearingExaminer/index.htm>

The focus of the hearing is usually a plan detailing the proposed development project. The hearing officer must determine whether the plan conforms to all applicable laws, regulations, and policies. If it does, then the hearing officer formally approves the plan. The approval may take the form of a written decision. The hearing officer may also have the option of adding conditions to an approval when needed to achieve full compliance. And, of course, the hearing officer can deny approval altogether.

The hearing may begin with a presentation by staff as to what has been proposed along with their recommendations: approve, approve with conditions, or deny. The applicant's attorney then presents legal arguments along with facts and expert opinion through witnesses in hopes of demonstrating that all requirements have been met. The attorneys representing citizens and local government can cross-examine the applicant's witnesses. It is then the turn of the citizen's attorney to put on their case. After cross-examining witnesses who testify on behalf of the citizens, the applicant's attorney and local government may get the last word by through rebuttal testimony. An appeal of the hearing officer's decision may go to a local Board of Appeals, the local legislative body, or to the courts.

LOCAL LEGISLATIVE BODY

The local legislative body may be known as a town or borough council, county commissioners, selectmen, board of supervisors, and various other titles. The local legislative body is responsible for enacting the laws setting forth how growth is managed. These laws must be consistent with State statutes as well as federal laws, including the U.S. Constitution.

The local legislative body is usually the final decision-maker on the master plan, amendments to the plan, and the zoning applied to each parcel of land within the jurisdiction. The local legislative body appoints members of the Planning Board and Board of Appeals or may hear appeals of the decisions made by the Planning Board or other units of government.

Like Planning Board members, most of those serving on local legislative bodies receive little or no compensation.²²⁴ Thus they also contribute many long hours towards the betterment of their community and deserve the respect and gratitude of us all.

The best local legislative bodies, like Planning Boards, are composed of people representing the diversity of views within the community and strive to fully hear and consider the concerns expressed by citizens. Few units of government have as much effect on our quality of life as local legislative bodies. Their decisions in large part determine the degree of congestion on our roads, the quality of our schools, and the healthfulness of our environment. Yet it amazing how few of us attend meetings held by our town council or county commissioners or provide input via a phone call, e-mail, or a letter.

²²⁴ See *Two Decades of Continuity and Change in American City Councils*. Commissioned by the National League of Cities, September, 2003. <http://www.nlc.org/content/Files/RMPcitycouncilrpt.pdf>

Many local legislative bodies now post their meeting dates and agendas on the internet and publish this same information in local newspapers. If you are concerned about how growth is managed in your area, then I urge you to monitor these announcements for relevant issues and then provide your thoughts.

MAYOR, COUNTY EXECUTIVE, OR MANAGER

Many local jurisdictions have a chief executive officer who is responsible for overseeing the various agencies that carry out the work of government. If elected, this chief officer is known as a mayor in municipalities (towns and cities) or as a county executive. If appointed by the local legislative body then the chief executive officer may have the title of town manager, city manager, or county manager.

The authority of the chief executive varies from jurisdiction to jurisdiction. The mayor of a large city or the executive of a densely populated county usually wields enormous power, including the right to veto actions of the local legislative body. A small town mayor may function more as an additional member of the local legislative body with no veto power and some limited authority beyond this role. A town or city manager is usually appointed to office by the local legislative body. Like any other appointed agency head, the manager serves at the pleasure of the local legislature and may be fired at any time.

A strong mayor or county executive may function as the true decision-maker for many aspects of how growth is managed. Since they oversee the planning department and other agencies, the mayor or county executive exerts considerable control over the recommendations these agencies make to the local legislative body, the planning commission, and other decision-makers. Even a weak mayor or town-city manager can influence land-use decision-making. So do not overlook the chief executive of your locality when exploring options for resolving your concerns.

STATE & FEDERAL GOVERNMENT

Regional, state and federal agencies can also influence how and where development goes. In more populated areas a Metropolitan Planning Organization (MPO) decides how and where transportation funds will be spent. By deciding where new roads go an MPO can play a major role in determining the pattern of future growth and whether existing developed areas will thrive or decline. State agencies are frequently responsible for issuing a variety of environmental permits/approvals and for distributing funds for the construction of schools, roads, water and sewer facilities, and other infrastructure. State agencies may also develop a number of the guidance documents used by local officials in determining whether specific permits/approvals should be granted. Federal agencies may be involved in project-specific decision-making, such as the permits issued by the U.S. Army Corps of Engineers for impacts to wetlands, streams or other *waters of the United States*..

For the most part, once local government decides that a project is acceptable on a specific tract of land regional, state and federal agencies are very reluctant to take actions which would stop the project. They may add conditions to a permit to reduce project impacts, but rarely will the conditions rise to the level of stopping a project.

COURTS

In most states there are three levels of courts which may hear a land use case. The first court encountered when an appeal is taken of a decision by a Board of Appeals, a local legislative body, or a planning commission is the trial court known variously as circuit court, superior court, or by other names. Those aggrieved by a trial court decision may then go to a Court of Appeals, Court of Special Appeals, or a mid-level appellate court known by some other name. The mid-level court decision may then be appealed to a state supreme court. But like the U.S. Supreme Court, the state supreme courts may only hear the cases they select. Frequently, appeals of land use decisions stop at the mid-level appellate court. It can take two- or three-years from the time a case is appealed to the trial court until a final decision is issued by the mid-level appellate court.

While the first level may be called the trial court, frequently these courts only look at the record established in a lower level proceeding. For example, if you take an appeal of a Board of Adjustment decision, the trial court judge may only consider the facts presented before the Board and whether the decision of the Board conformed with applicable law. In this case, new evidence cannot be introduced before the trial court judge. For better or worse, you are stuck with the record made at the lower level.

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Chapter 29: Zoning

Through the master planning process a community decides where it wants to permit high-density housing, shopping centers, office space, and other land uses. Zoning is the principle means of implementing this aspect of the plan.

A local jurisdiction will adopt an ordinance establishing a number of zoning districts. These may include a half-dozen residential districts where the dominant use in each will range from single-family detached homes to townhouses or apartments. Other districts would include those geared towards promoting agriculture along with zoning districts devoted exclusively to commercial or industrial uses. Many zoning ordinances will also allow for mixed-use development which may be in the form of a planned unit development district or one allowing a traditional neighborhood design.

The local legislative body adopts a set of zoning maps which assigns each parcel of land within the jurisdiction to a specific zoning district. The zoning ordinance will set forth the process by which the local decision-making body adopts the set of zoning maps which assign each parcel to a particular District. There will also be provisions for amending the maps. Both processes (adoption and amendment) usually require a public hearing before the local planning commission and the legislative decision-making body. The role of the planning commission is usually that of a fact-finder. That is the commission is usually responsible for gathering and assembling all the facts relevant to the criteria set forth in the zoning ordinance for making a decision on the adoption or amendment of the zoning maps. The commission will then make a recommendation to the local legislative body. But it will be the legislature that makes the final decision on zoning map adoption and amendments.

Some jurisdictions also employ overlay and floating zones. An overlay zone modifies the development permitted in underlying zones. For example, in my home state the Chesapeake Bay Critical Area has three overlay zones applied to all lands within 1,000-feet of tidal waters. Lands within the overlay zones must meet more stringent environmental protection requirements. A floating zone also modifies the uses allowed in the underlying district but are applied through a process beginning with a land owner request.

The zoning ordinance will set forth the following specific requirements for each district:

1. **By Right Uses:** These are land uses and other activities permitted within the District *by right*. For example, in most residential districts single-family detached homes are permitted *by right* as opposed to uses requiring a special exception or conditional use permit.
2. **Accessory Uses:** These are uses normally associated with those permitted by right, such as storage sheds or parking recreational vehicles on a lot zoned for single-family detached homes. But the zoning ordinance may contain restrictions intended to prevent an accessory use from causing an undue impact to adjoining property owners, such as limiting the number of RVs that can be kept on the lot.

3. **Special Exception, Conditional Use Permit, or Special Use Permit:** An activity requiring a special exception, conditional use permit, or special use permit is one which is normally compatible with other uses allowed in a Zoning District, but in some cases conflicts may arise. Usually, a formal evaluation is made to determine if there is anything about the proposed use which would cause excessive impacts on the particular tract of land. For instance, a golf course might be permitted by special exception or conditional use permit in a number of residential districts. In most cases a golf course would be a use compatible with homes. But if the homes are served by wells which are likely to become contaminated by golf course fertilizers and pesticides then a special exception/conditional use permit might be denied. Or the permit might contain conditions that resolve the potential impact, such as prohibiting the application of chemicals in areas where they will likely cause well contamination.
4. **Bulk Requirements:** The zoning ordinance will contain limits on how parcels within each district can be developed. Common limits include:
 - a. Minimum and maximum lot size;
 - b. Minimum lot width and length;
 - c. Number of dwelling units allowed per acre;
 - d. Height restrictions;
 - e. Setbacks from lot lines, streets, wetlands and streams; and
 - f. In commercial districts limits on Floor to Area Ratio (FAR) such as 0.4 which means the floor area cannot be more than 40% of the lot area.

The zoning ordinance may also contain requirements for signs, parking, roads, historic preservation, environmental protection, adequacy of public facilities, and a number of other development considerations. The ordinance may also specify the composition, powers, and duties of the legislative decision-making body, the Planning Commission, the Board of Appeals, hearing officers, the planning director, and other officials. Finally, provisions will be included to amend the text of the ordinance - a zoning text amendment - to create a new zoning district or to modify the uses permitted within an existing district. A zoning text amendment is also known as a *curative* amendment in some areas.

Chapter 30: Annexation

In *Cities Without Suburbs*²²⁵ former Albuquerque mayor David Rusk showed how towns and cities with “flexible” borders were able to maintain their tax base through a legal process known as annexation. Vacant or under developed land adjoining the municipality would be annexed into the corporate limits. When the property was fully developed the jurisdiction would reap the benefits in the form of increased tax revenue. Of course the town would also have to pick up the cost of providing public services. If the added revenue exceeded the additional expenses then town residents benefitted from either lower taxes or improved services.

In contrast, Mayor Rusk described towns that could not annex. Over time existing homes, businesses and schools aged while middle- and upper-income residents fled to the suburbs taking their higher tax payments with them. Lower income residents were left behind. Thus the municipality was faced with declining tax revenues and the higher expenses associated with a lower income population and deteriorating infrastructure.

While annexation is one solution to this problem it is not the only and not necessarily the best) solution. The *Smart Growth* movement was inspired in part by Mayor Rusk’s landmark work. Planning agencies, development interests and citizen advocacy groups began working together to reverse the factors which encouraged middle-class flight and sprawl. Policies were adopted which make it attractive to develop within existing towns and other population centers. But since the adoption of Smart Growth principles is far from universal and complete, annexation is still a common practice.

Development interests sometimes use annexation as a way of avoiding regulation. If a county has good growth management laws, but a town incorporated within the county has less stringent regulations, then a property owner may seek annexation into the town.

Annexation can also be motivated by a desire to access public services, such as water and sewer. A town with its own water and sewage treatment facilities may restrict access to properties located within the municipal boundaries. Properties adjoining the town can only develop at the much lower densities allowed on well and septic. Thus property owners wishing to maximize development profits have a strong incentive for requesting annexation into the municipality.

If the proposed annexation of a property will harm you or your neighbors, then take a look at the applicable laws. Could the annexation be done with conditions which resolve your concerns: an Equitable Solution?

²²⁵ *Cities Without Suburbs*, by David Rusk, Woodrow Wilson Center Press, 0-943875-74-9, 168 pp., 2nd Edition 1995.

If the annexation is motivated by a desire to avoid regulations, which would otherwise resolve your concerns, then can you convince the municipality to adopt similar laws? If not, then perhaps your best recourse is to find some portion of annexation requirements which the applicant fails to meet. Or can you convince final decision-makers to deny the application? Look to the decision-makers in both jurisdictions. Approval may be required from not only municipal officials but also those administering the jurisdiction in which the property is presently located. Also, approval may be required of a majority or all of those who own property within the area proposed for annexation.

Also see the CEDS webpage

[Winning Annexation Battles](#)

Chapter 31: Variances & Waivers

Most zoning ordinances contain provisions allowing the local jurisdiction to grant a variance or a waiver for certain requirements. For example, if someone wants to build a garage but they cannot meet, say, a 10-foot property line setback, but they can keep the garage eight-feet away, then they may get a variance, particularly if they proved that the variance was needed because of some unusual characteristics of their property and other criteria are met. Many local jurisdictions also require the applicant to demonstrate that the variance is needed to relieve hardship. In some localities a variance is called a "modification."

In their book *Land Use*²²⁶, law professors Robert Wright and Morton Gitelman said the following of variances:

The variance is the most controversial, most abused, and usually the most used administrative relief that can be granted in requests for zoning changes.

Professors Wright and Gitelman cited a Pennsylvania Supreme Court decision²²⁷ as offering an excellent description of four factors that should be met prior to the granting of any variance. These factors are:

1. "that an unnecessary hardship exists which is not created by the party seeking the variance and which is caused by unique physical circumstances of the property for which the variance is sought;
2. that a variance is needed to enable the party's reasonable use of the property;
3. that the variance will not alter the essential character of the district or neighborhood, or substantially impair the use or development of the adjacent property such that it is detrimental to the public's welfare; and
4. that the variance will afford the least intrusive solution."

The professors went on to say that...

If every board of adjustment and every court were more aware of these factors and applied them more rigorously in place of bending them to meet the economic aims of developers and landowners, use variances would no longer constitute a synonym for evasion of zoning

²²⁶ *Land Use in a Nutshell*, published by West Group, St. Paul, MN, 2000

²²⁷ Larsen v. Zoning Board of Adjustment of the City of Philadelphia, 543 Pa. 415, 672 A.2d 286 (Pa. 1996).

restrictions. As matters stand today, zoning is as much characterized by the variances from it as by the adherence to it.

A variance may be granted to a use restriction or an area restriction.

Use Variance: Most zoning ordinances specify the uses (activities) permitted within each zoning district. The ordinance, enabling statutes, or court precedents may allow the local jurisdiction to grant a variance to the use restriction when certain factors, like the four presented above, are met. For instance, apartments may be prohibited in a district intended primarily for single-family homes. But it may be possible to obtain a variance for the addition of a granny apartment within a single-family home.

Area Variance: An *area* variance would be needed to reduce, say, the minimum setback required from the front of a proposed building to the edge of a street or a variance might be granted to the minimum acreage required to build a home.

In my experience, it is rare that variances are granted to zoning requirements that directly affect public health and safety. I have never seen a variance to the 100-foot minimum setback a number of states require between a shallow well and a septic system. Nor have I seen a variance to intersection sight-distance requirements though some applicant traffic engineers do come up with creative arguments that less distance is required than called for by generally accepted guidelines.

The criteria for granting variances to environmental standards will frequently contain factors in addition to the four presented above. These factors may include a condition that the decision-making find that a variance will not cause a net increase in water pollution or that other specific environmental requirements are met before a variance can be granted.

Waivers: Occasionally land use ordinances will allow for a *waiver* of specific requirements if certain conditions are met. For instance, an applicant might receive a waiver from stormwater management requirements if it was determined the project would not cause adverse impacts downstream.

In many jurisdictions, an applicant must go before the local Board of Zoning Appeals or Zoning Adjustments to obtain a variance. However, some jurisdictions have granted the planning director the authority to issue a variance but allow citizens to contest the decision to a local Board of Zoning Appeals. A similar appeals process is sometimes available for waivers. In fact, some jurisdictions allow citizens to appeal virtually all land use decisions made by the local government.

Chapter 32: Development Review Process

A zoning ordinance or subdivision regulations will set forth the process for reviewing a proposed development project. Typically the process will consist of the following steps:

1. First, if necessary, the applicant requests a master plan amendment, annexation, a water and sewer plan amendment, or a change in zoning.
2. If the project requires a special exception, conditional use permit or a variance then a decision is made as to whether these approvals will be granted. In many cases a formal hearing is held.
3. A concept or sketch plan is submitted so staff and/or the Planning Commission can determine if there are any basic issues which would make eventual project approval unlikely.
4. Following concept or sketch plan approval, a more detailed preliminary plan is submitted along with various supporting documents such as a traffic impact study, stormwater management analyses and plans, architectural drawings, etc.
5. If preliminary plan approval is granted then the applicant proceeds with submission of the even more detailed plans required for final development/subdivision plan approval.
6. If the final development plan is approved then the applicant proceeds to the issuance of the grading and building permits required to actually break ground and start construction.

Many jurisdictions will combine similar steps in the process. For example, preliminary plan approval may be considered simultaneously with special exception-conditional use permit review. This is because both require a similar analysis and it is more efficient to carry out the analyses at the same time.

If you are grappling with a project which is so poorly conceived that the impacts cannot be resolved, then your best opportunity to defeat it will be at the first two steps in the development review process. In other words, you must start early and convince final decision-makers to deny the master plan amendment, annexation, a rezoning request, a special exception, the conditional use permit, or a variance. If a project is consistent with zoning and does not need a special exception, conditional use permit or a variance, then it is very likely that it will eventually be approved, as it should be. Your best opportunities to win changes that resolve project impacts will be at the first four steps in the process described above.

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Chapter 33: Public Participation

The zoning ordinance may also contain requirements for notifying the public about proposed development projects and opportunities to comment. Public notification could be as little as a legal announcement in a newspaper to something more responsible, such as posting signs on the site along with mailings to adjoining property owners. The notice may be given a week to several months prior to a hearing or the deadline for public comment.

A legal notice a few weeks before a hearing is not a very effective way for allowing the public to participate in the development review process. My home county (Baltimore County, Maryland) has one of the best development review public participation processes in the nation.

First, a Community Input Meeting (CIM) is held in the evening at a location near the proposed development site. The CIM is announced with a sign posted on the site, a mailing to adjacent property owners and the community associations active in the area, and a listing on the County's website. A copy of the applicant's Concept Plan is mailed out to any interested party. Both the applicant and County officials attend the CIM to explain the project and to answer citizen questions. Copies of the project Concept Plan are distributed. The County officials take detailed notes on citizen concerns. The applicant is encouraged to resolve each relevant issue.

Next, the applicant submits a Development Plan. A Development Plan conference is then held between the applicant and County officials. At the conference County officials discuss their outstanding concerns with the applicant. The public is allowed to attend the conference, but not to participate in the discussion.

Within 10 to 21 days following the conference a County hearing officer holds a public hearing on the Development Plan. Though this is a formal legal proceeding the public can present their concerns, the facts supporting each concern, and even question the applicant's witnesses if they are not represented by an attorney. The hearing officer can approve or deny the development plan. The hearing officer also has the option of approving the plan with any reasonable conditions needed to resolve outstanding issues.

If citizens are dissatisfied with the hearing officer's decision then they can take an appeal to the County Board of Appeals. If they are dissatisfied with the Board's decision then they can appeal to Circuit Court then the Maryland Court of Special Appeals.

When the CIM process was first proposed, many thought it would greatly increase citizen appeals of development approvals. In fact, this has not been the case. The process has probably had the opposite effect. By informing citizens of development proposals very early in the process it is easier for citizens to judge whether the project will cause undue impact and to work with the applicant and the County to resolve their concerns. So the CIM process has probably reduced the number of appeals and improved the compatibility of new development with existing land uses.

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Chapter 34: Permits & Other Approvals

In addition to those discussed above, following are the permits and other approvals a project may need to acquire along the path from conception to ribbon-cutting.

ADEQUATE PUBLIC FACILITIES

Some local jurisdictions have adopted adequate public facility ordinances (APFOs). The intent of APFOs is to manage development approvals so that schools, roads, water, sewer and other infrastructure are not overtaxed. Frequently, APFO requirements kick in at the building permit stage. In other words, a building permit would not be issued unless adequate capacity is available to accommodate the students generated by construction of a new home along with other additional service needs.

BUILDING PERMIT

Issuance of a building permit is usually the last step in the development review process. To get to the building permit stage an applicant must have complied with all zoning and subdivision requirements. The building permit focuses on compliance with codes for plumbing, electrical, construction practices, and so forth. In jurisdictions without zoning and subdivision regulations, this may be one of the few permits/approvals required before a project can break ground.

If you just learned about a project and all other permits/approvals have been granted, except for the Building Permit, then the likelihood of resolving your concerns is not good. The applicant has invested a lot of money in getting the project to this final design stage. The reviewing agencies have gone on record as approving the project. Relatively little flexibility remains for making changes. To win your concerns would need to be obvious, substantial, and correctable without major changes to the project.

ENVIRONMENTAL IMPACT STATEMENT

Most development projects are not required to comply with the environmental impact statement (EIS) provisions of the National Environmental Policy Act (NEPA). NEPA only comes into effect when a project involves a major federal action and that action is likely to result in a significant impact.

Examples of a major federal action would include projects where federal funds are used or federal permits are required. NEPA requires that all major federal actions be subjected to three levels of analysis:

- categorical exclusion determination;
- preparation of an environmental assessment/finding of no significant impact (EA/FONSI); and
- preparation of an environmental impact statement (EIS).

Categorical Exclusions apply to specific types of projects where prior analysis has shown that the project type does not cause a significant impact. If a project does not qualify for a categorical

exclusion, but further analysis (an environmental assessment) shows it will not cause harm then a Findings of No Significant Impact (FONSI) is issued. An EIS must be prepared for projects which fail to receive a categorical exclusion or FONSI. For further detail on NEPA go to: <http://www.epa.gov/compliance/nepa/index.html> and <http://ceq.eh.doe.gov/nepa/nepanet.htm>

As of 2003, sixteen states had adopted their own version of NEPA, usually called a Statye Environmental Quality Act (SEQA) or little NEPA: Arkansas, California, Connecticut, Florida, Hawaii, Indiana, Maryland, Massachusetts, Minnesota, Montana, New York, North Carolina, South Dakota, Virginia, Washington and Wisconsin. Additionally, the State of Pennsylvania was considering the adoption of a SEQA.

Most of the SEQAs only apply to State projects, although some encompass private projects as well. The Washington State Environmental Policy Act (SEPA) process is arguably the most comprehensive with respect to individual development projects.²²⁸ The following [CEDS website](#) publication contains an analysis of a proposed development project for compliance with the Washington state SEPA requirements, [Salmon, Lake Quality, Wetlands & Development Impacts - An Example of CEDS Analysis](#).

EROSION & SEDIMENT CONTROL PLAN APPROVAL

The impact of construction phase erosion and sediment pollution was described in the section of this book on aquatic resources. The U.S. Environmental Protection Agency (EPA) requires the use of erosion and sediment control measures on all construction sites five acres or larger. A number of states and local jurisdictions have also adopted their own erosion and sediment control requirements which may apply to all construction sites, not just those five acres or greater.

In areas where just the EPA requirements are in place the applicant must file a Notice Of Intent (NOI) form. A storm water pollution prevention plan (SWPPP) must be prepared which describes the Best Management Practices (BMPs) which will be used to minimize erosion and sediment pollution. The EPA BMPs requirements can be downloaded from: <http://www.epa.gov/owow/nps/urbanmm/index.html>

If erosion and sediment control is among your concerns then you should obtain the BMP requirements from the EPA site or from your state-local government. Arrange an opportunity to review the applicant's SWPPP. Compare the proposed BMPs with those presented in the EPA, state or local manual. Consider the advice provided in the aquatic resource impact section of this book on maximizing the effectiveness of construction phase controls. Verify that the applicant is taking all steps necessary to protect the aquatic environment.

²²⁸ For further detail on the Washington State Environmental Policy Act process visit: <http://www.ecy.wa.gov/programs/sea/sepa/e-review.html>

FIRE DEPARTMENT

In many localities the fire department will review a proposed development project for any factor with might impede fire suppression. These factors include:

- sufficient water pressure in areas served by public water;
- the need to install a pond, tank or other measures to ensure adequate water is available to fight fires in remote areas;
- proximity to areas subject to wildfires;
- at least two means of accessing a site (many local jurisdictions discourage projects where there would be only one road in and out that might be blocked thus preventing emergency vehicle access);
- the need to require sprinkler systems;
- whether building height or other factors exceeds the capability of fire equipment; and
- minimum response times from the nearest fire station (National Fire Protection Association standard 1710 requires a response time of four minute or less for career fire stations).

Further detail on this topic is provided in the section on *Fire* in Part I of this book.

GRADING PERMIT

A number of local jurisdictions require an applicant to submit a grading plan. If the plan complies with requirements such as erosion and sediment control then a grading permit is issued. The purpose of this permit is to ensure that grading, filling, and site clearance is done in a way which minimizes adverse effects. Through the grading permit review process other issues may be screened, such as checking to see if limits of disturbance will intrude upon aquatic resource buffers or onto adjoining properties, minimizing forest loss or altering viewsheds, and guarding against impacts to historic or archaeological resources.

HIGHWAY ACCESS PERMIT

To connect to an existing local or state road, one may need a highway access permit, even for a new driveway. To obtain the permit the applicant must demonstrate that safety will not be jeopardized. For example, the applicant must demonstrate that the sight-distance criteria presented earlier in this book are met. The applicant may be required to submit a full traffic impact study, especially for larger projects.

If traffic is among the concerns you have about a proposed development project, then contact the agency responsible for the affected roads. The responsible agency will usually be obvious from looking at a map or signs posted along the road. For example, if the road is a state route then it is maintained by the state highway agency. As always, request an opportunity to review any applications and other documents submitted for the proposed access. Compare the information presented in these documents to the agency's criteria for granting an access permit. Discuss any unresolved concerns with agency staff.

HISTORIC RESOURCE REVIEW

This topic was covered in detail earlier in Chapter 11. Many local jurisdictions and state agencies will review proposed development projects for impacts to historic or archaeological resources. Frequently this is done by the planning and zoning staff. The local zoning ordinance may require staff to sign-off on historic resource preservation requirements before a preliminary or final development plan can be approved. An assessment of impacts to historic resources is one of the elements of an EIS. To locate the local historic preservation review office for your area go to the [NPS Heritage Preservation Services website](http://nps.gov/hps).

NPDES POLLUTION DISCHARGE PERMIT

If an applicant proposes to construct a sewage treatment plant or some other new *point* source of pollution then they must comply with the provisions of the National Pollution Discharge Elimination System (NPDES) of the federal Clean Water Act. NPDES permits are not required for most *nonpoint* pollution sources such as septic systems serving individual homes and cropfield runoff.

An NPDES discharge permit must be obtained before a project commences. For the most part, EPA has delegated the authority to states for issuing NPDES discharge permits. To receive a permit the applicant must demonstrate that the discharge will be treated to a level sufficient to prevent a violation of water quality standards. Further information on the NPDES system can be found at: <http://cfpub.epa.gov/npdes/>.

If a project will connect to an existing sewerline then review the compliance history for the plant which treats the wastewater carried by the sewer. Compliance information for existing permitted discharges can be viewed at: <http://www.epa.gov/enviro/html/water.html#PCS>

If the plant is running at or over the design capacity or experienced one or more major violations a year, then these problems should be corrected before further connections are allowed.

OCCUPANCY PERMIT

Once construction of a home or other buildings has been completed the local government will issue a final approval known as an *occupancy permit*. If an applicant has failed to comply with some requirement crucial to the protection of you and your neighbors, then urge the local government to withhold the occupancy permit until the problem is resolved. Of course there must be some logical connection between the unresolved issue and the occupancy permit. For instance, if the applicant were required to install a required visual buffer between your home and a new commercial building, then it would be logical to withhold an occupancy permit. But if local officials had made a decision earlier in the process not to require a buffer then it is less likely you can delay occupancy permit issuance.

SEPTIC SYSTEM PERMIT

The aquatic resource effects of septic systems was covered in detail in a prior section of this book. Before construction may begin on a home or other building served by a septic system, the local health

department must certify that the site meets minimum requirements. If the project of concern to you will be served by a septic system then request an opportunity to review the health department's files. Compare results of percolation tests and other site investigations with the criteria contained in local or state law. Also compare the project with the recommendations given earlier in this book for protecting aquatic resources from septic system impacts. If you feel the criteria have not been met or some unusual condition exists which could cause undue impact, then ask the health department to withhold the septic system permit.

STORMWATER MANAGEMENT PLAN APPROVAL

Once the construction phase is completed, stormwater runoff from rooftops, streets and parking lots introduces a new set of aquatic resource impacts. Many local jurisdictions and some states have enacted laws mandating the use of BMPs to reduce the impact of post-construction stormwater runoff.

In other localities, especially towns and cities with a population of 100,000 or more, the EPA Stormwater NPDES Program requires control of runoff impacts from separate storm sewers.²²⁹ The portion of this book on aquatic resource impacts described measures to reduce or eliminate stormwater impacts. If stormwater management is required for the project of concern to you then request an opportunity to review the plans. Determine if highly-effective BMPs are proposed. If not then consider encouraging local officials to require these measures, particularly if the project threatens uniquely important or sensitive aquatic resources.

USE OR ZONING PERMIT

The local zoning ordinance will list a number of uses allowed by right or as accessory uses within each zoning district. An *accessory use* is one which is minor and commonly associated with the primary use of properties within a zoning district. Accessory uses should cause few, if any, compatibility problems. An example of an accessory use would be a small shed for storing a mower and other lawn-garden equipment in a zoning district where the primary use is single-family detached homes.

Many jurisdictions require a *use or zoning permit* whenever a property owner wishes to add one of these uses. A gray area emerges when a proposed use does not quite correspond to any of those allowed by right or as an accessory use. Normally, a use permit does not involve notification of adjoining residents. Instead, the property owner submits an application which is reviewed by staff. If the use conforms to applicable regulations then a permit is issued.

WATER & SEWER PLAN AMENDMENT

If a site is located outside the area served by public water and sewer services and the applicant wishes to build at densities greater than those possible with well and septic, then they will need to request an extension of water and sewer lines. Many local jurisdictions have adopted a master water and sewer plan which serves as a critical growth management tool. Extending water and sewer beyond

²²⁹ For further detail on EPA's separate storm sewer NPDES program visit: <http://cfpub.epa.gov/npdes/stormwater/munic.cfm>

the areas shown for service in the plan may require an amendment. Frequently, the local council or commissioners must hold a formal public hearing on an amendment request.

If vacant sites exist within the areas where water and sewer lines already exist, then growth should be directed to these locations first before extensions are made to other areas. It would be a waste of tax-dollars to construct new water and sewerlines while existing infrastructure goes underutilized. Similarly, new development should be directed to *redevelopment* sites, such as empty warehouses or abandoned shopping centers. If existing water and sewerlines are fully utilized then the applicant should be required to pay for service extensions.

If a project site is within an area designated for water and sewer service then the applicant may still need an approval to connect, which may go by the name of a water or sewer allocation. Local utilities use allocations to keep track of the commitments made to provide service. The allocation tracking system prevents a utility from committing to services which exceed their capacity.

WATER APPROPRIATION PERMIT

If a project will require water pumped from an aquifer or a surface source (lake, river, etc.) then they may need to apply for an appropriation permit from a state agency. Occasionally, local approval is required as well. Frequently, these permits are issued by the state natural resources or environmental agency. To obtain a permit the applicant must demonstrate that the quantity of water requested is truly needed and that the withdrawal will not adversely affect other users or the environment.

In eastern states water appropriation law is based upon the riparian use doctrine which allows those owning property adjoining a water body to make reasonable use of the water as long as it does not interfere with the rights of other riparian property owners.

In the west the prior appropriation doctrine is more common. This doctrine states that the first person to make beneficial use of water retains control of the water in perpetuity. In some states, like California, both doctrines apply.

WELL PERMIT

In addition to (or in-lieu of) a water appropriation permit local or state government may require an applicant to obtain a well permit before drilling commences. The permit will carry with it specifications on how the well is to be constructed to prevent contamination. For example, the driller may be required to extend the well a foot above ground so surface runoff cannot flow in through the top. Also, the applicant may be required to case the well in solid pipe from the surface to bedrock or the first layer of impermeable clay. Grouting with concrete may be required to further seal the well from contamination. Some states require the driller to submit a completion report for each well they construct. These reports can provide a wealth of valuable information about groundwater conditions,

geology and the vulnerability of wells to contamination from septic systems and other sources. The state or U.S. Geological Survey can also provide information on groundwater conditions.²³⁰

WETLAND PERMIT

The federal Clean Water Act prohibits dredging or the placement of fill within *waters of the United States*, which includes all our tidal waters, flowing waters (streams and rivers), lakes, ponds and wetlands. The upstream limit of *Waters of the US* extends to the head of intermittent stream flow.²³¹ The U.S. Army Corps of Engineers (USACE)²³² is the lead agency on wetland permits, though a number of states and local governments also regulate dredging and filling in wetlands and other waters.

The USACE has two broad categories for wetland permits: general and individual. General permits cover relatively minor activities which individually have minimal impact but could have a considerable effect cumulatively. Individual permits are required for activities with more substantial impact. For example, a proposal to construct a bridge across a small stream might qualify for a general permit whereas a proposal to build a road crossing impacting an acre or two of wetlands would not.

General permits vary from state-to-state. So check with your district USACE office to obtain detail on general permits.²³³

Before the USACE can issue a wetland permit your EPA regional office or the state environmental protection agency must grant a [Water Quality Certification](#) for the project. The WQC certifies that the proposed activities will not violate applicable water quality standards.

At first it might seem obvious what is a wetland. But in reality wetland identification gets a bit complex, particularly when attempting to decide where a wetland starts and ends. The bible on wetland identification is the USACE 1987 *Wetland Delineation Manual*.²³⁴ For larger development sites a USACE official will walk the area and prepare a *jurisdictional delineation* showing where dredging-filling would require a Corps permit.

²³⁰ Visit the U.S. Geological Survey at: <http://www.usgs.gov/>

²³¹ An intermittent stream carries water for more than just the period immediately after a rainfall-snowmelt-runoff event but less than year-round. Intermittent streams are shown as a broken blue line on topographic maps.

²³² For further information on U.S. Army Corps of Engineers wetland permitting visit: <http://www.usace.army.mil/public.htm#Regulatory>

²³³ To locate the USACE district for your area visit: <http://www.usace.army.mil/where.html#Divisions>

²³⁴ The U.S. Army Corps of Engineers Wetland Delineation Manual can be downloaded at: <http://www.wes.army.mil/el/wetlands/pdfs/wlman87.pdf>

If an applicant has proposed activities in areas which may be waters of the U.S., then contact the USACE district office for your area as well as any state or local agencies regulating activities in streams, wetlands and other waters. Request an opportunity to review project files. Discuss any unresolved concerns you have with agency staff. If you are dissatisfied with the results of these discussions then go on to the next section of this book on strategy options.

PART III: FORMULATING & IMPLEMENTING A WINNING STRATEGY FOR YOUR CAMPAIGN

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Chapter 35: Researching Strategy Options

INTRODUCTION

At the beginning of this book, in *The Secrets of Success*, I urged you to:

...aggressively pursue smart solutions to your core concerns.

This Part of the book is all about identifying, then aggressively pursuing the implementation of *Smart Solutions*.

What is a *Smart Solution*? I define it as one which:

...fully resolves each of your core concerns in a way that is lasting with the least effort and expense on your part.

There are usually several, frequently many, ways of resolving each of your core concerns. Each will vary in the degree to which it fully resolves a concern. Each will also vary with respect to long-term reliability. Additionally, each way differs in terms of the amount of time and expense you must expend to get it applied in a way that fully achieves your goals for years or decades to come. Thorough research is essential to identifying all smart solutions then selecting the best. It is this research which is the focus of this chapter.

The research recommended in this chapter can be carried out by volunteers, provided they have the time and motivation. If you run into any problems then I would be delighted to answer specific questions. Our advice is available free of charge to citizens working to preserve community quality of life. Just give me a call at 410-654-3021 or email me at: Rklein@ceds.org. In addition, we can also carry out the research for you. See *How CEDS Can Help You Find The Best Strategy* at the end of this chapter for further detail on this service.

BASIC STRATEGY OPTIONS

There are seven basic strategy options available to citizens for winning the implementation of a smart solution:

1. Negotiate with the Applicant When an Equitable Solution is Available;
2. Work with Regulatory Staff to Implement a Solution Through the Growth Management Process;
3. Lobby Final Decision-Makers to Adopt Your Preferred Solution;
4. Initiate Legal Action to Increase the Likelihood that Your Preferred Solution is Adopted;
5. Change the Law if Current Regulations Do Not Allow Resolution of Your Concerns;
6. Elect New Decision-Makers if Incumbents are Unresponsive to Community Concerns; or

7. Preserve the Site in Total or in Part.

In reality, many campaigns use a combination of these seven strategy options. Citizens will initiate discussions with staff and the applicant in hopes of reaching an agreement. Negotiations will then reach an impasse. Citizens will turn to elected officials urging them to use their influence with agency heads and the applicant to get negotiations going again. If the citizens are dissatisfied with what elected officials offer then legal options are pursued with the goal of convincing a decision-maker to deny a specific permit-approval or add conditions resolving citizen concerns. Once citizens initiate litigation the applicant faces the possibility of spending large sums on lawyers and experts while project ground-breaking is delayed. This puts increased pressure on the applicant and may prompt them to return to the negotiating table.

Determining which strategy option offer the best opportunity to resolve your concerns requires a fair bit of research. *Chapter 1: The Easy Solution*, provided an introduction to this research. The following guidance expands upon this introduction and explains how to decide which of the seven basic strategy options offers the greatest likelihood of resolving your concerns for the least cost.

FIRST, PRESERVE YOUR RIGHTS

By *Preserve Your Rights*, I mean make certain you do not miss critical opportunities to present your concerns to decision-makers or to appeal an unfavorable decision. In far too many towns and counties citizens get very little notice before permit decisions are made. Once a decision is made there may be as little as ten- to thirty-days to appeal this action. So your first step in forming a winning strategy must be to:

- identify all permits and other approvals the project will require;
- determine which will be the subject of a formal hearing or comment period and when each hearing-comment period is scheduled (or likely) to begin;
- learn how you can participate in the hearing or submit comments and learn of any scheduling changes; and
- the process for appealing a decision to grant each permit-approval if this happens before your concerns are fully resolved.

Again, the purpose of this research is to ensure that you do not miss any critical opportunities to influence decision-making or appeal an unfavorable decision. This information will then allow you to budget your resources (time and money) so you can proceed with other research. This information also allows to you to preserve your opportunity to influence decision-making or to take an appeal.

Begin your research into preserving your rights with the *lead* agency. For most development projects there will be one agency which is responsible for coordinating reviews by other agencies then compiling the results of the reviews into a report and a set of recommendations. This is the *lead* agency.

In addition, there is usually one individual who acts as the project reviewer for the lead agency. It is this *lead* person who does the coordination and drafts the report-recommendations. The lead staff person should be able to tell you which permits-approvals the applicant needs and answer process questions such as:

- when hearing(s) or comment periods are scheduled to begin;
- how to participate in each hearing and submit comments; and
- how to appeal a decision unfavorable to your interests.

Additional advice on working with this lead staff person can be found in *Chapter 38: Working With Regulatory Staff*. If you have any questions regarding how to carry out this research, then please feel free to contact me at: 410-654-3021 or Rklein@ceds.org. There is no charge for answering questions from citizen advocates by phone, provided the question doesn't require research.

Which of the seven strategy options offers you the best chance for victory depends first on whether an Equitable Solution is available and secondarily on which permits-approvals the applicant needs.

IS AN EQUITABLE SOLUTION AVAILABLE?

Part I of this book, *Identifying & Resolving Quality of Life Issues*, provided background on 24 categories of impact caused by land development. The 24 chapters in Part I also identified a number of ways of resolving each category of impact. For most projects, these solutions will reduce impacts to a point where they no longer impair quality of life yet allow the applicant to get much of what they want. Of course, this is what I mean by an Equitable Solution.

Advice is provided in *Chapter 37, Negotiating With The Applicant*, on *Finding An Equitable Solution*. No strategy option provides as quick and easy a path to victory as an Equitable Solution. However, you may need to gain considerable leverage over the applicant before they will enter into an agreement that fully binds both current and future property owners to the solution. This leverage can be gained through the second, third, and fourth strategy options presented above:

- working with regulatory staff to make the Win-Win solution a condition of a permit or other approval;
- lobbying final decision-makers to support your solution; or
- through legal action.

A specific permit-approval will frequently provide the best opportunity to gain additional leverage through these three strategy options. The section of this chapter headed *Evaluating Strategy Options for Winning Specific Permits-Approval* will explain how to gain this leverage.

If you have found a genuine win-win solution, yet the applicant refuses to adopt it or enter into a binding agreement, then your goal must to either:

- A. Convince a decision-maker to add conditions requiring full implementation of your win-win solution to the appropriate permit-approval; or
- B. Seek to defeat the project by convincing decision-makers to deny an essential permit or approval.

Later in this chapter I will explain how to research legal authority and decision-maker history. If this research shows that decision-makers routinely add conditions of the type you are seeking, and the conditions have always effectively resolved concerns similar to your's, then the *conditions* approach is your best strategy option.

If your research shows decision-makers always refuse to add conditions of the type your are seeking or the conditions are rarely applied effectively, then your best option is to defeat the project by convincing decision-makers to deny an essential permit-approval. Of course, most situations will lie somewhere between these two extremes.

DEFEATING A FATALLY-FLAWED PROJECT

Some development proposals are so poorly conceived and some sites are so uniquely sensitive that an Equitable Solution simply is not available. In other words, impacts cannot be resolved without making the project unprofitable for the applicant. Examples of these fatally-flawed projects include:

- building a shopping center in a wetland supporting a threatened-endangered species;
- locating a 24/7 big-box store in the middle of a residential neighborhood; or
- siting a landfill next to a school.

How do you know if a project is so fatally-flawed that an Equitable Solution is not available? Well, if you go through the steps for *Finding An Equitable Solution*, in *Chapter 37: Negotiating With The Applicant*, without identifying a reliable way to resolve each of your core concerns then an Equitable Solution is certainly not available from your perspective.

Most of the victories citizens have in defeating fatally-flawed projects are due to political action and secondarily to litigation. Once you demonstrate overwhelming citizen opposition to a project decision-makers will be far more inclined to:

- find a way to withhold an essential permit-approval;
- buy the site from the applicant; or
- find some other way to keep the project from going forward.

Of course, citizen opposition must be based on facts which demonstrate the project poses an undue threat to widely held community values. You must also demonstrate that these facts cause the project to conflict with a specific legal requirement for granting an essential permit-approval. Invariably citizens need the services of an attorney and expert witness testimony to get the facts into

a formal record in a way that denial of the permit-approval stands up on appeal. But read on before rushing out to hire an attorney.

Chapter 36: Mobilizing Support For Your Strategy, provides step-by-step guidance on how to greatly increase the number of people contributing volunteer hours, expertise, and dollars to your campaign. As your number of supporters grows, so does your political clout with final decision-makers. Advice is also provided in Chapter 36 on how to raise the funds needed for specific political organizing tactics and legal action. In fact, nothing demonstrates widespread, intense public support for a cause like raising thousands of dollars from the citizens impacted by a fatally-flawed project.

As your base of public support expands you will likely find that both regulatory staff, their agency heads, and elected officials will be more receptive to your concerns and more creative in interpreting existing laws in ways that address your concerns. Advice on working with regulatory staff, agency heads, elected officials, and other final decision-makers is provided in *Chapter 38: Working With Regulatory Staff* and *Chapter 39: Lobbying Final Decision-Makers*.

The project will be moving towards a critical event in the permit-approval process as you continue the effort to expand your base of support, your work with staff continues, and decision-maker lobbying progresses. This critical event may be:

- the start of a comment period;
- a hearing before a local planning commission, a Board of Appeals, the town council; or
- an opportunity to appeal a decision to grant a permit-approval before your concerns are fully resolved.

In most cases, you cannot afford to ignore these critical events. And in most cases you will need an attorney and an expert witness or two if you are to have a decent chance of either conditioning or blocking the permit-approval. There will usually be several - perhaps many - of these critical events. It is unlikely you will have the resources to pursue them all. So you must carefully research all upcoming events then select those which offer the greatest likelihood of success.

Each of these critical events should have been identified through the research described above under *First, Preserve Your Rights*. Using the advice given later in this chapter under *Evaluating Strategy Options for Winning Specific Permits-Approvals*, you must determine which critical event provides you with the best opportunity to resolve your concerns. Of course, you must have an attorney and witnesses on-board and ready to go well in advance of the critical event.

Frequently, the key critical event will be an administrative hearing before a planning commission, a board of adjustments, or a hearing officer. You must begin preparing for this hearing at the earliest possible moment when faced with a fatally-flawed project. I say this because the outcome you will be seeking is to defeat the project by convincing decision-makers to deny an essential permit or

approval. To achieve this goal you must prove that the project fails to comply with one or more of the criteria decision-makers are obligated to follow.

When faced with this challenge we identify every aspect of the project which fails to fully comply with any relevant criteria. Usually, our first cut analysis will uncover one or two dozen issues which have the potential to defeat the project. As research continues we'll discover problems with most of the issues. These problems will make a denial of an essential permit or approval unlikely. Our hope always is that at least three or four issues will still be viable come the start of the hearing. We then anticipate that the applicant will come in with revised plans that might negate another issue or two. If we have done our job well then at least one of the issues will still be alive by the end of the hearing. This issue will then provide a basis for the decision-maker to withhold approval for the project. If we have also been successful in helping our clients mobilize widespread support for their position, then a defeat of the fatally-flawed project becomes far more likely if one good issue survives to the end of the hearing.

Occasionally, local zoning ordinances and other applicable laws are so poorly written or out-of-date that they lack the language needed to stop a fatally-flawed project. When this is the case we frequently urge our clients to consider changing the law to provide the necessary authority.

Growth management is a rapidly evolving field. Concepts like *Smart Growth*, *New Urbanism*, and *Low-Impact Development* were in their infancy just a decade ago. Many localities have yet to update their laws to mandate the use of these new approaches. You may find that your local land use laws do not allow decision-makers to deny or even condition a permit to address a specific impact even though a highly-effective Smart Growth or Low-Impact Development technique is available. If staff, agency heads, and elected officials insist that this is the case, then see *Chapter 40: Legal Action*, for advice on how to find an attorney who can verify the lack of authority. If the attorney agrees then see *Chapter 41: Changing the Law*, for advice on how to give decision-makers the necessary authority.

Purchasing the project site is an alternative to changing the law. The site could then be preserved in a natural state in part or in entirety. The site might also be developed in a way that not only preserves, but enhances existing quality of life by creating facilities desired by area residents. Guidance on this strategy option is provided in *Chapter 16: Open Space Preservation*.

A specific permit-approval will frequently provide the best opportunity to defeat a fatally-flawed project. The next section of this chapter, *Evaluating Strategy Options for Winning Specific Permits-Approval*, will explain how to make the most of each opportunity.

If you have any questions regarding how to defeat a fatally-flawed project, then please feel free to contact me at: 410-654-3021 or Rklein@ceds.org. There is no charge for answering questions from citizen advocates by phone, provided the question doesn't require research.

EVALUATING STRATEGY OPTIONS FOR WINNING SPECIFIC PERMITS-APPROVALS

In order for project ground-breaking to begin, most applicants must obtain a number of permits and other approvals from the local government as well as regional, state, or federal agencies. These permits-approvals were described in Part II of this book. The strategy options offering you the greatest likelihood of success are largely a function of which of the following permits-approvals the applicant must obtain:

- A. Master plan amendment;
- B. Annexation;
- C. Zoning text (*curative*) amendment;
- D. Rezoning;
- E. Special Exception, Conditional Use Permit, and Special Use Permit;
- F. Variance;
- G. Subdivision & Site Plan; and
- H. Building-Grading Permit.

Few projects will require all of the permits-approvals listed above.

Political vs. Legal Action

There are a few generalizations that can be made about the strategy options which are likely to be successful with respect to the specific permits-approvals listed above. These generalizations are most applicable when considering campaigns emphasizing strategy options based on political versus legal action.

Political Action: This approach utilizes the advice given in *Chapter 36: Mobilizing Support For Your Strategy* to educate at first dozens, then hundreds, maybe thousands of people about the benefits of actively supporting your position. Political action then uses the guidance in *Chapter 39: Lobbying Final Decision-Makers*, to demonstrate to elected and appointed officials that the community will be behind them when they decide in your favor. Political action is most effective when you can demonstrate that you have sought to be fair with the applicant and that your position is well-reasoned and based upon values shared by a large percentage of community residents. Generally, political action is most successful in winning favorable action on four specific permits and approvals: a master plan amendment, annexation, a zoning text amendment, or rezoning. This is because of four factors:

- A. First, the local legislative body is usually the final decision-maker for all four permits-approvals and no other decision-maker is as sensitive to public opinion as a town or county council;

- B. Second, state laws and legal precedents usually give the local legislative body broad discretion in the action taken on these four permits-approvals;
- C. Third, community perception about overall quality of life impacts is particularly relevant to decision-making regarding these four permits-approvals; and
- D. Fourth, citizens tend to have the advantage in the political atmosphere which usually surrounds decision-making on these four permits-approvals.

But it would be a mistake to assume political action alone will always carry the day when any of these four permits-approvals are at issue. While there are many examples of citizens winning campaigns involving these four permits-approvals without professional assistance, the likelihood of victory is enhanced with the assistance of an experienced land use-zoning attorney.

Legal Action: As the phrase implies, legal action entails demonstrating that a project fails to comply with the laws, regulations, and policies governing land use in your area. Legal action requires the assistance of an experienced attorney and frequently one or more expert witnesses.

While no permit-approval process is completely insulated from the effect of community organizing, there are a number where political action alone rarely carries the day. A good example would be a variance. Local regulations usually spell out the legal requirements for granting a variance in detail. Furthermore, the conditions under which a variance can be denied are normally well defined through prior appellate court decisions. While it may be possible to convince a local decision-making body to deny a variance for purely political reasons, the denial will likely be overturned by the courts.

Generally, legal action is critical to the success of winning a favorable decision on a permit-approval which does not come before a local legislative body. This normally includes all of the permits-approvals listed above except the first four. However, in some localities citizens can win a favorable decision from a planning board-commission based primarily upon community sentiments regarding the project. But even in these instances the likelihood of victory is higher with aggressive legal action. Further detail is provided in *Chapter 40: Legal Action*.

Occasionally, legal action inadvertently creates the time required to win in a political arena. For example, let's say existing law does not address a significant project impact yet the current legislative body refuses to amend the law. In fact, they approve the project despite noncompliance with legal requirements which would have resolved other impacts of concern to citizens. The citizens appeal the decision. Project ground-breaking is postponed by the appeal. An election takes place during the two- to three-years required for appeals to run their course through the courts. The pro-development majority on the local legislative body is replaced by pro-growth-management candidates. These newly elected decision-makers immediately pass a law correcting the flaws in the growth-management process so citizen concerns are addressed. Sometime thereafter, citizens win the appeal when the courts overturn the approval granted by the former legislative body. If the

applicant still wishes to pursue the same project then they must reapply but now the new law will force a redesign eliminating the impacts of concern to citizens.

While it might be tempting to initiate legal action to create such a delay, I strongly urge you not to do so. Not only is this unethical but it could expose you to an expensive lawsuit brought by the applicant. However, you should not hesitate to appeal a decision to approve a project which fails to meet legal requirements that would have resolved your core concerns.

Discretionary vs. Nondiscretionary Actions: Another way of determining when to emphasize political or legal action is to assess how much discretion decision-makers have regarding a specific permit-approval. By *discretion* I mean how rigid are the legal criteria and court precedents for when a permit-approval can be conditioned or withheld. For example, the local legislative body frequently has the greatest degree of discretion with respect to:

- the content of a master plan;
- an amendment to a plan;
- a zoning text (*curative*) amendment;
- a rezoning; and
- whether to grant an annexation request.

Political action is generally most effective in carrying the day for these approvals since the decision-maker can condition or deny with a lower likelihood of reversal by the courts.

With other permits-approvals the law and legal precedents grant a lesser degree of discretion to decision-makers. Examples of the *nondiscretionary* permits-approvals would include:

- a subdivision or site plan;
- a special exception, a conditional use permit, or a special use permit;
- a variance or waiver; or
- a building permit.

If an applicant can demonstrate they have complied with the extensive legal requirements which usually exist for each of these approvals, then the decision-making body is obligated to approve or face likely reversal by the courts.

As the degree of discretion declines, so does the need to emphasize legal action over a political approach. This does not mean abandoning political action. As stated frequently throughout this book, the best way to ensure success is to aggressively pursue both political and legal action. The more successful you are in a political arena, the more inclined decision-makers tend to be in interpreting legal requirements in your favor. Conversely, the more you can show that the facts and the law support your position, the easier it will be for decision-makers to find a way to resolve your concerns.

Again, the preceding advice on when to emphasize political action vs. legal is general. This advice is not applicable to every specific case. You can gain critical insights into which strategy options to employ by researching how decision-makers have evaluated and acted on specific permits-approvals for similar projects in the past.

Identifying the Best Permit-Approval for Resolving Your Concerns

Following are the five steps involved in determining which permit-approval offers you the greatest likelihood of resolving your concerns.

1. Determine how much time remains before each critical event will take place. This will help you plan how to best use your time. It also ensures opportunities to influence decision-making are not missed.
2. Obtain all the documents relevant to the project and your concerns, including applicant submittals, staff comments and correspondence, applicable laws and regulations, policies, planning reports, guidance manuals, and so forth.
3. Review the requirements for each permit-approval to determine which most directly addresses your concerns and whether resolution of each concern is required by law.
4. Review applicant submittals and staff comments-correspondence to determine if your concerns have already been addressed in a way that fully resolves each. If not, then seek to negotiate resolution with staff, decision-makers, or the applicant.
5. If negotiations do not leave you confident that your concerns will be resolved, then research the decision-making history for each permit-approval the applicant must obtain. You will be seeking to determine how likely it is that you can convince those making decisions on each permit-approval to adopt your preferred solution. This research should also indicate the probability that the decision will be upheld on appeal.

If done well, the results of these five steps will show you which permit-approval offers you the best opportunity to resolve your concerns and will reveal many of the specific actions you must pursue to achieve success.

Decision-Making Process & Critical Events

In the section above on *First, Preserve Your Rights*, I urged you to identify all hearing dates, comment periods, appeal deadlines, and other critical events relevant to the project of concern to you. Identifying critical events usually takes but little time. The critical events will usually be described with respect to permit and other approval the project requires. Take the opportunity to ask for details regarding the decision-making process applicable to each permit-approval and how to obtain a copy of all the documents each agency has regarding the project and the process.

If your concerns are narrow, then I urge you to focus on the permit-approval specific to your concerns. For example, let's say you are concerned about an increase in traffic on your residential street. Discuss the following with staff:

- which staff person will have the lead in reviewing the project for traffic impacts;
- what documents has or will the applicant submit which are relevant to increased traffic on your street;
- what policies, laws, or other criteria are applicable to increased traffic on your street;
- how can you obtain a copy of the applicant's submittals along with the relevant policies, laws, or other criteria; and
- what process will the agency use in formulating a position on the issue of increased traffic on your street, which would likely be:
 - the lead staff person reviews applicant submittals for compliance;
 - if significant conflicts are found then the lead staff person drafts a set of comments;
 - the comments are reviewed by the lead's superior who then authorizes forwarding the comments letter to the applicant; and
 - once all comments are addressed the lead staff person documents in writing that the project meets all policies, laws, or other criteria are applicable to traffic impacts.

There are two critical event in the process described above. First, when the lead staff person drafts their initial comments. Second, when they document that all requirements have been met. You must begin working with the lead staff person before the first critical event occurs. Hopefully, once the lead hears of your specific concern they will look for a way to resolve the impact within the authority granted by the applicable policies, laws, or other criteria. Guidance is provided in *Chapter 38: Working with Regulatory Staff* on how to get the most out of your discussions with agency staff.

A permit-approval like a master plan amendment or annexation may have a very complicated and lengthy process with numerous critical events. To maximize the likelihood of a favorable outcome you must identify every step in the process and look for ways to influence decision-making at every step, particularly prior to critical events. Usually citizens wait until the last critical event - a public hearing - which occurs after all the deals and big decisions have been made. Most of the failures citizens experience are due to this tendency to begin too late in the process; thus the need to always aggressively pursue smart solutions.

Obtain All Relevant Documents

Much of the information needed to determine which permits-approvals offer you the best chance of success will be found in the applicant's submittals, comments generated by various agencies, and

other documents. Usually, the lead agency will maintain a project file containing all of these documents.

Most local governments will allow citizens to review the project file with little fuss. Some will require that you make an appointment or even ask you to submit a written request. Be sure to ask the lead project reviewer how to gain access to the file during the research described under *First, Preserve Your Rights and Decision-Making Process & Critical Events* above.

When I review a project file I seek to obtain a copy of every piece of paper in the file. For obvious reasons, staff prefer that I not ask for a copy of everything. Yet, what seems worthless to staff can be very important to citizens. The seemingly worthless fax cover sheet is a good example. Every time I come across a fax cover sheet I check the file to see if the documents listed on the sheet are present. It is not uncommon for documents to be sitting on a reviewer desk and checking fax cover sheets is a good way to learn of these missing items. Of course, I also ask the lead reviewer if they have any documents which haven't been placed in the file. Some jurisdictions have a policy which states that a document only becomes available to the public after it has been reviewed by staff. When we question this policy we frequently find no legal basis and the documents are subsequently released.

I usually bring a portable scanner, a laptop computer, and a digital camera when I review a file. I'll run every letter- or legal-size piece of paper through the scanner then store the image on a laptop connected to the scanner. With the camera I'll take a high-resolution digital image of every document that won't fit through the scanner.

In some cases those who maintain the file will not allow the use of a scanner and camera. Instead, they ask that I mark the documents I want to copy with post-its and paper clips. When this is the case I make a list identifying every document I marked for copy. The list includes the following: the document date, type of document (letter, report, memo, email, etc.), the author of the document, to whom it was addressed, the title or subject of the document, and the number of pages. When I receive the copies, which is usually a day or two after reviewing the file, I compare my list to what I actually received. It is normal for a few documents to be missing because a post-it came off or the person running the copies just overlooked something. I almost always receive the missing documents after making a follow-up request.

Getting copies of plans can be a problem in small towns or rural counties where agencies lack the equipment to reproduce documents larger than legal size. Larger towns and urban counties usually have the necessary equipment. But when the agency cannot reproduce oversized documents I try the following alternatives:

- ask if I can take a digital photo of the plans;
- ask if I can run the plans out to a printer with the necessary equipment; or

- when all else fails I copy plans in letter-size sections, making certain each section overlaps, then I paste them all together to make a full-size copy of the original plan.

After I finish going through the file, I'll ask the lead reviewer what laws, regulations, planning reports, guidance manual, policy documents, or other materials contain the criteria relevant to the project and the concerns of our clients. I'll also ask how each can be obtained. Frequently these days everything is available online. If not, I'll purchase a paper copy of each.

After I obtain all the relevant documents I run the letter- and legal-size items through a scanner and convert everything to searchable text using Adobe or other software. Having everything in searchable format makes the review of these documents far easier. For example, this book contains nearly 90,000 words. It is also posted on the CEDS website in a searchable-text format. So if you are interested in a particular topic but didn't see it in the table of contents and you don't want to read the entire book, you can call up a text search tool, type in a keyword, then hit enter to see every place in the book where the keyword appears. You can do the same for all project documents after converting them to searchable text. Be certain to convert laws, guidance manuals, policies, and all other documents to searchable text as well.

Linking Regulatory Requirements to Resolution of Your Core Concerns

After you have obtained all the documents relevant to your concerns, the next step is to research the requirements relevant to each permit-approval the applicant must obtain. The goal is to identify those permits-approvals where regulations or policies require that your concerns be resolved or that the project be denied an essential permit-approval.

I assume that you are sitting before a computer and you are looking at an online version of applicable ordinances-regulations or those that you scanned from paper copies and converted to searchable text. If not, then open up a paper copy.

To simplify the language of this section I'll refer to ordinances and regulations as *ordinance*, as in the *Zoning Ordinance of Anytown, USA*. To make the following suggestions easier to understand, let's assume your core concern is impact to a wetland and you know that the local Wetland Board will hold a hearing in two weeks. In fact, the Board hearing is your first opportunity to participate in the decision-making process with respect to wetland impacts.

There should be a section in the local ordinance specific to the Wetland Board. This section will set forth:

- the purpose of the Board;
- the number of members;
- how members are appointed to the Board and their terms (duration) of office;
- the scope of the Board's authority;

- what wetland related activities must be approved by the Board;
- what information must be submitted to the Board;
- the criteria for granting approval;
- public participation opportunities including required public notice and hearing(s);
- how the Board must go about making a decision; and
- how a decision by the Board can be appealed.

To find this section in the ordinance first look through the table of contents or the index to see if there is a reference to the *Wetland Board* or just *wetlands*. If you cannot find it in either location and you have the ordinance on your computer screen, then use the search function to identify all occurrences of the keyword: *wetland*. If you still cannot find a reference to wetlands then look for a section on environment, where requirements relevant to wetlands may occur. If references to wetlands still appear absent then contact Wetland Board staff or the project reviewer for the lead agency to find out how to obtain a copy of the laws and policies under which the Board operates. If you have taken all of these steps and are still at a loss then contact me at: 410-654-3021 or Rklein@ceds.org.

Hopefully, the applicant's submittal to the Wetland Board were among the documents you already have, along with all other relevant materials. There should be an application, a letter, or a report setting forth what wetland impacts are proposed and why the applicant feels the Board should grant approval. Compare the proposed impacts and justifications with the criteria contained in the ordinance to see if the harm done to the wetland is within the allowed scope and to verify that all specific requirements are met.

Approval Criteria: The criteria for granting approval are usually the most important section of a local ordinance. These criteria will set forth the requirements that must be met for the Board to approve wetland impacts. Following is an example of how the criteria may appear in the ordinance:

§101.2 Wetland Approval Criteria.

- A. *The Wetland Board shall withhold approval unless it finds that the proposed activity will not:*
 - 1) *adversely affect a threatened or endangered species;*
 - 2) *result in a net increase in pollution loadings, or*
 - 3) *other wise degrade wetland ecosystems.*

The guidance presented in Part I of this book will help you determine if approval criteria have been met.

It is critical that your testimony before the Board very clearly prove why the criteria have not been met. It must not be generic. For example, let's say one of the criteria reads:

The applicant shall demonstrate that the project will not degrade wetland ecosystems,

Following are examples of the generic and specific testimony that might typically be offered with respect to this criteria:

Generic: A recent government study showed that development is degrading the ecosystem of hundreds of acres of wetlands each year throughout your state. You argue that since the proposed project is “development” too it will cause wetland degradation too. Therefore the Board should deny approval.

Specific: You begin your testimony by citing the same study referenced above but add that the greatest damage has been, say, among a type of wetland known as a *fen*²³⁵. You then cite the portions of the study which show that fens are not only uniquely important but also highly-sensitive to the effects of nearby development. Next, you point to a portion of the study which shows that fen-type wetland ecosystems begin to degrade when there is an average of one house for every eight-acres of land in the watershed. Finally, you provide the Board with a map showing the watershed of the fen, transfer the watershed boundary to the applicant’s plan, and point out that the project will increase the housing density in the watershed from the current one per 20 acres to one house per three acres after development. Therefore, you conclude, the project will degrade the wetland ecosystem and the Board is bound by their own criteria to deny approval.

The specific testimony presented above has a far greater likelihood of not only convincing the Board to deny approval but of also getting facts into the record which would prompt the courts to uphold the denial if the applicant appeals. However, most savvy applicant attorneys will not let this testimony stand alone. Instead, they will put on a rebuttal witness who will likely have better credentials (degrees, training, and experience) in wetland ecology and will attempt to explain why the project will not harm the fen. As will be explained in *Chapter 40: Legal Action*, the better credentials of the applicant’s *expert* witness will likely, but not always, trump your testimony as a *lay* witness. The end result will be court reversal if the Board denies approval based upon your testimony alone.

²³⁵ The U.S. Environmental Protection Agency defines a fen as: *Waterlogged, spongy ground containing alkaline decaying vegetation, characterized by reeds, that may develop into peat. It sometimes occurs in the sinkholes of karst region.*

Custom & Practice: In most localities a *custom and practice* has evolved as to how regulatory requirements are interpreted. Even highly-respected wetland experts can disagree on how to determine if a specific requirement has been met. *Custom and practice* tends to govern how a requirement is interpreted and, therefore, how to judge if compliance has been achieved.

During your discussions with staff it is important to ask how each regulatory requirement is interpreted. But keep in mind that just because things have always been done in a certain way does not mean that way is right. We've had a number of cases where we showed custom and practice was at odds with the intent of an ordinance. This allowed our clients to succeed in convincing the decision-making body to deny approval and adopt a new custom and practice. This scenario tends to unfold in local jurisdictions that have become very applicant oriented. Over time staff learn that their recommendations are always rejected when they favor the community or environment over the interests of the property owner. So staff try to find a point where some community-environmental protection is achieved without unduly risking rejection by decision-makers. It is this type of custom and practice which is most easily overturned.

As you are reviewing the ordinance determine if the Wetland Board is the final decision-maker or simply makes a recommendation to a planning commission or some other body. This information should be contained in the portion of the ordinance setting forth the authority of the Board or in the portion on what action the Board may take on an application. If the Wetland Board simply recommends then use the advice given below for researching how consistently the final decision-maker follows the Board's recommendation. If the final decision-maker almost always adopts the recommendation then winning Board support becomes critical to success. If the Board recommendation is rarely followed then perhaps your limited resources should be focused elsewhere.

The process described above should be completed for each permit-approval relevant to your concerns. Continuing with the wetland example, I would look next at portions of the ordinance pertaining to erosion and sediment control, since excessive mud pollution during the construction phase could devastate the wetland. Next, I would look at post-construction stormwater management. Improperly controlled runoff has destroyed thousands of acres of wetlands.

After researching the ordinance to determine if the project meets applicable criteria, the next step is to review the history for each permit-approval where the ordinance provides decision-makers with the authority to address your concerns. This history will provide critical insight into whether a decision-maker is likely to approve, condition, or deny the permit-approval based upon facts similar to those applicable to your case. The next section of this book describes how to carry out research into decision-making history.

Researching Decision-Making History

Does your local Board of Appeals have a history of granting every variance application they receive? Do the courts uphold the variance approval every time someone appeals the decision of the Board?

If the answer to both questions is yes, then opposing a variance is probably not a very good use of your limited resources.

Does the local Planning Commission have a record for conditioning or denying preliminary plans for projects which are strongly opposed (for valid reasons) by the community? Were these decisions upheld by the courts? A yes to both questions makes the planning commission hearing on this permit-approval a top priority for use of your limited resources, provided further research shows your case possesses the same elements which resulted in previous conditioning-denials without reversal by the courts.

In some localities you can research decision-making history online. All land use decisions are posted on a website structured so you can search for cases involving specific permits-approvals or project types. But creating and maintaining such a complete online database consumes considerable resources and not all local jurisdictions have done so. A number of states post appellate court decisions on their websites, so researching the history of appeals is a bit easier. However, only *reported* appellate decisions may be posted. In Maryland, only 12% to 15% of all appellate court decisions are reported.

If online decisions are not available in your area, then try the old-fashion approach - visiting offices, skimming through lots of records, and asking questions. Actually, I suggest beginning with questions. Folks who may know the decision-making history of local Boards, commissions, the legislative body, or other decision-makers include:

- planning and zoning staff, including the agency director;
- staff to a Board, commission, or legislative body;
- current or former members of a Board, commission, or legislative body;
- other elected officials who interact with the body, such as a State delegate or senator;
- citizen activists who monitor a decision-making body; and
- attorneys who frequently appear before the body.

Using the guidance provided in *Chapter 38: Working with Regulatory Staff* talk with each of these people to get their insights on how the decision-making body has acted in the past on the permits-approvals relevant to the project of concern to you. If you have an Equitable Solution or other conditions you would like added to a permit-approval then ask if the decision-making body:

- a) has the legal authority to impose such a condition,
- b) under what circumstances have they done so in the past, and
- c) has there been any problem enforcing the condition at previously approved development sites?

If you feel an Equitable Solution is not available and a permit-approval should be denied, then ask if the decision-making body has done this in the past and under what circumstances might they withhold the permit-approval for the project of concern to you?

If you learn of specific cases which may serve as a precedent for your's then ask how to get a copy of the written decision, assuming one exists, a transcript, or minutes from the hearing where the decision was made. These documents may contain important information about the facts and legal issues which prompted the body to reach their decision.

If your conversations turn up little useful information then consider reviewing the records of the decision-making body. Frequently, those serving as staff to a Board or Commission will know of prior cases similar to your's. If not then ask if a paper or computer record of prior decisions is kept. The record may show the name of the parties, the permit-approval at issue, and the decision. If you are fortunate the record may also show whether the decision was appealed along with the outcome.

If such a record does not exist then you might ask to look at the minutes for past meetings-hearings in hopes of identifying similar cases. Note the cases which are most relevant to your's then ask if you can get a copy of the decision, if one exists, or any other written record detailing the basis for the decision.

Be judicious in the number of documents you request. Staff cooperation is critical and avoid souring your relationship by asking for too many documents. Usually, I ask for copies of no more than three-to six-decisions. If you come across cases that are recent and nearly identical to your's then there may be value in asking to look at the case file. The file may contain a wealth of information on how the decision-making body views various facts and legal issues.

If you identify decisions similar to your's then ask if they were appealed. Usually the person who helped you find a case will know if the decision was appealed and which body heard the appeal. Contact this body to learn if the decision was upheld, reversed, or remanded on appeal. Try to obtain a copy of the decision regardless of which way it went since it likely contains valuable information. Next, research whether this decision was appealed and so on until you reach the end of the appeals history for each specific case.

After completing this research see if citizens or a citizen group was involved in the case as protestants, opponents, or appellants. If they were then a conversation with these people may uncover critical information about mistakes to avoid, things that worked well for them, which attorney or expert witnesses they used and how well each did their job, the amount of funds they had to raise to win their case, and so on.

Finally, do not overlook the role of staff in influencing decision-making. In many jurisdictions, particularly those with a large number of professionals, the analysis provided by staff tends to serve

as the primary basis for facts considered by decision-makers. Frequently, the decision-making body will closely adhere to staff recommendations.

If your decision-makers rely heavily on their recommendations, then every effort should be made to educate staff about your concerns and your preferred solution. Again, advice on this topic is provided in *Chapter 38: Working with Regulatory Staff*. But the point here is to be sure to research how closely the final decision-maker follows staff recommendations.

If everything goes well, this research should tell you:

1. Whether the decision-making body has ever taken the action you are hoping for on a specific permit-approval;
2. What facts and legal issues the body considered most relevant in reaching a decision;
3. How important it is to win the support of staff;
4. The importance of political action to victory;
5. Whether an attorney and expert witness(s) are needed and, if so, who does the best job for citizens.
6. Was the decision upheld on appeal; and
7. What it might cost to win a similar victory.

This research should allow you to determine which strategy option offers the greatest likelihood of winning a favorable decision on each specific permit-approval. The research should also reveal the relative value of political and legal action.

There may be some situations where neither legal nor political action is likely to produce the desired outcome, particularly if your goal is to defeat a fatally-flawed project. This is sometimes the case with *By-Right* projects where only a site plan approval is required along with a building and grading permit. If the project fully complies with all applicable requirements then the decision-making body has no choice but to grant approval, which will surely be upheld if appealed to the courts. In this situation and other similarly difficult scenarios, consider strategy options such as those described in: *Chapter 41: Changing the Law* and *Chapter 16: Open Space Preservation*.

On rare occasions citizens are faced with simply having no good strategy option. When this happens your only choice may be to go for a *Hail, Mary* and hope you get lucky by winning where no one has done so before. But frankly, I find these acts of desperation are more a result of less than thorough research by:

- citizens attempting to do too many things at once or lacking the necessary experience;
- hiring a professional²³⁶ to do the research, but putting them on too tight a budget, which means too little time for research; or
- using a professional with too little experience in winning land use cases on behalf of citizens.

If you feel you have thoroughly researched your options but none appears promising, then please contact me at: 410-654-3021 or Rklein@ceds.org. We can discuss the problem to see if we can find a better option. As always, I do not charge citizen advocates for this advice by phone. Alternatively, if you feel the research described above requires more time than you have, consider hiring CEDS do this research for you. Further detail on this service can be found at the *CEDS Initial Strategy Analysis* webpage: <http://www.ceds.org/strategy.html>.

Following are links to two examples of the type of decision-making history analysis needed to maximize the likelihood that citizens will win a campaign:

A Citizens Perspective on the Baltimore County Development Review Process

http://www.ceds.org/BaltimoreCounty/A_Citizens_Perspective_on_the_Baltimore_County_Development_Review_Process.pdf

This analysis consists of all development proposals considered by Baltimore County, MD decision-makers over a three-year period. The analysis shows how citizens can stop truly bad development projects and win changes to resolve concerns about fundamentally sound proposals.

Preserving Cul-De-Sac Streets from Becoming Through Roads

http://www.ceds.org/BaltimoreCounty/Cul-De-Sac_Streets.pdf.

The Cul-De-Sac Street analysis provides guidance on how to win a specific issue: preventing the conversion of a dead-end (cul-de-sac) residential street into a through road.

WINNING BETTER GROWTH MANAGEMENT OVERALL WHILE GRAPPLING WITH ONE PROJECT

Chances are the project threatening your interests is a reflection of poor growth management on the part of your local government. After all, if a full set of responsible growth management measures were in place and local decision-makers were committed to upholding these measures, a fatally-flawed project would never get past the earliest stage of the review process. Consider then the benefits of making minor adjustments to your effort which will expand public support for instituting responsible growth management. Ultimately, the single most important ingredient is the election of decision-makers committed to responsible growth management. So if you are in the midst of the campaign season take a look at who is running for elective office in your area. Use the guidance in

²³⁶ Professionals who can do this research include [CEDS](#), land planners, some civil engineers, and land-use or zoning attorneys with extensive experience helping citizens. If you'd like to hire such a professional contact [CEDS](mailto:help@ceds.org) at help@ceds.org or 410-654-3021.

Chapter 42 to identify candidates who are committed to responsible growth management. This chapter also provides advice on how to help your supporters appreciate the benefits of voting for responsible growth management candidates into office.

There are also many examples of battles over a single flawed project changing the way growth is managed by incumbent decision-makers. Perhaps the greatest example is the management scheme known as *Smart Growth*.

There is a lot of argument about who founded Smart Growth and where. I know for a fact that it came about because of an edge-city proposed in the early 1990s for a 2,000-acre site on the Potomac, just downriver of Washington, D.C. The applicant called this project Chapmans Landing. To the citizens who cherished this area, it was Chapman Forest. CEDS was part of an impressive network of individuals and citizen groups who lobbied local and state government to preserve this uniquely important area. Today the area is known as [Chapman State Forest & Park](#).

Chapmans Forest became the poster-child for the many flaws in the old approach to growth management. Literally tens of thousands of Maryland voters had lobbied then Governor Parris Glendening to save Chapman Forest. In 1997, after purchasing the 2,000-acre site, the Governor used the momentum created by the Chapman Forest campaign to win passage of five pieces of legislation in the Maryland General Assembly. These five new laws became the core of what is known today as *Smart Growth*.

For guidance on how your battle over a single project might lead to the adoption of responsible growth management laws in your area see *Chapter 41: Changing The Law*.

HOW CEDS CAN HELP YOU FIND THE BEST STRATEGY

If you have any questions regarding how to carry out the research recommended in this chapter, then please feel free to contact me at: 410-654-3021 or Rklein@ceds.org. I do not charge for answering questions from citizen advocates by phone. Our conversation will be far more productive if you attempt to complete the research first or at least read through this chapter before calling. Its much easier to answer specific questions about a particular research step. Its very frustrating to essentially repeat the guidance given in this chapter.

If you feel the research described above requires more time then you have, consider hiring CEDS do this research for you. Further detail on this service can be found at the CEDS *Initial Strategy Analysis* webpage: <http://www.ceds.org/strategy.html>

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Chapter 36: Mobilizing Support For Your Strategy

Unless you have identified an Equitable Solution the applicant is sure to go for or you are wealthy, you will likely need more volunteer hours, dollars, and political clout then you can provide on your own. Since most development projects impact a number of people, these resources are usually available if you know how to ask for them, which is what this chapter is all about.

FUND RAISING

Usually funds are the form of support most urgently needed. A project is chugging along the development review process, a hearing is coming up in a few weeks and you need a lawyer and an expert witness or two so you have a shot at winning a favorable decision at the hearing. For the vast majority of citizen campaigns the funds come from those who are directly impacted by a project; not foundations or other organizations. The exception would be campaigns where land preservation is a realistic option. Still the funds used to wage the political and legal battle to win through land preservation will come mostly from those directly impacted.

Who Are Your Supporters

From whom can you draw support? From anyone potentially impacted by the project. The impact or effect can be negative or positive. For example, let's say you wish to save a large tract of forest. Your potential supporters would include:

- those who live next to the forest;
- others who live along the roads which would receive the increased traffic if the forest were developed;
- the parents whose children attend the school which may become overcrowded if the forest were converted to housing;
- the people who presently hike, hunt, birdwatch, or ride horses in the forest;
- the residents of the town downstream who rely upon the forest to provide clean drinking water;
- if you live in a hilly or mountainous area then those living more distant may value the forest because they see it from their homes;
- the folks who value the historic aspects of the forest;
- people concerned about the general decline of forest throughout a region;
- those who work farms adjoining the forest and fear complaints from new neighbors about livestock odors, machinery noise, or dust; and
- on and on the list might go.

Your Message

To win the support of others you need to craft a concise message. An effective message has three parts:

1. **The Impact:** How will the project affect your potential supporters? The more direct the impact the better. And the more the impact affects strongly-held values the better. If an

applicant proposes an adult book store in a residential area, then the whole neighborhood will come out in force. If the project entails development similar to the existing neighborhood then the level of support will likely be low.

2. **The Solution:** What is your solution to prevent the impact? The more credible the solution, the more support you will generate. If it is obvious how your solution will work and why there's a good chance it will produce victory, then you need say no more. But if its not so obvious then offer an example or two of how a similar solution worked in a similar campaign waged by folks just like you and your supporters. There's lots of examples to choose from. Give CEDS a call and we can offer several examples.
3. **The Request:** What is it you want your supporters to do? Contribute dollars, poll their friends and neighbors for professional services, call or write decision-makers, or attend a hearing? The more specific, the better. And its generally best to ask for just one thing at a time and to make the request face-to-face or at least by phone. The more personal the method of contact, the better the response rate.

Your message also needs to be distilled down to a clear, concise statement. The standard goal in organizing is to get the message down to ten words or less. For instance, the message of this book could be stated in eight words...

To win development campaigns, aggressively pursue win-win solutions.

Okay the statement is nine words if you quibble and say win-win is two.

Continuing with the forest example, the message could read...

Mayor Smith save our forest to save our schools.

You could also substitute any other strongly-held value for schools.

Following the short statement would be something conveying more detail on the three parts given above for an effective message, perhaps something along the lines of...

We must save our forest to save our neighborhoods, nearby working farms, to prevent overcrowding of our schools and roads, and to protect our water supply. Our goal is to convince Mayor Smith that there's overwhelming support among city residents to purchase the forest. We'll also initiate legal action to prevent the forest from being developed before Mayor Smith can act. Citizens used this same strategy to save the 200-acre Bucklodge Forest in Montgomery County, MD, the 2,000-acre Chapman Forest in Prince George's County, MD, and the 16,000-acre Sterling Forest in New York. We can do the same. But first we need to establish a Forest Defense Fund of \$10,000, which will go mostly for legal expenses. To do this we need

100 people who will contribute \$100 each. Will you join with me in making a \$100 contribution?

Your message should focus on the benefits of supporting the effort, not the negative aspects. For example, state the goal as to save the forest; not to stop a development project. Or the goal is to keep the neighborhood a good place to raise a family; not to stop an adult bookstore. By the same token the name of the effort should focus on the positive, not the negative: Citizens to Preserve the Forest or Save Our Children (from the adult bookstore).

After picking a name, set up a bank account to receive contributions. Many folks believe they need to establish a nonprofit organization to begin fund-raising. This is not the case. In fact, there are good reasons **not** to apply for nonprofit status. The federal limits on nonprofit electioneering and even lobbying may unduly restrict a campaign. Also, most of the folks who support your campaign will do so whether their contribution is tax-deductible or not. So just go to a local bank and set up the same type of account as a small business. But you should check with a good accountant to see if any permits are required to raise funds in your state. Also, the accountant can help you with tax filings and related matters.

Where To Begin

The best place to start enlisting supporters is among your own neighbors or the other folks most directly impacted by a project. Invite a dozen or so people over to your house for an evening meeting to discuss the project. Present your message then the supporting details. If the message is clear and compelling then most folks will become active supporters by the end of the evening. At this first organizing meeting its okay to ignore the *ask for one thing* rule given above. In addition to dollars ask folks to volunteer to oversee the numerous tasks presented in this book for winning a land development campaign.

Please feel free to suggest that you and several others participate in a strategy session by phone with Richard Klein, the author of this book. The sessions are usually held on an evening or weekend. Folks gather around a speaker phone on a kitchen table and spend half-hour to hour describing what they learned through the *Easy Solution* presented in Chapter 1 of this book. We then brainstorm strategy options in hopes of finding at least one which sounds like a winner. The strategy sessions by phone are free. Just pick three dates-times that are good for you and chances are I'll be available for at least one date-time.

After this first neighborhood meeting and strategy session you could hold small, informal meetings in other affected neighborhoods or you could convene a large public meeting.

Citizen Public Meeting

As the name implies, this is a public meeting called by citizens - you and your allies. You control the agenda, not some government agency or the applicant. The purpose of the meeting is to alert a

large number of people to the opportunity to save something they value and to offer them the chance to join with you in supporting the effort.

Frequently a community meeting will draw the attendance of 200 to 500 people and raise the \$3,000 to \$30,000 needed to win most campaigns. Thus a community meeting can help make your campaign a success by providing you with the volunteers and dollars essential to victory. Also, nothing shows the depth of citizen support like financial contributions. All elected decision-makers know how hard it is to raise money. They must do it every two to six years to get reelected. So if a large number of people donate at your meeting, decision-makers will take notice. In fact, it is not uncommon for citizens to win substantial concessions from decision-makers just by holding a successful community meeting.

Again, the purpose of the community meeting is to alert people to project impacts and to enlist their support for your strategy to prevent these impacts. The agenda must focus on the three elements of an effective message: the impact, the solution, and the request. You must get through these three topics in no more than 45 minutes otherwise people will begin leaving before you get to the request.

Select a meeting location which has capacity for 200 to 500 people. Prepare a flyer for use in inviting your potential supporters to the meeting. On the [CEDS website](#) you will find a sample flyer on the Download Publications page labeled *Community Meeting Samples: Flyer, Factsheet, Pledge Form, Volunteer Survey Form, and Meeting Outline*.

Distribute the flyer door-to-door, at signalized intersections during morning rush-hour, through the mail, and (*with permission*) at shopping centers, churches, concerts, carnivals, and any other location where potential supporters might be present.

Draft a press release for distribution to newspapers, television and radio stations as well as other media outlets. See the next section of this book on *Publicity* for advice on drafting a press release.

Invite one or two citizens to speak who have won similar campaigns. These folks will be crucial to convincing those who attend your meeting that you can win also. If you have trouble locating these folks then give CEDS a call. We may know of folks who won similar campaigns in your area. Draft a factsheet for distribution to meeting attendees. The factsheet should summarize the three agenda items: how the project will harm attendees, your proven strategy for winning the campaign, and what you need to win - \$5,000 to \$15,000 in contributions (50 to 150 donations of \$100 each). The CEDS download referenced above contains a sample factsheet. The factsheet should be the *only* piece of literature handed to people as they walk into the meeting room. You want to make certain they read the factsheet early, before the meeting starts, so skeptics realize you've got a good strategy and begin thinking about how much of a contribution to make.

Draft a pledge form that can be used by those who do not bring a checkbook. Again, a sample pledge form can be found in the CEDS website download.

Get several of your active supporters to agree to stand up and announce they will donate \$100 at the public meeting.

Plan the meeting so you get through the three parts of the agenda in about 45 minutes. When the third item is completed and you've told folks what support you need, then announce that you're going to take 15 minutes of questions and afterwards you are going to ask for donations. Then as the first question is taken begin circulating pledge forms throughout the audience.

After 15 minutes of questions remind folks what their donations will accomplish and how much you need, then ask people to stand who can pledge \$100. Of course a few of your folks will immediately stand and hold up their \$100 checks. This should get the momentum going and prompt others to stand and announce a substantial contribution.

Tell everyone that donation baskets will now circulate throughout the audience so pledges and checks can be collected. Take additional questions as the collection baskets circulate and until folks start leaving.

Immediately after the meeting send a thank you letter or e-mail out to all the folks who contributed. For those who pledged remind them of the amount they offered to donate and enclose a self-addressed stamped envelope so they can promptly mail their check. In each envelope include a survey form querying folks about their concerns and describing the expertise you need such as attorneys, traffic engineers, environmental scientists, community organizers, fund-raising experts, political strategists, etc. The survey form should allow folks to check off those expertise they are willing to provide on a no-cost/low-cost basis. A sample survey form can be found in the [CEDS website](#) download *Community Meeting Samples: Flyer, Factsheet, Pledge Form, Volunteer Survey Form, and Meeting Outline*.

Consider circulating a request for contributions among potential supporters who did not attend the meeting.

Three weeks after the meeting mail a friendly, but firm reminder out to those folks who have not fulfilled their pledge.

If you cannot generate sufficient support to win the campaign through the folks impacted by the project of concern to you, then consider linking it to all similar projects proposed for your area. Frequently a common solution can be found for multiple project impacts. If your campaign provides an opportunity to set a precedent for implementing a common solution, then those affected by the other projects may provide active support for your efforts.

GETTING YOUR MESSAGE OUT

The purpose of getting your message out is to expand your base of public support and political clout. Each of the following options provides an opportunity to allow new volunteers to take an role in making your campaign a success.

Press Releases

The purpose of a press release is to get your “news” out to newsletter editors, newspapers, television and radio stations, and online information services. Following is some advice for drafting a press release. This advice was derived from guidelines published by several organizations, such as the Sierra Club, plus from the author’s experience. Even with this advice there’s no guarantee that a media outlet will run your release. But these suggestions do increase the likelihood.

1. If you have it, put the press release on your letterhead. Otherwise plain paper is OK.
2. Type "News Release" using a large point size at the top of the first page.
3. In the upper lefthand corner type "For Immediate Release" if you want it to be run right away. Otherwise, type the first date on which you’d want the release to appear.
4. In the upper right type the name, phone number, and email address of the person(s) to contact for more information.
5. Try to keep the release to one page.
6. If you need to go to two pages, then type "more" at the bottom of the first page.
7. To mark the end of the release type “#####” (centered) below the last line of the release. This symbol tells an editor that the release is finished.
8. The press release headline should grab attention. In other words, it should focus on that portion of the release content which would be of greatest interest to readers-listeners-viewers.
9. Your news release should read like a news story. Say the most important things first, and use a catchy lead sentence to engage your reader. A limited amount of background information and supporting quotes should be put in the following paragraphs. In general, paragraphs should be limited to one or two sentences. The first time you use an acronym, make sure it appears in parentheses after the full name of whatever it represents.
10. Your press release should include 2 or 3 pithy soundbite quotes. Quotes should be front-loaded, in other words, the conclusion should come first followed by the argument (this contradicts how we usually make arguments). Quotes are like pictures, they need to be framed. Make sure the quotes connect to the contextual text around them. Finally, be sure to only quote one person per organization and read their quotes aloud to make sure they don’t sound stilted.

11. Limit the release to one page, two only if absolutely necessary. Keep it simple, clear and direct. Do feel free to include visual aids, such as photos from the campaign, to increase interest when possible.
12. Contact each newspaper, television and radio station, and online information service serving your area. Also find out which of the organizations supporting your campaign publishes a newsletter. Find out which reporter or other person handles issues resembling yours. Also find out the deadline for each media outlet. For example, weekly newspapers may go to press the Wednesday before each Monday when a new issue hits the stands. If the press release is intended to help with turn-out at a community meeting, a hearing, or some other event then make certain you get the release out well in advance of the deadline.
13. Follow-up on the press release with a phone call to each recipient. After introducing yourself say you are following up on the press release to answer any questions they may have. This should allow an opening sufficient for you to gauge their interest in covering your campaign.
14. Offer to take the contact on a tour of the site so you can show them first-hand why you are concerned. But do not actually enter the site unless you have permission.
15. If the contact seems to have little interest in your campaign, then give the editor, publisher, or station manager a call. Ask for an opportunity to meet with them to discuss an issue which may be perceived as insignificant but is actually of vital importance to the community.

Letters To The Editor

Ask for several volunteers to write a *Letter To The Editor*. It is surprising how many people read this section of the newspaper. Equally surprising is how often a paper runs a letter to the edit. The American Civil Liberties Union offers the following advice on writing a letter to the editor.

Keep it short and on one subject. Many newspapers have strict limits on the length of letters and have limited space to publish them. Keeping your letter brief will help assure that your important points are not cut out by the newspaper.

Make it legible. Your letter doesn't have to be fancy, but you should use a typewriter or computer word processor if your handwriting is difficult to read.

Send letters to weekly community newspapers too. The smaller the newspaper's circulation, the easier it is to get your letter printed.

Be sure to include your contact information. Many newspapers will only print a letter to the editor after calling the author to verify his or her identity and address. Newspapers will

not give out that information, and will usually only print your name and city should your letter be published.

Make references to the newspaper. While some papers print general commentary, many will only print letters that refer to a specific article. Here are some examples of easy ways to refer to articles in your opening sentence:

- I was disappointed to see that The Post's May 18 editorial "School Vouchers Are Right On" omitted some of the key facts in the debate.
- I strongly disagree with (author's name) narrow view on women's reproductive rights. ("Name of Op-Ed," date)
- I am deeply saddened to read that Congressman Doe is working to roll back affirmative action. ("Title of Article," date)

Yard Signs

Yard signs are relatively inexpensive (\$2 - \$5 each) and can be a very effective way of demonstrating widespread support for a campaign. I recall one campaign in my home county where residents were opposed to an inappropriate project proposed for a very rural area. Over a period of a couple of weeks yard signs began appearing seemingly in front of every homes for miles in all directions. The tasteful signs advocated rural preservation by keeping the inappropriate use out of the area. The signs and other skillfully executed tactics prompted the applicant to find another location for the project. Imagine the impact though of local elected officials driving through an area and seeing that hundreds of voters, perhaps some of them the official's acquaintances, advocating action on the official's part? Again, done right yard signs can be extremely effective.

Since yard signs are viewed mostly by passing motorists, the message must be simple, the type large and legible, and the color scheme eye-catching. One rule-of-thumb has it that yard signs should be at least 14" x 28" when placed along neighborhood streets (where the speed limit is 30 mph or less). On other roads yard signs should be 2' x 4' or larger.

Before investing a lot of money and time in yard signs make certain that a significant number of households are willing to have a sign placed in their yard. What's a "significant number?" Well, candidates running for elective office try to get at least one sign for every 30 households. But for a campaign involving a poorly conceived land use project *significant* is more like one for every ten households. Anything less and it looks like most people do not support your campaign.

The first folks to ask to place signs in their yard should be your current supporters; those who have given hours or funds to your campaign. Ask them to ask their neighbors to allow a sign to be placed in their yard. Also ask that your supporters contact relatives or acquaintances living elsewhere in the area to place a sign in their yard. This may send a signal to decision-makers that support for your campaign is spreading throughout the area, making it more difficult to ignore the issue.

Paid Advertising

Consider running newspaper, TV, and radio ads. Most campaigns will have a very limited budget for buying ad space. Generally ads are used to produce a large showing of support just before a decision-maker must act. For newspapers consider full-page ads as well as mini-ads signed by your prominent supporters along with a brief statement describing why they support your efforts.

Chapter 37: Negotiate with the Applicant

No other strategy option offers the benefits or challenges of negotiation. For all the parties involved - you, the applicant and government officials - it is the least expensive in terms of hours, dollars and emotional strain. The key to successful negotiation is two part.

First, the more successful you are in finding a truly win-win solution, the more likely a satisfactory agreement.

Second, the applicant and/or government officials must view a negotiated settlement as more desirable than continued conflict.

The challenging part is that usually the applicant and other decision-makers have far more negotiating experience than you. However, with the suggestions contained in this section you can level the playing field.

FINDING AN EQUITABLE SOLUTION

An Equitable Solution is one which genuinely resolves your concerns while allowing the applicant to achieve their goals. This will usually be a solution which requires project modifications but not to the point where the project is no longer viable. However, if you feel a project is so fatally flawed impacts cannot be designed away, then the win-win solution could be buying the applicant out by convincing government agencies and/or private parties to acquire the site for preservation in total or in part.

In previous sections of this book many possible win-win solutions were offered. For example, in the section on traffic mention was made of how one deals with a proposal to increase traffic volume on residential streets. Some win-win solutions could be:

- allow a reasonable increase if speed humps or other calming measures are used to slow traffic so safety, air pollution and noise are all improved;
- if current traffic volume is at 900 vehicles per day (vpd) then the applicant might be allowed to build 10 new homes which would bring volume up to the residential street threshold of 1,000 vpd; or
- the applicant could be required to purchase additional land so access may be gained to some other road where an increase in traffic volume will not be as harmful.

As these three examples illustrate, it is rare that a solution is totally win-win for all parties involved. The traffic calming approach is a win for the folks currently living along the street since it improves their quality of life, but traffic volume also increases. Whoever ends up paying for the traffic calming measures - the applicant or the tax-payers - may not view this as a complete win-win solution. Forcing the applicant to find another access point is a complete win for the citizens but is

probably not a perfect solution from the applicant's perspective. The point is that you may not find an ideal solution which is truly a win-win for everyone. But, the closer you come, the better.

Before you can find an Equitable Solution you need to understand what the other parties want. The first place to begin is with your parties - your neighbors and the other folks who are actively supporting your effort.

Engage them in a process where collectively you determine what you want to achieve. In other words, what is it about the development project that is of greatest concern to you and your supporters?

Of these issues of greatest concern, which are the most important as opposed to those you could live with?

It is not uncommon for citizens to give me a call about a project and begin with a long list of concerns. Some of these concerns are very important *core issues* while others are on the list because they seem to increase the likelihood of victory. After running through the long list of issues, the caller will usually conclude with:

“...and these are the reasons why we want to stop the project.”

I then say

“Well, I can see why you want to stop the project. If I lived in your neighborhood and faced a project posing all those impacts I'd want to stop it too. But it'll probably take hundreds of hours and thousands of dollars to kill the project. And you'll probably face other development proposals for the same tract of land every few years. Of course if you were primarily concerned about the environmental impact there's probably a way that can be fixed without stopping the project.”

It's at this point where the caller and I begin focusing in on their core issues. You and the folks who share your concerns need to go through a similar process and determine what is it you are really concerned about.

While there are projects so flawed they should be stopped, this is not true for the vast majority of development proposals. In other words, you should assume that there probably is something approaching an Equitable Solution for most of your core issues.

Even if a project is fatally flawed and stopping it is imperative, an Equitable Solution is still possible. The site could be purchased for some more benign limited development venture with the applicant fairly compensated for their time and expense. However, a community should not feel

compelled to find an Equitable Solution if an applicant proposes something quite inappropriate or takes greed to the extreme.

Begin looking for ways to modify the project once you and your allies identify the core issues. The Part of this book on *Identifying Project Impacts & Technical Solutions* provides guidance on possible fixes for a variety of development impacts. Government officials will likely have thoughts on possible solutions as well. Other sources of advice would include citizen groups, university faculty, and, of course, CEDS. It seems like we have researched virtually all the potential development impacts conceivable and there few for which we cannot offer possible win-win solutions.

Of utmost importance is to focus on the result; not the solution. Does it truly matter to you how an impact is resolved? Of course not. The only thing of importance is that a solution works. So avoid the trap of becoming wedded to a specific solution.

Once you succeed in finding at least one potential win-win solution for each of your core issues, then you are ready to begin the negotiation.

THE NEGOTIATION

You may be wondering why an applicant would want to negotiate with you? Principally because there's a chance you could cause them substantial delay, which equals money. Also, in many localities decision-makers take a dim view of developers who cavalierly ignore citizen concerns, especially when those concerns are presented in a reasonable, constructive manner. The decision-maker may have myriad ways to tie up an unreasonable applicant's project. But, this does not mean you can ask for the moon and expect to get it. In most situations it will all boil down to the following very simple question:

Does it cost the applicant more to fight you then to accept your win-win solution?

Following are the factors the applicant will be considering when forming their answer to this question:

- Do you come across as credible and reasonable? If not then it is unlikely final decision-makers will take you seriously. In other words, you are not much of a threat.
- Are the decision-makers key to approving the applicant's project likely to be responsive to your concerns?
- Do these decision-makers have a history of ignoring or championing citizen concerns?
- Do you have issues that are so strong final decisions-makers will feel compelled to act on them?
- How committed are you to achieving your goals? If the applicant gets the impression you will go away easily, then it is unlikely they will agree to your win-win solution. On the other hand, if you have already hired a lawyer and begun mobilizing support then your commitment is obviously more than passing.

- Is your solution truly a win for the applicant?
- What will the applicant lose by agreeing to your solution?
- Are you the only opposition to the project?
- Will settling with you encourage others to begin making demands?

Even if the answers to these questions all favor settling with you, do not expect to reach a satisfactory agreement quickly. In fact, your first meeting with the applicant will probably be nothing more than a get acquainted session. It is not uncommon for an applicant to refuse to seriously negotiate until citizens have demonstrated their commitment by filing the first appeal of a project approval. But it is very important to accomplish several objectives early in the process.

- Find out as much as you can about the applicant's goals and constraints, which will allow you to modify your solutions so they come closer to a win-win. If the applicant is proposing 100 houses then don't expect to learn how many they can lose before having to walk away from the project. Instead, look for where there may be flexibility. For instance, try to learn which lots might be reduced in size to save more open space. Or why particular access points were selected and any obstacles to shifting access so they no longer need to connect to your dead-end street. As you go through each of your solutions the applicant will likely explain why each will or will not work. Carefully note each reason then suggest any obvious alternatives that might resolve the applicant's concerns.
- Make it clear to the applicant that your goal is not to stop the project, but to find a solution which works for them and you.

Prior to meeting with the applicant, get together with your allies to reach consensus on the following points. It is crucial that you agree on these points *prior* to meeting with the applicant. You do not want to get into a debate among yourselves during the meeting.

1. Who will attend the meeting from your side? Two or three people are best; but no more than six.
2. Who will act as spokesperson for your group?
3. Who will be responsible for taking detailed notes of what is said during the meeting? Generally, it is not okay to tape a meeting.
4. What issues will be raised with the applicant, who will present each issue, and what justification will be offered for why you believe the issue to be real?
5. Everyone must agree to listen while the applicant gives you their take on the validity of each issue.

6. What solutions will be offered and who will present the solution (usually the same person who presents the issue)?
7. If the applicant offers alternative solutions then get all your folks to agree to ask for time to fully consider the alternative. A solution which sounds good at first, may not seem so great a day later. Never be pressured into making a quick decision.
8. Make certain everyone understands that the first meeting probably will not result in a satisfactory agreement; it's just a first step.
9. Encourage folks not to take a maybe as a no. Instead, view it as an opening to continue discussions in hopes of turning it into a yes.
10. Make certain everyone understands that you have good viable alternatives if the applicant refuses to negotiate in good faith. The alternatives will usually be the other strategy options presented in this Part of the book - working with regulatory staff, lobbying final decision-makers, legal action, etc. In other words, when everyone walks into the meeting with the applicant, they should not feel compelled to settle at any cost; they know they have other options. This reduces the pressure on you and your folks to reach a settlement at the first meeting.
11. Everyone in your group must keep their temper and do not threaten. Definitely no one utters threats such announcing they will delay the project, drive up costs, or use laws for purposes other than they were intended. All three of these threats may be grounds for a lawsuit against you.
12. Everyone also agrees to end the meeting if the applicant threatens or uses other intimidation tactics.

Your request to meet with the applicant can be made by phone or letter. A phone call is best since it moves the process along more quickly and allows you to get an initial sense of the applicant's willingness to negotiate. Regardless of whether you make the initial contact by phone or letter stress that you want to find an Equitable Solution, that you have several in mind, and you would like to meet.

Press for a meeting with the applicant since they have decision-making authority. But do not refuse to meet with the applicant's representative, even their attorney. Again, the goal of the first meeting is to demonstrate your interest in an Equitable Solution and to learn as much as you can about the applicant's goals and constraints.

If the applicant refuses to meet, rejects your solutions without offering specific reasons, or does not offer alternative win-win solutions, then you can let other decision-makers know you tried to work with the applicant but were unsuccessful. Your position will be strengthened if you can say you tried

to initiate win-win negotiations but the applicant refused to participate or the negotiations failed to reach resolution. But make certain you give it your best try. Your goal must be a successful negotiation; not merely the appearance.

Where to hold the meeting? A neutral location is nice, but not crucial. If the applicant (and you) are committed to the process then it does not matter where meetings are held. The initial meeting could be in your home, the applicant's office, or any other convenient, quiet location.

Begin the meeting with introductions. Thank the applicant for taking the time to meet with you. Next, describe each of your core issues and why you believe the project will cause each impact. Listen very carefully to the applicant's response. If they feel the impact is not likely to occur then ask why and listen with an open mind. Ask for further detail if this is necessary for a complete understanding of the applicant's perspective. After the meeting you will want to review the details to determine if the applicant is correct or if they have missed something. After the applicant gives their perspective on an issue, offer any information you have which might prompt them to rethink their position.

If the applicant disagrees on the validity of an issue then look for ways around the impasse. Are you missing some information crucial to confirming the validity of an issue? If so, then suggest tabling the issue until the missing information can be acquired and you can meet again. If other issues remain then move on to the next.

If you and the applicant agree that an impact will or *may* occur then offer any solutions you have identified. If the applicant feels a solution is not the most desirable then ask for their thoughts on alternatives. Again, make certain someone in your group is taking detailed notes.

Most meetings will last one to two hours. Whenever possible, try to end the meeting on a positive note. If an impasse resulted from a lack of information, then seek agreement with the applicant on how to obtain the missing data, then set another time to meet so you can continue the discussions. If all else fails then simply agree to disagree. Thank the applicant for taking the time to meet with you and express your hope that you can find an Equitable Solution in the future.

If you reach agreement on implementing a solution then explore options for guaranteeing that it will work on a long term basis. Consult with a qualified attorney on the value of drafting an agreement between you and the applicant to further guarantee full implementation. Additionally, most solutions will require changes in project plans. For example, if the applicant agrees to drop a proposal to connect to a dead-end road or to use more effective BMPs then development plans must be revised to reflect these changes.

Ask the applicant when the plan revisions will be completed. Ask the applicant to send you a copy of the revised plans. After you have reviewed the revised plans and you are satisfied your concerns have been fully addressed then ask the applicant when the revisions will be submitted to permitting-

approval agencies. Follow-up by checking with agency staff to verify that the revised plans were submitted and approved as the binding documents. The next section offers advice on how to work with regulatory staff to ensure that solutions become part of project permits and other approvals.

Chapter 38: Working with Regulatory Staff

Frequently citizens resolve their concerns by working with the staff responsible for reviewing development projects. The purpose of the staff review is to determine if the project complies with various regulations and policies. These staff people may be the individuals responsible for reviewing preliminary subdivision plans, wetland permit applications, stormwater management plans, traffic impact studies, or a host of other submittals an applicant must make to receive all necessary permits and other approvals. If the project reviewer is uncertain of their authority to resolve your concerns then you may also be dealing with their superiors.

The role of regulatory staff is to help applicants understand and comply with requirements designed to protect public health, safety and welfare. Applicants may range from the individual homeowner wishing to build a deck and to the development company seeking approval to construct a shopping mall. Given this role, you will find regulatory staff most cooperative if you seek their assistance in implementing an Equitable Solution. The quickest way to lose their help is to pressure them to stop a project, unless the project is blatantly bad, which is rarely the case.

While most regulatory staff are dedicated public servants with a genuine desire to help, they are also universally underpaid and overworked. They tend to get frustrated with citizens who have not familiarized themselves with the basics. This is one of the reasons why consultants tend to get easier access to regulatory staff and files. The consultant can ask for precisely what they want and pose questions that are usually easy to answer. The staff person does not need to spend a lot of time educating the consultant in the basics. So take the time to educate yourself on the technical and legal aspects of the issue(s) of concern to you prior to contacting regulatory staff.

Your initial staff contact will likely be to look at project plans and other documents as part of *The Easy Solution* recommended at the beginning of this book. At that initial meeting ask each staff person what regulations, policies and guidance documents are relevant to the issue(s) of concern to you. Frequently these documents are available in local public libraries or online. Make the effort to read these materials following your initial meeting. You will no doubt have many questions after reading the documents. But if it is obvious that you have made an effort to educate yourself then you will likely find staff more cooperative in answering your questions, particularly if they are specific and relevant to the project under review. Also, the better you understand the technical aspects and legal constraints the easier it will be for you and staff to find a solution that works and can be implemented through a permit or other approval.

At first glance rules, regulations and guidance documents may appear to lock reviewing agencies tightly in to what they can and cannot require. Generally though staff do have some flexibility, especially where a project will cause impacts greater than those normally associated with development. For example, if a project threatens the best trout stream in a county or the highest (or worse) performing school then staff may be in a position where they can call for control measures

not normally employed. Obviously, the more public support for enhanced controls, the easier it is for staff to call for their use.

Now that we have this preliminary stuff out of the way, let's pick up where we left off. You have just had your first negotiating session with the applicant. Chances are the session did not result in satisfactory resolution of your concerns. At this point you request a meeting with the staff person responsible for reviewing the project for the issues of concern to you. Your hope is to convince the staff person to adopt your win-win solution or help you find an equally effective alternative.

Generally, meetings with staff are one-on-one. But feel free to bring along another person if you would like help with items such as taking notes on staff suggestions.

Begin the meeting by expressing your desire to find an Equitable Solution. In fact, you might point out that you have met with the applicant in hopes of reaching a mutually satisfactory agreement. Say you wanted to meet with regulatory staff because you think you have a solution and you would like their opinion.

Next, describe your concerns and why you believe the project will cause each impact. Ask the staff person if they agree that the impact is possible. If they disagree then carefully note their reasons why. If you believe you have some relevant facts which staff is unaware of, then, by all means, present them. If the disagreement is a result of inadequate information then explore options for obtaining the data. Suggest that the issue be tabled until the missing information can be obtained and you can meet again. Alternatively, you could also ask the staff person to assume for the moment that the information will show the concern is real, then present your solution and ask if they feel it is workable. If the staff person still disagrees then you should go onto to your next issue.

If the staff person agrees that an impact is possible or likely then present your solution(s). Ask if they feel the solution will work from a technical perspective. If the response is positive, then ask if the agency has the legal authority to require the applicant to implement solution. If they say no or they are uncertain then ask for detail so you can research this latter.

If staff believes a solution to be unworkable then ask if they have any alternatives to suggest. A good way to phrase this request is something along the lines of:

If you lived where I do and you shared my concern about the project, how would you go about getting it resolved?

Sometimes discussions with staff enter a sort of twilight zone where logic seems to break down. The facts supporting your concerns seem obvious and compelling yet staff insists you are wrong or you have not quite convinced them you are right. Or it appears they clearly have the authority to require implementation of a solution, but staff insist they do not. Of course you should continue the discussion, asking additional questions, in hopes of determining whether you are missing something.

Besides the possibility of thick-headedness on your part, there are at least three other possible explanations for the apparent impasse:

- The agency has established a history of approving similar projects without requiring solutions such as those you suggest. If they were to deny approval for this project then the applicant may be in a good position to get the decision reversed in court.
- The staff person's superiors have directed them to approve the project or staff knows that those who advance in the agency do not take actions such as those you are advocating.
- The staff person has taken a dislike to you. Again, most staff people are dedicated, caring individuals. However, even a saint can lose their patience if you begin accusing them of being in cahoots with the applicant, lazy, of below average IQ, or you make other offensive remarks.

If a staff person feels they lack the authority to mandate a solution then ask if they could get their superior's opinion and/or recommend it to their superior. If they are reluctant then contact the superior directly.

If you come to agreement on a solution, then ask the staff person how implementation can be guaranteed. More likely than not their response will be to make it a condition in a permit or some other approval. It is also likely that they will need to send a letter to the applicant notifying them that they are required to modify their plans and other submittals to show how the solution will be implemented. Request a copy of the letter as well as the permit/approval document. When the revised plans/submittals are received then request an opportunity to review the documents to verify that the solution has been incorporated.

If you do not quite get to the point of full agreement then consider sending a follow-up letter confirming your understanding of whatever points of agreement you have reached, what the next steps will be, who will do them, and by when.

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Chapter 39: Lobbying Final Decision-Makers

A final decision-maker is anyone who has the authority to resolve your concerns. The applicant is certainly a final decision-maker. In many instances regulatory staff have the authority to require adoption of your preferred solution, but they can be over-ruled by agency heads. So a department director or secretary may be the actual final decision-maker. The local legislative body are frequently final decision-makers. They can deny or condition rezonings, adopt new laws to resolve impacts inadequately addressed by existing law, or approve funds to buy a site. Sometimes state legislators or members of Congress also have the power to resolve your concerns. A mayor or county executive may be a final decision-maker since the department heads report to them. The governor of your state or even the President can be final decision-makers for regional or national issues. In other words, for any given issue there may be several decision-makers who have the power to implement your preferred solution.

WHICH DECISION-MAKER TO APPROACH FIRST

To win you must figure out which decision-maker(s) can be most easily influenced to act. How do you do this? Usually the best place to begin is by talking with the decision-maker who was elected to represent you.

In many localities council or commission members are elected by district. The elected official representing your district will usually be more receptive to your concerns than other members, especially if they did not rely heavily on developer-real estate money during their last election campaign. If council members are not elected by district then try the official with the best reputation for helping citizens resolve development-related concerns. Veteran citizen activists will know who this official is.

THE MEETING

Perhaps you are at the point where there has been an initial meeting with the applicant and regulatory staff. But the applicant has not agreed to act and staff feel they lack the authority to force the applicant to adopt your preferred solution. So the purpose of meeting with the council-commission representative is to request their help in finding a way to get your solution implemented or to come up with other equally effective solutions. Following are some examples of what you might request.

- If the applicant is reluctant to negotiate then ask if the decision-maker would be willing to encourage the applicant to reconsider;
- If staff feel they lack the authority to mandate a solution then ask the decision-maker if they agree or, if they're uncertain, if they would request an opinion from the legal staff;
- If a department head feels they have the authority to mandate a solution but lack the funds to ensure long term maintenance, then ask the decision-maker if they would support a budget amendment making the necessary funds available;
- If a department head has simply been unresponsive then ask the decision-maker if they could talk with the official;

- Ask the decision-maker if they believe it may be possible to acquire the funds to preserve the site in total or partially; or
- If it looks like current law prohibits full implementation of your solution, then ask the decision-maker to help you change the law.

In some local jurisdictions council members, commissioners or board of supervisor members are prohibited from discussing proposed development projects: an *ex parte* communication. This restriction results from the role they play in the process as a board of appeals or as the final approving authority. If you run into this problem then consider discussing a solution in general. For instance, if you are concerned about increasing the number of houses along a dead-end street then ask your representative to consider a law limiting the number of houses built on all dead-end roads, not just the one affected by the proposed development project. Such a generic conversation should be permissible as long as it does not focus in on one particular project or your dead-end road.

Most elected officials are motivated by good intentions. They want to serve the public good. Of course public good has many aspects, including keeping housing costs down and minimizing property rights infringement as well as safeguarding the environment, schools, historic resources and other values. But all elected officials are also motivated by political considerations. The greater your public support, the more likely it is the decision-maker will act as you wish. This is why the section on *Expanding Public Support* appeared first in this Part of the book. The impact of your supporters will be even greater if they include people the decision-maker views as influential. Examples of these influential people would include:

- leaders of community associations and other citizen groups, especially those with a large membership in the decision-maker's district;
- religious leaders, especially someone from the decision-maker's place of worship;
- business owners or corporate executives especially from companies employing a large number of people who live in the decision-maker's district;
- contributors to the elected official's campaign fund (in many places campaign finance records are open to the public and may even be available online²³⁷);
- leaders of organizations which endorsed the decision-maker during their last campaign (assuming they are an elected official);
- other elected officials, particularly those in leadership positions in the decision-maker's party;
- individuals with good, positive name recognition; or
- anyone who the decision-maker would prefer not to offend by rejecting your request for help.

Prior to meeting with the decision-maker, get your allies together in hopes of reaching consensus on the following points. You don't want to debate any of these points among yourselves while meeting with the decision-maker.

²³⁷ For contributions to candidates for federal office go to: <http://www.fecinfo.com/> For state and local candidates go to: <http://www.afscme.org/wrkplace/campfin.htm>

1. Who will attend the meeting from your side? Two to six is best and should include at least one person likely to be viewed as influential by the decision-maker. Make certain though this person solidly supports your position and avoid folks with a reputation for flip-flopping on issues.
2. Who will act as spokesperson?
3. Who will be responsible for taking detailed notes of what is said during the meeting? Generally, it is not okay to tape a meeting.
4. What issues will be raised, who will present each issue, and what justification will be offered for why you believe the issue to be real?
5. What solutions will be offered and who will present the solution (usually the same person who presents the issue)?
6. If the decision-maker offers alternative solutions then make certain everyone agrees not to agree during the meeting. Instead listen with an open mind and ask for time to consult with others. This will allow you to think through the alternative and determine if it really is as good as it sounded at first.
7. Prepare your allies for not achieving victory at the first meeting; it will probably be just a first step.
8. Don't take a maybe as a no. Instead, view it as an opening to continue discussions in hopes of turning it into a yes.
9. Make certain everyone understands that you have alternatives and while winning the decision-maker's support is certainly desirable it is not your only option. If the decision-maker refuses to support you at this first meeting then your alternatives include:
 - a. Mobilizing more of your supporters to lobby the decision-maker;
 - b. Turning your attention to other decision-makers; and/or
 - c. Initiating legal action.By making your allies aware of your options it will reduce their tendency to agree to proposals that may be less than satisfactory.
10. Everyone in your group must agree to keep their temper and not threaten.

11. Everyone also agrees to end the meeting if the decision-maker is the first one to use threats or other intimidation tactics.

Begin the meeting with the decision-maker by thanking them for taking the time to see you. Compliment them on past actions you know of where they supported responsible growth management. Describe your concerns, the basis for your concerns, your proposed solution and why you believe the solution to be the best choice. If you have already met with the applicant, staff, department heads, or others then point this out and describe the outcome. After answering any questions the decision-maker may have, then ask what they would do if in your position.

Do they see another more workable solution?

Or what approach would they take to win implementation of your preferred solution?

Most importantly, what are they willing to do to help resolve your concerns?

End the meeting by reviewing your points of agreement and next steps (who is to do what by when). Lastly, thank the decision-maker again for taking the time to meet with you.

POST-MEETING ANALYSIS

After the meeting, adjourn to another location to chat with your allies about next steps. Review what each of you heard during the meeting with respect to points of agreement and disagreement as well as action items - who will do what by when. When you reach consensus then consider following up on the meeting with a letter to the decision-maker which begins with another thank you then lists points of agreement and next steps. Close with a sentence asking if the letter accurately reflects the decision-maker's recollection of the meeting.

If the decision-maker agreed to support your efforts and committed to taking specific steps to fulfill the promise, then you are in good shape. Be certain to follow-up with the decision-maker to see if there is anything you can do to help and to verify that they are making good on their commitments. But also monitor permit-approval processes so you do not lose any opportunities to appeal a decision to approve the project before your concerns are resolved.

If the decision-maker seemed undecided about supporting your effort, then focus your post-meeting discussion on how you might win them over.

1. Was it your collective sense that the decision-maker felt they did not have sufficient information?

If yes, then the next step is obvious: get the information as quickly as possible and meet again with the decision-maker.

2. Did you get the sense that the decision-maker felt that the political repercussions of supporting your position were too great?

If yes, then search among your supporters for others who can influence the decision-maker and consider the three tactics described below.

3. Did the decision-maker agree that your solution made sense, but they felt other final decision-makers would oppose it?

If this was the case then you probably discussed ways of winning the support of these other decision-makers, such as meeting with them (making certain to include folks among your supporters whom the other decision-makers would view as influential).

4. Was the decision-maker just dead set against your solution and didn't seem interested in helping you find other fixes?

If this was your sense then move on to another final decision-maker. Its always best to focus your energy on your allies not your adversaries. There are usually several final decision-makers and one of them will likely be more open to your campaign. If they all refuse to act then you should focus continued political pressure on the decision-maker most likely to turn around while simultaneously initiating legal action.

Following are three possible tactics for providing a decision-maker with the public support needed to take a tough stand.

LETTERS, PHONE CALLS, POSTCARDS & EMAILS

In my home state citizen activists have a saying about bills before the Maryland General Assembly; if a Senator or Delegate gets more than six letters or calls on a piece of legislation than this indicates widespread public interest in the measure.

Isn't this great?!

We just sit down at the start of the legislative session, pick out the bills we do and don't like and get seven or more people to write a letter about each one. Then we can go watch football or ski for the rest of the winter while all our pet bills sail through and the peeves crash and burn.

Of course this is not the way it works.

Yes, if a decision-maker gets a half-dozen or more well written, well reasoned letters then this does indicate that enough people are interested so that the 0.1% - 1% who act on their interests have started writing. But if all the letters sound alike then the decision-maker concludes that this is not a spontaneous public response reflecting widespread interest but a lobbying effort orchestrated by

an advocacy group. This reduces the impact of the letters, but not completely. If the six letters were signed by the top six contributors to the decision-maker's last election campaign then it probably does not matter whether they sound alike or not. The decision-maker will listen very closely to what their six best supporters have to say.

The key then to making an impact through the letter writing tactic is to search for people to write letters who can influence the decision-maker, such as:

- campaign contributors;
- officials from the decision-maker's party;
- organizations that endorsed the decision-maker during their last campaign;
- leaders of groups with a large membership in the decision-maker's district;
- business owners or corporate executives with a large number of employees in the district;
- registered voters who:
 - live in the decision-maker's district (especially in the precincts the decision-maker won during the last election),
 - belong to the same party, and
 - are frequent primary voters (voted in two or more of the last primary elections²³⁸).

Make certain the letter demonstrate that the signer clearly understands the issue, has considered the pros and cons, and presents well-reasoned arguments for supporting your position. You could provide your influential supporters with a sample letter and factsheet or even write the letter for them. Have them mail the letter to you, not directly to the decision-maker. This way you know the letter was actually written and you can present all the letters to the decision-maker en masse.

These same principles apply to e-mails and phone calls. Ask people to copy you with e-mails as well as the reply they receive. Ask folks to let you know how the decision-maker responded to phone calls.

Postcards are much like a petition. If someone only signs a postcard and does not take the time to write a thoughtful letter, then their interest in the issue is probably rather superficial. However, if 10% of the voters in the decision-maker's district sign a postcard, then the impact increases dramatically.

Avoid the temptation to flood a decision-maker's office with calls, letters and e-mails. Instead, start with a few contacts from your most influential supporters. If this low-key effort does not seem to have an effect, then increase the volume if you believe the decision-maker may turn around.

²³⁸ Frequent primary voters are key to winning tight election races. A decision-maker tends to be more influenced by how frequent primary voters think compared to voters in general; especially people who seldom vote.

PUBLIC OPINION SURVEY

Citizens have used public opinion surveys to demonstrate widespread voter-taxpayer support for a given solution. Generally surveys work best for issues where the decision-maker is considering a discretionary action, such as:

- how much funds to allocate to a project such as land preservation, improved transit, reducing class size, or environmental restoration projects;
- whether to downzone rural lands while adopting a program to compensate family farm owners for the equity loss;
- construction of a new highway; or
- whether rezoning should be granted for a large, controversial project.

These actions are mostly all discretionary because government is not required by law to approve-disapprove if specific criteria are met. In other words, government has substantial discretion with respect to questions such as how tax revenues are budgeted, whether to amend a master plan to set the stage for rezoning large areas, or whether to grant a request to rezone a specific property. A public opinion survey would not help much with nondiscretionary decisions, such as whether to grant approval for a preliminary plan of subdivision or a wetland permit application.

The classic scenario for initiating a survey is where decision-makers believe a majority of taxpayers oppose a solution advocated by citizens. In fact, the decision-makers use this claim as a principle reason for not supporting the solution. The citizens advocating the solution are confident majority support is there and carry out a survey to document their belief. The results of the survey show that the citizen advocates are right and that decision-makers should support the solution if they believe in will of the people. The survey results can also generate a fair amount of newspaper, radio and TV coverage.

There are a number of good references on conducting citizen surveys, such as *Public Opinion Polling: A Handbook for Public Interest and Citizen Advocacy Groups*.²³⁹ While volunteers can carry out the actual survey, it is vitally important that a qualified professional design the survey and the sampling methodology. I have seen more than one citizen group invest a lot of time and money in a survey only to have the results prove worthless due to poor design.

PETITION

The petition does have a place in advocating for Responsibly Managed Growth, but this tactic also has some severe limitations. Of course a petition is crucial for getting a referendum issue on the ballot. But a petition tends not to be terribly effective in swaying decision-makers. The reason is that most decision-makers know it is easy to get people to sign a petition. So you start off with a device which does not necessarily show a high level of public support for a solution. Additionally,

²³⁹ Public Opinion Polling, by Celinda C. Lake for the Montana Alliance for Progressive Policy, published by Island Press, 165 pp., 1987.

within two weeks most petition signers will not recall what it was they signed. More importantly, it is unlikely someone will go to the trouble of tracking how a decision-maker acted on an issue simply because they signed a petition. In other words, come the next election it is unlikely petition signers will know how candidates acted on the issue and then use this as a basis for casting votes. But there are ways of making petitions more effective. For instance, you can make follow-up mailings to petition signers to increase their depth of knowledge and commitment to the issue. You can then do a final mailing so petition signers receive it a few days before an election. This final mailing will show which candidates did and did not support the solution advocated on the petition. If decision-makers know you plan to take these steps, then the petition will have greater impact. However it is hard to get this message across without sounding like you are making a threat, which is generally a mistake.

At first blush it may seem a simple matter to draft a petition. Sadly, this is not the case. If a petition is being used to get an issue on the ballot then it must meet a verify specific legal form both in terms of how the heading is worded and the space provided for signatures, printed name, address, etc. Also, you may need to verify that signers are currently registered to vote. More than one citizen group has collected thousands of signatures only to have them all thrown out because of some procedural snafu. Obviously you should consult with an attorney experienced in petition format before launching a drive.

CHARRETTE

Over the last decade a collaborative process known as a charrette has been used increasingly to resolve land-use disputes. Typically, the charrette process lasts three-days to a couple of weeks. During the charrette stakeholders (citizens, developers, government officials, affected business and land owners, etc.) meet with a “design team” brought in from the outside. The design team consists of experts from various disciplines (planners, environmental engineers, etc.) who provide objective input on technical and process issues. The intent of the process is to provide all stakeholders with the resources needed to understand issues and evaluate alternatives. The stakeholders are then encouraged to thoroughly evaluate each alternative in hopes of arriving at a mutually satisfactory solution.

Because of the time and expense involved, charrettes tend to be used only for planning at a town, county or watershed level, although they have been applied to large individual projects, such as one which would substantially alter the character or size of a community, town or area.

Calling for a charrette can be a great way for citizens to gain the time and resources needed to thoroughly evaluate a proposed project or a master plan change. However, it should not be used solely for delay.

Again, if a project or plan change has major quality of life repercussions then a charrette offers a way ensuring that it only proceeds after thorough evaluation in a process where you are an equal participant. But a charrette is not a guarantee that the process will be fair, much less that your viewpoint will prevail.

The fairness of the charrette depends upon the objectivity and biases of the design team, as well as those sponsoring the charrette, which are usually local elected officials. There are a number of professionals and enterprises serving as charrette design teams. You should insist upon a role in selecting the design team. As teams or team members are proposed ask for a list of all the charrettes each has served. Contact the citizens involved with several of these charrettes to learn how well the design team performed. As the charrette proceeds compare the advice given by design team members with that provided by citizen advocacy groups. This may allow you to determine if the advice fairly reflects all viewpoints - pro-citizen as well as pro-development.

To learn more about charrettes visit the following websites: CharretteCenter.Com or the [National Charrette Institute](http://NationalCharretteInstitute).

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Chapter 40: Legal Action

The purpose of legal action is to convince a final decision-maker to either deny a permit-approval or to grant a permit-approval with conditions implementing your preferred solution. If the permit-approval is granted before your concerns are fully resolved, then legal action may continue in the form of an appeal to the courts.

One of the most frustrating calls I get is from an activist who has spent the past two years raising tens of thousands of dollars for legal action. By the time they call they are drained of funds and energy with little to show for it all, but still they refuse to give up. So we go through possible strategy options. We usually discover at least a couple of options that should have been pursued either in lieu of legal action or in concert. Frequently, these options had about the same probability of success as legal action, though at a far lower cost, but no one did the research needed to identify these options. So litigation was the only strategy pursued.

If you completed the research presented in *Chapter 35: Researching Strategy Options*, you will know which strategy options offer the greatest likelihood of victory. Implementing any of these options is generally easier if you have the assistance of a good attorney. But, as stated in Chapter 35, the need for an attorney varies with respect to the specific permit or approval you focus on.

WHEN TO HIRE A LAWYER

We strongly urge you **NOT** to immediately rush out and hire a lawyer the moment you learn of a project threatening your interests. Instead, you should complete the research described in *Chapter 35: Researching Strategy Options*. Without this research you will not know: a) if you need a lawyer, and more importantly, b) what type of lawyer you need; one specializing in land use-zoning matters, environmental law, annexations, etc.

Not all lawyers are equally qualified to practice in the multiple areas of law associated with a typical development project. Additionally, lawyers vary in their ability to implement specific strategy options: litigation, lobbying elected officials to change the law, land preservation, negotiating with applicants, etc. Again, until you've completed the *Chapter 35* research into your strategy options you will not know if you need a lawyer and what expertise to look for when interviewing prospective attorneys. Finally, far too many attorneys will urge you to start spending your limited resources on the next permit-approval to be heard by a decision-making body. This may or may not be the best place to invest your time and money. Again, only by researching *all* of your strategy options will you know where and when expenditure of your limited resources buys the greatest likelihood of victory.

If you are uncertain whether you need to hire an attorney or if you feel you need professional help in *Researching Strategy Options* then contact me at 410-654-3021 or Rklein@ceds.org

FINDING A GOOD ATTORNEY

Many states and counties have a few attorneys who specialize in representing citizens in land use and zoning cases. Of course, most land use-zoning attorneys work the developer side of the fence and either refuse to represent citizens or do not understand how to maximize the likelihood of success when representing citizens.

The attorneys who specialize in representing citizens recognize that your financial resources are limited, but you probably have a lot of volunteer hours to invest. To minimize expense they will urge you to do as much of the leg-work as possible. For example, they will suggest that you obtain plans and other submittals rather than paying someone in the attorney's office to do this. But most importantly, most citizen specialist attorneys will be very honest with you about your chances of prevailing in your effort to condition or block a permit-approval. Many of these specialist attorneys will also do an initial meeting with citizens free of charge. During this meeting they can assess the strengths and weaknesses of your case, suggest how you can increase your chances of victory, and offer other important advice such as which decision-makers are likely to be influenced by your arguments.

How do you find these citizen specialist attorneys?

First, contact CEDS. Over the past three decades we've compiled a list of more than 130 attorneys practicing throughout the nation who have a good reputation for helping citizens win zoning, land use, and environmental cases. To learn if one of these attorneys is practicing in your area contact us at 1-800-773-4571 or Help@ceds.org. You can also try talking with long time citizen activists in your area or ask for referrals from citizen groups active in your state, such as those listed on the [*State By State Resources*](#) page of the [CEDS website](#).

If you are fortunate enough to have several citizen specialist attorneys to choose from then ask around to learn which has been most successful with cases like yours. The better the reputation of your attorney, the more seriously the applicant and others will take you and the greater the likelihood of victory.

I urge you to meet with each attorney to see which impresses you the most. Following are some questions you might ask during the meeting:

1. How many land use-zoning cases have you handled?
2. How many of these cases were on behalf of citizens?
3. What was the outcome of these cases?
4. Would you mind if we contacted your former citizen clients to get a reference on the quality of your work?

5. Have you ever had a case involving the same permit-approval at issue in our case?
6. Have you argued land use cases in both the trial and appellate courts?
7. How many of these cases have you won?
8. Have you ever represented the applicant, their associates, or is there any other potential conflict of interest?
9. What is the minimum amount of legal work you recommend performing at this point and what would this work cost?
10. If funds were not as limited as they are today:
 - a. What other legal work would you recommend doing at this point?
 - b. How would this work strengthen our position?
 - c. What would this additional work cost?
11. In the interests of minimizing expense, ask the attorney what work you could do which might normally be performed by the attorney or their staff?
12. If you completed the research suggested in Chapter 35 under the heading *Linking Regulatory Requirements to Resolution of Your Core Concerns*, then did you conclude that resolution of your concerns is required by applicable laws or that criteria for granting a permit-approval requires resolution of your concerns? If yes, then discuss your conclusions with the attorney. Ask if they are familiar with the applicable section of the law and, if yes, how likely it is that decision-makers will agree with your conclusions.
13. If you feel you have identified an Equitable Solution, then ask the attorney for their opinion on the reliability of the solution from a legal perspective. Ask if they would be willing to contact the applicant to arrange a negotiating meeting. Ask if they would be willing to attend the negotiating meeting with you. Of course, ask what it would cost to do any research needed to assess solution reliability and to attend the meeting.

Few attorneys will give great answers to all of the questions suggested above. Obviously, some questions are more critical than others. Frequently, the selection of an attorney comes down to who impresses you the most.

Once you retain an attorney, do not make a secret of it. This action alone will not produce victory, but it does increase the likelihood of a successful outcome. Again, hiring an attorney shows the applicant and others that you are committed to winning.

MINIMIZING THE EXPENSE OF LEGAL ACTION

In those cases where legal action was necessary, our clients have spent as little as \$1,000 and in excess of \$100,000. Legal action usually begins at an administrative hearing before a planning commission, a board of appeals, or a local legislative body. If an attorney is needed then their fee will be about \$3,000 to \$5,000 plus an average of \$1,500 for each expert witness. Typically, an administrative hearing ends up costing \$5,000 to \$10,000. There will usually be two or three levels of appeal following the administrative hearing. Each level of appeal usually costs another \$5,000 to \$10,000, most of which is attorney fees.

From my conversations with citizens who did not use our services during administrative and appeal hearings, their costs are two- to five-times greater than what our clients spend. I usually get a stunned silence when I describe our usual cost figures. I attribute the silence to the caller trying to determine if I'm being honest. To me there is little mystery in why we can put on high-quality cases that cost our clients a fifth to half of what attorneys outside our network charge citizens.

First of all, because we specialize in helping citizens with development issues and we do this throughout the United States, we have far greater experience than most in what works. Because of the unique depth of our expertise it is very easy for CEDS to identify issues, solutions, and determine if and where legal action is warranted.

Second, the 130 attorneys in the CEDS network specialize in representing citizens in land use and zoning cases. Most of the attorneys outside our network who represent citizens practice relatively little land use and zoning law. This means citizens are paying the attorney to educate themselves about an area of law new to them. When citizens utilize attorneys in the CEDS network they are only paying the attorney to prepare then argue their case.

Third, the attorneys in our network are comfortable allowing citizens to perform a large part of the legwork the attorney or a paralegal would normally perform. The attorney's comfort level is higher if the citizens are following the guidance provided in this book when carrying out the legwork.

Fourth, as you will see in the section below on *Expert Witnesses*, we are very efficient at identifying and preparing professionals for testimony.

With the guidance provided in this book you can use these same four factors to minimize cost while maximizing the likelihood of victory in a legal arena.

Citizens will occasionally ask about free or *pro bono* attorneys. There are certainly many examples of cases won by attorneys working for free. The Chapmans Forest case described in Chapter 27 was

won with the help of several pro bono attorneys, though it was ultimately political action which won this campaign. The cases which attract pro bono attorneys tend to be very high profile where the attorney will benefit from substantial publicity. In reality, it is rare for an attorney to offer their services for free unless the case will generate considerable of exposure for them.

LEGAL VS. FACTUAL ISSUES

The issues presented at a hearing tend to be classified as either legal or factual, though frequently an issue has elements of both. Following are examples of legal and factual issues.

Legal Issue

Let's say zoning regulations state that a building shall not be within 25 feet of a street in a residential district. Unless a variance or waiver is granted then a decision to approve a building 20 feet from a street would likely be overturned by the courts on appeal.

Factual Issue

If the applicant does seek a variance or waiver then more subjective criteria might come into play, such as the following from *Chapter 31: Variances & Waivers*:

1. that an unnecessary hardship exists which is not created by the party seeking the variance and which is caused by unique physical circumstances of the property for which the variance is sought;
2. that a variance is needed to enable the party's reasonable use of the property;
3. that the variance will not alter the essential character of the district or neighborhood, or substantially impair the use or development of the adjacent property such that it is detrimental to the public's welfare; and
4. that the variance will afford the least intrusive solution.

Since the applicant would have the burden of proof their attorney would likely call an expert in land planning and/or site design to present facts regarding each of these four criteria. The expert would then be asked to draw conclusions, based upon these facts, demonstrating that all four criteria are met and, therefore, the variance should be granted. The difference then between a legal and factual issue is that the former tends to clearly conflict with an applicable section of the law while the latter tends to be more subjective and open to debate.

Legal issues are generally the least expensive because the attorney can argue the issue as a matter of law without an expert witness. But a factual issue will likely require testimony from at least one expert witness which adds to the cost and duration of the hearing.

If your *Chapter 35* research showed that the final decision-maker is applicant oriented, then you are less likely to win on a factual issue. This is because the courts generally defer to a planning commission or some other final decision-maker on factual issues. In many states, courts will uphold a decision as long as there is at least a *scintilla*²⁴⁰ of evidence in the record supporting the conclusion on the factual issue. You might present a Ph.D. land planner to rebut the applicant's planner who has just a Bachelor degree, yet the courts would still uphold a decision based upon the testimony of the less qualified witness. The key question the courts will look at is: Was the issue *fairly debatable*? In other words, could a reasonable person have reached the same conclusion as the final decision-maker based upon the evidence? If the answer is yes, then the question is fairly debatable and the courts will usually uphold the decision.

So, if your *Chapter 35* research did show that the final decision-maker is very applicant oriented, then focus your limited resources on finding good legal issues. A good legal issue improves your chances of winning on appeal. Since the decision-maker is predisposed to believe the applicant's experts you will avoid the expense of hiring your own expert witness. However, if applicant attorneys have grown lazy from years of getting what they want, they may be so sloppy in getting even a scintilla of evidence into the record that factual testimony from your expert could cause the courts to side with you on appeal. Of course, you should get advice from a good attorney when trying to decide where to focus your limited resources for legal action.

HEARING PROCEDURES

The most common arena for legal action in a land use case is a hearing before a planning commission, a Board of Appeals, a Town Council, or some other decision-making body. The purpose of the hearing is to create a formal opportunity for staff, the applicant, and the public to put facts into evidence which each believes to be relevant to the criteria the body must consider in rendering a decision on a specific permit or approval. If you completed the actions suggested in *Chapter 35: Researching Strategy Options* you will have the criteria in hand along with facts supporting your belief that the criteria have not been met.

Hearings tend to be of two types: legislative or a semi-formal hearing.

Legislative

A hearing on a master plan, a plan amendment, a zoning text amendment, a rezoning, or other legislative action tends to be very informal. Each person gives their testimony, usually with a three-to ten-minute time limit. There is no cross-examination and the decision-maker, usually the local legislative body, asks few questions. The record may remain open for a week or two so written comments can be filed. The body meets again in public to discuss the facts in the record, the relevance of the facts to decision-making criteria, then the body will vote to approve, approve with conditions, or deny.

²⁴⁰ **Scintilla** >noun a tiny trace or amount: not a scintilla of doubt.-ORIGIN Latin, 'spark'.

Administrative Hearing

This type of hearing somewhat resembles a television courtroom drama, though the rules of evidence are relaxed and everyone tends to behave with civility. Normally, staff make their presentation first followed by the applicant then the public get their say. If citizens are represented by an attorney then they put on their case after the applicant concludes. The members of the decision-making body, the applicant's attorney, and staff usually have an opportunity to ask questions (cross-examine) each person who testifies. Citizens who are not represented by an attorney may also be allowed to cross-examine staff and applicant witnesses. After testimony is completed the applicant and staff may have the option of putting on rebuttal witnesses to refute statements made by each other and the public. The body may render a decision at the end of the hearing or sometime thereafter. A semi-formal hearing is more likely for a subdivision or site plan, a special exception, a conditional use permit, a special use permit, or a variance.

Rules of Procedure

At your earliest convenience, well in advance of the hearing, see if the decision-making body has adopted rules of procedures or other guidelines for how their hearings are conducted. The rules or guidelines may contain requirements critical to your case. For example, one Board of Appeals in my home state requires citizens to submit written reports 30 days in advance of a hearing. Miss this deadline and your expert witness cannot submit a report.

The rules of procedure may be part of the zoning ordinance or some other portion of the ordinance. They may also be in the form of a policy document. I urge you to contact the office of the decision-making body to see if rules of procedure or other guidelines exist for conducting the hearing. Be certain to check the rules or with office staff about time limits on testimony by citizens and expert witnesses.

Postponements

Decision-making bodies will postpone a hearing if you can show a good cause. For example, if you were supposed to receive notice of the hearing, but you did not, then you might get a postponement, particularly if you did not learn of the hearing until two- or three-weeks before the hearing date. If you just hired an attorney they may convince the applicant's attorney to agree to a postponement as a professional courtesy. If you cannot get a postponement and numerous citizens plan on testifying then you may get a second hearing date simply because testimony could not be completed during the day (or night) of the hearing. Of course, it would be unethical to have a lot of people testify just to get a continuance of a hearing.

Hearings that begin in the morning usually adjourn by the end of the work day. Those starting in the evening usually end by 10:00 pm or so. But I also recall one hearing which started at 6:00 pm, went all through the night, then at 8:00 am the next morning the decision-making body adjourned, drove out to the project site, and reconvened the hearing which finally ended at 10:00 am - 16 hours after it started!

Conflict of Interest & Decision-Maker Recusal

Occasionally, a member of a decision-making body will have a connection to one of the parties in a case that it rises to the level of a conflict of interest. When this occurs you may succeed in forcing the individual to recuse themselves from hearing the case. What constitutes a conflict of interest sufficient to warrant recusal varies from state to state. Generally, the conflict must be pretty blatant. For example, being a realtor is not necessarily grounds for recusal in a case involving a proposed development project. However, recusal is more justified if the realtor has a financial interest in the project, the applicant is their brother-in-law, or the realtor specializes in selling only houses built by the developer.

I urge you to pursue recusal only in the most extreme cases and only after you have consulted with an attorney specializing in this area of the law (ethics) in your state. An unsuccessful effort to force a recusal could sour your relationship with not only the target but other members of the decision-making body.

Court Reporter

If you think there is a strong likelihood that the decision-making body will rule against you and you plan to appeal, then consider having a court reporter present to make an accurate record of the hearing. Even if the hearing is taped, I urge you to go to the added expense of hiring a professional court reporter. As someone who has tried to figure out who said what from hearing tapes, the record created by a court reporter makes it much easier to draft the legal documents required for an appeal.

Required Findings

The decision-making criteria referenced throughout this book are also referred to as required findings. In order for a decision to stand up on appeal it must be supported by a document addressing the required findings. The document will contain a description of the facts presented before the decision-making body and why these facts led the body to conclude that the applicable criteria had or had not been met.

For a legislative body these required findings may take the form of a resolution. The courts, many hearing officers, and a Board of Appeals may publish required findings as a formal decision. A rural planning commission may document their required findings in minutes.

Once a decision is rendered it is critical that you obtain a copy of this document. See if it contains all of the required findings. Verify that each finding is supported by facts present in the hearing record. If not, then this alone might give you a good chance of overturning the decision on appeal. In fact, we have won a number of cases because of this very issue. Frequently, though, the win is temporary since the courts usually remand (send back) the document so the decision-making body can dot the i's and cross the t's. But if facts supporting a required finding simply are not in the record then another hearing may be needed.

WITNESSES

The evidence supporting factual issues must come in through witnesses. The witness must explain what the evidence is, how it was obtained, and why it demonstrates that the legal requirements for approving, conditioning, or denying a permit-approval have or have not been met.

There are three types of witnesses: expert, fact, and lay witnesses.

Expert Witness: These individuals can demonstrate that through their education, training, and work experience they have acquired an understanding of a subject which is superior to that of the general public. Because of this expertise this type of witness can introduce factual evidence and interpret how this evidence relates to specific criteria the decision-maker must consider. Generally, as an expert witness' years of experience and level of education increases, so does the weight (influence) of their testimony.

Fact Witness: This type of witness lacks the experts' specialized training and experience in the subject matter of their testimony and is limited to just testifying as to the existence of specific facts. For example, the witness could testify that a road is, say, 16-feet wide and this fact would probably be accepted into evidence. But the witness could not then offer an opinion as to what limits on traffic volume should apply to a road 16-feet in width. Or if the decision-making body permitted the witness to state an opinion it would have less weight then if a veteran traffic engineer offered the same opinion.

Lay Witness: Most of those who testify at a hearing are classified as lay witnesses. But please don't take this as demeaning. In fact, I have seen many cases won by lay testimony. Of course, a lay witness is free to testify about their perception of facts and state their opinion on how these facts bear on legal requirements. But unless the witness demonstrates specialized knowledge of the subject area gained through education, training, or experience the testimony may not carry the day. This is particularly true if the applicant puts on an expert witness to rebut the lay testimony.

I recall one case where a client gave lay-witness testimony about sight-distance using the CEDS procedures presented in *Chapter 23: Traffic*, of this book. The applicant's attorney was sloppy and did not present a rebuttal witness. Because the facts and opinion offered by our client was the only testimony in the record on sight-distance and this testimony showed that legal requirements were not met, the hearing officer denied project approval based solely on the lay testimony.

Our client was very lucky in the sight-distance case described above. In most cases, the applicant's attorney will have an engineer in the hearing room, ready to offer rebuttal testimony and prevent this exact situation from occurring. Had the applicant's attorney put on a rebuttal expert witness the hearing officer would have been obligated to approve the project, other wise his denial would have been quickly overturned on appeal.

Expert Witnesses

I strongly urge you to line up someone who can qualify as an expert witness for each issue you hope to win on before the final decision-making body.

How do you find expert witnesses?

Well, like attorneys, most professionals who work as expert witnesses in development cases do so for the applicant and are reluctant to assist citizens. Fortunately, attorneys specializing in representing citizen usually have a number of willing expert witnesses they have used in the past. While these experts frequently charge a reduced fee for citizen clients, they cannot work for free. If your resources are limited, as they usually are, then look among your own supporters for professionals who may qualify as experts and are willing to testify for no-cost/low-cost. But keep in mind that just because someone has the right credentials they are not necessarily a good witness - someone who takes the time to thoroughly analyze an issue and can present their conclusions in a concise, compelling way. Unfortunately, it is hard to tell in advance whether an expert will make a strong or weak witness. This is why attorneys prefer using experts they have seen testify before.

Other places to find good expert witnesses are among the faculty of colleges and universities. Frequently local, state, or federal officials also make good expert witnesses and have the added advantage of being free. However, prevailing political winds may cause these officials to be a weaker witness when compared to a truly independent expert. Citizen advocacy groups, such as those listed for your state on the [CEDS State-By-State Resources](#) webpage, may know of professionals who have been good expert witnesses in other cases. And if all else fails there is always the yellow pages. You may have difficulty finding local professionals to take your case. If this happens then try calling professionals located in other parts of your state. But be prepared to call a dozen or more firms before finding one: a) willing to work for citizens, b) at a price you can afford, and c) who inspires confidence. If you have difficulty finding the right expert, then contact me at 410-654-3021 or Rklein@ceds.org.

Following are some suggestions for getting the strongest expert witness testimony for the best price.

Condense: You may have hundreds of pages of documents as a result of your efforts to *Obtain All Relevant Documents* as described in *Chapter 35: Researching Strategy Options*. There will likely be one of two results if you ask a witness to go through all of these documents to determine the validity of a specific concern. First, the expert will ask for a much larger retainer. Second, it will take a longer time to get an initial opinion. A third result is also possible: They'll decide the case is more trouble than it's worth. Instead, separate out the documents relevant to the issue you would like the expert to consider.

Criteria: Expert witness testimony only makes sense if it directly relates to legal criteria the decision-making body must consider. If you feel specific criteria have not been met then prepare a copy of the relevant ordinance, regulations, or policy document in which the criteria appear.

Highlight the criteria and place a post-it on the page(s) where the text appears if the document is large.

Relevant Facts: Go through the condensed documents and highlight the facts which you believe support your opinion that the decision-making criteria have not been met.

Issue Summary: Prepare a summary of the issue you would like the expert to consider. The summary should include basic information such as the applicant's name and the name of their attorney and consultants. The expert will need this information to determine if they have a conflict of interest. Next, add a paragraph to the summary about why you are concerned about the project and the issue. Present the criteria you believe are relevant to the issue and a description of the facts supporting your belief that the criteria have not been met. End the summary by stating that it represents your perception of the criteria and relevant facts. Make clear the fact that you are not an expert in this area. Instead, you prepared the summary in hopes of making it easier for the actual expert to form an initial opinion on whether there is a valid issue.

Initial Opinion: Once a potential expert witness has agreed to look at the issue and has confirmed that a conflict of interest does not exist, ask if you can meet at their office. During the meeting go over the information presented in the summary and point out the highlighted documents supporting your belief that a valid issue exists. Next, ask if this information is sufficient for the expert to form an initial opinion. If more information is needed then see if you can get it or ask the expert what it would cost for them to do this legwork.

If the expert says they do believe your concerns are valid and the relevant criteria may not be met, then ask what it will cost to form a final opinion and then present testimony before the decision-making body. Get a quote on an additional fee to prepare a report, but consult with your attorney before actually asking the witness to prepare a report. In some cases a report is crucial; in others it's just an unnecessary expense. If your attorney opts for a report then determine if the decision-making body requires submission of reports in advance of a hearing.

Of course, you should also make certain the expert witness is available on the scheduled hearing date(s). If there is a scheduling conflict then go to the section on *Postponements* under *Hearing Procedures* above for advice on seeking another hearing date when the witness is available. Finally, find out when the expert will complete whatever additional work is needed to reach a final opinion. Urge the witness to pick a date at least a week or two in advance of when they would present their testimony. Schedule a date around that time when the expert can meet with you and your attorney to review testimony.

Qualifications: If the initial opinion of the expert is favorable, then ask for a copy of their resume' or Curriculum Vitae (CV). Ask the witness if they have qualified as an expert on the issue which will be the focus of their testimony. If they have, then so far so good. Ask also if they have ever been rejected as an expert on the issue. If they have then this is a serious problem. Ask if you can

contact former clients to get a reference on the quality of their assistance. Be certain to talk with the former clients to verify that the expert can provide strong testimony. Finally, ask your attorney to review the resume-CV and the responses to the questions posed above to determine if the witness can qualify as an expert.

Review of Testimony: As suggested above, meet with the expert a week or two before they are scheduled to testify. If you have hired an attorney then it is critical that they be present for this meeting. The purpose of the meeting is to ensure that both the expert witness and the attorney are fully prepared.

Expert witness testimony usually conforms to the following outline:

- Name, place of employment, and business address;
- Qualifications (education, training, and work) in general and, most importantly, specific to the focus of their testimony. Be certain the witness brings at least three copies of their resume' or CV to the hearing;
- Occasions when they have qualified as an expert on the issue which is the focus of their testimony and whether they have ever failed to qualify as an expert;
- How and when they became involved in the case and what they were asked to do;
- What steps they took to determine if a significant issue existed - the documents they reviewed, any field work, analyses, discussions with agency staff or other experts;
- What facts they considered in forming an opinion and how they came by these facts; and
- Their opinion and why this opinion demonstrates that the project fails to comply with the criteria the decision-making body must use as the basis for granting, conditioning, or denying project approval.

It is ***critical*** that the testimony be very specific to the site and project at issue. If general, the applicant's attorney will have a much easier time refuting the testimony.

It is also ***critical*** that your attorney be present for this review and that both of you anticipate the hardest questions the applicant's lawyer may ask. Additionally, ask the expert to speculate about counter-arguments he would offer if he was the applicant's rebuttal witness. Going through this exercise a week or two before the hearing should flush out all the weaknesses in the testimony while still allowing sufficient time to correct any defects.

The purpose of reviewing testimony is, of course, ***NOT*** to tell the witness what to say. Most credible witnesses will refuse to do so and will abruptly end their relationship with you. Instead, the purpose of the review is to ensure that:

- all essential facts have been gathered;
- the facts can be presented in a way that satisfies the rules of evidence;
- the conclusions based upon these facts are logical;

- the relevance of the conclusions to decision-making criteria is clearly presented; and
- that your attorney fully understands the testimony.

Again, it is ***critical*** that your attorney be present for the review of each expert witnesses' testimony. I say this for two reasons. First, it is your attorney who will be asking questions of the witness. These questions must be designed to get all of the essential facts and conclusions into the record. The better your attorney understands the issues and testimony, the better they will be on the direct-examination (questioning) of each witness. Second, your attorney will be doing the cross-examination of applicant witnesses rebutting the testimony of your expert. To handle the cross successfully your attorney must fully understand the basis for your expert's conclusions and the likely counter-arguments. ***And there are always counter-arguments.***

You would be surprised how often attorneys representing citizens fail to thoroughly review and comprehend expert witness testimony. In fact, several of our early cases were lost because of an attorney who failed to fully prepare in this way. I have sworn to never let this happen again. Yet, to this day a disturbing number of attorneys downplay the importance of thorough preparation. Usually the attorney is trying to save the citizen's some money and sometimes they are juggling too many cases. In either situation I insist that the attorney attend the testimony review. This does not always make me popular with the attorney but I figure my job is to help citizens protect their quality of life. As far as I'm concerned, nothing should ever get in the way of this primary responsibility. In fact, a big part of what I do in managing cases is to make certain that everyone knows their job, has the resources to get it done, and gives it 100%. This is a major factor accounting for the phenomenal 75% success rate enjoyed by our clients.

The steps described above may seem like a lot of trouble, but I assure they are well worth it. Condensing relevant information and the other suggestions given above can cut the total cost of testimony from one witness from a normal \$4,000 to \$7,000 down to \$1,000 to \$2,000. Plus, you end up with much stronger testimony and an attorney who is more fully prepared, both of which gives you a much greater likelihood of a favorable decision.

ADVICE FOR CITIZENS PRESENTING TESTIMONY

You and most of your allies will be testifying as lay witnesses. The purpose of citizen testimony differs from that of a fact or expert witness in that it should send a political message as well as getting facts and conclusions into the record which are relevant to decision-making criteria. It is also okay, sometimes even valuable, to include some emotion in citizen testimony. But if a number of citizens will be speaking then their testimony should not be repetitive.

Generally, citizen testimony should be no more than three- to five-minutes long. I have heard many eloquent citizens present highly effective testimony and rarely did it take more time than this. Of course, if the decision-making body imposes a time limit on citizen testimony then you must adhere to the limit. Following is an outline of testimony I suggest to our clients.

- State your name, address, and where you live in relation to the development site;
- Describe how you came to learn of the project and the hearing;
- Explain how you believe the project will affect your quality of life and that of your family and neighbors (assuming they will not be testifying). Focus on those quality of life elements which are within the scope of the hearing. In other words, if the hearing is solely about wetland impacts don't get into traffic and schools; stick to wetlands;
- Describe any efforts you made to work with the applicant, staff, or elected officials to resolve your concerns and the outcome of these efforts;
- Present the facts which led you to believe that the project will adversely affect the elements of your quality of life under the decision-makers purview;
- Explain why you believe these facts demonstrate that specific decision-making criteria have not been met;
- End by asking the decision-maker to take whatever specific action will resolve your concerns, which is usually to deny approval or grant approval with conditions; and
- Let the decision-maker know you are finished by saying: "*Thank you. Any questions.*"

If you have hired an attorney than get a copy of your testimony and that of other citizens to the attorney well in advance of the hearing. This will allow the attorney to verify that nothing in your testimony conflicts with anything your expert witness(es) might say. Also, your attorney can follow along as you present testimony. If you missed a point your attorney can ask you a question as a reminder.

Be certain to rehearse your testimony by repeatedly reading it aloud. Try to get to the point where you can read it completely from memory or by glancing just a few times at your notes. When you reach this point you will find that stage-fright and other nervous reactions to public speaking will have diminished greatly. Please **DO NOT** stand before the decision-making body and read from a piece of paper held in front of your face.

If you find that you must exceed the time limit to make every point in your testimony, then consider submitting a letter into the record with the points you cannot include. After completing your testimony ask the chair of the decision-making body if you can submit additional comments into the record in the form of a letter. Bring enough copies of your testimony, letter, and any other documents so you can one to each member of the decision-making body plus a few extra for their staff and the applicant's attorney. Prior to the start of the hearing ask the chair or staff if you should submit these documents in advance or wait until you testify.

If there will be a number of citizens testifying then pester them to get their written testimony to you well in advance of the hearing. If they cannot seem to commit their testimony to writing then push for just an outline. From these documents try to figure out a logical order for testimony.

If there are dozens or hundreds of citizens who wish to testify and you believe they will all be saying much the same thing, then consider giving everyone a break with the following tactic. Make certain

your testimony contains all the points others would cover. Ask each of those who plan to attend the hearing if your testimony does address their points. If they say yes, then ask if they would agree to forego testimony and instead stand when, at the end of your testimony, you say:

Now, I ask everyone present who agrees with me to stand.

If you explain to folks that this will get your collective points across, make a very favorable impression on the decision-making body, and get the hearing over sooner, most will agree enthusiastically. The few who don't are free to testify. Again, this tactic can be more effective than hour upon hour of citizens testifying on essentially the same points.

STANDING

In many localities a legal action can only proceed if it is filed on behalf of at least one person who meets a *standing* test as an *aggrieved party*. Try to get those in your group who may have standing to attend the hearing and preferably testify. If they do not testify then make certain they sign-in on the sheet set out by the decision-making body. In some jurisdictions, an appeal can only be filed on behalf of a party who attended the relevant hearing.

Usually, the standing test requires a demonstration that the rights and privileges of an individual will be harmed in a way that is greater than that of the general public. The actual test ranges from very lenient to strict. In some cases one must only live within sight or sound of a project site to have standing. In other situations one must own property adjoining the site that will be adversely affected if the project is approved. At the federal level organizations such as the Sierra Club can become parties but a number of states and local jurisdictions only allow individuals to be parties.

If you retain an attorney then ask if there will a problem with standing? The attorney will likely ask where you and your allies live in relation to the project and how the project will affect you. From this description the attorney should be able to say whether standing will be an issue.

TAKINGS & PROPERTY RIGHTS

The takings issue often comes up when a local government expresses concern about being sued. The fifth amendment of the U.S. Constitution protects all of us from the government taking our property without just compensation. At the same time government has an obligation to protect all of us from property uses that interfere with our rights. But when does the action of government in regulating land use go from a legitimate exercise of authority to a taking? An incomplete answer is any government action which prevents economically viable use of property without compensation. In 1980, a case known as *Agins v. Tiburon*²⁴¹ produced a "takings" test which goes like this:

Does a government action advance some legitimate purpose and, if so, does the property owner have any economic use left once the government action takes effect?

²⁴¹ *Agins v. City of Tiburon*, 157 Cal.Rptr. 372, 598 P.2d 25 (Cal. 1979)

If the answer is no then the action may be a taking and property owner compensation may be required.

Occasionally, property owners, development interests, or decision-makers will claim that land use regulation violates the inalienable rights of the property owner. While it is true that an owner cannot be denied all use of their property without just compensation, it is also true that one may not use their property in a way that interferes with the rights of their neighbors. This concept dates from the founding of the United States and actually goes far back in English law. In fact, the Roman law known as the Twelve Tables, promulgated in 450 B.C., contained setbacks and other restrictions on use of property so as to protect neighboring property owners.

Claims that property rights are inalienable can be traced back to the writings of Sir William Blackstone in 1738. While Sir William did write that property rights cannot be violated even for the general good of the whole community, he was referring to the inherent right of Englishmen to own property.²⁴² Blackstone went on to say that property could be used and enjoyed without control or diminution *save only by the laws of the land*. Clearly, these “laws of the land” would be those designed to restrict uses of property which would injure one’s neighbors.

STAYS & INJUNCTIONS

A stay prevents an agency from issuing a permit and thereby prevents an applicant from breaking ground. Some agency regulations automatically stay the issuance of a permit if an appeal is taken of a project approval, usually though for just the first level of appeal. In other situations a request must be made for a stay.

Citizens also have the options of asking the courts to enjoin an applicant from proceeding with a project. Frequently, two requirements prevent citizens from proceeding with an injunction. First, they must show that some irreparable harm is imminent if the project proceeds. Second, they must post a very large bond. It is usually the great expense of the latter requirement that dissuades citizens from pursuing injunctive relief.

As a practical matter, once citizens take an appeal of a permit-approval most projects do not proceed. This is because most projects are backed by bank financing. Banks are very leery of financing a project that is on appeal. However, you should **never, never** take an appeal for the purpose of delaying a project or affecting the applicant’s financing. This is not only unethical and illegal but it could also make you the losing party in an expensive lawsuit.

²⁴² See Chapter II in *Land Use in a Nutshell*, 4th Edition, West Group, P.O. Box 64526, St. Paul, MN 55164-0526 <http://west.thomson.com/default.asp>

PETITION & REFERENDA

In a number of localities citizens have the right to take a decision of the legislative body directly to the voters through petition or referendum. During the next election voters may have the right to undo a decision to approve a fatally-flawed project. But this right is by no means universal and it frequently only applies to new laws, not actions such as approving a proposed development project.

The petition and referendum process is not the same thing. In general, the petition process allows voters to change the law without having to go through the legislative body. The referendum process allows the voters to undo certain decisions made by the legislative body.

Check with the local legislative body or planning and zoning officials to see if this right exists in your jurisdiction. If they say no and you have any reason to question this, then please contact me at 410-654-3021 or Rklein@ceds.org. I may be able to contact one of the attorneys in our network to see if they can verify what you have been told.

If the right of petition or referendum is available then you will be in a race to meet the requirements for getting it on the ballot for the next election. First, you must get a minimum percentage of voters to sign a petition calling supporting the call for a referendum. Be certain that the form of the petition complies with legal requirements by having an experienced attorney review the form. There will be a time limit by which you must obtain the signatures.

It is critical that you make certain those who sign the petition are registered to vote within the appropriate jurisdiction. You should strive to get at least 10% more signatures than are actually needed. Many signers vote infrequently and think they are still registered, while in fact they are not. So a portion of petition signers are always disqualified. Again, get at least 10% more signatures than you need.

Once you get the measure on the ballot make certain it is worded clearly and in a way that is fair. It will likely be the local government who decides how the measure appears on the ballot. It is not uncommon for a measure to be so poorly worded that it's unclear whether a yes vote supports or defeats the measure.

The biggest challenge will be getting a large enough percentage of votes to win the measure. In some localities a simple majority (51%) wins. In other areas the measure only carries with a super majority of votes (60%, 66%, etc.). As a general rule of thumb, you should only proceed with a petition or referendum if initial polling shows that at least 50% of voters will support the measure.

There is much more that goes into a campaign to win by petition or referendum. For further detail see *The Campaign Manager: Running and Winning Local Elections*²⁴³ or contact me at 410-654-

²⁴³ *The Campaign Manager: Running and Winning Local Elections*, by Catherine M. Shaw, published 2004 by the Westview Press.

3021 or Rklein@ceds.org. Within the CEDS network are a number of professional campaign managers who have overseen successful petition and referendum drives. If you wish, we can discuss the cost of having a member of the CEDS network take a quick look at your proposed effort to assess the likelihood of success.

PROTEST PETITION

In a number of local jurisdictions citizens have the right to file a protest petition, which requires a super-majority to approve actions such as a rezoning request. A super-majority may mean that 66% or 75% of the members of the local legislative body must vote in favor of the action for it to be approved. If a protest petition is not filed then the action is approved by simple majority vote (>50%).

The requirements to invoke a super-majority vote through a protest petition vary from state to state and with the nature of the action. In the case of a proposal to rezone a number of properties, one may need the signature of 20% or more of all affected property owners to invoke the super-majority vote requirement. If only one property is proposed for rezoning then you may need signatures from, say, 20% or more of those owning property within a set distance, such as 100-feet, from the property boundary.

Check with local planning and zoning officials to learn if the protest petition process applies to the action of concern to you. Of course, you should also verify what you are told by consulting with a land-use or zoning attorney.

LAWSUITS AGAINST CITIZENS & GOVERNMENT

At one time it was common to hear of applicants who threatened to sue citizens for opposing their projects. In fact, this form of harassment even gained a name - a SLAPP suit, which stands for *Strategic Lawsuit Against Public Participation*.

The first amendment of the U.S. Constitution provides each of us with the right to petition government for redress of grievances. A SLAPP suit may stifle this right. A number of citizens hit with SLAPP suits have *BackSLAPPed* with a counter suit and won when the courts found they were just exercising their first amendment rights. But its still no fun to be sued.

SLAPP suits tend to be an act of desperation and are usually filed when an applicant fears they are about to lose. Many people, including most decision-makers, find SLAPP suits quite offensive and will turn away from an applicant who resorts to this tactic. The exception are situations where a citizen has been acting in an inappropriate manner and engaging in their own less than honorable tactics. So the best way to avoid a SLAPP suit is to focus on your core issues and state your public position along the lines of:

Our goal is not to stop the project, but to ensure that all significant impacts have been resolved before the project is approved.

For further information on SLAPP suits visit the Anti-SLAPP Resource Center website at:

<http://www.thefirstamendment.org/antislappresourcecenter.html>

Occasionally, a local planning commission will express reluctance about denying or conditioning approval of a project for fear of being sued by the applicant. In these instances it helps to either have the citizen's attorney or the commission's legal counsel advise them at the hearing on what they can and cannot do without risking the loss of a lawsuit. During your testimony you might point out how much more risky it is for the commission to approve projects that are not in conformance with approval criteria. Taken to a logical extreme, the commission might one day find itself approving an adult bookstore next to an elementary school because the applicant threatened a lawsuit.

Also see the CEDS webpages

[Smart Legal Strategies](#)

[Equitable Solutions](#)

Chapter 41: Changing the Law

If previous strategy approaches are not working then a change of law may be worth consideration, especially if the applicant has absolutely refused to negotiate and staff/decision-makers are sympathetic but they contend that existing law does not provide the authority to resolve your concerns. Once you identify a change in law that will resolve your concerns, use the guidance in this chapter as well as that in Chapters 36 and 39 to lobby the appropriate legislative body to enact the new law. If your hope is that the new law will apply to a proposed development project, then you are racing against a clock. So, as I said in the Secrets of Success, ***hustle, hustle, hustle.***

BASIC OPTIONS FOR CHANGING THE LAW

There are five basic options for changing the law:

- A. Convince the local legislative body to adopt zoning;
- B. Change the zoning applied to a development site to another zoning district in which allowed uses are more compatible with your quality of life;
- C. Changes the uses permitted within a zoning district to limit incompatible uses;
- D. Change the performance standards in the zoning ordinance to require more effective quality of life protection measures;
- E. Change other local, state, or federal laws to require more effective quality of life protection measures.

Adoption of Zoning

There remains a number of local jurisdictions in the United States which have not adopted zoning as a means to gain the benefits of growth while minimizing adverse effects. If this is true of your locality, then consider calling for the adoption of zoning, though this may not happen quickly enough to affect a proposed development project.

A town, city, or county derives the authority to adopt planning and zoning laws through state enabling legislation. A number of state enabling laws require a local jurisdiction to go through a lengthy study process leading to the adoption of a master plan then a zoning ordinance designed to implement the goals and objectives of the plan. If this is the true of your state, then the process may move too slowly to affect a proposed development project. But if your state allows for the imposition of a building moratorium during the study-adoption process, then this approach may be appropriate for your situation.

If you are concerned about lands that are not the subject of a development proposal, then winning the adoption of zoning may be a viable option for ensuring that the use of these lands remains compatible with your quality of life.

In localities lacking zoning proposed development projects must still conform to county, state, and federal laws. These laws usually require compliance with building codes, well and septic system regulations, and wetland protection requirements, to name a few. If your area lacks zoning consider whether changing these laws is a way of resolving your concerns.

Zoning Change

In most localities there are two processes for adjusting the zoning applied to each parcel of land: comprehensive rezoning and spot zoning.

Comprehensive Rezoning: This process is initially employed when the jurisdiction adopts a master plan and zoning ordinance. The master plan sets forth the collective vision of how voters wish their area to grow. In broad strokes the plan shows where industrial uses should go as well as retail commercial, residential, and institutional uses. Each parcel of land within each general use area is then assigned to zoning districts intended to maximize the benefits of new development while buffering existing and adjoining uses from negative effects.

A number of local jurisdictions will periodically examine whether conditions have changed sufficiently to warrant a change in zoning. This process takes places every ten- to fifteen-years when the master or master plan is thoroughly reviewed then revised to reflect current conditions. It may also occur, say, every two- to four-years in between master plan updates. During these interim updates property owners, planning staff, and members of the local legislative body have the opportunity to propose rezoning of particular parcels of land. In a number of localities anyone can propose a rezoning either directly or through their representative on the local legislative body.

The criteria for granting-denying a rezoning request vary from jurisdiction to jurisdiction, but generally come down to:

- Was the original zoning applied mistakenly?
- Have conditions changed sufficiently in the vicinity of the subject parcel(s) that the original zoning is no longer appropriate?
- Will the proposed zoning be consistent with the purposes of the master plan and zoning ordinance?

The rezoning process and criteria will usually be found in the local zoning ordinance, the charter for your town, city, or county, or in the statute enabling local planning and zoning in your state.

Spot Zoning: A change in the zoning applied to a specific lot or parcel is known as *spot zoning*. Generally, spot zoning is illegal because it tends to be arbitrary in the parcels it is applied to, capricious in that it circumvents the master planning process, and unreasonable in that it applies to a very small area. However, courts have upheld spot zoning if the proponents can demonstrate that the three criteria given above are met.

Actions in addition to a rezoning have been overturned by courts because they are, in effect, spot zoning, but fail to meet the three criteria above. These actions include: zoning text amendments, special exceptions, conditional use permits, special use permits, and variances. If the action is clearly arbitrary, capricious, and unreasonable (as defined above) then it may be overturned as spot zoning.

Permitted Uses

Most zoning ordinances contain a list of uses that are permitted within each zoning district:

- by-right;
- by special exception, conditional use permit, or special use permit; and
- as accessory uses.

By-right uses are those that can be approved without a hearing focusing on the appropriateness of the use for the proposed development site. By-right uses are usually compatible with all other activities permitted in the zone, provided various performance standards are met.

A hearing on the site-specific appropriateness of the use is required for activities permitted by special exception, conditional use permit, or special use permit. If the final decision-maker determines that the impact of the use would be significantly greater on the proposed site than most other similarly zoned properties, then a denial is in order.

Accessory uses normally have a very minor effect on neighboring property owners. Typical accessory uses might include a tool shed, a sign, underground cables, etc.

If your local zoning ordinance permits uses by-right within a zone and the use can be incompatible with other by-right uses, then a change is warranted. Consider calling for a zoning text amendment that either deletes the use completely from the zoning district or changes it to one requiring a special exception, conditional use permit, or special use permit.

Performance Standards

Performance standards are limits on the intensity of use or how and where the use may be constructed within a site. Performance standards also include measures to minimize adverse effects. Following are examples of some of the many performance standards in use around the country:

- limits on the number of residential units per acre;
- the percentage of a site that may be covered by commercial, institutional, or industrial uses;
- building setbacks from property lines;
- building height restrictions;
- lighting requirements;
- visual and noise buffering requirements; or
- various environmental protection measures such as stream-wetland buffers, erosion and sediment control, well-septic regulations, and stormwater management requirements.

Most performance standards will be contained within the zoning ordinance but may appear in subdivision or development regulations. If existing performance standards are inadequate to resolve the impact of a proposed development project, then consider calling for a change of law to improve the standard or to adopt a new one. But first make certain you have thoroughly exhausted your efforts to get decision-makers to impose the standard as a condition of approval. Winning a condition is far less difficult when compared to changing a law.

Changing Other Local, State or Federal Laws

Frequently a development project must conform not only to laws of the town where the site is located, but those administered by a county, state, or federal agency as well. For example, in rural areas if new homes are proposed for construction within a town and will be served by a well and septic system then the county health department may be the approving authority. If a project will include a new wastewater treatment plant then the developer may need an NPDES discharge permit from the state pollution control agency. The U.S. Army Corps of Engineers is commonly involved in regulating wetland impacts.

If local decision-makers claim they lack the authority to enact a law resolving your concerns, then research whether another local unit of government or a state-federal agency has the necessary authority. Usually, local planning and zoning officials can tell you which agency, if any, administers the area of law pertaining to your concern. Our clients have won a number of cases where local government refused to amend their laws but we succeeded in getting the state legislature to enact the necessary change. Generally, it is more difficult to change state law compared to local, but circumstances sometimes favor this approach.

HOW TO FIND THE BEST WORDING FOR A NEW LAW

Once have concluded that decision-makers lack the authority to address your concerns, the next question becomes:

How do you draft the wording for a bill²⁴⁴ that changes existing law in a way that grants decision-makers with the power to resolve your concerns?

Many ideas for possible bill content will be found in Part I of this book. Just go to the chapter specific to your concerns. Additionally, if local planning and zoning officials are cooperative then they can certainly suggest language for the bill. Veteran legislators endlessly amaze me with the superior bill language they come up with compared to what I would have proposed. If neither approach works then try looking around at other jurisdictions in your state.

Is there another borough, town, or county that has a law on their books which would resolve the impacts of concern to you? If there is then changing the law just became a bit easier. This approach has an added advantage. Decision-makers prefer not to be the first to adopt a new, never-tried-before law. If you can point to another jurisdiction which has a law in place similar to the one you are advocating, then local decision-makers will embrace it more readily. Rather than speculating about the impact of the law - what it will and will not do, undesirable side effects, unforeseen costs - your decision-makers can look at how well it actually works in the other jurisdiction where it is already in effect. More importantly, you can do the same and verify that it truly resolves your concerns.

How do you determine if another jurisdiction has a law which would resolve your concerns? Contact citizen groups active throughout your state, such as the Sierra Club, League of Women Voters, historic preservation organizations, etc. To find these groups go to the [CEDS website](#), click on the *State By State Resources* button, then scroll down to your state.

State agencies may also be of help, particularly if there is a land use planning agency at the state level. If your issue is traffic-related then contact the state highway or transportation agency. For environmental issues contact the state natural resources, conservation or environment department. In most states there are also a few jurisdictions widely regarded as having the most progressive laws. The planning staff in these jurisdictions might know of a law on their books which would resolve your concerns if adopted by your local decision-makers.

If you find a law which seems workable then make certain it truly will resolve your concerns. Talk to the staff and citizen activists in the jurisdiction where the law is already in place. Describe your situation, your concerns, and where your project stands in the review process. Ask staff or citizen activists their opinion about how well the law would resolve your concerns if adopted by your local government. Have your attorney review the law also.

Following are some factors which might negate the impact of a new law.

²⁴⁴ A proposed law is usually called a *bill*.

Grandfathering: New land-use laws commonly include a clause exempting projects which have reached a specific milepost in the development review process. For example, projects which have received subdivision plan approval may be exempted. This practice is known as *grandfathering*. Generally, the local legislative body is not required to include a grandfathering clause in new laws. Nevertheless, it is common practice to include grandfathering language. So, take a careful look at any new law you are considering to see if it has a grandfathering clause. If it does, then will the clause exempt the project of concern to you? If it will then you need to lobby for an amendment.

Vested Rights: If you are seeking to resolve your concerns through a change in law, then it is critical that the law take effect before an applicant's rights to proceed with the project become *vested*. If vesting occurs before the effective date, then the new law has no effect on the project.

In a number of states, an applicant's right to develop a site does not become vested until all required permits-approvals have been granted and significant construction has occurred. In my home state *significant construction* is defined as at least having building footers in the ground.

Primacy & Preemption: Sometimes a new law is overturned by the courts because another unit of government has established primacy with respect to the activity regulated by the new law. For example, in the early 1990s citizens in my home state citizens were faced with an epidemic of construction and demolition debris landfills (aka rubbledumps). We sought to halt the proliferation by getting local governments to adopt new laws requiring liners, leachate collection systems, and other water quality protection measures. But the appellate courts overturned these local laws ruling that state landfill laws and programs were so comprehensive in protecting water quality as to *preempt* the right of local government in this area. However, the courts have upheld local landfill laws pertaining to issues traditionally under the purview of zoning, such as in which zoning districts landfills are permitted, height limits, setbacks from roads and nearby houses, etc.

Emergency Action: Many local legislative bodies have the option of adopting a bill as emergency legislation. The bill then becomes law upon passage or signature by a mayor or other chief executive. Other wise, the bill may not take effect for a period of weeks or months after adoption. If you are concerned that a project may be exempted from the bill due to grandfathering or vesting, then explore the possibility of getting it handled as emergency legislation.

Moratorium: Consider calling for a *moratorium* if emergency legislation alone will not resolve your concern that a project may become grandfathered or vested before a new law can take effect. The moratorium would place a hold on further processing of permit applications for all projects similar to that targeted by the proposed law. For example, if you'd like to change the siting criteria for asphalt plants then the moratorium would put a hold on processing permits-approvals for *all* proposed asphalt plants; not just one plant of concern to you.

The duration of the moratorium depends upon the amount of time local officials will need to study the justification for changing a law and the best way to word the law so the intended purposes are

achieved without unduly infringing upon property-owner rights. Most moratoria last for six months to two years. Normally, a moratorium is initiated through a resolution adopted by the local decision-making body. In some states, a moratorium can only occur when there is a direct threat to public health. In other states local governments have broader discretion in using moratoria to get the time needed to study and enact improvements to their growth-management process.

Have Your Attorney Review The Bill: Have your attorney review the draft law to make certain it fully resolves your concerns, at least from a legal perspective. Your attorney should also look for any content that may result in the law being overturned by the courts, such as primacy or preemption issues. This **must** be an attorney hired by you; not an attorney representing the local government or someone else. Occasionally, a law will be written so it can be easily overturned by the courts. This is done by unscrupulous legislators attempting to give the appearance of being responsive to community concerns while they are in fact in the developers camp. The best way to avoid this and other booby traps is to have your attorney thoroughly review the bill.

WINNING THE ADOPTION OF A NEW LAW

For the most part, it will be the local legislative body that must enact laws affecting proposed development projects. Of course, this means you must convince a majority of the legislators to support the law. If a mayor, county executive, a governor, or some other official has veto power over legislative actions then you must either win the support of this official or that of enough legislators to override the veto. Guidance for winning the support of legislators and other officials was provided in *Chapter 39: Lobbying Key Decision-Makers* and *Chapter 36: Mobilizing Support For Your Strategy*. Following is additional advice specific to enacting a new law.

Identifying Friends & Foes

The first task in winning support for a new law is to learn how many legislators are likely to vote in favor of the measure. If you have a solid majority, then your job is simply a matter of hanging on to your supporters. If a clear majority is strongly opposed to the bill, then don't give up. There still may be a way to get the bill passed by amending problem language or mounting a far more aggressive campaign.

Hopefully you have at least one friend on the legislative body. This friend can poll other legislators to determine who is supportive, who is opposed, and who is undecided. If you do not presently have a relationship with a member of the legislative body, then start with the legislator who represents your area. If legislators are elected at-large, not by district, then ask around about which member tends to be the most community-oriented or pro-growth-management. Usually there's at least one legislator with such a reputation.

If your ally says they are the only one among seven legislators who supports the bill and the other six are strongly opposed, then you should take a second look at other strategy options. If a change in law is still your best option, then proceed ahead with the advice offered in the remainder of this chapter.

If you find that a clear majority of legislators support the bill and a veto is unlikely, then try bringing it to a vote quickly. Delay only allows opponents to strengthen their position.

A more typical scenario would be something like:

- two legislators are strong supporters of your bill;
- two are undecided;
- one is weakly opposed; and
- the other two legislators are solid opponents.

Given this scenario you should focus your lobbying efforts on the undecided's first, then the weakly opposed legislator. Winning the support of any two of these three legislators gives you a majority (four out of seven votes) when added to the two supporters you already have.

Turning Undecided & Weakly Opposed Legislators Into Supporters

Request a meeting with the undecided legislators for the purpose of learning more about their perspective on the proposed bill. Your goal is to find out what factors cause the legislators to be undecided, then to see if you can address their concerns without unduly jeopardizing the degree to which the bill resolves your concerns. If after making a genuine effort to address their concerns a legislator remains undecided, then you should quickly yet tactfully increase the lobbying effort beginning with the legislator's political family.

Networking Political Families: A political family are all those people an elected official relies upon for their future in politics. Political family members include the legislator's campaign manager, campaign contributors, campaign volunteers, the chair and central committee for the legislator's party, organizations that endorsed the legislator in the last election, and other elected officials who serve as mentors or king-makers.

Compile a list of each legislator's political family through the following steps.

1. Talk to your friend(s) on the legislative body to learn who influences the undecided legislator.
2. If the legislator has a website then visit it and look for the names of campaign staff, key volunteers, organizational endorsements, etc. Otherwise, search local newspapers published during the peak of the last campaign. From newspaper articles and campaign ads you should get a list of endorsing organizations.
3. Check with the local elections office to see if campaign finance records are available. In some localities these records are online. If finance records are available then compile a list of those who made contributions to the legislator's campaign. Be sure to note those who gave money as well as in-kind services. While you are at the elections office get a list of the central committee

members along with precinct-by-precinct results for the last primary and general election in which the legislator ran.

Compile a list of all the individuals and organizations obtained through the preceding steps. Compare the list with your roster of supporters. Do you see anyone or a group which is a member of the legislator's political family and who is among your supporters? Have others active in your campaign look over the list as well for mutual acquaintances. Ask each mutual acquaintance for the following:

- Contact the legislator with a message along the following lines:

I understand you have some reservations about the bill. I certainly wouldn't ask you to compromise your principles. However, I want you to know that I understand your concerns, but I think they are outweighed by the benefits of the bill and it should become law.

- Ask the political family member to allow you to put their name on a list of those who support the bill;
- Ask if they have any friends on endorsing organizations or the party central committee and would they be willing to contact the organization about urging the legislator to support the bill; and
- Ask the political family member to review your list to see who is missing, particularly those who have the legislator's ear. Ask also if they would be willing to contact these folks for you or allow you to use their name as an introduction.

Ask everyone who lobbies on behalf of the bill to share the response they received from the legislator, particularly those who communicate face-to-face or by phone. This will allow you to track the effect of your lobbying efforts. Of course, you should also stay in contact with the legislator directly, perhaps calling every week or two and beginning the conversation with something like...

I know that some of our mutual acquaintances been contacting you about the bill. I wanted to see if there is any additional information I might provide at this point or if you have any new thoughts about how the bill might be modified to resolve both of our concerns.

If the legislator remains undecided then begin mobilizing support in those areas where the legislator got the most votes in the last election.

Mobilizing Support In A Legislator's Base Precincts:

Every county, city, and town is divided into election districts or wards, then precincts. A *base precinct* is one in which a legislator won a majority of votes in the last election.

Earlier in this section of the book I urged you to obtain precinct voting records while you were at the elections office. Following is a description of how you can use these results to increase the number

of people offering their support to the legislator if s/he opts to support the bill. And these will be people (voters) the legislator will be counting on to win the next election.

1. Look at the overall voting results for the last primary and general election in which the legislator ran. Focus on the election where the legislator won by the narrowest margin.
2. Highlight those precincts where the majority of votes were cast for the legislator.
3. Beginning with the precinct where the legislator won by the greatest margin, see if there is at least one vacant property within the precinct where the impact of development would be reduced if your proposed change of law were enacted.
4. Repeat step three with all other precincts the legislator won.
5. Return to the elections office. Request a file containing all of the registered voters located within the precincts identified above where there is at least one potential development site affected by the bill. If you are asked why you want the list, be honest, of course. Say you will use it to educate voters about an important piece of legislation. Many local election offices will not release voter lists if they think you are using it for marketing or some purpose other than electoral activity. If asked whether you want the complete record for each voter or just the walking list, ask for full records. If they ask if you want an electronic or hard copy, get the electronic version.
6. Identify the streets and street block number abutting each potential development site.
7. Sort the registered voters list by street name then house number.
8. Compile a mailing list of all voters who live within the abutting street block numbers.. If the list is very long then reduce the list to those who voted in three or four of the past four elections. These *frequent voters* are critical to winning elections and will have the greatest influence with the legislator. Frequent voters also tend to be the people who donate hours and dollars to political campaigns as well as causes such as yours.
9. Mail a letter to each voter with a message along the following lines:

Dear Ms. Jones:

I understand you live next to a vacant tract of land located at... I also live next to a similar tract of vacant property, only mine has been proposed for development as... My neighbors and I are deeply concerned that this development will harm our quality of life by... The same may be true if the property near you were proposed for similar development. Unfortunately, existing law does not allow our Town to prevent this impact. Therefore, we have asked the Town Council to adopt a new law providing the necessary authority.

Councilmember Smith has been reluctant to support the proposed law. I hope you would consider contacting Councilmember Smith at 987-654-3210 or CSmith@TownCouncil.gov and express your desire that they support the law. I will call in the next day or two to answer any questions you may have. In the meantime, I can be reached at 987-654-0123 or JaneDoe@Ourtown.com.

10. Be certain to place the follow-up phone call to each recipient a day or two after the letter should have arrived. Begin the call with something like...

Hi, this is Jane Doe. I wrote to you a couple of days ago about a bill that would protect you and me from development on properties like the one near your home at... Do you recall receiving the letter? If yes, ask if they have any questions. If they don't recall receiving the letter then summarize the content and ask for questions. In either case, ask if they would be willing to contact Councilmember Smith about supporting a new law that would protect both of you. If they agree then ask that they copy you with their letter or e-mail and any reply they receive and to let you know how their phone call goes with the Councilmember.

Through the preceding steps you can demonstrate ever-growing support for the legislator should they choose to vote in favor of the bill. And the support will be among the voters who are most important to the legislator's political future.

Again, you should start with the precinct where the legislator won by the greatest majority in the last election then move on to the next until completing all the precincts the legislator carried. Consider increasing the visibility of support by asking all those who agreed to contact the legislator if they would be willing to post a yard sign signifying their support. Hopefully, the legislator will shortly see your yard signs everywhere they travel within their base precincts. You could further increase the demonstration of support by holding a community meeting in each precinct, hopefully attended by a standing-room-only crowd. There are a variety of other approaches available for expanding the number of voters encouraging a legislator to support a bill. If you would like to discuss these options or any other topic presented in this chapter, then contact me at 410-654-3021 or Rklein@ceds.org.

When you have secured majority support ask friendly legislators to bring the bill up for a vote before the legislative body. The vote will usually take place at an open meeting of the body. Make certain you have a standing-room-only crowd present to witness the vote. The crowd should be composed of political family members as well as voters from the base precincts of the legislators who agreed to support the bill. This step will reduce the likelihood of any 11th hour surprises in the form of new amendments or legislators who switch their vote from yeah to nay.

What do you do when you can't convince a majority of legislators to support changing the law? Well one option is to elect more responsible decision-makers. If final action on a project can be held off until after the next election then you may succeed in replacing opposing decision-makers with

supporters. Guidance on how to pursue this option is provided in *Chapter 42: Electing & Retaining Candidates Committed To Responsible Growth Management*.

Petition & Referenda

If the local legislative body refuses to change the law then see if you have the right to take this question directly to the voters through a petition or referendum. Check with the local legislative body or planning and zoning officials to see if this right exists in your jurisdiction. If they say no and you have any reason to question this, then please contact me at 410-654-3021 or Rklein@ceds.org. I can contact one of the attorneys in our network to see if they can verify what you have been told.

If the right of petition or referendum is available then be certain you fully understand all the requirements for getting the question on the ballot come the next election.

First, you must get a minimum percentage of voters to sign the petition putting the measure on the ballot. It is critical that you make certain those who sign the petition are registered to vote within the appropriate jurisdiction. You should strive to get at least 10% more signatures than are actually needed. Many signers vote infrequently and think they are still registered, while in fact they are not. So a portion of petition signers are always disqualified. Again, get at least 10% more signatures than you need.

Second, be certain that the form of the petition complies with legal requirements by having an experienced attorney review the form. Contact me if you have trouble locating an attorney who will do this for you. Generally, the more simple the wording of the petition, the better.

Third, there will be a deadline by which you must obtain the signatures. You must realistically assess your ability to get the signatures by the deadline.

Fourth, as a general rule of thumb, you should only proceed with a petition or referendum if initial polling shows that at least 50% of voters will support the measure. If you do not start off with this minimum level of support then it is unlikely you can counter opposition efforts to defeat the measure. Many of the professionals who specialize in managing petition and referendum drives say that you should really have 60% to 70% of the voters with you before making a decision to proceed. Again, it is vital that your initial polling show at least 50% of the voters are with you before starting what will become a very time consuming and expensive effort.

Once you get the measure on the ballot make certain it is worded clearly and in a way that is fair. It will likely be the local government who decides how the measure appears on the ballot. If local officials are opposed to your efforts they may word the measure so poorly that voters will be confused as to whether a yes vote supports or defeats the measure.

The biggest challenge will be getting a large enough percentage of votes to win the measure. In some localities a simple majority (51%) wins. In other areas the measure only carries with a super

majority of votes (60%, 66%, etc.). Those opposed to the measure will likely bring in professionals with considerable experience defeating ballot measures. You should strive to gain access to other, equally experienced professionals.

There is much more that goes into a campaign to win by petition or referendum. For further detail see *The Campaign Manager : Running and Winning Local Elections*²⁴⁵ or contact me at 410-654-3021 or Rklein@ceds.org. Within the CEDS network there are a number of professional campaign managers who have overseen successful petition and referendum drives. If you wish, we can discuss the cost of having a member of the CEDS network take a quick look at your proposed effort to assess the likelihood of success.

²⁴⁵ *The Campaign Manager : Running and Winning Local Elections*, by Catherine M. Shaw, published 2004 by the Westview Press.

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Chapter 42: Electing & Retaining Decision-Makers Committed To Responsible Growth Management

I get more than a dozen calls a week from people throughout the country concerned about proposed development projects or growth in general. A question common to these conversations is:

How can I guarantee that growth will be managed responsibly in the future?

My answer is always the same:

About the closest thing to a guarantee is to elect decision-makers who are committed to responsible growth management then provide them with the support they need to do their job.

By *responsible* growth management I mean a set of laws and policies designed to ensure that development preserves and enhances quality of life for current and future residents. This is actually the first part of my definition of responsible growth management.

The second and most critical part is electing a local legislative body, a mayor, a county executive, and other decision-makers who are firmly committed to administering and enforcing these laws and policies in a way that preserves and enhances quality of life. Without decision-makers committed to responsible growth management, you and other citizens will continually be plagued by the occasional fatally-flawed project along with poorly-planned growth in general. There just isn't a set of laws, policies, or programs that can be put in place which will deliver responsible growth management as assuredly as electing good decision-makers and then supporting them aggressively throughout their term in office.

INVEST IN ELECTIONS NOT LAWYERS

If you are considering a commitment of \$5,000 or \$10,000 to hire a lawyer and fight a development project, yet you are really concerned about how growth is being managed throughout your area - not just one project - then consider using a portion or all of these funds to help elect a pro-growth-management decision-maker. Since most growth-management decisions are made at the local level and local elections are relatively inexpensive to win, the pooled resources of you and your allies could make a big difference. For example, a study of the 2004 elections in 50 New Jersey municipalities (towns-cities) showed candidates raised an average of \$16,645 with businesses and business PACs contributing an average of \$1,315²⁴⁶. In 2005, the median amount spent by winning

²⁴⁶ *Local Campaign Financing: an Analysis of Trends in Communities Large and Small*, published December 2005 by State of New Jersey Election Law Enforcement Commission, P.O. Box 185, Trenton, NJ 08625-0185, available online at: http://www.elec.state.nj.us/pdffiles/White_Papers/white18.pdf

candidates who ran for mayor in 38 Massachusetts cities was \$38,751, with a range of \$607 to \$2,361,830 (Boston)²⁴⁷.

Most of us live in towns where local elections are won for the average amount spent in New Jersey - \$16,645 or we live in larger cities and counties where a winning candidate will spend about \$40,000 to win a seat on the local legislative body.

Citizens will usually spend \$20,000 to \$50,000 opposing a single development at the administrative hearing level then into the appellate courts. If these same funds were applied to a local election, citizens might get one or two pro-growth-management candidates into decision-making positions. So if your goal is to improve growth management throughout your town, city, or county consider instead investing your time and money in the electoral process.

CAN RESPONSIBLE GROWTH-MANAGEMENT CANDIDATES WIN?

The answer to this question is, of course, a resounding *yes!*

American voters strongly support Responsibly Managed Growth and other responsible growth management policies. According to the [Land Trust Alliance](#) and [The Trust for Public Land](#), voters have supported 75% to 80% of the open space preservation measures on ballots throughout the United States in elections since 2001. In 2006 alone, voters approved a record \$6.03 billion nationally for local conservation spending.

It is not just ballot measures voters support but responsible growth-management candidates too. In 2002, land use attorney and citizen advocate Tom Dernoga won a seat on the County Council of Prince George's County, Maryland based on a responsible growth management platform. Also in 2002, Michigan governor Jennifer M. Granholm won her election in part because she has been a leading Responsibly Managed Growth advocate. Republican Mitt Romney did the same when he won the 2002 governor's race in Massachusetts.

In 2004, voters in Volusia County, Florida supported a measure to adopt an urban growth boundary to protect rural lands and wetland. In 2006, Democrat Timothy M. Kaine was elected Governor of Virginia. Shortly after the election he announced that his first priority would be to give local decision-makers the authority to limit growth to prevent sprawl from aggravating traffic congestion. Clearly, candidates committed to responsible growth management can win local and statewide races.

In 2006, the Bush administration's generally perceived poor land use policies hurt 37% of candidates running for U.S. Senate seats in Washington state. It even now appears that responsible growth management may be a key issue in the 2008 Presidential elections.

²⁴⁷ *Campaign Finance Activity by Mayoral Candidates in Massachusetts*, published in 2005 by the Massachusetts Office of Campaign and Political Finance, One Ashburton Place, Room 411, Boston, Massachusetts 02108, (617) 727-8352, available online at: <http://www.mass.gov/ocpf/mayors05.pdf>

FINDING GOOD CANDIDATES

Who makes the best candidate:

Those with a long history of commitment to managing growth responsibly.

Beware of candidates who lack such a history or only recently became advocates of responsible growth management. You may find that once in office their lip-service is paid to Responsibly Managed Growth but their vote always goes to development interests.

The best candidates and those who remain fully committed once in office are those who lead efforts to protect their neighbors from a flawed development proposal or from poorly planned growth in general. In fact, many of our former clients now sit on the local and statewide decision-maker bodies overseeing growth management. First we help them defeat a flawed project then we help them become responsible growth management decision-makers.

It used to be that democrats were more supportive of responsible growth management when compared to republicans. Fortunately, that just isn't true anymore. In fact, one of the most effective elected officials I know is a Republican.

Baltimore County Councilman T. Bryan McIntire has probably preserved more rural land than any other local elected official in the United States. Since this Republican was first elected to the Council in 1994, he has preserved more than ***90,000 acres of farm and forest land!*** He has also won passage of measures to help farm owners recover substantial equity from their land while also preserving it from development.

So how do you determine if a candidate truly is committed to managing growth responsibly? Well, there is no fool-proof test but the best place to begin is to have a long conversation with the candidate. What you will be looking for is indications of how much thought they have given to responsible growth management. Hopefully they have specific ideas about what they want to accomplish and a strategy for how to pull the accomplishment off once in office. Following are some other good indicators.

1. Will the candidate go on record as supporting the specific changes to law or the new growth-management programs you are advocating? By *on record* I mean will the candidate make a formal, public announcement that they supports your position. If the candidate feels your approach may not be the best way to improve growth management, do they have an equally effective alternative? If yes, will the candidate then go on record supporting the alternative?
2. Do the candidate's campaign finance records show significant contributions from development companies, real estate interests, or others who traditionally have not supported responsible growth management?

3. Has the candidate been endorsed by development companies, real estate interests, or others that do not support responsible growth management?
4. Have pro-growth-management groups like the Sierra Club endorsed the candidate?

It is rare that a candidate can win an election running on just one issue, even growth management. But candidates who support responsible growth management tend to support other issues which have broad appeal among voters. So when searching for candidates to back do not become fixated on their growth-management position. Instead, consider the compatibility of their entire platform with their position on growth management. If a significant conflict exists then the warning bells should sound. In the end an ideal candidate is one who impresses you as fully committed to responsible growth management and is the most electable given their position on all other campaign issues.

SETTING THE GROWTH-MANAGEMENT AGENDA IN THE NEXT ELECTION

To get candidates elected who are committed to responsible growth management, you must make this one of the hottest issue in the next election. To make growth-management a hot campaign issue you must show voters how:

- the current approach to growth-management has harmed their quality of life; and
- how responsible growth-management could prevent further harm and enhance the quality of life most voters enjoy.

It is far more likely you will make growth-management a hot topic on the campaign trail if you focus not on your pet peeves but those growth issues voters find most disturbing or compelling. For example, you may be concerned about how a proposed development project will increase through-traffic on your residential street. Your goal may be to change local law to limit how much traffic can be added to residential streets. If a large percentage of voters live on streets where through traffic is an issue, then this may be a good topic to organize around. However, it is likely that a larger portion of voters view rush-hour traffic congestion as a more critical issue. A candidate who pledges to deal with traffic congestion would likely garner more votes than one focusing on through-traffic.

How do you determine which growth related issues are of greatest concern to voters? Following are some of the many ways for answering this question.

1. You could talk to your friends on the local legislative body and ask what issues tend to result in the largest turnout at hearings and what issues they get the most calls about.
2. Review past issues of local newspapers to gain an insight into the issues which get the most coverage or those which tend to generate the greatest number of *Letters To The Editor*.

3. Look at past elections and any growth-related issues candidates ran on; both winning and losing candidates. Try to determine which issues tended to be associated with the candidates who won their election.

While the three preceding approaches will give you an indication of the issues voters feel most strongly about, polling voters directly is the best approach.

Polling to Identify Hot-Button Issues

Past voter polling on growth management usually shows five issues rank among the top: traffic congestion, school overcrowding, loss of open space, other environmental issues, and property taxes. In rural areas the loss of small-town atmosphere tends to be the most strongly felt growth impact.

A poll is the most effective way of learning what issues voters presently care about and how to frame your proposed solution to maximize voter support. For example, it may be your perception that voters in your small town are against a proposed big-box store because of added traffic congestion. However, a poll might reveal that while many voters express some concern about traffic, they are more deeply troubled by the impact of the big-box on main street businesses and the loss of the friendly atmosphere in their small-town.

Polling data can also indicate how new issues might be framed to capture voter attention. Continuing with the big-box example, the poll might show that voters believe these stores add hundreds of new car trips a day to local roads. When they learn the increase is more on the order of 3,000 to 12,000 trips per day²⁴⁸ voters may move this impact to first place on their list of *reasons why our town is better off without a big-box store*.

The professionals in the business recommend polling no less 200 voters, preferably 400-500²⁴⁹. By polling I do not mean simply calling 200 phone numbers, but actually completing the survey questionnaire with 200 randomly selected voters. If you have a long questionnaire then you may only complete two or three surveys per hour. But for a survey focused on one topic, like growth management, the questionnaire could be shorter. Even then you likely will complete no more than four or five surveys per hour. Completing 200 questionnaires would require 40- to 100-volunteer hours. Surveys are best done where multiple phone lines are present in one location, such as a large office. If you have, say, five volunteers calling from 6:00 to 9:00 P.M. on weekday evenings then it would take three to seven evenings to get 200 completed questionnaires.

Before going to the considerable effort involved in conducting your own poll see what data already exists. First of all, there is a good chance the candidate or their party already has polling data or

²⁴⁸ See *Impact of Big-Box Stores on Traffic* at: <http://69.36.183.145/images/pdf/Traffic.pdf>

²⁴⁹ *Public Opinion Polling: A Handbook For Public Interest And Citizen Advocacy Groups*, written by Celinda Lake and published in 1987 by Island Press.

plans to survey voters. If growth management questions were not included in the last poll, then push to make them part of the next.

Following are several examples of public opinion polls focusing on growth management. Use the questions in these three examples as a guide to the type of questions you might include in your survey.

- *Attitudes and Perceptions about Land Use on the Eastern Shore* [Maryland]
<http://www.eslc.org/pdf/fullpublicreport.pdf>
- *A digest of California public opinion on...Growth and Development*
<http://www.field.com/fieldpollonline/subscribers/COI-02-May-Population.pdf>
- *Vermonters Awareness of and Attitudes Towards Sprawl Development in 2002*
<http://crs.uvm.edu/vtrpoll/2002/sprawl.html>

Following are some other possible sources of polling data.

- A number of local or regional governments will conduct a public opinion survey among residents at various times, such as when a master plan is up for revision. So check with the local planning office or the legislative body to see if polling data is available.
- State government also conducts polls. Search the website for the following state agencies for polling data: land planning; housing or community development; economic development; or natural resources, conservation, and environmental protection.
- A regional or statewide Responsibly Managed Growth advocacy group may have conducted a recent survey as well. You will find several of these groups for your state on the *CEDS State-By-State Resources* webpage: <http://www.ceds.org/links>
- Check with faculty at state universities to see if they have relevant polling data. Begin with planning and political science departments. Also ask if there is anyone on the faculty who has expertise in public opinion polling. You may wish to tap this professor for help in drafting a questionnaire and other tasks critical to accurate polling.

Polling, like many of the other topics addressed in this book, requires a fair degree of expertise to be done well. However, if you are operating on a shoe-string budget and existing polling results are inadequate, then consider conducting your own survey. Advice on how to put a poll together can be found in *Public Opinion Polling: A Handbook For Public Interest And Citizen Advocacy Groups*²⁵⁰.

²⁵⁰ *Public Opinion Polling: A Handbook For Public Interest And Citizen Advocacy Groups*, written by Celinda Lake and published in 1987 by Island Press.

If you need further advice or you decide to hire someone to put the poll together for you then please contact me at 410-654-3021 or Rklein@ceds.org. There are several professional polling firms in the CEDS network.

Your poll should focus on registered voters who meet the following criteria:

- they meet the definition of a *frequent* voter by voting in three or four of the last four elections;
- they are registered in high priority precincts;
- if your candidate will face a challenger in a primary election, then focus on voters affiliated with your candidate's party; and
- if you are focusing on the general election, then concentrate on voters who have a history of supporting candidates in addition to those from their party (e.g. a Republican who has voted for Democrats and Republicans).

Frequent Voters: Those who have voted in three or four of the past four elections are particularly important since they are the voters most likely to show up at the next election. These *frequent* voters also tend to be the people who donate hours and dollars to political campaigns as well as causes such as responsible growth management.

To identify frequent voters obtain the registered voters list from the local elections office. Request a file containing all of the registered voters located within the precincts where your candidate(s) will be running. If you are asked why you want the list, be honest, of course. Say you will use the list to educate voters about issues in the upcoming election. Many local election offices will not release a voter list if they think you are using it for some purpose other than electoral activity, like selling something other than a candidate or law. If asked whether you want the full record for each voter or just the walking list, ask for full records. Finally, if given the choice of electronic or paper format, get the electronic version.

High Priority Precincts: These precincts are described below in the section on *Where To Focus Your Efforts and Analysis of Past Election Results*. It will be these election precincts where your efforts will produce the greatest number of votes for your candidate. Therefore, polling should be concentrated first in the high priority precincts.

Party Affiliation: In a primary race only those who belong to the same party as your candidate can cast a vote for (or against) the person you support. It makes no sense to poll someone who cannot vote for your candidate. If you are focused on the general election, then concentrate your polling on voters who are affiliated with your candidate's party or have a history of swing-voting - supporting candidates from parties other than their own. There is no point in polling someone who never votes for members of your candidate's party.

Your initial or *benchmark* poll will tell you how voters perceive various growth management issues. These results should allow you to focus in on those issues of greatest concern to voters. During the benchmark poll you should also get voter attitudes towards various ways of resolving each issue. This data will allow you to craft solutions which fully address your concerns and are favored by a large percentage of voters.

Continued polling (*tracking polls*) throughout the weeks and months leading up to the election will tell you whether other growth issues have gained greater importance among voters or if voter perception of the effectiveness of your proposed solution has changed. Therefore, continued polling is essential to detecting the need to adjust your preferred approach to growth management to maximize voter support and, therefore, the likelihood your candidate(s) will win.

Issues Contrasting Pro-Development vs. Responsible Growth-Management Candidates

Throughout the campaign you should engage in a series of activities intended to help an ever greater number of voters appreciate the need to elect candidates committed to responsible growth management. Of course, the activities should focus on the growth issues of greatest concern to voters while demonstrating how your preferred solution will not only resolve negative effects but enhance those quality of life elements affected by each issue.

From *Chapter 35: Researching Strategy Options*, you should know what solutions are available for resolving each issue voters view as a priority. From the results of the polling suggested above, you should know what issues voters view as most critical to their quality of life and what solutions they perceive as most effective, desirable.

Otto von Bismarck said: "*Politics is the art of the possible.*" If the Chancellor was managing an election he would likely say: *Focus on the issues which make it possible for your candidate to win.* These issues, of course, are those which voters care about the most. In other words, resist the temptation to focus on your pet issues and solutions. Instead, focus on issues which will be most effective in getting responsible growth management candidates elected. Of course, you can press each candidate for a commitment to address your core issue through your preferred solution while devoting your voter education resources to those issues-solutions most likely to get good candidates elected. So, again, focus on those issues-solutions which make it possible to get responsible growth-management candidates elected.

Generally, the best campaign issues are those voters already care about. These will be the issues voters have been reading and hearing about in the media. But the issues they will care most about are those voters *perceive* as affecting them directly. It will be easier to make one of these issues into a hot campaign topic compared to issues which indirectly affect voters or have received little media coverage. Polling results should reveal which issues are most strongly felt among voters in your area.

Once you have a list of potentially hot issues, focus on those issue-solution combinations which will most clearly contrast responsible growth management candidates with those who favor development interests. For instance, let's say traffic congestion is a hot issue among frequent voters. Your responsible growth management solution might be to prohibit any development that would cause the degree of traffic congestion to cross a threshold voters view as intolerable (see *Measuring Congestion* in *Chapter 23: Traffic*), while requiring developers to pay into a fund to improve mass transit and other measures which will reduce traffic congestion. Pro-development candidates might espouse concern about this same issue, but would favor only payment into a fund with no restriction on further growth. Questions regarding these two solutions should be included in the next poll to determine if voters see a clear contrast and favor candidates supporting your responsible growth management solution.

PRESS CANDIDATES FOR SPECIFIC COMMITMENTS DURING THE CAMPAIGN

Its time to press candidates for a commitment when you have issues-solutions supported by a large percentage of voters. Meet with each candidate identified through *Finding Good Candidates* above. Share your polling results which show substantial voter support for each issue-solution beginning with that which is most important to you. Pose the following questions to each candidate:

Do you view this issue as a major threat to quality of life in our community?

If they answer yes, then the next question is:

If elected will you introduce a bill implementing our preferred solution then work to convince a majority of other legislators to support the bill?

If a candidate answers yes to both questions, then ask that they go on record by making a press announcement, including the issue-solution in stump speeches, adding it to campaign literature, their website, etc. You should be open to several *yes, but...* responses.

- ***Yes, but*** the candidate believes that if you frame (word) the issue-solution in a different way you will win greater voter support. An extreme example would be...

Your Wording: *We want to stop greedy developers from making traffic congestion worse by banning growth near overcrowded roads.*

Candidate's Wording: *I pledge to keep traffic congestion from growing worse by steering growth to those portions of our community with mass transit service and roads with excess capacity.*

The candidate's wording addresses the same issue and presents the same solution but in a way that will likely appeal to a larger percentage of voters, particularly the moderate majority. Of

course, this should be okay with you. But if you are in doubt then do a poll on both ways of framing the issue-solution;

- **Yes, but** the candidate feels another solution is available which is just as effective as your's but is more appealing to voters. If you are satisfied that the candidate's solution will be just as effective, then this should be okay too.
- **Yes, but** the candidate feels their announcement of support for the issue-solution should be delayed for a number of potentially good reasons. For example, their next stump speech may be before an audience which would have little interest in traffic congestion. Their next press release may be locked into focusing on another issue important to voters. A short delay should be okay for these and other good reasons. But if the candidate keeps finding reasons to delay an announcement of support for your issue-solution, then they may not be committed to responsible growth management.

If the candidate agrees to support your first (most important) issue-solution, then ask for a commitment to any other issues-solutions you have developed. Avoid the temptation to press for commitments on too many issues. The goal, after all, is to get candidates elected who are committed to managing growth responsibly. Think of your request for commitments of support on specific issues-solutions as sort of a litmus test. If a candidate is willing to support your top two or three issues-solutions then they will likely support other responsible growth management measures once they are elected.

WINNING LOCAL ELECTIONS WITH GROWTH MANAGEMENT ISSUES

It is not enough to win a commitment from candidates that they will support your issues and solutions. You need to get enough candidates elected so the local legislative body is dominated by decision-makers committed to responsible growth management. If your local government has an elected chief executive (mayor, county executive, etc.) then you must help a responsible growth management candidate win this office too. Mobilizing voter support aggressively, but wisely, is the key to achieving these goals.

Identifying High Priority Precincts

If you live in a very small town, then perhaps it doesn't matter where you focus your energies. However, if your town is large or you live in a county or city, then it is unlikely you can cover all areas fully. Precinct analysis is a tool to help you prioritize voter education efforts.

In some areas candidates for the local legislative body run by district, each of which covers a portion of the jurisdiction. Only voters registered in a district may vote for candidates running for the seat on the local legislative body representing that district. In other localities candidates are elected at-large and everyone casts their votes for the same slate of candidates. Some local legislative bodies are a mix of candidates elected by district and at-large. To make this even more complex, in some jurisdictions all seats on the local legislative body are up for election at the same time. In other

localities terms are staggered so each year one or two seats are up for reelection. Of course, a chief executive is elected at-large.

A local jurisdiction will be divided into districts or wards. The districts and wards are composed of precincts. The number of precincts will vary depending upon the area covered by the district or ward. A county with a large population might contain more than two hundred precincts, while election districts within the county consist of 20 or 30 precincts.

A precinct-by-precinct analysis of past voting patterns will show you where voters are most likely to support responsible growth management candidates. Polling results will show you the precincts where voters are likely to be most responsive to the issues-solutions supported by your candidate(s).

The precincts where:

- past election results show support for candidates similar to your's; and
- where growth management concerns coincide with your issues-solutions

will become the *priority precincts* for your voter education efforts.

Analysis of Past Election Results: Will your candidate(s) be running against a challenger in the primary election? If yes, then the precinct analysis will focus first on past primaries, then the general election. If your candidate is unchallenged in the primary then apply the following advice to an analysis of general election results.

Begin with the most recent election resembling the upcoming race. If your candidate faces a contest in the primary election then focus on the most recent primary. Additionally, if your candidate is running during a presidential election year then look back to the last presidential election year primary.

Now, take a look at the candidates who ran in the most recent similar election. You will be looking for candidates who closely resemble your's. By *resemble* I mean the candidate:

- ran for the same office your candidate is seeking;
- was of the same gender as your candidate;
- belonged to the same party as your candidate; and
- their political ideology was similar to that of your candidate.

How do you get these four items of information about past candidates? If you have a friend on the local legislative body, then they should be familiar with past candidates. Also try others active in local politics. The local elections office can provide you with the first three items of information. You can also research candidate ideology by looking at newspapers published during the last similar

election, a voters guide from that election, and candidate websites (assuming they are still up). Of course, determining the ideology of winning candidates is simple; you just look at their record.

If you cannot find a candidate who ran for the same office in the similar election, then look for one that had the other three common characteristics: gender, party affiliation, and political ideology. Should a candidate matching these three characteristics prove elusive then begin looking at elections in other years. Also, take a look at any issues related to growth management that were on the ballot during the similar year.

Now you are ready to begin the precinct analysis. But first you must obtain the voting results from the similar election. In many localities election results are available online. In others you must request the results from the local or state elections board. If given the choice, request the results in electronic format. While at the elections office obtain maps showing the boundary of the precincts where your candidate is running. If your candidate will be running at-large, then you will need maps of all precincts within your town, city, or county. Other wise, just get the maps for the appropriate district or ward.

Again, the goal of this phase of the analysis is to identify those precincts where your limited resources will garner the greatest number of votes for your candidate. The high priority precincts will be those where the similar candidate received a large percentage of the vote, but voter turnout was low to medium. The large percentage of support indicates that voters in the precinct are inclined to favor a candidate like your's. Had the candidate put more effort into the precinct during the past election they might have won by getting more voters to the polls.

The precincts where the similar candidate had low support in the past election, but voter turnout was high, should be avoided like a toxic waste dump. The voters in these low-support, high-turnout precincts are inclined to vote against a candidate like your's. The last thing you want to do is to divert resources from high support precincts to one of these low-support areas. The only thing the diversion will produce is to get more people to the polls so they can vote for your candidate's opponent.

An example of the precinct analysis is provided in the tables on the two pages following this one. These tables are headed:

Sample Precinct Tabulation - Candidate Smith's 2006 Primary

Precinct Targeting Worksheets - Candidate Smith's 2006 Primary

In this example, the similar candidate is Smith and the similar election was the 2006 primary. There are 32 precincts in the district where Smith ran. The precinct identifier appears in the left-hand column of the two tables you will find on the page headed *Sample Precinct Tabulation - Candidate Smith's 2006 Primary*. In the table on the left the *Votes Cast* column is a total of the votes Smith

received along with those cast for all other challengers in the 2006 primary. *Percent Support* is, of course, the percentage of all votes cast which were *for* Smith. The table on the right side shows the percentage of all registered voters who came out for the 2006 primary election. After compiling the data, the left-hand table was sorted in descending order for percent support then the right-hand table was sorted in descending order of percent turnout.

The data from the *Sample Precinct Tabulation* was then transferred to the *Precinct Targeting Worksheets - Candidate Smith's 2006 Primary*. The left worksheet groups the 32 precincts into six categories: low, medium, and high for percent support and percent turnout. The six categories are identified with two letter codes as follows: Low Support (LS), Medium Support (MS), High Support (HS), Low Turnout (LT), Medium Turnout (MT), and High Turnout (HT).

SAMPLE PRECINCT TABULATION - CANDIDATE SMITH'S 2006 PRIMARY

Precinct	Votes Cast	Votes for Smith	Percent Support
11-004	196	82	41.84%
9-020	407	170	41.77%
11-008	353	142	40.23%
9-006	358	131	36.59%
9-028	309	113	36.57%
9-023	471	170	36.09%
9-003	443	151	34.09%
11-014	392	132	33.67%
11-020	24	8	33.33%
11-005	649	216	33.28%
11-007	324	105	32.41%
11-017	414	133	32.13%
9-021	543	172	31.68%
9-016	185	58	31.35%
11-018	256	80	31.25%
9-019	349	109	31.23%
11-019	296	90	30.41%
9-015	454	138	30.40%
11-010	412	125	30.34%
11-012	547	165	30.16%
9-018	308	92	29.87%
9-025	333	98	29.43%
9-014	486	143	29.42%
9-012	320	91	28.44%
9-005	553	157	28.39%
9-010	559	158	28.26%
9-026	168	47	27.98%
9-004	558	153	27.42%
11-006	299	82	27.42%
9-017	234	64	27.35%
9-011	340	89	26.18%
9-013	547	128	23.40%

Precinct	Registered Voters	Votes Cast	Percent Turnout
9-013	1166	547	46.91%
9-014	1191	486	40.81%
9-003	1124	443	39.41%
9-005	1434	553	38.56%
9-012	859	320	37.25%
9-026	455	168	36.92%
9-016	517	185	35.78%
9-010	1587	559	35.22%
11-005	1864	649	34.82%
11-007	948	324	34.18%
9-021	1611	543	33.71%
11-018	760	256	33.68%
9-004	1660	558	33.61%
11-020	72	24	33.33%
9-015	1369	454	33.16%
9-017	706	234	33.14%
11-012	1661	547	32.93%
9-023	1470	471	32.04%
9-025	1041	333	31.99%
11-006	946	299	31.61%
11-010	1306	412	31.55%
9-019	1107	349	31.53%
11-008	1140	353	30.96%
9-018	996	308	30.92%
11-014	1277	392	30.70%
11-017	1421	414	29.13%
9-006	1255	358	28.53%
9-011	1230	340	27.64%
11-004	729	196	26.89%
11-019	1102	296	26.86%
9-028	1190	309	25.97%
9-020	1897	407	21.45%

These two tables are modeled after Figures 6.2 in *The Campaign Manager: Running and Winning Local Elections*, by Catherine M. Shaw, published in 2004 by the Westview Press.

PRECINCT TARGETING WORKSHEETS - CANDIDATE SMITH'S 2006 PRIMARY

High Support (HS) 11-040 9-020 11-008 9-006 9-028 9-023 9-003 11-014 11-020 11-005	High Turnout (HT) 9-013 9-014 9-003 9-005 9-012 9-026 9-016 9-010 11-005 11-007	(1) HS + LT = High Priority 9-020 11-008 9-006 9-028 11-014	(6) MS + HT = Medium Priority 11-007 9-016
		(2) HS + MT = High Priority 9-023 11-020	(7) LS + LT = Low Priority 9-018 9-011 11-010
		(3) MS + LT = High Priority 11-017 11-019	(8) LS + MT = Low Priority 9-025 9-004 11-006 9-017
		(4) MS + MT = Medium Priority 9-021 11-018 9-019 9-015 11-012 9-023 9-025 11-006 9-019	(9) LS + HT = Low Priority 9-013 9-014 9-012 9-005 9-010 9-026
		(5) HS + HT = Medium Priority 11-005	These two worksheets are modeled after Figure 6.3 and 6.4 in <i>The Campaign Manager: Running and Winning Local Elections</i> , by Catherine M. Shaw, 2004, Westview Press.
		9-018 9-013 9-025 9-011 9-014 9-017 9-012 9-005 9-010 9-026 9-004 11-006	9-020 11-008 11-010 9-018 11-014 11-017 11-017 9-006 11-011 9-011 11-004 11-004 11-019 11-019 9-028

These two worksheets are modeled after Figures 6.3 and 6.4 in *The Campaign Manager: Running and Winning Local Elections*, by Catherine M. Shaw, published in 2004 by the Westview Press.

The right worksheet groups the precincts into nine categories, with (1) precincts being the highest priority for where you should focus your efforts. As stated above, the highest priority precincts are those where the similar candidate from the last similar election received high support and voter turnout was low. The low priority precincts are those where the similar candidate received low support and turnout was high. Your efforts to first educate voters then get them to the polls would begin with the HS+LT precincts, then move on to the HS+MT precincts, then MS+LT precincts, and so on.

So why are *High Support + High Turnout* precincts in the fifth (5) priority category? Well, voters in these precincts are likely to support your candidate anyway. These voters are also likely to come to the polls in large numbers. So each hour or dollar invested in the HS+HT precincts will likely result in fewer additional votes compared to the HS+LT precincts. This does not mean HS+HT precincts should be ignored; just that your candidate is more likely to win if you devote your resources first to the (1) to (4) precincts.

To further illustrate the benefits of precinct analysis, consider that in the Smith example there are more than 37,000 registered voters in the 32 precincts. In the 2006 primary, a total of 12,087 votes were cast. To win the 2006 primary a candidate needed 6,044 votes (assuming just two contenders).

As shown in the table to the left (*Potential Votes in High-Support + Low-Turnout Precincts*), there

Potential Votes in High-Support + Low-Turnout Precincts

Precinct	Registered Voters	Maximum Turnout	Potential Votes
9-020	1,897	47%	892
11-008	996	47%	468
9-006	1,255	47%	590
9-028	1,190	47%	559
11-014	1,277	47%	600
Total	6,615		3,109

are 6,615 registered voters in the five highest priority precincts. The *Sample Precinct Tabulation* shows that in 2006, the highest turnout rate was 47%. If you succeeded in generating an equivalent turnout rate your candidate might win 3,109 votes in these five precincts, which is more than half (51%) of what would be needed to win a two candidate race. Of course, this also assumes 100% of the votes were cast in favor of your candidate, which would never happen. Instead, your candidate might win 60% to 70% of the votes, which means you need to

focus on the top seven or nine precincts. For further detail on analyzing precinct voting results see *The Campaign Manager: Running and Winning Local Elections*²⁵¹.

Factoring Polling Data Into Precinct Analysis: Voter attitudes can change considerably from one election cycle to the next. You may even encounter apparent contradictions like the following:

²⁵¹ *The Campaign Manager: Running and Winning Local Elections*, by Catherine M. Shaw, published 2004 by the Westview Press.

Your voting history analysis showed low support for a similar candidate in a given precinct during an election two- or four-years ago, yet your polling data shows a high-percentage of voters in the precinct are now deeply concerned about growth management. Voters in the precinct now express high support for a candidate resembling that they rejected in the past election.

This apparent conflict can likely be explained by an event during the intervening years which educated voters on the need to adopt a more responsible approach to growth management. For instance, many of the voters may have participated in an effort to keep a severely flawed development project out of their neighborhood. Or perhaps a large development project in an adjacent precinct has caused school overcrowding or traffic congestion to reach epic proportions.

If polling data shows high support for responsible growth management then consider elevating a precinct on the priority list even if the similar candidate did not do so well in the prior election. Raising precinct priority would be particularly appropriate if voter turnout was low in the last similar election.

Mobilizing Support Among Groups Active in High Priority Precincts

Once you have identified high priority precincts, the next step is to analyze growth management issues within these precincts. The goal is to identify those precincts where responsible growth management issues will generate the greatest number of votes for your candidate.

Earlier in this chapter I suggested that you poll frequent voters registered in the high priority precincts. I then suggested that you focus on growth management issues which:

- appeal to a large percentage of frequent voters;
- contrast your candidate with other candidates who are not committed to responsible growth management; and
- involve solutions your candidate has agreed to support.

The polling results will reveal those precincts where voters are already concerned about these issues. Following is advice on how to identify those high priority precincts where support for your candidate can be increased by educating voters about these issues.

Most precincts are relatively small with respect to area and population. While a rural precinct may cover a 40-square mile area, many suburban and urban precincts encompass less than a square mile and are frequently under 100 acres. A 100-acre precinct would equal a square measuring 2,000 feet on a side. The *Sample Precinct Tabulation* table showed that the number of registered voters in the 32 precincts ranges from 72 to 1,897. As shown in the *Potential Votes in High-Support + Low-Turnout Precincts* table above, there are just 6,759 registered voters in the five highest priority precincts. The relatively small area and population of most precincts means that the impact-zone of one poorly conceived development project could easily touch everyone who lives within one or more precincts. Or the parents of children attending an overcrowded school may compose a large percentage of voters in a precinct.

The most efficient means of increasing voter support is through groups which have a substantial membership in a high priority precinct. Following is advice on how to identify then request the support of three types of groups likely to support a responsible growth management candidate:

- those who are fighting a flawed project now or did so in the last year or two;
- those who are concerned about a specific impact of growth as opposed to a specific project; and
- a group with a large number of members who live near sites where a flawed development project could be proposed.

In addition to organized groups, advice will be offered later in this section on educating individual, frequent voters about the benefits of supporting your candidate.

Current or Recent Development Battles: If the citizens opposing a development project have been following the advice given in this book, they should have dozens, hundreds, perhaps more than a thousand supporters. Helping the leaders of this effort appreciate the benefits of electing responsible growth management candidates, like your's, could easily get you overwhelming support in one or more precincts.

How do you determine if there is or has been a citizen group opposing a project in the high priority voting precincts?

If you live in a small town and you are active with others advocating responsible growth management, then you likely know of the project proposals opposed by nearby residents. In fact, you could probably look at maps of the high priority precincts and identify those where citizens have fought or are currently opposing poorly planned development projects. In larger jurisdictions you can learn of current or recent battles in the high priority precincts by:

- reviewing past issues of local newspapers;
- contacting community or neighborhood association leaders;
- speaking with the leaders of groups focused on the environment, historic preservation, etc.;
- talking with friends on the local legislative body;
- asking local planning commission members or their staff;
- searching the internet using keywords like the name of your area and sprawl, development, oppose, hearing, etc.; or
- talking with local attorneys who specialize in representing citizens in land use cases.

Once you have identified current or recent battles in high priority precincts, contact the citizens who led each campaign. Explain how supporting your candidate will reduce the likelihood that they and

others will be threatened by similarly flawed development proposals in the future. Specifically, ask the group to urge their members who live in a high priority precinct to support your candidate. The enthusiasm with which the group approaches this task will increase considerably if you can honestly answer two questions with a *yes*:

Can your candidate take office quickly enough to vote against the project (*Chapter 35*), change the law (*see Chapter 41*), or take some other action beneficial to the citizens fighting the project?

Has the candidate agreed to actually take any of these steps?

Again, if the answer is yes to both questions, then make certain the citizens fighting the flawed project are aware of this. Chances are this will become the best and least expensive strategy option for resolving citizen concerns about the flawed project.

Finally, check with the candidate to see if they would like a formal endorsement from the group. Since growth is but one of several, perhaps many, issues in a campaign, there are situations where an endorsement from one group may turn-off voters concerned about some other issue. But if your candidate see an endorsement by the group as beneficial, then press the group to formally endorse the candidate. Ask the group for approval to mention their endorsement on campaign brochures, in letters, in press releases, etc.

Groups Concerned About Specific Growth Impacts: If your area has been suffering from years of poorly managed growth, then there will likely be groups in the high priority precincts who are frustrated by specific impacts, not specific projects. Results of polling conducted within each precinct should reveal which impacts voters detest the most. With a little imagination it should be easy to identify groups particularly sensitive to each impact.

For example, if school additions and new construction has not kept up with growth then class sizes may have swelled to the point where student performance has declined and discipline problems have escalated. Many students may spend their day in drafty, poorly lit portable classrooms. In this situation the school PTA may enthusiastically embrace a candidate who promises to introduce legislation to:

- enact adequate public facility requirements prohibiting further development in the service area of any overcrowded school;
- require developers to pay an impact fee designed to offset the cost of increasing school capacity;
- shift the cost burden of building new roads, sewers, and other infrastructure from the taxpayers to developers then allocate these funds to school improvements; or
- a combination of these and other options.

While a PTA may be prohibited from formally endorsing a candidate, there are a number of ways they can let their members know which candidate they prefer. For instance, community associations representing neighborhoods near an overcrowded school would likely be dominated by members whose children attend the overcrowded school. These members can likely convince the association to support a candidate promising to improve the school situation. Many teacher unions formally endorse candidates and mail to parents just before an election.

In addition to overcrowded schools, the area is probably suffering from other quality of life impacts, such as congested roads, loss of open space, a paucity of park and recreation facilities, and on the list could go. Community, neighborhood, or homeowner associations representing those suffering from these impacts would likely support a candidate promising legislation to first halt the decline, then reverse the effects of mismanaged growth.

As suggested above for groups fighting specific projects, ask the candidate if they would like a formal endorsement from groups concerned about specific growth impacts. Ask the group if they could schedule a meeting before the election where the candidate could speak about his plans to resolve growth impacts as well as other issues of concern to group members. Finally, ask if a group leader would be willing to join the candidate in knocking on doors at the home of their members.

Future Flawed Development Sites: What do you do when there haven't been any recent development battles and the effects of growth mismanagement have yet to be felt in a high priority precinct? Well, there's a good chance frequent voters in the precinct are aware of how poorly planned growth is moving towards them. In fact, many residents may have moved to the precinct to escape the mismanaged growth that degraded quality of life in their former precinct. But the level of support generated by the *theory* of creeping sprawl is an order of magnitude lower than that caused by a development notice posted on vacant property next to a neighborhood.

One way to make the specter of growth mismanagement more real is to identify the vacant properties within a high priority precinct then alert groups representing nearby residents of all the incompatible uses presently permitted on the property. For example, if your area has been plagued by a proliferation of big-box stores, landfills, or other uses incompatible with a residential neighborhood, then look for vacant property abutting neighborhoods where these uses might be proposed.

A big-box store of the super variety requires a 7- to 15-acre site. So, identify all of the vacant properties seven-acre or more that are next to an existing neighborhood within high priority precincts. Include sites even if they are not completely vacant. If the cost of removing existing buildings and other structures is insignificant compared to the profit of developing the site, then rest assured the property could be developed as a big-box store. We even had one case where a developer proposed taking down an aging seven-story hospital to develop a site.

The possibility of a big-box will be more plausible if a site has zoning permitting this use. But don't exclude a site because it lacks the right zoning. If incumbent decision-makers are very development-oriented then they may be easily swayed to rezone the property.

Once possible big-box sites are identified then contact the association representing neighborhoods within the potential impact zone. Explain why you believe the site could be developed as a big-box store, but make it clear that you have no reason to believe that the property owner or anyone else is actually planning to develop the site in this manner. Next, describe how the measure your candidate supports will reduce the likelihood that a big-box store could be built on the site affecting association members.

If the association agrees to support your candidate then ask the candidate if they would like a formal endorsement. Ask the group if they could schedule a meeting before the election where the candidate could speak about his plans to prevent big-box stores and other incompatible uses on the vacant property. The candidate should also describe any measures he is considering which would increase the probability that the site is only developed in ways that preserve and enhance quality of life for association members. Ask also if a group leader would be willing to join the candidate in knocking on doors of their members.

The big-box scenario presented above is but one example of a land use which would degrade quality of life if placed next to a residential neighborhood. Of course, there are many other uses which are also incompatible, even though they may offer many benefits.

We have developed an approach for ensuring that vacant lands near a neighborhood are only developed with compatible uses. This approach is known as *Proactive Neighborhood Planning*. Click on the following link to learn more about how our approach can be used for identifying potentially incompatible uses on vacant sites in high priority precincts or anywhere else:

<http://www.ceds.org/pnp>

Educating Individual Voters

In some parts of the country nearly every neighborhood has an association and there are numerous groups focusing on the specific issues affected by growth. In areas such as this it is easy to identify, then contact these groups. But this is not the case in many other localities. If this is the situation in your area then your first point of contact becomes the individual voter, not the leadership of a group representing the voter and their neighbors.

Frequent voters should be the first folks you contact, beginning with those most directly impacted by poorly managed growth. Frequent voters are the folks who came to the polls in three or four of the last four elections. They are the most likely voters to show up at the next election. Also, frequent voters tend to be the most active residents of their neighborhoods. They also account for

an inordinately large share of the volunteer hours and dollars contributed to candidates and other causes.

Earlier in this section I explained how to identify frequent voters from the registered voters list obtained from the local elections office. I suggest concentrating on frequent voters who:

- belong to the candidate's party; or
- who have a history of swing voting (Democrats who occasionally vote for Republicans, etc.); and

who live near:

- sites where a flawed development project is or was recently opposed by citizens; or
- locations where the impacts of poorly planned growth are particularly acute, such an area with overcrowded schools, residential streets with high volumes of through-traffic, etc.; or
- vacant sites where development incompatible with nearby neighborhoods may be proposed.

Of course, suggestions for identifying these three focal points of poorly planned growth were provided earlier in this section under the headings of: *Current or Recent Development Battles*, *Groups Concerned About Specific Growth Impacts*, and *Future Flawed Development Sites*.

The first frequent voters to contact will be those living near any of the three focal points. The first contact should be made by way of a letter. In the letter describe the focal point and why you believe it has (or will) impact the voter's quality of life. Explain what your candidate will do, if elected, to prevent similar growth mismanagement in the future and any measures your candidate supports for reversing the effects of past flawed development. End the letter with a request that the voter support the candidate. Provide a phone number and/or e-mail address if the voter wishes further information. Finally, say you or another volunteer will call in the next day or two to see if the voter has any questions and ask whether they would like to speak with your candidate. Verify that you have the frequent voters phone number before saying you will call. If you or one of your supporters lives nearby then have them sign the letter and make the follow-up call. The neighbor should begin the letter with something like...

*Dear Mr. Smith:
I am a neighbor of yours.*

I live two blocks away on...

Like me you are probably deeply troubled by...

The purpose of the letter and follow-up call goes beyond winning one vote. You are also looking for prospective leaders; folks who are willing to help their neighbors appreciate the importance of electing responsible growth management candidates. The prospective leaders would be asked to:

- hold a coffee in their home so their neighbors can meet the candidate;
- join the candidate when they knock on the doors of other voters in their neighborhood; or
- help organize a large responsible growth management rally in the precinct just before the election. The rally would be organized similar to the *Citizen Public Meeting* described in Chapter 36.

Making Potential Growth Impacts More Real

While continued growth mismanagement may pose a very real threat to quality of life, voters may view this as just another bad thing which might happen, but probably won't. There are a number of steps you can take to make the future impact of poor growth planning more real. Following are a couple of examples.

Through-Traffic: If continued growth in your area will increase through traffic on residential streets, then arrange a demonstration. For instance, let's say current traffic volume on the street is about 50 vehicles during morning rush hour and your projections show that with continued growth mismanagement it could quadruple to 200 vehicles, which is excessive for most residential streets. Recruit twenty people to participate in the demonstrate. Simulate *existing* peak-hour traffic volume by having five of the drivers travel the street during a six-minute period. Next, simulate 200 vehicles per hour by having all 20 volunteers drive their car along the street in a six-minute period.

The demonstration should occur at a time when most of those who live on the street are home, like between 9:00 and 10:00 A.M. on a Saturday morning. Of course, you should announce the demonstration well in advance. Make certain the local police department and the community association is okay with the event. Ask all those who live on the street to be out on the sidewalk to view the demonstration. Alert the press that you will be staging the event. And of course make certain your candidate is on hand to explain what they will do, if elected, to prevent through traffic from growing worse on this and other residential streets.

Noise: A number of the land uses which are particularly incompatible with neighborhoods are noisy. These activities include mining, landfills, or any other activity that generates substantial heavy truck traffic. Other land uses generate noise from sources besides trucks, such as a variety of manufacturing operations or even all night big-box stores oriented towards home improvement and construction. We have received calls from people around the country complaining about hammering and sawing occurring all night long at some of these big-boxes.

To simulate a noisy land use get a boom box and a sound meter. Record the sound emitted at a location whether the noisy land use presently operates. Using the sound meter note the noise level (in decibels) at varying distances from the source. Set the boom box up on the vacant site where

noise would be emitted. Set the volume so the sound level (decibels) are about the same at those measured varying distances from the original source. If you cannot set up on the site then place the boom box at the nearest location you can access. Set the volume level so the sound level is again about the same as it would be if the boom box were at the point on the site where the noise would be emitted.

If the noise will come from heavy trucks rumbling along a residential street use the same basic approach as described above, only mount the boom box on luggage rack on top of a car and set the volume to simulate the decibel output of the truck.

Do a test before the actual demonstration regardless of whether you place the boom box on the site, nearby, or mount it on a car. The test may reveal problems which make a demonstration impractical. But more likely, the test will allow you to optimize the impact of the demonstration.

As with through traffic, the noise demonstration should occur when most of those who live near the vacant site or on the affected street will be home. Of course, you should announce the demonstration well in advance. Again, make certain the local police department and the community association is okay with the event. Ask all those who live near the site or on the street to be outside for the demonstration. Alert the press that you will be staging the event. And, again, make certain your candidate is on hand to explain what they will do, if elected, to prevent the noisy land use or increased truck traffic.

Again, these are just two examples of the many ways the impact of future growth mismanagement could be made real. If you'd like to explore ideas for how to demonstrate other impact, then contact me at 410-654-3021 or Help@ceds.org.

Get Out The Vote

It doesn't do much good to have high voter support within a precinct if the turnout at the polls is low. *Get Out The Vote* (GOTV) activities are intended to motivate voters to come out on election day. GOTV activities traditionally range from a literature drop the day before an election to phone calls to driving voters to their polling place. The activities described above for making growth impacts more real could also serve to get out the vote if staged a day or two before an election. Talk with the candidate(s) you are supporting about employing the activities described above to GOTV.

Coordinate With The Candidate

Growth management will likely be but one of a number of issues voters will consider in deciding who they will support in the upcoming election. It may frequently be a major issue, sometimes number one, but in some high priority precincts the candidate's support for responsible growth management might even cost some votes. Because of these larger considerations it is critical that you closely coordinate your efforts with those of the candidate(s) you are supporting.

The candidate's campaign manager may have a preference as to the timing of specific activities, such as the announcement of endorsements and the candidate's support of specific growth management measures. Both the candidate and their manager can verify your analysis of precinct priorities. In fact, you would likely do the polling and precinct analysis in concert with the manager and candidate. If you have chosen a candidate truly committed to responsible growth management then it should be easy to resolve your differences.

Offer to ask your supporters for those willing to help with campaign tasks like canvassing neighborhoods, staffing phone banks, stuffing envelopes, and the dozens of other tasks critical to a successful election effort. Also consider offering to help organize fund raisers among your supporters. Hopefully, the volunteers you found through growth management will soon become active members of the campaign of the candidate(s) you are supporting. The more each candidate feels their election victory was due to you and your allies, the more likely it will be that they can shift growth management in a more responsible direction once in office.

SUPPORTING GOOD CANDIDATES AFTER THE ELECTION

Life would be nice if you could walk away from a hard-won election victory confident all would be well now that you have a solid majority of responsible growth management candidates dominating local decision-making bodies. Unfortunately, the moment your responsible growth management candidates are elected pro-development interests begin wooing, lobbying, and cajoling. I've seen more than one candidate I swore was solid begin reversing their position once in office. But more common is the situation where good candidates lack the on-going public support needed to get good growth management reforms enacted in a way that delivers the desired result.

Ongoing public support takes a variety of forms.

- As the newly elected candidate begins formulating their strategy for winning passage of the legislation implementing responsible growth management measures, you and your allies should employ the suggestions presented in *Chapter 41: Changing The Law* for encouraging full support among all members of the local legislative body as well as the mayor or other chief executive;
- When a hearing is held or a vote taken on each piece of legislation you and your allies should be there in standing-room-only numbers;
- You should establish a scorecard or some other system for measuring the effectiveness of each incumbent (including those you supported) in moving the jurisdiction towards responsible growth management;
- A system should also be put in place for evaluating how well staff are implementing the specific provisions that make up responsible growth management; and

- In four years you need to repeat all the steps suggested above for getting incumbents reelected, provided they succeeded in pushing growth management towards a more responsible approach during their first term in office.

Providing these and other forms of support will be much easier if you channel the momentum generated by the election campaign into an ongoing responsible growth management organization. In other words, consider designing a series of activities, like those presented above, which allow those who supported your candidate to continue working on behalf of responsible growth management under the umbrella of an established organization or a new group.

As stated previously in this chapter, frequent voters are far more likely to support social causes, like a Citizens for Responsible Growth Management, with volunteer hours and dollars. So begin by talking with the frequent voters who supported your candidate about their interest in seeing a membership organization established which focuses on improving growth management in your area. I suspect you will find a great deal of enthusiasm for such a movement.

HOW CEDS CAN HELP YOU ELECT RESPONSIBLE GROWTH MANAGEMENT CANDIDATES

First of all, if you have any questions about the topics presented in this chapter, then please contact me at 410-654-3021 or Help@ceds.org. Our advice is available free to citizens working to elect responsible growth management candidates.

Within the CEDS network we have people with extensive experience in campaign management. So, if you wish we can discuss how CEDS can carry-out any of the tasks for you. We frequently find that our clients are surprised at how inexpensive our services are. We can also explain how you can quickly raise the funds to cover the cost of our help plus other expenses associated with getting good candidates elected.

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A Closing Word on Strategy & Persistence

At times it may seem like your efforts are having little effect. But then you cross a vague threshold known only to the applicant or some other final decision-maker. All of a sudden things start turning your way. The applicant asks to reopen negotiations. A mayor or council chair announces support for your effort. Persistence is the key to getting to this point.

So to win keep pushing and pushing until you run out of volunteer hours and dollars then figure out a way to get more of both. And, as always, please do not hesitate to give me a call. The last section of this book explains how we can help.

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HOW CEDS CAN HELP

Advice by phone is always available free of charge to citizens and citizen groups. Just give us me a call at 410-654-3021. About two-thirds of the folks we help find that our free advice and free publications, such as this book, are all they need. The other third hire CEDS to manage a portion or all of their campaign because they lack the large amount of time or expertise frequently required to win a campaign.

STRATEGY SESSIONS BY PHONE

Our phone conversation can be one-on-one or include other folks active in your effort. For example, you might pick a time when you and your allies can meet around a speaker phone set up on a kitchen table. We would spend a half-hour or so discussing what you know about the project, the steps you have pursued thus far, where the project stands in the review process, and your goals. I can then suggest strategy options which have worked in campaigns resembling yours.

INITIAL STRATEGY ANALYSIS

What's the quickest, least expensive way of preserving your community and environment from the impact of a poorly conceived development project?

A CEDS *Initial Strategy Analysis* can get you the answer to this question in one- to two weeks.

For most land use and environmental issues there are a dozen or more potential strategy options. Identifying these options, then selecting that most likely to produce victory, can be a daunting task for those new to land use and environmental advocacy.

In Part III of this book I explained how to identify possible strategy options then determine which option is the most promising. If your case is simple and you have the hundred or so hours required to win most cases, then begin by pursuing the actions described in *Chapter 1 - The Easy Solution*.

If you lack the time or your case is complex, then consider retaining CEDS to prepare an initial strategy analysis for you. In most cases we can complete an analysis within one- or two-weeks for under \$1,000, though the actual fee depends upon case complexity. If there is a need to travel to your area then the fee might increase by another \$300 to \$500. But usually we can complete the analysis from our Baltimore office.

Examples of the hundreds of strategy analyses we've completed for folks throughout the United States can be viewed on the CEDS Strategy Analysis webpage:

<http://www.ceds.org/strategy.html>.

In most instances, we urge our clients not to request a written report, such as those on the webpage referenced above. We find that citizens' limited funds can be better spent on other actions. Instead,

we suggest discussing the results by phone or in-person. To discuss a strategy analysis for your case contact me at 1-800-773-4571 or Rklein@ceds.org

CAMPAIGN MANAGEMENT

For large, complex projects many citizen groups retain CEDS to manage implementation of the results of the Initial Strategy Analysis. We essentially do all the work described in this book for winning the campaign. This work includes:

- any further research needed to verify that specific impacts will occur;
- managing fund-raising and volunteer recruitment efforts;
- publicity;
- identifying attorneys qualified to handle the case;
- assisting you with attorney interviews so you can decide which to hire;
- recruiting effective, low-cost professionals to serve as expert witnesses;
- researching land preservation options;
- working with regulatory staff and decision-makers;
- assisting you with applicant negotiations; and
- managing the numerous other tasks involved in winning a campaign to preserve a neighborhood and the environment.

Usually a decision to retain us for campaign management occurs after the Initial Strategy Analysis. Frequently, the analysis shows a strategy which can be implemented with volunteers and free ongoing phone advice from CEDS. If not then the results of the analysis will make it easier for us to estimate campaign management costs.

ABOUT THE AUTHOR & CEDS

In addition to writing this book, I wrote *Everyone Wins: A Citizens Guide To Development*, which was published by the American Planning Association. I have been working in the community and environmental advocacy field for 38 years. From 1979 to 1987 I was employed by the Maryland Department of Natural Resources and spent ten of those years serving as the director of the Maryland Save Our Streams program.

In 1987, I founded Community & Environmental Defense Services (www.ceds.org), a company which assists people in resolving their concerns about activities posing a threat to a neighborhood or the environment. Since 1987, I have evaluated more than a thousand proposed development projects for impacts to neighborhoods, aquatic systems, and other environmental resources. These projects range from a single acre to massive residential-commercial complexes and range from coast to coast. In most cases these evaluations result in recommendations for minimizing impacts while

allowing applicants to achieve most of their goals. I have testified before many administrative and judicial decision-makers both as a lay and expert witness.

Over my 38-year career I have helped citizens with just about every form of growth and growth impact imaginable; not just those presented in *How To Win Land Development Issues* but many more. This experience allows me to quickly identify the impacts likely to result from a proposed development project and to swiftly formulate winning solutions. My background as both an agency insider and citizen advocate also allows me to effectively negotiate with regulatory staff and other decision-makers. This experience accounts for the unusually high success rate (75%) of CEDS in resolving citizen concerns.

CEDS is a combination of a citizen advocacy group, a law clinic, and a consulting firm. Our mission is to help people defend their neighborhood and environment from the impact of poorly planned development activities. CEDS is a nationwide network of attorneys, environmental scientists, traffic engineers, planners, political strategists, fund-raisers, and many other professionals. While our clients occasionally include government agencies and development companies, 99% of the people we help are citizens and citizen organizations. Our advice is always available free by phone to citizens. Just call 410-654-3021 or e-mail us at: help@ceds.org

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ABBREVIATIONS

Ac: Acre.

ACLU: American Civil Liberties Union.

ADT: Average daily traffic.

AFT: American Farmland Trust.

AICP: American Institute of Certified Planners.

APA: American Planning Association.

APFO: Adequate public facilities ordinance.

BMP: Best management practice.

C&D: Construction and demolition debris.

CAA: Clean air act.

CEDS: Community & Environmental Defense Services

CEO: Chief executive officer.

CEQ: Council on environmental quality.

CPTED: Crime Prevention Through Environmental Design

CSO: Combined sewer overflow.

CWA: Clean water act.

DA: Drainage area also Department of the Army.

dB: Decibel

dBA: A-weighted decibel.

DOT: Department of Transportation.

EA: Environmental assessment.

EDF: Environmental Defense Fund.

EDU: Equivalent dwelling unit.

EIS: Environmental impact statement.

EJ: Environmental justice.

EMR: Electromagnetic radiation.

EPA: United States Environmental Protection Agency.

ESC: Erosion and sediment control.

FHWA: Federal Highway Administration.

FID: Forest interior dwelling bird.

FONSI: Finding of non significant impact.

FPS: Feet per second.

GIS: Geographic information system.

GPS: Geographic positioning system.

IA: Impervious area.

ISTEA: Interstate transportation efficiency act.

JD: Jurisdictional (wetland) delineation.

LOD: Limits of disturbance.

LOS: Level of service.

LULU: Locally unwanted land use.

MGD: Million gallons per day.

Mi.: Mile

MPH: Miles per hour.

MPO: Metropolitan planning organization.

MSA: Metropolitan statistical area.

MTBE: Methyl tertiary-butyl ether

NAD: North America datum.

NEPA: National environmental policy act.

NFPA: National Fire Protection Association.

NOI: Notice of intent.

NPDES: National Pollutant Discharge Elimination System.

NPS: National Park Service.

NRCS: Natural Resources Conservation Service, formerly the Soil Conservation Service.

NRDC: Natural Resources Defense Council.

NTHP: National Trust for Historic Preservation.

OSD: Onside sewage disposal system.

PAH: Polycyclic aromatic hydrocarbons.

PDR: Purchase of development rights.

RTA: Residential transition area.

RTE: Rare, threatened or endangered species.

SCS: Soil Conservation Service; now the Natural Resources Conservation Service.

SLAPP: Strategic lawsuit against public participation.

SSO: Separate sewer overflow.

SUV: Sport utility vehicle.

SWM: Stormwater management.

SWPPP: Stormwater pollution prevention plan.

TDR: Transfer of development rights.

TMDL: Total maximum daily load.

TND: Traditional neighborhood design.

TOD: Transit oriented development.

Topo: Topographic map.

TPL: Trust for Public Land.

VMT: Vehicle miles traveled.

USACE: United States Army Corps of Engineers.

USDA: United States Department of Agriculture.

USFWS: United States Fish & Wildlife Service.

USGS: United States Geological Survey.

VOC: Volatile organic compounds.

VPD: Vehicles per day.

VPH: Vehicles per hour.

WQC: Water quality certification.