

Community Redesign

integrating
land use,
transportation,
and
natural resources



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Introduction

The design of communities and landscape is not always a hot news item. But in an era of rapid growth, with a projected population increase of one million people in the next forty years, residents of the Twin Cities have a renewed interest in how their neighborhoods and cities will take shape to accommodate this growth. At an alarming rate, communities are consuming ever greater amounts of land, serving less people and at greater cost to local governments and the environment. Meanwhile, a sense of sameness seems to threaten the unique qualities in cities across the region. Do current trends predict the future? Fortunately neighborhoods and cities do have alternatives.

As traffic congestion increases, open space disappears, land and home costs skyrocket, and our natural resources disappear, a serious questioning of past land use practices and policies has begun. Are there things that could be done differently, so that our land consumption does not outpace our population growth? Can new businesses and homes be built without sacrificing natural areas? Can all activities be located so that they are not dependent on another trip, battling traffic? How can each of these concerns be brought together in the neighborhood, town, and landscape of the subregion—the larger arena that each of us traverses between work, school, shopping, and play.

The Design Center for American Landscape is a research center at the University of Minnesota's College of Architecture and Landscape Architecture that has been trying to answer these types of questions with communities in the Twin Cities metro region since 1988. As more local developers, governments, and citizens sought alternatives to the status quo, the need for local examples became apparent. This handbook is a compilation of information and experience gained from working at a variety of project scales and locations. The approaches are drawn from a wide array of practitioners and proponents of concepts such as livable communities, smart growth, transit-oriented development, green infrastructure, and low-impact development, represented in the extensive list of references. Because of active participation in these discussions, the Center has contributed to the pool of ideas as well.

This handbook highlights and integrates these various arenas of concern—the environment, transportation, housing, neighborhood placemaking, and sustainable development. Coming from a physical design perspective, this book places emphasis on this dimension, while recognizing the importance of other issues such as financing, economics, and social services.

The handbook concentrates on the place-making elements of design that can enhance livability in the following ways: protecting and restoring natural systems, strengthening social connections, providing transportation choices, enhancing homes and neighborhoods, and integrating land uses and economic activities

The book agrees with the premise that local governments wishing to implement these ideas should:

1. Proactively plan rather than wait for development proposals to come in,
2. Prepare specific plans prior to any development, based upon livability principles, and
3. Carry out proactive planning in an open and participatory process. (Weissman, 1992)

Regardless of who prepares these proactive plans, whether it is city staff or a consulting firm, everyone in the process can benefit from knowing how other communities have faced similar issues. Staff, citizens, planning commissioners, or city council members who have seen “what might be” are better prepared to evaluate development proposals, revise existing policies, or develop programs to support their own vision.

Organization of the Handbook

This introductory chapter describes five general goals—they reappear throughout the book as a common thread—and three scales of community design. Chapter 2 is a general guide to the process used by the Design Center and its project partners as they have explored, analyzed, proposed, and implemented projects throughout the Twin Cities.

The next three chapters discuss three different scales of work that are defined in terms of size rather than political boundary, though in many cases the two coincide. Chapter 3 focuses on the neighborhood scale, chapter 4 covers the town scale and the subregion is covered in chapter 5, describing larger-scale efforts. Those with more experience with community design and planning may want to jump to the scale of work of most interest.



Neighborhood:

Areas comprised of multiple blocks within a limited geographic area, typically less than a mile square.



Town:

Places that contain multiple neighborhoods or subdivisions that share community features such as a commercial center or corridor, with an area roughly one mile to six miles square.



Subregion:

Larger areas where several communities share a resource, such as a transportation corridor or river.

Each chapter begins with the five general goals, made into more scale-specific principles. Case studies are then profiled, following the general process format introduced in chapter 2. The main body of the book is followed by a glossary of terms that frequently crop up in the professional literature and popular press.

Neighborhood Scale Case Studies

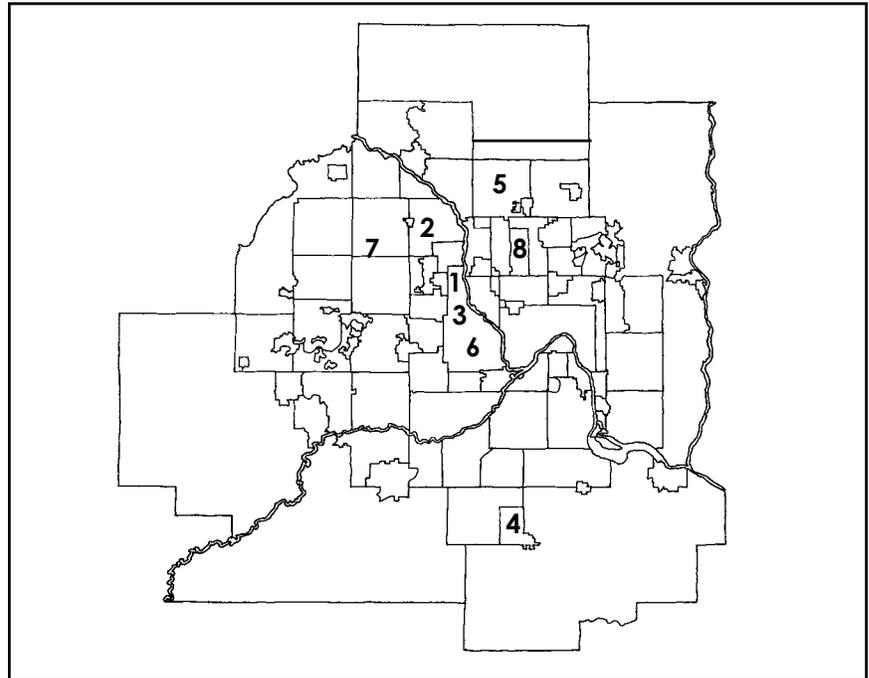
- 1. Humboldt Avenue
- 2. Brooklyn Boulevard
- 3. Near North Minneapolis

Town Scale Case Studies

- 4. Farmington
- 5. NE Blaine
- 6. Nicollet Avenue

Subregional Case Studies

- 7. County Highway 81
- 8. North Metro I-35W Coalition



Community Goals

Based upon the Design Center’s work with local communities, the following goals have been recurring themes that have guided the work:

- Protect and Restore Natural Systems
- Strengthen Social Connections
- Provide Transportation Choices
- Enhance Homes and Neighborhoods
- Integrate Land Uses and Economic Activities

Each of these goals is briefly described, including reasons why regions should be interested in the benefits of moving away from past land use practices and moving toward a pattern of development that can improve quality of life over the long term.

Protect and Restore Natural Systems

This goal reflects the growing realization that current developments are severely hampering the survival of all but the most human-tolerant plant and animal species. In this metropolitan area, it’s especially important to think about, because we are at the upper reaches of the Mississippi River Flyway, the primary bird migratory route for the mid-continent. We are also an area of exceptional plant community diversity where three biomes converge: the prairie, big woods, and boreal forest. Complementary to the concern for the health and vitality of native plant and animal species is the concern for water quality. We know that non-point source water pollution from urban and rural land use is severely degrading our lakes and streams. Certainly the Twin Cities regional identity is defined, in part, by our urban lakes and rivers. This goal focuses on natural systems—the ecological functions of the landscape—rather than strictly parks or open space. For this goal to be realized, places for habitat and movement of plant and animal species must be considered in projects at every scale. Urban runoff must be seen not only as a nuisance to be removed during storms, but also as a resource to be returned to the soil and then slowly released into the groundwater or surface waters.

Strengthen Social Connections

Many of the land use patterns that have evolved in the last fifty years have resulted in a landscape that physically separates people from each other and from local destinations. While this handbook does not have the space to delve into the many causes of this phenomenon, a new focus of civic leaders is to provide public settings where people can interact with others in their neighborhood or town. Trails, parks, streets, public, and semi-public institutions are all places that can be designed to afford people the opportunity for casual encounters of friends and neighbors. Creating these places today becomes particularly important when some traditional meeting places no longer serve that purpose. For instance, in districts where school choice allows many options, the neighborhood school is less a focal point for getting to know neighbors, however the nearby park remains a



As development pressure increases, small and large natural areas begin to disappear, until only larger wetlands remain, severely compromised by adjacent land uses.



An inviting entry area between the sidewalk and a library and recreation center. (Highland Park, St. Paul)

local gathering place where T-ball and soccer games are played. Large churches may draw from the entire region rather than the relative small geographic range of a parish church, however a local community center may be the hub of adult education classes or family programs.

Provide Transportation Choices

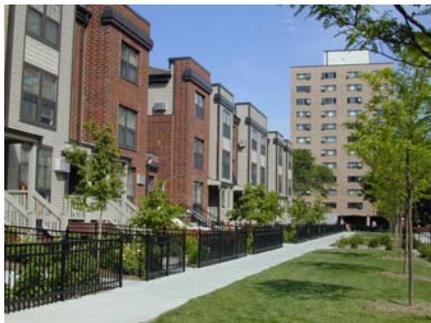
Our typical planning process does a great job of analyzing and addressing the needs of moving and parking automobiles, with less priority for other options for getting around. On most site plans, the goal is moving people from parking to building rather than between the building and other destinations such as a noon-time walk to a cafe or a walk to the bus stop. At a larger scale, trails are often designed for recreation purposes to link homes and parks, but little investment is given to other places where trails and sidewalks would be helpful, such as between parks and business centers or along arterials where bus service is available. As land uses separate and spread out, car travel becomes a requirement rather than a choice. This design strategy has resulted in more vehicle miles traveled, at great cost in the form of traffic congestion, continual road reconstruction, and diminished air quality, and many believe at great cost to the collective health of our people. As activity is engineered out of our lives, it becomes harder to integrate exercise into daily living.



The different goals address issues that are interrelated. A family bike ride or a stroll down the sidewalk to the local video store are opportunities to have casual interactions with neighbors that are less possible when pathways are not provided and there are no nearby destinations.

Enhance Homes and Neighborhoods

This goal promotes the idea of neighborhood design rather than housing development design. The prevalent practice is to place all multi-family housing in one area, single family housing in another area, and both of those uses well-separated from business or commercial uses. In theory, the desire to separate these uses creates a more harmonious environment. In practice, it also can create a landscape that limits choice in housing options within a neighborhood for people who cannot afford or do not choose to live in a single family home. If a community becomes unbalanced in its housing mix, particularly places that develop in a short period of time, concentrations of age groups may strain services such as school facilities or health care if the population is unusually young or elderly. The lack of nearby services typically results in more car trips per household, adding to congestion. In some cases, segregating land uses can also result in a concentration of poverty that can negatively impact a community's ability to attract services. A preferred approach is to achieve a harmonious environment through quality design rather than separating "incompatible" land uses that effectively create socio-economic enclaves. Paying attention to street design and access to local amenities, as well as the architectural character of buildings, are all part of designing a quality neighborhood.



For many years in the Twin Cities, the ideal home-type has been equated with single family houses. This type of housing is well-suited and preferred by some, but other types of well-designed dwellings are equally needed and desirable.

Integrate Land Uses and Economic Activity

The concept of mixing land uses applies not only to predominantly residential neighborhoods, but also to the commercial areas

of a neighborhood, town or subregion. Integrating land uses traditionally segregated by zoning, a mixed-use strategy clusters different land uses and activities within a walkable area. The benefits of such an arrangement include a reduced reliance on car trips for short errands. If housing is added to the mix, not only are more people around throughout the day and evening, the possibility of living near work allows the option of further reducing automobile dependence. A well-designed mixed use area can also create a sense of place in areas lacking such a center.

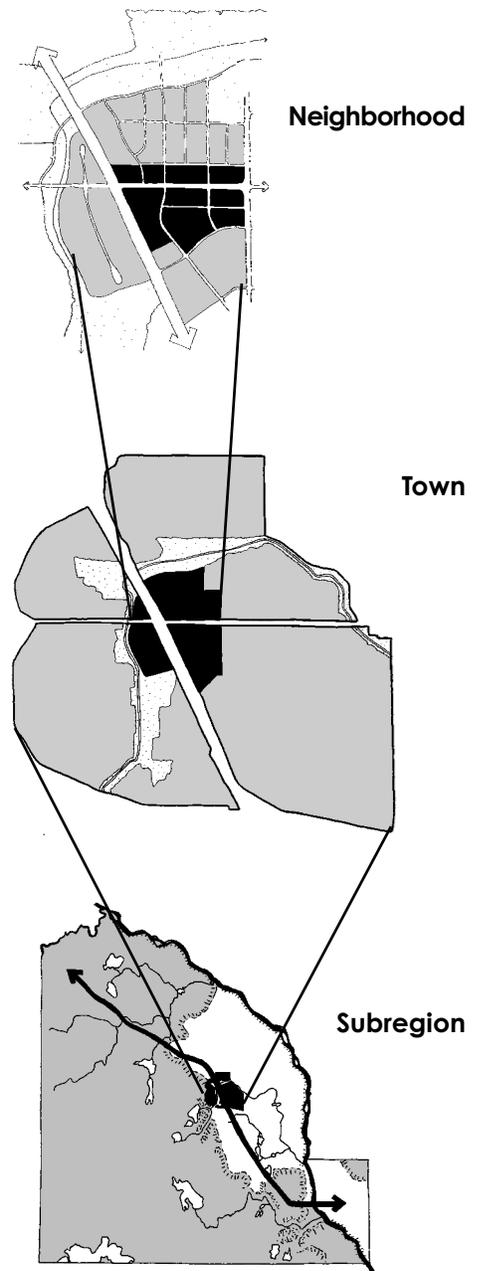


Suburban communities are retrofitting older shopping centers by adding civic open space and increasing the amount of housing near to shopping and work places.

Three Scales of Design

The goals described above are general and broad brush. How they are applied, on the ground, depends in part on the local qualities of a place, and in part, on the scale of a project's focus. Places in the metropolitan area are constantly undergoing change, with roads and utilities under repair, new stormwater requirements, and market forces that generate zoning change requests and new development options. Each of these changes are opportunities to incrementally improve the quality of the metro environment.

Sometimes the opportunities are hard to see without looking at a more detailed scale or the broader scale. This handbook discusses three scales: the neighborhood, town and subregion. They are discussed and defined in more detail in chapters 3, 4, and 5. Though presented in separate chapters, the most effective practice is to be aware all three scales on every project. When working at the neighborhood scale, knowing the larger context can inform decisions about where to locate different types of housing, pathways, or environmental restoration projects. When working at the macro scale, such as multiple communities along a highway corridor, it is important to look at the implications of subregional projects on a neighborhood or town scale. Not only does this kind of "zoom lens" approach help set priorities within a community, it also makes a better case for projects and improvements that are competing for metropolitan, state, or federal funding matches.



Chapter Two:

Planning and Design Process

Every project is unique in its circumstance and reason for being: a developer seeks a zoning change, triggering neighborhood activism; elected officials begin planning for a larger city hall; a county proposes a road upgrade; new environmental regulations require water system retrofits. While the origins of each project are different, each has the potential to add value to the community by achieving one or more of the five goals described in the introduction. Whoever initiates the process, whether it is the staff of a city, a citizen group, or an advocacy group, the effort will likely involve a variety of people and occur over a period of years. This road-map is a guide through that process, distilled from case study experiences in the Twin Cities and further afield.

The information is basic and geared toward the newcomer to the physical design dimensions of community development—whether a junior staff member or citizen activist wanting to participate in or initiate a project in their community. To those familiar with this process, the chapter offers a reference that compiles familiar strategies, and maybe a new thing or two.

The chapter outlines general process steps and tasks that will help deliver more from each project, by connecting it to multiple other threads in the community fabric. The process steps are:

- Assessing the place
- Engaging communities
- Taking inventory of the landscape
- Analyzing and interpreting the place
- Exploring design scenarios
- Agreeing on design principles
- Moving forward

Although presented linearly, in practice, the order may be different, with some parts of the process repeated several times if the area of concern is particularly complex.

Each step and anticipated outcome is briefly described, then followed by a checklist of tasks,

accompanied by helpful tools. These steps are also used to organize the case study presentations found in chapters 3, 4, and 5. They help address questions that need answering to elevate a run-of-the-mill project into a civic endeavor that captures the most of local opportunities and achieves broader community-building goals. This chapter concludes with a summary checklist of tasks and tools.

Guide to the Chapter

The following list shows what questions each process step can help answer.

Assessing the place

What has prompted the need or desire for change in the physical environment?

What processes will produce well-informed decisions and design?

Engaging communities

Who should be involved?

How can we engage local people and stakeholders?

Taking inventory of the landscape

What natural and physical resources do we have and where are they located?

How can the information be visualized?

Analyzing and interpreting the place

Where is there room for improvement?

What kind of changes are possible or desirable?

Exploring design scenarios

What kind of place can we make?

What are the different ways we can connect and integrate community systems to make places?

Agreeing on design principles

What is our conceptual vision for this place?

What design and planning principles will guide future efforts?

Moving forward

What are the critical next steps to move the project toward implementation?

What resources might help steer these next steps?

Assessing the place: issues, scales, and boundaries

*What has prompted the need or desire for change in the physical environment?
What processes will produce well-informed decisions and design?*

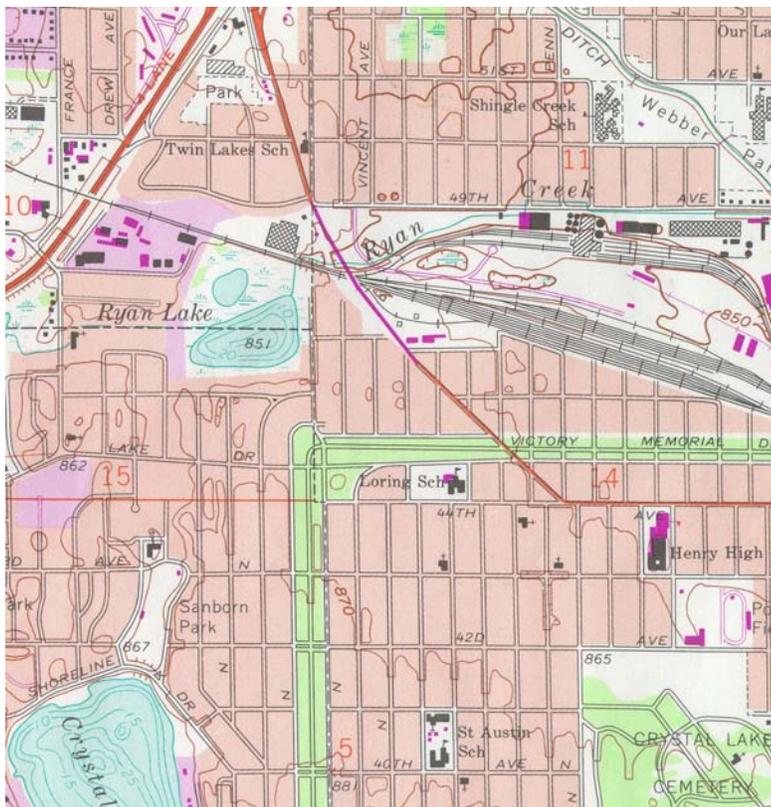
While each community project is unique, two kinds of projects are typical: an idea looking for a place, such as the location for a new city hall, or a place undergoing or in need of change, such as a highway corridor with stagnating land values. This handbook focuses on the latter, though a site selection process could use similar techniques to evaluate the potential of different sites. For a place in need of change, the key initiating task is to develop a process that clarifies issues, explores alternatives, involves the community in a variety of ways, and arrives at an implementation strategy that is politically and economically feasible.

Desired outcome:

The outcome of this guided discussion will be a process proposal that includes the general scope and scale of the study area, general community redesign goals, process steps, and timelines.

Task: Agree on general goals, work scope and parameters of study or project.

For discussion, draft a list of general goals such as the ones outlined in this book. Having that discussion with a map, such as a USGS Quadrangle, in front of the group can generate a more focused discussion about the parameters of a study or project and who should be involved (tool 1). The area of study may include more than one boundary—for example, a focus area where the most change is likely to occur and a broader study area to provide context. In addition to geographic boundaries, other parameters should be established, such as policies or areas that are “off-limits” for change. Circumstances may alter these parameters as the process moves forward, however, it is useful to articulate as many of these givens as possible. By working backwards from fixed deadlines such as grant application due dates, a general timeline and work scope can be established.



Tool 1: A USGS quadrangle map

This 1"=2000' scale map is particularly helpful, because it identifies topography, roads, major buildings, and natural features. Municipal boundaries are less prominent, and looking at an area in a different context than the typical neighborhood or city map helps people think outside the box. These inexpensive maps are available as electronic files or hard copies that can be purchased at map stores or the Minnesota Geologic Survey. Be sure to check when the maps were last updated.

Task: Discuss issues and review existing plans and projects in the area of concern and surroundings.

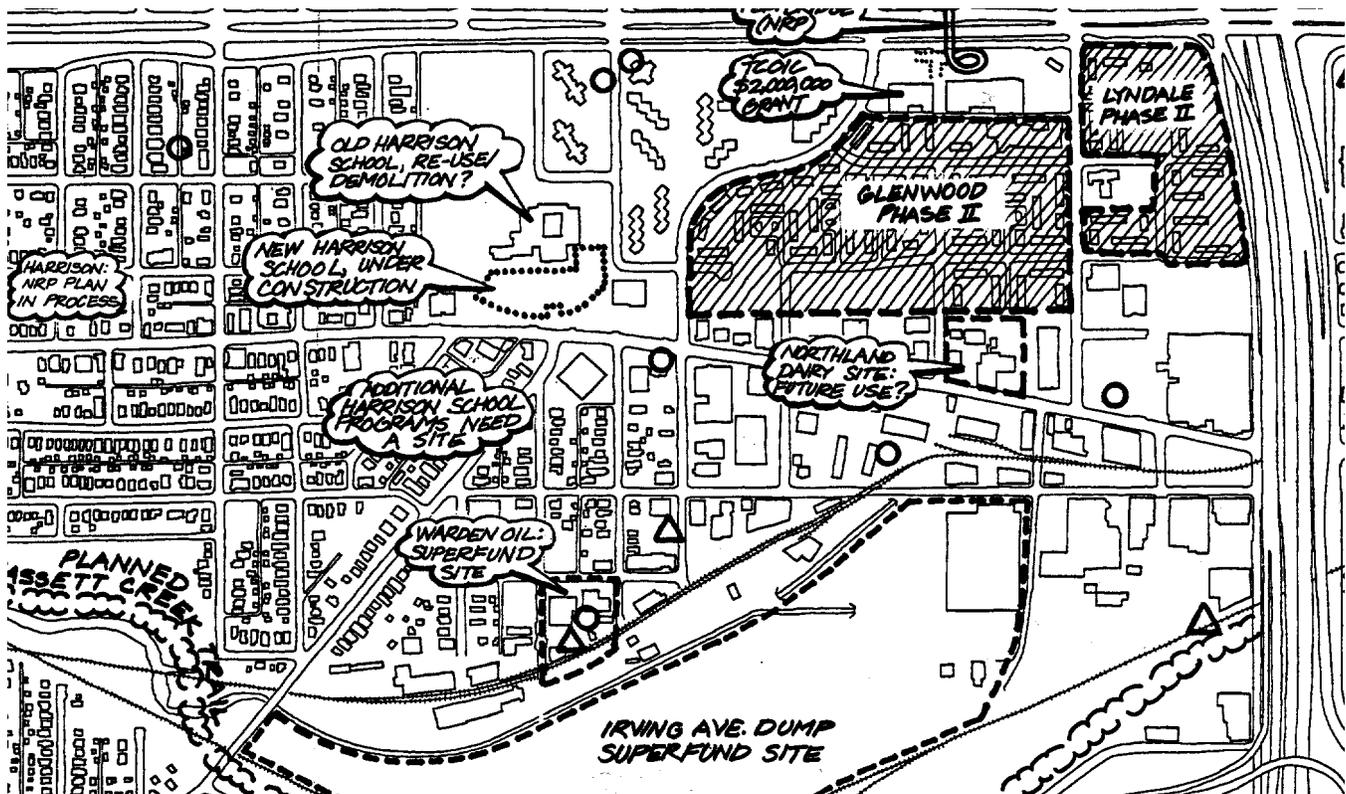
A small group can brainstorm to create a draft list and map of issues, proposed plans and projects in the vicinity. Visit with others to verify or add to the information shown. This activity helps build awareness of your project, and will reduce the number of surprises later on. Visit the site. Resources include neighborhood, city, and regional plans for the future, including capital improvement plans, comprehensive plans, small area plans, and transportation plans (tools 2,3).



Tool 3: A walk-through or drive-through of the area
Impressions of the actual site as a pedestrian, bus passenger, or driver can heighten awareness of the positive elements or shortcomings of a place. This activity is most effectively done as a group—partly to insure that it happens, partly because casual insights and conversations can be thought-provoking. The tour can also include other parts of the community that demonstrate positive qualities that might be transferred to the area of concern.

Tool 2: Annotated map

This type of map serves to capture as many potential elements that could affect or complement each other. The example includes elements that were happening at a larger or smaller scale than the study at hand. The elements are displayed in a bubble over the map, providing a mental map of where activities are taking place, suggesting possible relationships among previously separate efforts.



Engaging local and regional communities

Who should be involved?

How can we engage local people and stakeholders?

This handbook proposes that the process of building metropolitan communities benefits from the knowledge and participation of a broader range of people than those typically involved in zoning or planning changes: decision makers, their staff, and directly-affected property owners. Inviting broader participation does not imply a free-for-all, but rather a thoughtfully planned involvement strategy that moves beyond the public hearing format. Other forms of participation can yield valuable information and deeper insight for those involved.

Desired outcome:

An effectively designed community engagement strategy will create goodwill and utilize the local knowledge and talents available. A well-informed group of citizens and constituents will be more aware of upcoming change and its rationale.

Task: Decide who should be involved and how.

There are many different formats for involvement, such as an open participation or a stakeholder group process. An expansive pool of participants can result in more varied thinking. Beyond planning commissioners, community development staff, planning staff, property owners, residents, and elected officials, consider

Examples of format options:

Open participation process

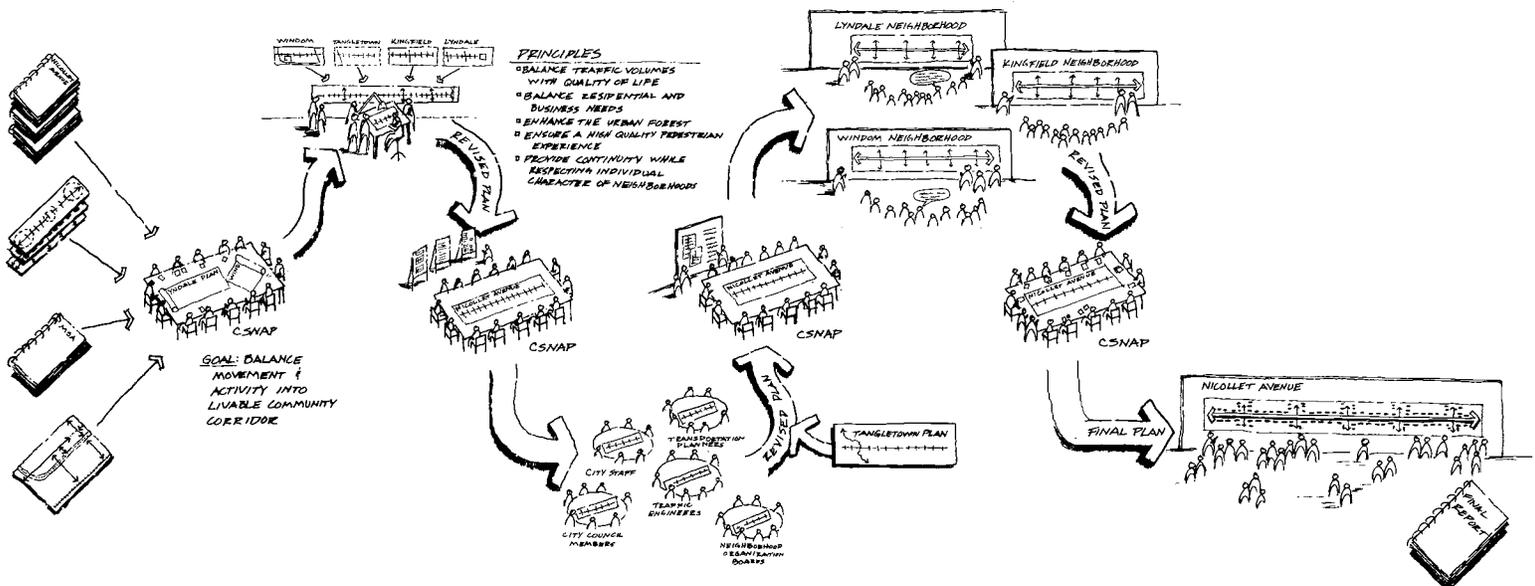
The public is invited to attend a series of meetings and workshops, organized by a task force or committee, with input and feedback recorded and summarized as a report to a decision-making body. This format is inclusive, giving all a chance to participate. However, the weight of participants' opinions is unclear and attendance may vary widely, making it difficult to progress through a series of issues or decisions.

Stakeholder group process

The sponsoring organization assembles a stakeholder group, representing all primary interests in the project. The stakeholder group controls the agenda and identifies information and analysis needs to support staff. Each member reports to and represents their constituency group. A more in-depth awareness can result as well as a greater chance that the stakeholder group's recommendations will be supported by participating constituency groups. The process can be more time-consuming and is most effective if members communicate with and responsibly represent the interests of their group. If no agreement on recommendations can be reached, a majority and minority report can be produced.

Tool 4: Process diagram

A depiction of the process, including images of products as well as where and how people will be able to participate, will be helpful throughout the study.



including members of advocacy groups, regional organizations, and service groups. Diagramming the process in an illustrated flow chart is a helpful brainstorming and communications tool (tool 4).

Task: Encourage productive discussion and information gathering from a diverse group of people affected by the project.

Being clear about the desired outcome how “input” will be used will create a better experience for everyone. Having the group agree on their own set of ground rules is an effective strategy (tool 5). There are many formats for conducting sessions. For example:

- Informational meetings serve to get the facts out.
- Workshops imply more engagement with concepts or design scenarios.
- Roundtables bring together experts or interested parties to share information and discuss specific topics.

Task: Create a communications plan.

The goal is to keep people informed, including those less directly engaged in the process (tools 6,7,8). For instance:

- Record all public meeting comments verbalized on a flip chart.
- Summarize the meeting, and also transcribe the flip charts verbatim, and send periodic briefs or newsletters.
- Post short summaries and proceedings on a project website.
- Make short presentations to recognized community groups
- Videotape meetings for community cable.



Tool 5: Interactive models or maps

Drawings or physical models of a place, with alternative designs or parts to move around, are a particularly effective way to engage people. The model allows people to move close to the discussion and challenges them to understand the locations of things. Overlays, such as a quarter mile/five minute walk circle or transparencies that show below-surface soil conditions or locations of utilities can also enhance understanding of the site. Aerial orthophotos—photographs that are reproducible to a measured scale—can show detail as well as the relationships between places that might not be visible from the eye-level view. Orthophotos also capture vegetation patterns not typically captured on a map.

Tool 6: Feedback or comment sheets

Provide time to fill out at the meeting, for collection at the end. People rarely send comments in after the fact, though this should always be an option. Asking people to briefly comment-on or circle ideas that they like can be helpful in getting a read on what the less vocal participants are thinking. It also allows people to absorb different concepts or information at their own pace.

Tool 7: Project website

This tool is labor intensive, but has the benefit of keeping people informed about the project. Keeping the site fresh requires posting timely updates. Meeting summaries created along the way can be incorporated into a final report or document.

Tool 8: Briefing sheets

Specific information about traffic flows, housing types, or native plant communities can be summarized into short hand-outs. Some concepts may be unfamiliar, because they run counter to the way developments have been constructed in recent years. Examples of these briefing sheets are in the “ingredients” chapter of this text. Seek brevity, as most people will only have time to skim either prior to or during a meeting.

Taking inventory of the landscape

What natural and physical resources do we have and where are they located?

How can the information be visualized?

In this information age, availability of data is less a concern that finding it, sifting through it, and presenting it in ways that make sense to people. Information gatherers will vary by project. It may be consultants, a city staffer assigned to a task force, or a citizen activist. Not every piece of information is relevant, but taking inventory of a place should include information that can inform the achievement of all five community design goals. That means collecting and mapping information on natural resources, transportation systems, land use and local economy, neighborhood features, and social issues. A menu of inventory options goes into more depth on suggestions for how and what to collect on each of these topic areas (tool 15). Inventorying happens throughout the process, as new information becomes needed or available. Often, design scenarios created through the process will generate questions that require more research.

Desired outcome:

This step should result in a shared understanding of the change area as well as surrounding areas of potential impact. Information gaps can also be identified and filling them prioritized.



Task: Get out into the landscape.

To best get a sense of how the study area functions, there is no substitute for being there. A group site visit is an effective tool for kicking off task force or committee work. Other techniques include photography assignments and windshield surveys. If a site visit is not possible, a picture, or birds-eye aerial photography tour is helpful (tools 3,9,10,11).

Task: Collect relevant studies and reports and make data available to participants.

Information such as geotechnical surveys, social service assessments and transportation reports can be digested into briefing sheets (tool 8). Some reports may be so relevant they should be excerpted or duplicated in their entirety, for the more detail-minded. Precedents of similar projects are another form of useful research early on and throughout the process (tool 12).

Task: Take advantage of available mapped data.

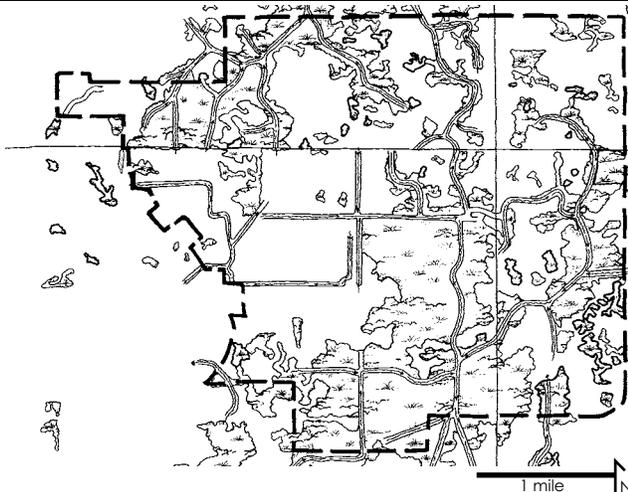
Many cities, counties, and agencies have geographic information systems (GIS) that contain data layers useful to a projects, as well as traditional maps (tools 13, 14).

Tool 9: Aerial bird's-eyed view photos

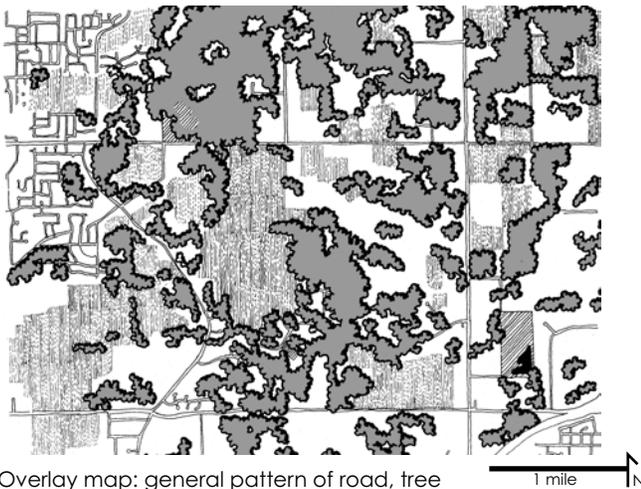
The view from lowlevel (500 feet+) captures the patterns and spaces of urban and rural spaces particularly effectively. A different view of a neighborhood or familiar place can often reveal insights that the eye-level photo cannot duplicate. While it requires only one hour of flight time, many images can result that are useful for communications pieces, inventorying physical developments and before and after image sketches.

Tool 10: Windshield survey

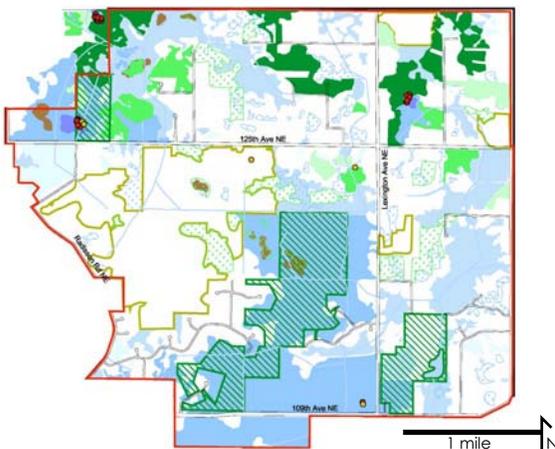
This data gathering technique simply involves driving through the site, map in hand, with a checklist of characteristics and qualities to note. Results can be tabulated in a variety of ways, and can yield information such as the numbers of a particular type of businesses in the area, the amount of vegetation, or the presence/absence of people using a space during different times of the day.



Overlay map: wetland complexes and drainage ditch systems, hand-drawn from the USGS quadrangle and National Wetlands Inventory.



Overlay map: general pattern of road, tree cover, and farm fields, hand-drawn from USGS quadrangles and aerial orthoquad photographs.



Graphic from a digital natural resource inventory showing different patches of wetland, woodlands and location points where rare and endangered species have been identified. Different combinations of information can be generated, such as only the highest quality woodlands, or all patches over a certain acreage.

Tool 11: Photography assignment

To get a better sense of important local place, values, or concerns, send people out with a camera and set of instructions. People can be asked to take pictures of places they treasure, or places that need improvement. They can be asked to stay within the study area, or be encouraged to document places elsewhere that have qualities they enjoy. People can be asked to talk about their images with the group, or a more formal analysis can look at the content of the images to draw conclusions.

Tool 12: Precedent research

Learning about projects that display similar characteristics to the scale of the project can add insight and expand the palette of possible solutions. This should be assigned to consultants, if available, otherwise committee members recruited for their expertise can be tapped. Other precedents might relate to the project "type" or "situation," such as corridor plans and projects that encouraged mixed use redevelopment or places that were successful in turning around a big demographic imbalance. Organizations such as the Urban Land Institute (ULI) frequently publish profiles of projects, as do publications on landscape architecture, architecture, and real estate development.

Tool 13: Overlay maps

Overlay maps show information themes on separate layers, but at the same scale. Displayed on transparencies together, relationships between different land uses become easier to detect than if viewed on separate maps that are at different scales. In the example above, the two layers could identify where park land acquisition might be focused or where future development could be clustered. Overlays can be hand drawn, as shown to the left, or digital, as part of a Geographic Information System (GIS, tool 14). Hand drawn layers are the appropriate tool when understanding the big picture is important and pinpoint accuracy is not required.

Tool 14: Geographic information systems (GIS)

GIS is a tool for electronically storing spatial data. Information is coded, or digitized, into a standard coordinate system that relates a shape or point to a location. Information is stored in different layers that can be combined in a variety of ways. Not only a storer of information, such as property boundaries or soils, GIS can also be used as an analysis tool, by asking for intersections or unions from different layers, similar to other database queries, but with a map resulting. For instance, GIS could be queried to find all the properties that are over 5 acres or have valuation above a certain threshold. Because it is stored in a database format, this query could also yield the number of acres as well. While much of this could be done by hand, GIS allows the generation of these hybrid maps at a common scale, with less additional effort once the data has been digitized.

Tool 15: Menu of inventory options

the following notes summarize specific inventory and data gathering activities, organized topically under the five goals described in the introduction.

Presentation recommendations:

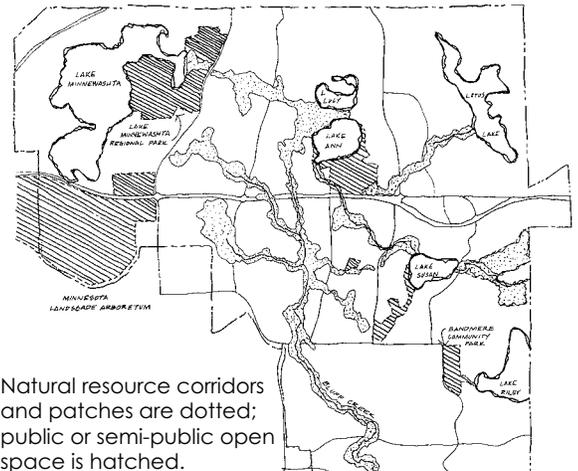
- Use a base map that is scaled for the task at hand, for instance: 1 inch = 200 feet for a neighborhood project, 1 inch = 1000 feet for a town scale investigation, and 1 inch = a mile for a subregional overview.
- Three-hole punch the information and provide a notebook for committee members, particularly for a process that involves a community or task force that continues to meet over a period of time.

Natural resources

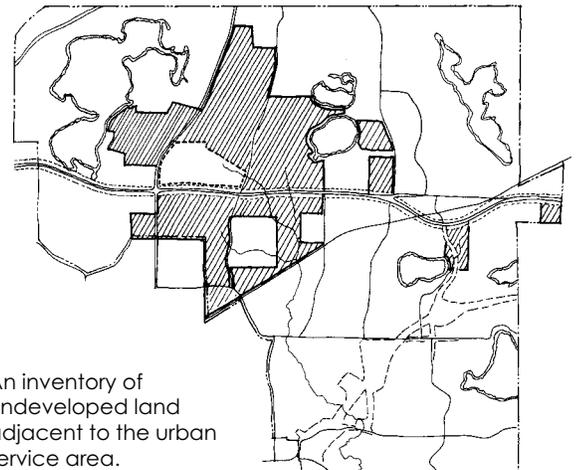
- Often, a lack of knowledge or awareness is the biggest threat to natural resources at the neighborhood scale. Here are some ways to overcome this problem:
 - Walking tours.
 - Hands-on habitat restoration demonstration project.
 - Telling the story of what the land used to be like in earlier days—historical maps and descriptions are particularly compelling.
 - On maps and plans, depict the site within the big picture—as a stepping stone or small link to a larger network of natural areas.
- Gather or collect data on neighborhood stormwater, plants, and animals. If there is little natural habitat remaining, examine soil and water patterns for good locations to recontour, replant and restore.
- Survey neighborhood residents to get a sense of what they know about their local natural resources and what they value.
- Identify open space sites that are both valued by residents or have local natural resource significance by adding biodiversity, unique or scenic views or water quality benefits.
- Determine the threats and opportunities to priority sites or systems, such as stormwater overloads or restoration potential through stormwater management practices.
- Identify design and funding strategies—short and long term—to address threats and capitalize on priority locations. Include neighbors as much as possible in the information gathering, prioritization and implementation planning.
- Include this information in Request for Proposals for development sites and public works projects that intersect with priority sites.
- Evaluate developments as to whether they add threats or capitalize on opportunities to preserve or restore natural systems and site.

Social dimensions

- Inventory existing assets—where people gather, and what programmatic or physical aspects of the place brings them together.
- Conduct a demographic analysis to determine who is missing from the picture—elderly or maybe young families.
- Evaluate underutilized public rights-of-way, areas, and gathering spaces. They may not be comfortable, easily accessible or offer an attraction—something as simple as a bench under a tree.
- Involve citizenry in the inventorying of public spaces. For instance, involve the block club network to collect information.
- “Homework assignments” can be given to people on the task force or citizens committee—ask them to photograph or map their favorite neighborhood places, where they would expect to run into neighbors or meet a friend.



Natural resource corridors and patches are dotted; public or semi-public open space is hatched.



An inventory of undeveloped land adjacent to the urban service area.

Transportation

- Find out whom has jurisdiction over the streets in the planning area, the classification and design parameters for that type of street. For instance, it may be a county road, or a city street that receives state aid. Each of these facts makes a difference as to minimum widths, number, and location of driveways. Also find out if these jurisdictions have any immediate or long-term projects regarding the street.
- Gather Average Daily Traffic (ADTs) counts from the city public works department, if they exist. Many local streets do not have these.
- Map out all sidewalks, off-street paths and bike locations. Often these are not included in standard city maps.
- On a map, notate all destinations that may attract numbers of people, such as stores, restaurants, coffee shops, churches, schools, bus stops, trails, places of employment, and parks.
- Map out existing vegetation patterns along movement corridors. This can be begun with an aerial orthophoto, then field check in particularly critical areas, such as along sidewalks, parking lots, and parks.
- Review typical sections of streets to observe widths and locations of roads, medians, sidewalks, distance to the nearest building vegetation edge, and on-street parking areas as well.
- Research the existing bus routes through the area, their frequency of service and destinations. Also research the level of car ownership in the area, from census tract information.
- Calculate the intensity of development around existing or potential walkable areas.
- Commission an analysis of traffic speeds and movements at several critical locations, during the week and weekends.
- Determine where critical pedestrian crossings are located, based upon an analysis of informal pathways through spaces, desire paths, between work or home and destinations. Identify gaps in the pedestrian network, overlaying desire paths with the existing pedestrian network map.
- Determine what factors are detracting or contributing to neighborhood quality of life—traffic speeds, volumes, or driver inattention to pedestrians.
- Test different strategies to address problems, such as traffic calming techniques or driver awareness tools.

Land use mix

- Supplement existing land use maps with a richer array of distinctions between types of uses. Indicate multistory vs. single story buildings. At the neighborhood scale, it is possible to drive the blocks or use the yellow pages and identify the name and type of business. This information can be used to better understand numbers of employees and customers that are part-time residents of the neighborhood.
- Draw a “figure ground” of buildings. Either use existing GIS data layers or hand-trace the footprints of buildings off of 1”=100’ aerial maps, called “half-sections” and color in the buildings. This drawing will give a sense of the scale of buildings and how pedestrians would feel in the environment around the buildings. Including stands of vegetation gives the complete picture of how open or closed the buildings are.
- Have people take photographs of environments they enjoy being in and feel safe in, and also less favorite places in the neighborhood. The photographs can be discussed or analyzed to better understand local preferences and valued places as well as areas in need of attention. These places can then be mapped.

Homes and neighborhoods

- Through local government tax records, inventory the age of houses and determine the predominant ages and housing types.
- Map different demographic profiles to show distributions of ages and household types. Cross reference this information with the land use mix map to show where new housing types might be needed to address unmet housing needs.
- Select and analyze a prototypical house, multifamily complex, or business and show how alternative enhancements to these structures and site could work within the neighborhood, by adding more green, improving the exteriors, or adding more space without negatively impacting the area. Successful alternatives can be the basis for design guidelines or criteria for a targeted neighborhood fix-it loan program.

Analyzing and interpreting the place

*Where is there room for improvement?
What kind of change is possible or desirable?*

You've gathered or reviewed piles of information about the physical, social, and economic dimensions of the place, as well as information about how other areas facing similar situations have addressed the issues at hand. This inventory is, in itself, an act of analysis, because decisions have been made about what information to collect. Taking this process a step further into analysis means putting together several different layers or pieces of information together to answer questions. It is important to distill the analysis into a brief set of conclusions that can be used effectively through the remaining steps.

Desired outcome:

The analysis should result in clearly reasoned and illustrated conclusions about the feasibility of different natural resource, land use mix, and transportation options.

Task: Formulate questions for analysis.

The analysis needed is directly related to the goals articulated for the project or study area (see Example Box). Include qualitative aspects of the area, such as valued views to preserve (tool 16). Analyze quantitative aspects of the area, such as demographic information, with physical data, such as existing transit service to understand where the greatest gaps exist between need and service.

Task: Create maps that locate where desired improvements could be sited.

Using the GIS layers or hand-drawn maps collected or created for the inventory, combine different layers to highlight spatial relationships between important components needed to achieve project goals. A physical design analysis should graphically or verbally highlight, compare or contrast important dimensions of inventory information or design concepts (tool 14).

Task: Evaluate existing conditions with respect to different physical, social, and economic criteria.

Before jumping to conclusions about the causes and solutions to perceived problems, a more systematic review of the area will result in a more complete array of the potential limits and opportunities of an area. A basic checklist can be used for projects with a narrow focus. A tool such as a matrix is more suited to a project with multiple goals (tool 17).

Example: Using goals to frame questions

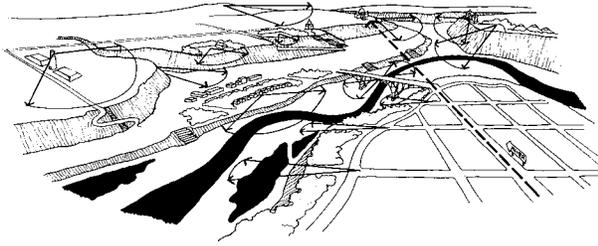
Protect and restore natural systems
Where are local water quality problems occurring and what alternatives exist for correcting them as part of proposed improvements?
What are the threats to existing natural areas and how can they be addressed in the context of the study area?

Strengthen social connections
Are there existing gathering places that could better accommodate people?
What attractions can be accommodated locally that current residents or employees seek in other places?
What places do people avoid?

Provide transportation options
What is the best location to add the development intensity needed to attract transit service?
Where are prime walking or bicycling destinations located and what is the quality of pathways between them?

Enhance homes and neighborhoods
What are the maintenance needs of the most common house type and where are they concentrated?
Is reinvestment occurring in older neighborhoods, as shown by building permits?

Integrate land uses and economic activity
What kind of demographics are needed to attract commercial services that are lacking?
Where are opportunity sites available to add new uses that complement existing development?



Tool 16: Perspective drawings and diagrammatic maps
 Drawings that accentuate three-dimensional qualities can be effective at recording and communicating prominent features and views.

Tool 17: Matrix

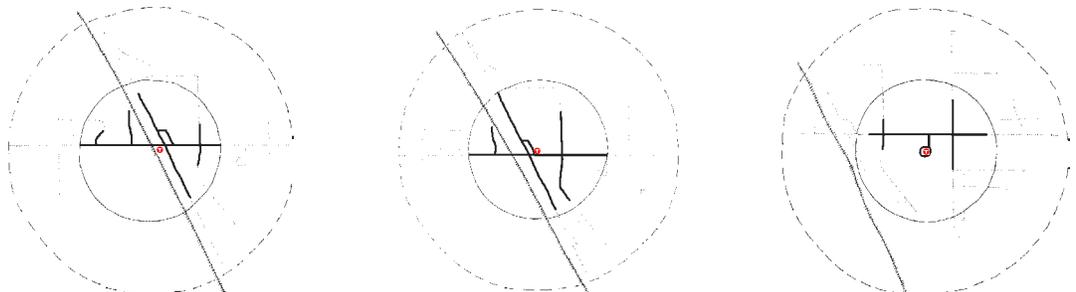
A matrix is a tool to be more systematic about analyzing the dimensions and qualities of a place. Goals could be the columns of a spread sheet, while physical or social dimensions could be the rows. The existing conditions of a site or area can be recorded in each cell of the matrix. This analysis can be accomplished with words, diagrams, photographs or a combination. Further into the process the matrix can then be used to evaluate alternatives, using the same criteria. Criteria can be quantitative, such as frequency of transit service, or more qualitative, such as perceived safety of bus stop areas.

Matrix: Transit-Oriented Design Alternatives Analysis

① Railroad Right-of-Way Transit Station ② Co Rd 81 Busway Transit Station ③ Alternative Transit Station Location

Walkable Routes
 Which streets enable walking access to the transit station area?

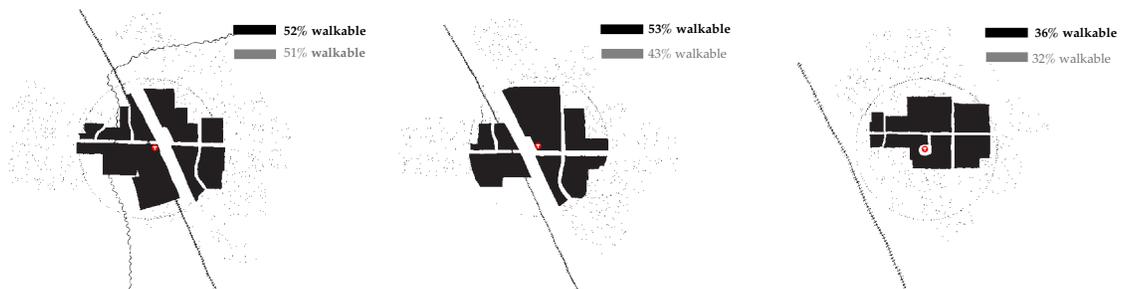
inner circle: 1/4 mile radius
 outer circle: 1/2 mile radius



Walkable areas

Which areas are within convenient walking distance of the transit station?

■ parcels within 1/4 mile or 5 minute walking distance
 ■ parcels within 1/2 mile or 10 minute walking distance



Mix of Land Uses

What is the mix of land uses in this district?

■ Single Family Residential
 ■ Multi-Family Residential
 ■ Commercial
 ■ Institutions
 ■ Parks
 ■ Industrial
 ● Transit Station



Exploring design scenarios

*What kind of place can we make?
What are the different ways we can connect and
integrate community systems to make places?*

There is a good chance that whoever initiated the project or study has some design scenario or option in mind. It is always a good idea to look at more than one scenario, even if only to confirm the original idea. Each design scenario is a visual representation of how the same general design principles can be applied to the site in different ways. Whenever used, design scenarios are not intended as the final plan, but rather a catalyst to discussion and a means to test the implications of different directions or emphases that the project could take. Proposing scenarios is helpful throughout the process of designing a community.

Desired outcome:

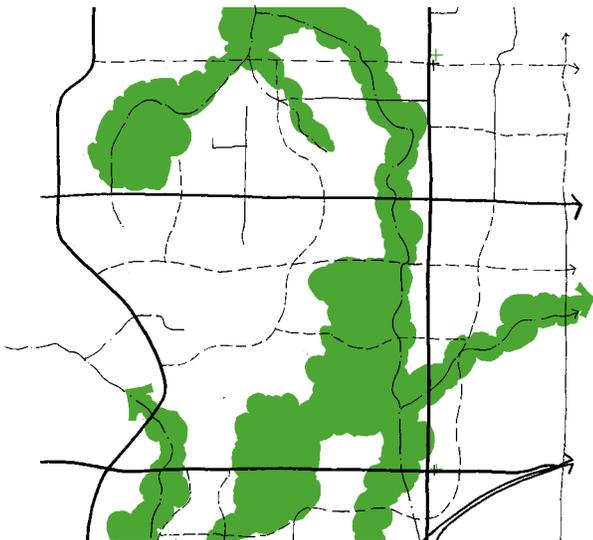
Exploration of design scenarios should yield a richer array of possibilities than moving ahead with a single idea. Typically a hybrid scenario will result, bringing into the project a more multi-

faceted project that meets more needs than originally conceived. Taking the time to explore ideas on paper is well spent, considering the time and expense of a capital investment.

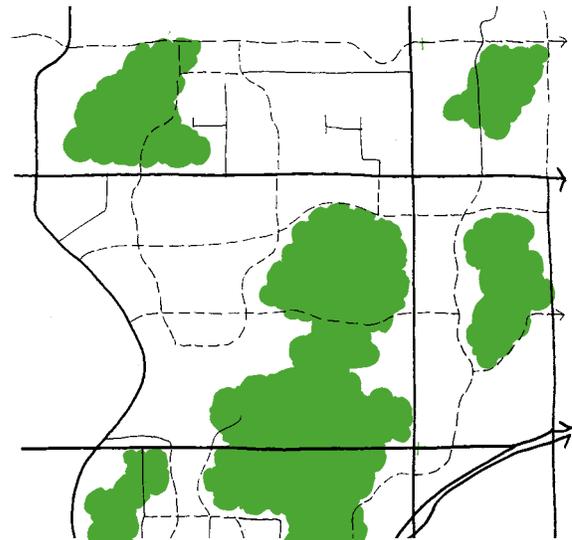
Task: Use design scenarios throughout the process.

Below is a description of how scenarios might come to play at different stages of a planning or implementation process (tools 18, 19, 20).

Initial stage: Concepts are tested conceptually at a macro scale can better inform the information needs for inventory and analysis. Another approach is to select a small focus area for a quick test of scenarios. In the act of creating these initial scenarios, designers may discover potential program elements or information gaps that need to be filled. These images can also be useful to generate interest in the project or for grant and funding proposals.



Community built around the design principle of connecting linear open spaces along the water system.



Community built around the design principle of preserving and buffering large natural areas.

Tool 18: Initial stage concept diagram

Only the major components are shown, such as roads and open space, as in the illustration. An even simpler technique is a bubble diagram, in which shapes are blocked out in wide markers on an existing map.

Mid stage: At this stage, the scenarios should illustrate how different principles, emphasized to different degrees, can impact the results or how different interpretations of the same principles can yield a different mix of activities and land uses. Discussion of the scenarios can yield a more focused list of desired results and design principles to guide evaluation of future design proposals. This process piece is discussed more fully in the next section.

Final stages: More nuanced design explorations can be tailored to show how the place can be fine-tuned in a variety of ways. Different results should be compared and contrasted with regard to the on-the-ground experience of those experiencing the place, with emphasis on the pedestrian, bicyclist, or disabled person. More specific wildlife and water quality impacts can also be evaluated at this level of detail.

Task: Propose a spectrum of design scenarios that a design team or workshop group can apply to the site.

There are different approaches that can help shape a set of community design alternatives. A wide spectrum of approaches, in the land use mix or formal arrangement, can help participants better understand, articulate, and develop priorities. It is important to explore truly different alternatives, not merely minor variations of one idea. The following list suggests some that have proven useful in designing neighborhoods, towns, and subregions:

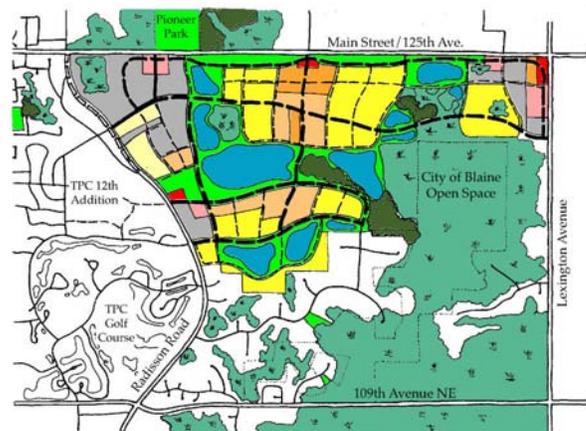
1. Most change to least change. This scenario frame can test the limits or ambition of a group or community and helps people think outside their preconceptions.
2. Land use mix. This scenario frame explores each potential land use to its maximum limit. This exercise demonstrates the suitability of the entire area for one kind of land use or another.
3. Goals. Create different scenarios emphasizing one goal with other goals being more subordinate. This scenario frame is helpful to understand the priorities of

different constituencies, but also the potential negative impact on other goals.

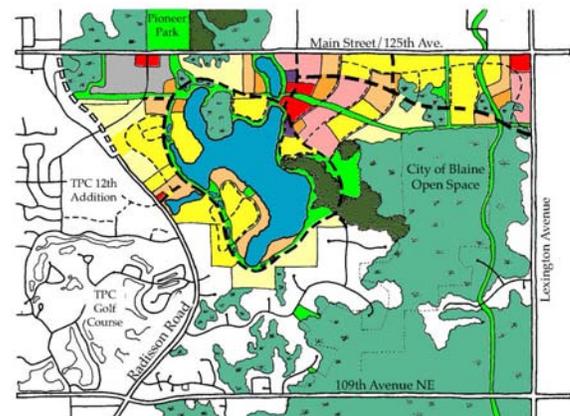
4. Potential funding sources. Realistically, many community redesign projects cannot take place without a combination of financial strategies. Often grant, loan, or tax-incentive programs are an important leverage point for communities in getting the kind of project they are seeking, in partnership with the private sector. Scenarios can be created that are geared to the priorities of different funding programs.

Tool 19: Mid-stage concept scenario diagrams

The top scenario is a big picture concept for organizing development around an open space system, used at the initial stage of the study. The lower two scenarios presented here were produced mid-stage.



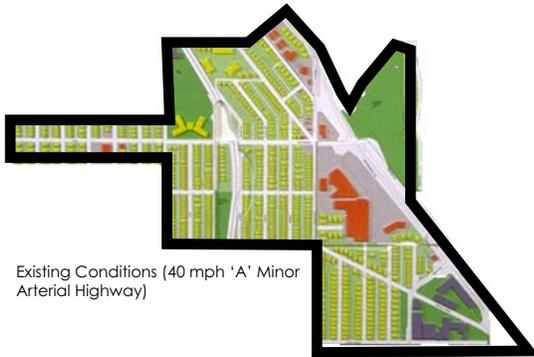
Connecting Neighborhood Scenario



Parkway Loop Scenario

Task: Select a method of presenting scenarios that is easy to grasp, with enough detail to understand implications

Depending on the scale of work, scenarios can be created and presented in a variety of formats. Generally, it is difficult for people, especially in a large room, to distinguish fine differences between scenarios. If the drawings look too similar, take a step back and either enlarge the area of concern, or use a different technique, such as a model or diagram rather than three different colored plans (tools 18, 19, 20).



Existing Conditions (40 mph 'A' Minor Arterial Highway)

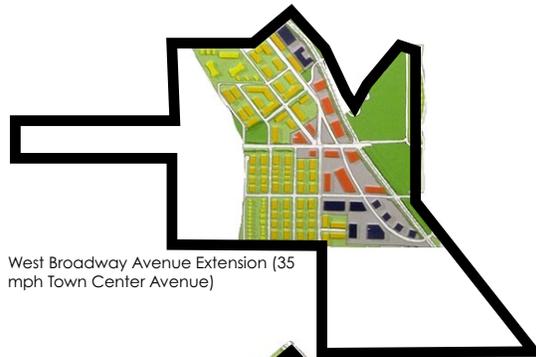


Composite Scenario: Crystal Lake Terrace Neighborhood (35mph Town Center Avenue)

This pizza box model shows the final composite scenario in place, after groups had discussed three alternatives, shown to the right, that explore least area of change to most change, as well as land use mixes and different designs for the main roadway running through the area.

Tool 20: Final-stage interactive models and maps

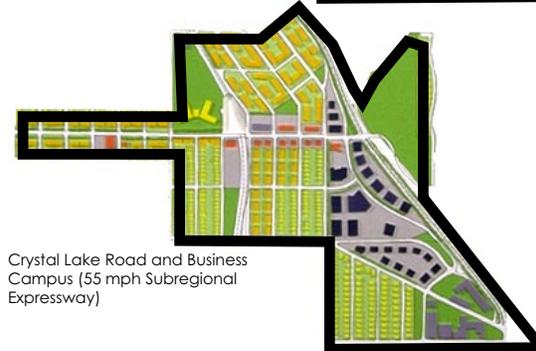
A "pizza box" model, named for its resemblance to a delivery box, is appropriate for smaller group meetings. The example shown was for a the neighborhood planning effort, the scale at 1 inch equals 200 feet. Roads are drawn in and buildings, cut out of foam board in the appropriate land use color, are attached. Topography can be suggested by building up layers of foam core. Different areas of change are cut out of the base, allowing new alternatives to be modeled and shown in the neighborhood context. The initial model building is an investment in time, but well worth the effort because these models give people a more tactile understanding of where and how different alternatives play out. It is particularly useful when multiple stakeholder meetings are anticipated, or a long planning horizon is involved, because the model can then be used many times, with new scenarios easily modeled as the process evolves. If multiple small groups are meeting simultaneously, the model base and different alternative pieces can be photocopied. If this method is used, group members can cut and reshape the pieces to create their own composite scenario.



West Broadway Avenue Extension (35 mph Town Center Avenue)



Terrace Transit Village (45 mph Community Boulevard)



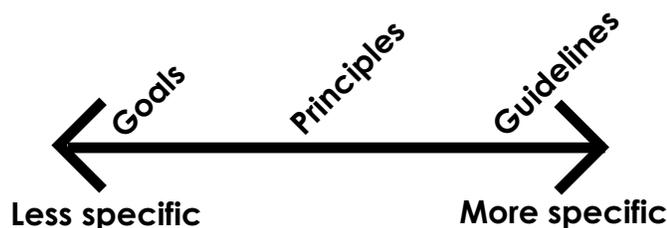
Crystal Lake Road and Business Campus (55 mph Subregional Expressway)

Agreeing on design principles

What is our conceptual vision for this place?

What design and planning principles will guide future efforts?

Between the planning and implementation stages of any community redesign, many variables can change. For example, the site boundaries may expand or an expected funding stream may dry up. Because such variables shift, it is important to agree upon a solid base of planning or design principles that can be adhered to, but achieved in a variety of ways and hold up over a long period. Design principles typically define preferred relationships between uses and outcomes that are more specific than general goals, but less specific than guidelines addressing the details of site or buildings. Every design scenario is based upon principles of some sort, whether explicit or implicit. Making the underlying design principles explicit is not only needed for creating a good set of alternatives, but also for coming to agreement on the set of principles that will guide the selection of developer teams, the review of plans and the judgment of success or shortcomings of the final results.



Desired outcome:

This step will yield a set of principles that will guide the implementation and evaluation of the project.

Task: Gather and assess feedback on design principles.

In the earlier stages of a community planning process, it is important to encourage people to evaluate the principles rather than the pictures themselves. The scenario illustrations are useful tools to picture the implications of design principles. However, the many variables that come between early planning and ultimate project initiation will make the image rapidly obsolete as a design concept. The time for detailed scrutiny of plans is during later stages of the project, when the design concept comes in for more formal review in front of planning commissions and city councils. Tools 21-23 are useful for focusing feedback on the principles rather than the plan.

Task: Summarize and illustrate the results.

Based upon the results of feedback, a new set of principles can be demonstrated with a new scenario and illustrated with diagrams to help visualize words into physical forms (tool 24).

Tool 21: Small group discussion

Principles from each scenario are discussed by category and the small group agrees on a composite list of principles to bring forward to a larger group. The larger group can then discuss and agree upon principles that are common. For areas of less agreement, these results can be carried forward to the decision-making body as-is, or a simple straw poll can be held to demonstrate levels of support for different principles.

Tool 22: Decision-maker review

Results of design scenario forums or meetings are summarized, focusing on issues, pros and cons that surfaced. This report is shared and discussed, with decision-makers then going through their own selection process. A simple technique is to go around the room asking each decision maker to select a preferred principle from each topical category. The subsequent speakers add items missing from the developing list, or propose an alternative selection. A full-group discussion can then focus on the areas of difference, with a show of hands determining the final list.

Tool 23: Menu of principles

Principles from the various design scenarios are listed, and participants then circle or check-off preferred principles. Typically space is provided to allow re-writes or edits. These responses are tallied and used as a basis for discussion or are passed to a decision making group as further information for their own deliberations.

Tool 24: Illustration of principles

After a discussion or survey of preferred principles, a composite set of principles can be illustrated. Simple diagrams that show one principle at a time are particularly effective. The diagrams are based upon a new scenario that demonstrates how the principles could work together on the site.

Menu of Principles

This sheet shows how scenarios taken from a model can be used for comment sheets. These sheets can be handed out to participants. They can rank the three alternatives, or put pluses and minuses next to each principle to show agreement or disagreement.

West Broadway Avenue Extension (35 mph Town Center Avenue)



- Higher density housing near neighborhood center
- American Legion & north CSAH 81 sites redeveloped as retail & office
- Transit center at American Legion site
- Terrace Mall/Wards is mix of retail and office
- Extend downtown West Broadway, Hubbard and 35th Avenues through Terrace Mall site
- Concentrate retail between CSAH 81 and new West Broadway Avenue
- Frontage roads eliminated
- Maximum CSAH 81 access points; every 1/8 mile

Terrace Transit Village (45 mph Community Boulevard)



- Higher density housing near neighborhood center
- American Legion & north CSAH 81 sites redeveloped with new housing
- Focus retail along 36th Avenue
- Transit center at Terrace Mall site
- Terrace Mall converted to a mixed-use neighborhood transit village
- West Broadway Avenue cuts through Terrace Mall
- Frontage roads eliminated
- CSAH 81 access every 1/4 mile – one access between 36th Ave. & Lowry Ave./Oakdale Ave.

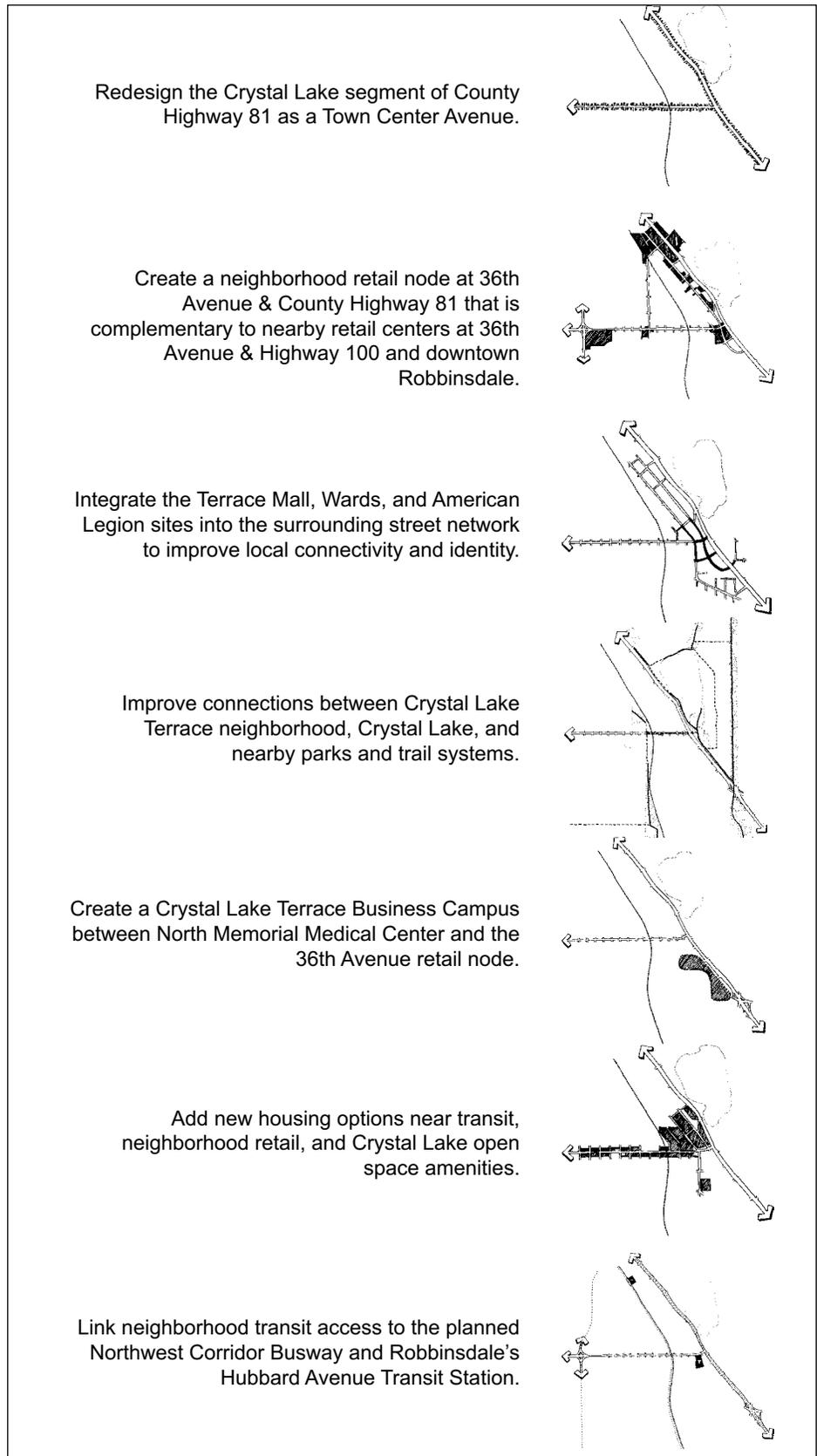
Crystal Lake Road & Business Campus (55 mph Subregional Expressway)



- Higher density housing around transit center and all along 36th Avenue
- Transit center is along railroad
- Focus retail and service businesses along 36th Avenue; now Crystal Lake Road
- Convert Terrace Mall & American Legion sites to Crystal Lake Business Campus
- North Memorial Medical Center campus expansion into adjacent residential area
- Keep some frontage roads
- CSAH 81 access every 1/2 mile – no access between 36th Ave. and Lowry Ave./Oakdale Ave.

Illustration of Principles

This drawing shows the composite set of principles that came out of round-table discussions with civic leaders and citizens discussing the three scenarios shown on the previous page.



Moving forward

*What are the critical next steps to move the project toward implementation?
What resources might help steer these next steps?*

At this point, there is a basis for moving forward. Potential opportunities have been fully explored, and there is some agreement about more specific principles regarding land use mix, natural resources, transportation, social connections, and residential neighborhood quality. This groundwork prepares a community well for taking next steps toward implementation, though these steps may vary depending upon the size and scope of the program. Community redesign at all scales is typically a multi-year effort that might span the terms of different office holders. Typically they are complex, because the number of affected and interested people is greater than a single use project on one discrete site. Therefore it is important to not only record what was decided in terms of design, but also what needs to be done to make it happen. Specific roles, responsibilities, and timelines should also be decided and recorded.

Desired outcome:

The outcome of this process should be a road map that clearly articulates what needs to be done, by what time, and by whom. This plan may be modified or changed at the beginning of the implementation process, but that discussion benefits from a clear starting point or game plan.

Task: Decide on action items, organize by time requirements, and agree on assignments for individuals or organizations.

There are a variety of strategies to organize the tasks ahead into manageable parts. An action plan can break down work as a year by year work plan, or multi-year by individual project area and the required steps and tasks, including who is responsible for each. Specific tasks should be included such as: preparing and submitting grant applications, issuing Request for Proposals (RFPs) or Qualifications (RFQs) for a design team or developer team; convening of advisory groups; or carrying out a legislative strategy.

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Tool 25: Action plan.

This type of document breaks down phases and components of the project and assigns roles, costs, time frames, and policy actions required for implementation.

Task: Propose an implementation governance structure.

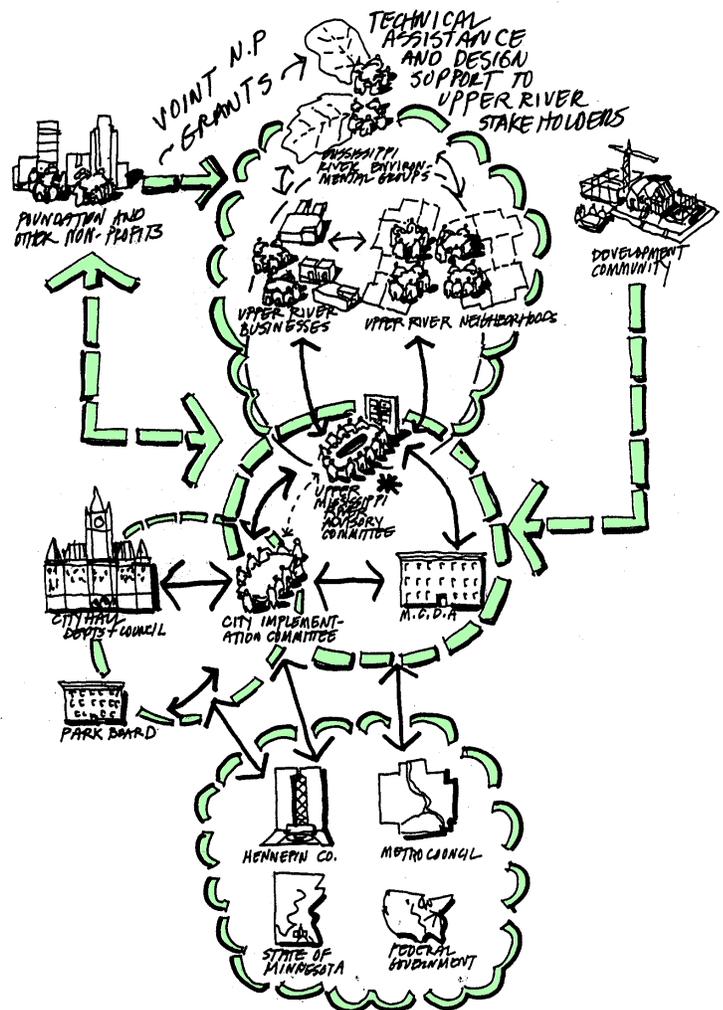
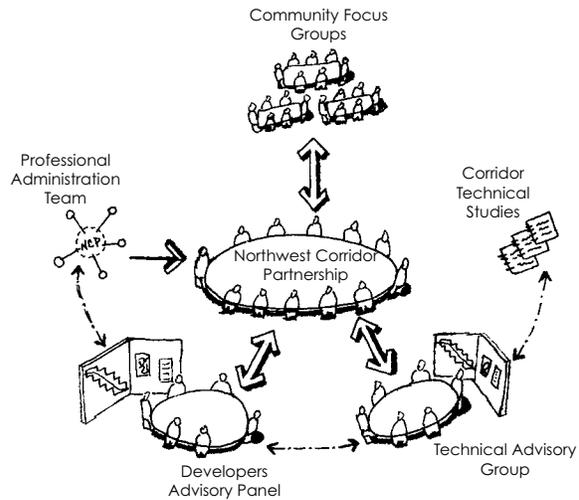
Typically a two or three tier approach is used to carry out projects that integrate land use, transportation, and natural resource components. For example an Implementation Committee might be composed of decision-makers such as board members, elected officials, or department heads. Supplying this committee with information are Technical Advisory Committees, composed of staff from different departments and agencies, or non-profit volunteers with relevant expertise. A Citizen or At-Large Advisory Committee could be made up of self-selected volunteers or appointed representatives from different neighborhood organizations or the general membership of an advocacy group. It is useful to outline or propose a communication strategy for keeping these various committees informed and aligned with each others work, as well as the larger community of less involved citizens and advocates.

Task: Create a document summarizing the process, its results, and next steps.

A brief report, summarizing major conclusions, can be supplemented by more detailed appendices of different process steps and results. Include graphics that can be easily reproduced and re-used for grant applications, RFPs, or legislative briefings. Sometimes a more streamlined, newsletter format report is most effective at communicating with a broad array of audiences, with the more detailed report reserved for those more involved in the nuts and bolts of the project (tool 26).

Tool 26: Organization illustration.

Whether a fairly simple structure, (top illustration) or more complex organization (bottom illustration), a visual depiction helps sort out who is involved and how they connect. These examples take the idea of a flow chart one step further, as an memory aid and to help distinguish roles and functions of various committees, task forces, departments, or agencies.



MODEL 2.3 COMMITTEE WORKING RELATIONSHIPS
 MARCH 26, 2001 MORRISH WORKING DRAFT
 "WITH N.O.O. SUPPORT"

Checklist of Tasks and Tools

Assessing the place

Task: Agree on general goals, work scope and parameters of study or project (tool 1).

Task: Discuss issues and review existing plans and projects in the area of concern and surroundings (tools 2, 3).

Engaging communities

Task: Decide who should be involved and how (tool 4).

Task: Encourage productive discussion and information gathering from a diverse group of people affected by the project (tool 5).

Task: Create a communications plan (tool 6, 7, 8).

Taking inventory of the landscape

Task: Get out into the landscape (tools 3, 9, 10, 11).

Task: Collect relevant studies and reports and make data available to participants (tools 12, 15).

Task: Take advantage of available mapped data (tools 13, 14).

Analyzing and interpreting the place

Task: Formulate questions for analysis (tool 16).

Task: Create maps that locate where desired improvements could be sited (tool 14).

Task: Evaluate existing conditions with respect to different physical, social, and economic criteria (tool 17).

Exploring design scenarios

Task: Use design scenarios throughout the process (tools 18, 19, 20).

Task: Propose a spectrum of design scenarios that a design team or workshop group can apply to the site.

Agreeing on design principles

Task: Gather and assess feedback on design principles. principles (tools 21, 22, 23).

Task: Summarize and illustrate the results (tool 24).

Moving forward

Task: Decide on action items, organize by time requirements, and agree on assignments for individuals or organizations (tool 25).

Task: Propose an implementation governance structure (tool 26).

Task: Create a document summarizing the process, its results, and next steps.

This list is a compilation of all the tasks and tools described in the process steps. While the tasks include suggestions for helpful tools, some of the tools are more universally useful in all stages.

Tool 1: A USGS quadrangle map

Tool 2: Annotated map

Tool 3: A walk-through or drive-through of the area

Tool 4: Process diagram

Tool 5: Interactive models or maps

Tool 6: Feedback or comment sheets

Tool 7: Project website

Tool 8: Briefing sheets

Tool 9: Aerial bird's-eyed view photos

Tool 10: Windshield survey

Tool 11: Photography assignment

Tool 12: Precedent research

Tool 13: Overlay maps

Tool 14: Geographic information systems (GIS)

Tool 15: Menu of inventory options

Tool 16: Perspective drawings and diagrammatic maps

Tool 17: Matrix

Tool 18: Initial stage concept diagram

Tool 19: Mid-stage concept scenario diagrams

Tool 20: Final-stage interactive models and maps

Tool 21: Small group discussion

Tool 22: Decision-maker review

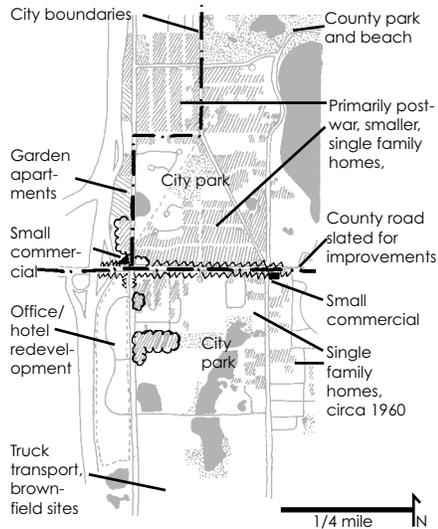
Tool 23: Menu of principles

Tool 24: Illustration of principles

Tool 25: Action plan

Tool 26: Organization illustration

Chapter Three: The Neighborhood Scale



This map shows a typical place settled primarily in the post-war era. The area will be used to illustrate the text that describes principles for guiding neighborhood development or reinvestment. You will see this same neighborhood shown within a larger area in subsequent chapters that address the town and subregional scale.

Neighborhoods can be defined in many ways: by natural or built edges and boundaries; areas of similar building and development patterns; or a central institution such as school or parish church. In this text, neighborhoods are focus areas that address issues block-by-block within a limited geographic area, typically less than a mile square. Making desirable and vital communities at the neighborhood scale typically focuses on enhancing or maintaining local quality of life, community character, transportation connections, and convenient access to amenities. Although each neighborhood is unique based upon its location, local culture, and landscape, a vital and sustainable neighborhood should integrate the various activities and destinations of daily life, including a range of housing options, stores, services, recreation and natural areas, public spaces, and transportation connections. If coordinated, local improvement activities can create memorable places, while ensuring economic prosperity and efficient use of land resources. The following principles, synthesized from the case studies that are profiled in this chapter, are examples of how to make general goals more specific to neighborhood-level activities.

Protect and Restore Natural Systems

Identify, preserve, or restore locally significant remnant natural resources, such as small woodlots and tributary water features.

Strengthen Social Connections

Enhance the quality of everyday destinations, so they are people attractors and make it easy to walk or bike between them, so people may meet and greet their neighbors.

Provide Transportation Choices

Identify and fill sites that can receive additional commercial intensity without jeopardizing the quality of existing businesses or residences.

Enhance Homes and Neighborhoods

Intensify development along potential transit corridors and make easy walking connections to surrounding land uses.

Integrate Land Uses and Economic Activity

Create programs to renovate and add to existing housing types and, in newly developing areas, encourage a development pattern with homes that are oriented toward a connected network of streets and strategically located parks or open spaces.

Neighborhood Scale Principles

The following text briefly describes the issues that frame the principles. Different neighborhood-scale issues would likely result in modifications of the statements, better tailored to the project at hand.

Identify, preserve, or restore locally significant remnant natural resources, such as small woodlots and tributary water features.

At the neighborhood scale, restoring and protecting natural resources means identifying, expanding, and connecting the local system of natural resources, as well as protecting remnant features that may remain. Natural areas are usually treasured by local residents, regardless of their “ecological significance” on a regional scale. Water quality issues tend to be an organizing force and of intense interest, because residents can see the negative effects that can be caused by urban runoff. Walking to and around lakes, wetlands, and streams is also an important quality-of-life dimension, though often controversial if expanded public access is perceived to be at the expense of privacy.

Enhance the quality of everyday destinations, so they are people attractors and make it easy to walk or bike between them, so people may meet and greet their neighbors.

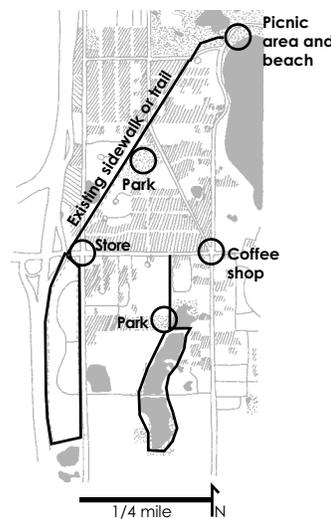
Fostering social connections may be a matter of preserving the viability of local institutions or encouraging new relationships among neighbors around local parks, roads, or other neighborhood improvements. For people to become familiar and feel connected to one another, neighborhood scale design focuses on places that allow everyday, casual encounters, including face-to-face conversations, a quick greeting, or simply eye-contact. Having citizen participation in the course of planning neighborhood improvements can create a sense of identity and belonging, especially in an area undergoing a shift in residents or employees.

Intensify development along potential transit corridors and make easy walking connections to surrounding land uses.

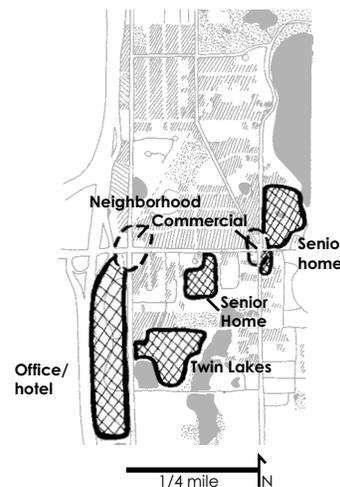
Because major transit systems are decided at a regional level, providing travel options at the neighborhood scale is typically an access issue. Access to existing bus lines or regional trails may mean strategically locating new pathway links, calming traffic, and providing commuter parking if transit service is located too far for a comfortable walk.



The hatched areas show more habitat-friendly locations in the neighborhood, where tree canopy is complemented by understory vegetation where migrant or resident wildlife can take refuge.



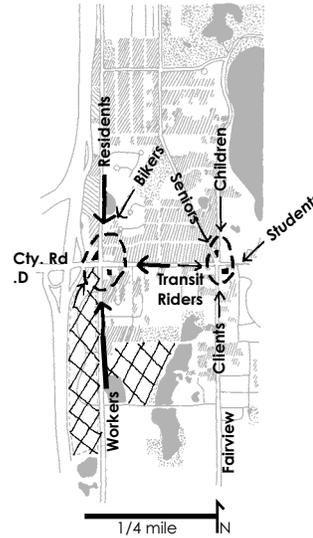
Many amenities exist in the neighborhood, but not all are easily accessed on foot or by bicycle, important for children, but also the employees, seniors, and exercise seekers in the area.



Over time this neighborhood has seen an intensification of uses, as the hatched areas show new developments that bring more people to the area on a daily basis. This intensification increases opportunities for transportation alternatives, such as buses, shuttles, and foot travel between locations, cutting down the number of daily auto trips.

Identify and fill sites that can receive additional commercial intensity without jeopardizing the quality of existing businesses or residences.

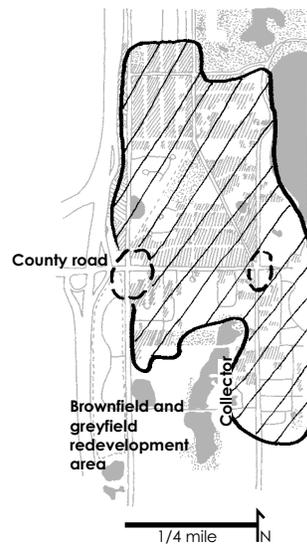
At the neighborhood scale, diversifying and increasing the local economy can be a modest endeavor, aimed at retaining or attracting a business that can serve people within walking distance. Some neighborhood businesses have the potential of a wider draw. Carefully designing and managing the traffic and parking generated by an attractive local restaurant or store can be important when these businesses expand or locate in a predominantly residential neighborhood. In neighborhoods that are primarily commercial in nature, the goal may be to add housing that brings people to the area beyond the work day hours. From a transit perspective, this mix can be beneficial in generating transit riders going in two directions that can attract more frequent service throughout the day.



The intersections of county roads were first developed as service stations. Now that new senior housing and offices are in the area, these businesses have additional local clientele. Small changes to the zoning codes can help these commercial areas adapt.

Create programs to renovate and add to existing housing types and, in newly developing areas, encourage a development pattern with homes that are oriented toward a connected network of streets and strategically located parks or open spaces.

The goal of enhancing homes and creating neighborhoods is achieved at this scale with a careful inventory of existing assets and gaps in the type of homes available. Existing homes may benefit from fix-up grants or flexible zoning standards or building code enforcement. Filling gaps in housing types, or the addition of a local service businesses such as video stores and coffee shops may require more extensive site analysis and site design guidelines to develop properties that have the location to attract clientele while not negatively affecting neighboring homes. Looking up at the town scale can place the neighborhood in a city-wide context that suggests creation of a larger scale program applicable to multiple neighborhoods facing similar issues.



The residential area of this neighborhood has a diverse mix of housing types that can be added to over time. Larger home sites along the collector streets and locations in the redevelopment area are examples of where these additions can occur.

Neighborhood-Scale Case Studies

Three local case studies of recent neighborhood redesign projects in the Twin Cities help illustrate local communities' approaches to improving and redefining their neighborhoods:

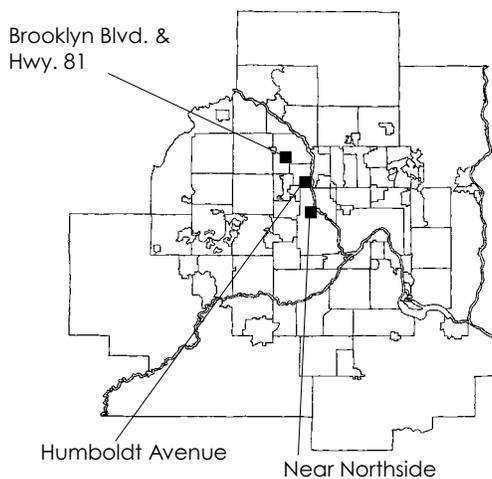
- Humboldt Avenue in Minneapolis
- Brooklyn Boulevard & Highway 81 in Brooklyn Park
- Near Northside in Minneapolis

This chapter begins with an overview of the case studies and scale specific principles guiding these holistic and integrated projects that also benefit their larger surroundings.

Humboldt Avenue neighborhood is a modest post-war suburban style development of small single family homes typical of that era when housing needs outweighed other considerations. This case study looks at the strategic redevelopment of new housing along a mundane roadway—redesigned to become a gracious parkway-style boulevard that parallels a public green complete with a creek, parks, and schools. This multi-phased, seven year initiative is substantially complete, resulting in a significant diversification in the types of housing available within the neighborhood and a much stronger visual and physical connection to Shingle Creek—a previously hidden asset.

Located further north and west of Humboldt Avenue, the case of Brooklyn Boulevard and Highway 81 shows at how a transit investment—a bus corridor in this case—can be the impetus for change. An intersection is envisioned as the center of neighborhood activity rather than four corners of isolated, disconnected land uses. At the beginnings of the process, this write-up summarizes the very early planning and discussions required for implementing this scale of transformation.

Finally, the Near Northside case study looks at an eighty acre area near downtown Minneapolis that required a substantial reworking of the terrain. This isolated neighborhood not only needed better homes, but also reconnection to its neighbors, and creative solutions to significant soil and water issues that have plagued homes and businesses since development first occurred here one hundred years ago. In construction today, the case study also highlights the series of steps required for successful implementation.



Humboldt Avenue, Minneapolis

Revitalizing a neighborhood with social and environmental amenities



Brooklyn Boulevard & Highway 81

Creating a transit-supportive walkable center with neighborhood amenities



Near Northside

Repositioning and reconnecting a deteriorating neighborhood to its surroundings

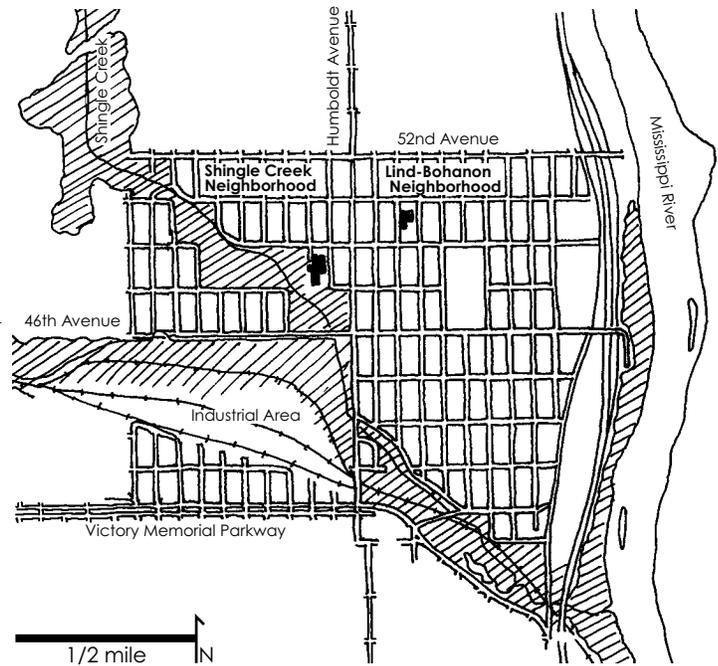
Case Study

Creating a community parkway:

New greenway and housing amenities for Humboldt Avenue neighborhoods in Minneapolis, Minnesota

Assessing the Place

Humboldt Avenue North lies within two north Minneapolis neighborhoods, Lind-Bohanon and Shingle Creek, and has been experiencing deteriorating housing, declining property values, and increasing resident turnover. These neighborhoods are dominated by small Cape Cod and Rambler style homes, mostly built in the 1950s, with many homes deteriorating due to poor quality design and inadequate maintenance. Hennepin County and the City of Minneapolis identified this project as a partnership opportunity to link housing redevelopment with major public reinvestments in infrastructure, including roadways and open spaces. Consisting of eight blocks along Humboldt Avenue, from Victory Memorial Parkway north to 53rd Avenue.



Engaging Communities

This project sought to engage residents of the Lind-Bohanon and Shingle Creek neighborhoods in an effort to redesign and resituate their neighborhoods. Following large public discussions held by design consultants at several community meetings, many residents felt frustrated and somewhat uninformed about the project. In response to those sentiments, the project team retooled the participation strategy. Instead of a broad-brush informational meeting format, residents had the opportunity to sign-up for one of 40 workshops, using interactive models to explore different configurations of blocks, homes, yards, and open spaces. A maximum of 12 participants per workshop allowed each attendee to have his or her voice heard. These community discussions resulted in an expanded inventory of ideas, issues and opportunities, as well as greater feedback on three possible neighborhood design scenarios for the city and the county. In addition, phone interviews and comment cards provided alternate forums for residents to communicate their input.



Looking north, Humboldt Avenue bisects a neighborhood of single family homes that are close to parks and parkways, yet feel disconnected from these amenities. The post-war building boom left a pattern of smaller single family homes and little diversity in the housing stock.



1-story Rambler Home



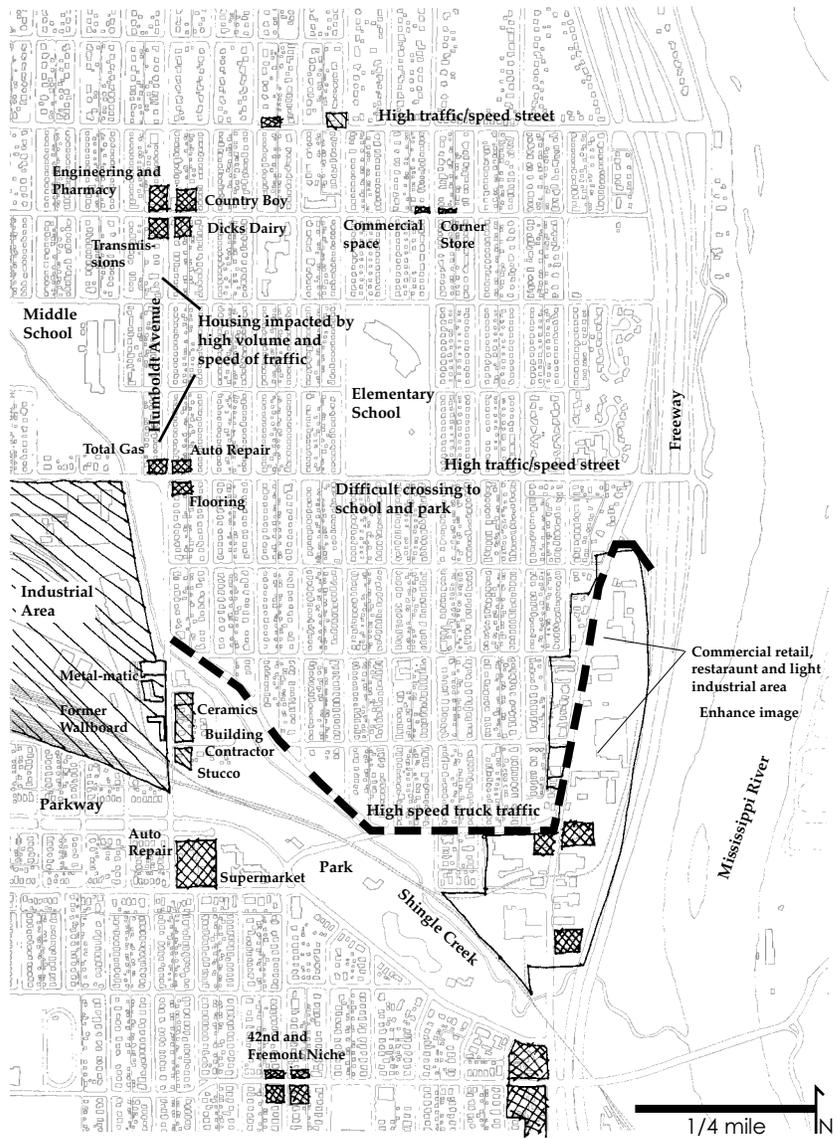
1-story Cape Cod Home



1-story Bungalow Home



Shingle Creek



Taking Inventory of the Landscape

A neighborhood inventory identified existing conditions, assets, and challenges:

Homes

Housing types were generally limited to small, two-bedroom homes that were less able to compete within the metropolitan real estate market. Housing age, design, and construction methods indicated a need for targeted renovation or replacement with new housing.

Businesses

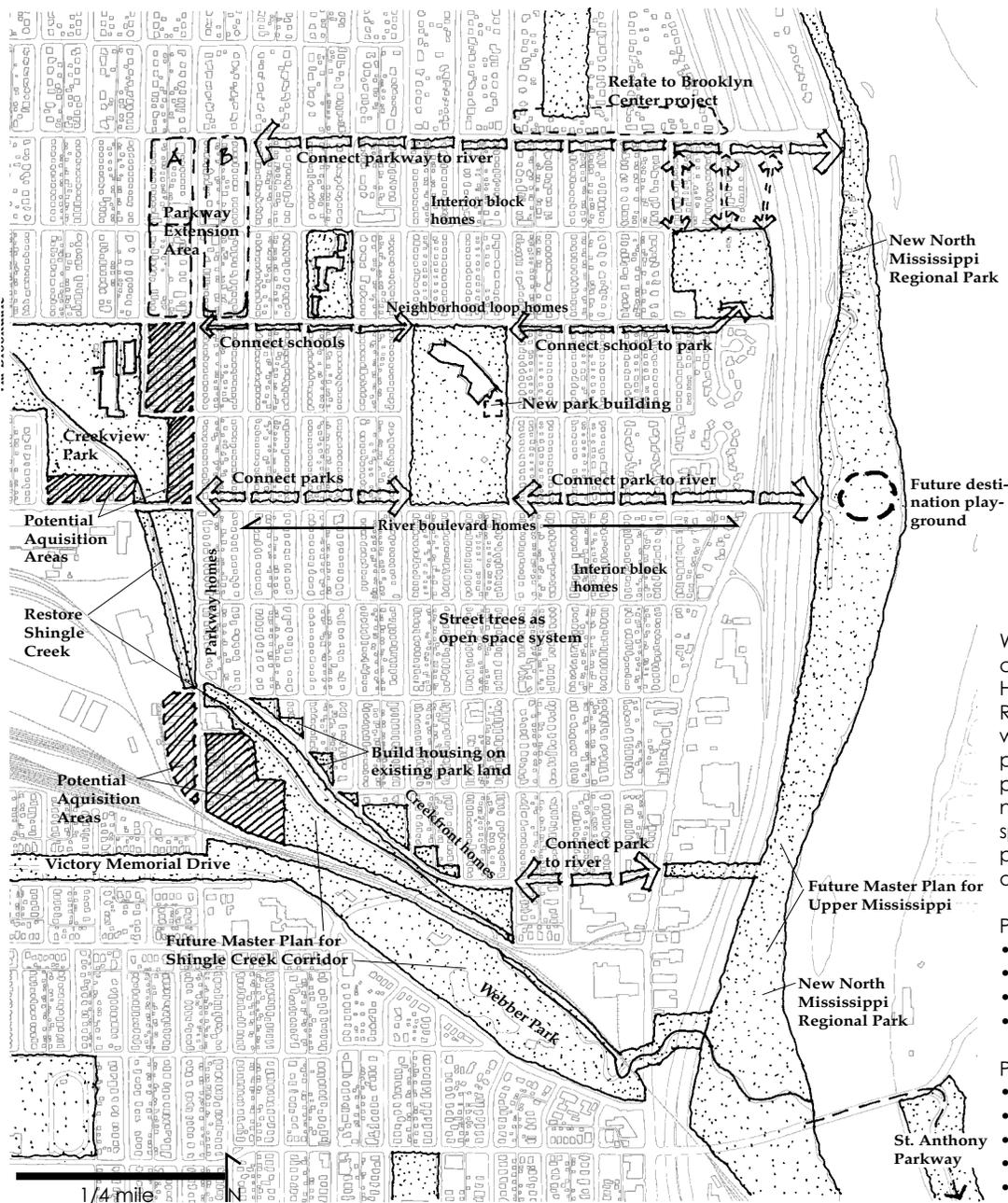
The limited commercial areas were small, struggling, and often incompatible with adjacent uses. The industrial area was full, but presented an unattractive image toward the street and generated unmanaged truck traffic.

Movement network

A rail line that intersected Humboldt Avenue created a sense of disconnection between neighborhoods north and south of the tracks. Truck traffic used arterial streets to access the industrial area. Safety of pedestrian crossings was an issue, particularly for neighborhood children.

Parks

Existing development patterns hid Shingle Creek's natural corridor. Parks were isolated by development, poorly connected to the road network, and did not link to other natural open spaces, including the nearby Mississippi River.



Working with a market consultant team, the Humboldt Avenue Reinvestment Area Study was conducted to assess the potential for attracting private reinvestment in these neighborhoods and specifically what types of public reinvestments would attract private reinvestment.

- Public space types
- key connection streets
 - creek and river corridors
 - community schools
 - neighborhood parks

- Private reinvestment types
- parkway homes
 - river boulevard homes
 - creekfront homes
 - neighborhood loop homes
 - interior block homes

Analyzing and Interpreting the Place

Urban design analysis uncovered important organizing features for revitalizing these neighborhoods. These features included: key connection streets, the natural landscapes of Shingle Creek and the Mississippi River, local community institutions, and the unique housing styles within the neighborhoods. These unique features offered a baseline for future urban design enhancements that better reflected the neighborhoods' functional structure and unique identity.

Integrating various community systems into signature amenities for the neighborhood pro-

vided new opportunities to add value to the community. For instance, by linking the primary roadway network with the park system, creation of a "parkway" community was possible.

Several distinct housing styles already existed in these neighborhoods. New housing added to the neighborhoods could be compatible with the existing types, identified as parkway homes, river boulevard homes, creekfront homes, neighborhood loop homes, and interior block homes.



A model of existing conditions was created out of foam core, with removable areas of change. Homes and other buildings were cut from foam core in standard land use colors. The three dimensional quality of the model helped people see the existing neighborhood patterns and how modifications to the area would work within the existing context.

Exploring Design Scenarios

For the forty small group meetings, an interactive “pizza box,” a fairly flat portable model with moveable sections, was used to discuss proposed reinvestment ideas. Because of county leadership in the discussions, the redesign of Humboldt Avenue—a county road—became the central organizing feature of four potential design scenarios.

- Bohanon Lake
- Straight Parkway
- Curving Parkway
- Minimal Parkway

Each scenario illustrated the various options for redesigning Humboldt Avenue, encompassing road redesign, connections to the school, new housing types, stormwater ponding, Shingle Creek restoration, bike and pedestrian paths, reconfigured blocks, and creation of a neighborhood gateway. Although some residents were skeptical about the project, they still stayed to participate in the meetings. The overwhelming feedback was that significant reinvestment was needed in these neighborhoods. Following the small group meetings and further research, a series of design principles was proposed and used to guide the final plan development:

*Protect and Restore
Natural Systems*

*Strengthen Social
Connections*

*Diversify and Increase
the Local Economy*

*Provide Travel
Options*

*Enhance Homes and
Neighborhoods*

Place-Specific Design Principles

Make a parkway extension that highlights the Shingle Creek corridor, and connect it to other neighborhood institutions and amenities.

Reveal existing park and school facilities and connect them with linear corridors to maximize these existing public investments.

Retain the valued neighborhood commercial businesses, and plan housing, road, and amenity changes that will attract more neighborhood commercial services and amenities.

Build a physical hierarchy of street corridors that reflects all the roles they play in the neighborhood— as biking and walking ways; as neighborhood image communicators; as green corridors; and as car and truck routes.

Add missing housing types to provide life-cycle housing in the neighborhood, and renovate existing homes where feasible. New homes should reinforce the existing neighborhood fabric.

Moving Forward

The final plan, generated by a team of consultants and based upon the design principles, resulted from a series of design scenario reviews. Reviews included decision-makers and those who would be responsible for implementing and maintaining different components of the project.

Implementation of this major neighborhood redesign plan involved partnerships between the Hennepin County's Community Works Division and Transportation Department, Minneapolis Community Development Agency, neighborhood associations, the state, and Metropolitan Council. CommonBond Communities, a non-profit developer and manager of affordable housing, developed a new apartment building for senior residents. Country Home Builders was selected through an RFP process to develop the private housing, 20% of which was required to be affordable, according to the city's guidelines.

Public initiatives and financing were used to acquire redevelopment properties, relocate residents, remove existing buildings, and upgrade city infrastructure, including the roadway, sidewalks, boulevard landscaping, stormwater management, connections to public places, and enhancements to Shingle Creek drainage, vegetation, and trails. A total of 197 units were acquired, accomplished without condemnation proceedings except in two unique cases.

Still under construction in 2002, eight new home styles are being added, ultimately totalling up to 120 detached homes and 80 attached townhomes. The new apartment building, called Shingle Creek Commons, has 75 housing units with underground parking and convenient access to the pathways along Shingle Creek and the Greenway.

Demand for housing in the neighborhood has risen, as have home values. Many of the relocated residents bought other homes within the neighborhood or are interested in buying the new homes as they become available. The addition of new housing, the parkway, and open space improvements are expected to attract additional private investment in the neighborhood's housing.

General Timeline:

- 1994 Initial meeting with neighborhoods
- 1995 Inventory of a larger project area
- 1996 Larger area study
- 1997 Small Group workshops of Humboldt Greenway study area
- 1997 Design concept created
- 1998 Financing/ Funding Efforts
- 1999 Design roundtables to refine concept plan
- 2000 Acquisition and land assembly
- 2001 Reconstruction of Humboldt Avenue
- 2001- Present, Residential constructions
- 2003 Scheduled reconstruction of East/West Roadways



The final plan included: redesigning Humboldt Avenue to a gently curving parkway, reconfiguring street connections, providing open space along the creek corridor, including a broader mix of housing types, and increasing neighborhood connections to local school campuses and the Mississippi River. (Planning, Engineering, and Landscape Architecture consultant: URS Corp)



The architectural styles reflect the traditional housing styles of nearby Victory Memorial Drive. (Conceptual Design by Aaron Parker
Final Designs by Nelson Tremain Partnership)

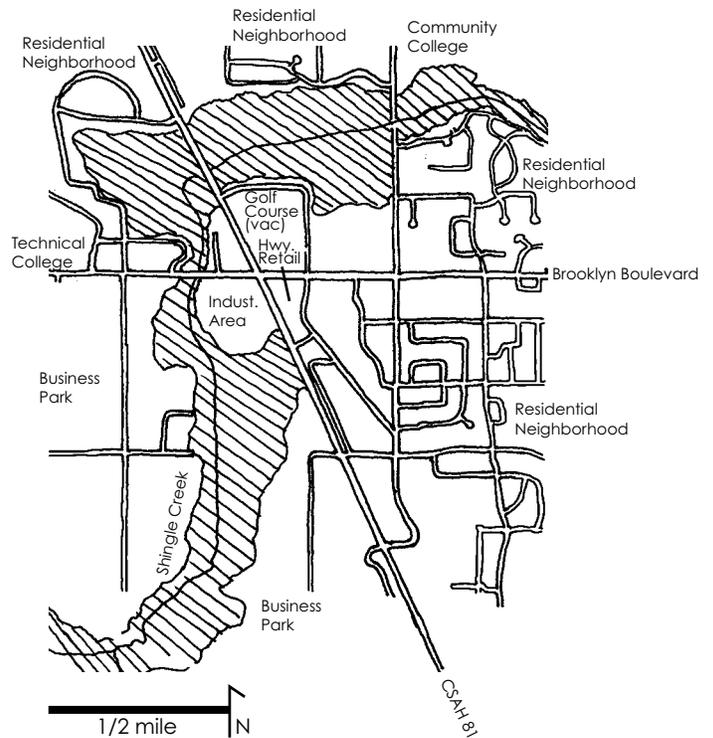
Case Study

Creating a transit-supportive walkable center:

New land use development patterns for the Brooklyn Boulevard & County Highway 81 district in Brooklyn Park, Minnesota

Assessing the Place

This case study grew out a larger effort to examine the implications of a significant investments in transit along a suburban highway. Involving Hennepin County's Department of Transit and Community Works, the Northwest Corridor Partnership, and local community groups, this larger study identified the location where Brooklyn Boulevard intersects with County Highway 81 as an area that could become more transit-supportive over time. Lying just outside of the metro interstate beltway, land uses consist of a large industrial business park, two nearby college campuses, auto oriented highway retail, four residential neighborhoods, and an undeveloped former city golf course. Shingle Creek and its wetlands flow through the center of the district, although the creek is primarily hidden from public visibility and access. Low density residential patterns, railroad and creek corridors, and limited street connections, present challenges to achieve the intensity of land use and network of streets and walkways that facilitate transit use.



Engaging Communities

This case study represents the very initial stages of a potentially long-term redevelopment effort. Local stakeholders from Brooklyn Park were invited to participate in a series of three community design workshops over a three month period. Community representatives included planning commissioners, elected officials, Citizen Long-Range Improvement Committee (CLIC) members, city staff, residents, and property owners.

- Workshop #1 - Discovering the Corridor, Existing Neighborhoods and Districts
- Workshop #2 - Exploring Opportunities for Improving Community Design
- Workshop #3 - Summarizing District Planning and Design Principles

The results of workshops were presented to the city's Planning Commission for their review. As improvements or transit investments become funded, a planning process would take place, involving participants from each of the sub-areas identified on the map above.



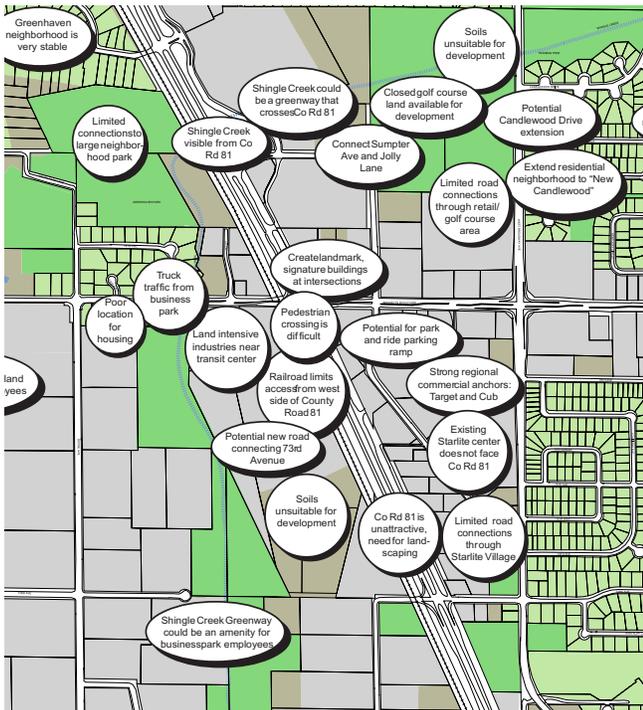
Looking east, above, it is easy to see the auto-oriented nature and large scale of development around the of County Highway 81 and Brooklyn Boulevard. Looking west, development has little orientation toward the extensive wetlands and creek.



Taking Inventory of the Landscape

The preliminary inventory of the Brooklyn Boulevard/Hwy 81 neighborhood involved taking aerial photos and ground photos, and drawing existing land use patterns. GIS land use, parcel, road right-of-way, railroads, creeks, lakes, and parks data was analyzed to gain an understanding of existing patterns and activities. For example, the separation of different land uses is very apparent as is the lack of good connections, which are limited by the railroad, the creek, wetlands, insufficient road network, and the large block structure.

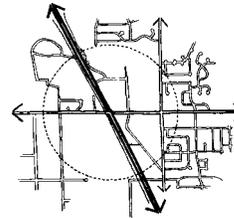
At the first workshop, with the use of detailed aerial orthophotos and overlays and the second workshop through the use of design scenarios, additional data was gathered from participants about perceived issues, assets, and challenges within the area. This information was integrated with other inventory data and summarized on a map, part of which is shown below.



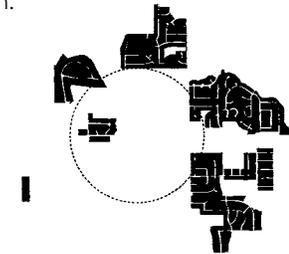
Locating issues, assets, and challenges on a map of the area makes a firm connection between ideas and places for implementation.



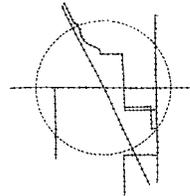
The existing intersections lack visual appeal and pedestrian accommodation.



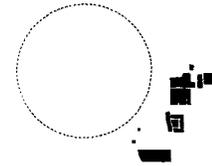
Road Networks



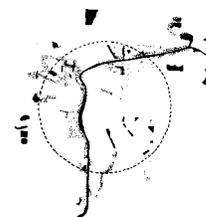
Single-Family Residential



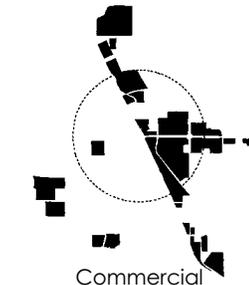
Bus Routes



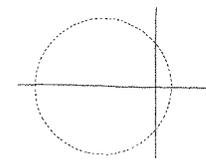
Multi-Family Residential



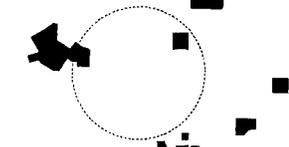
Natural Systems



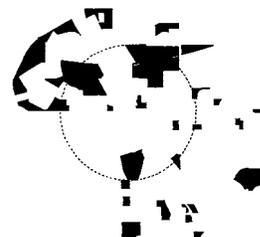
Commercial



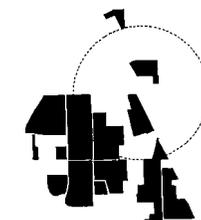
Recreational Trails



Public

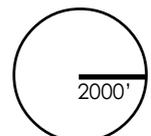


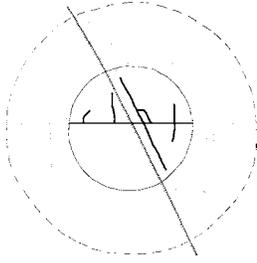
Parks & Open Spaces



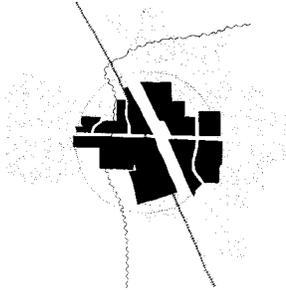
Industrial

Information from a variety of sources was compiled into a standard format. The common frame of reference is a 2000' radius circle drawn from the center point of a potential transit stop.

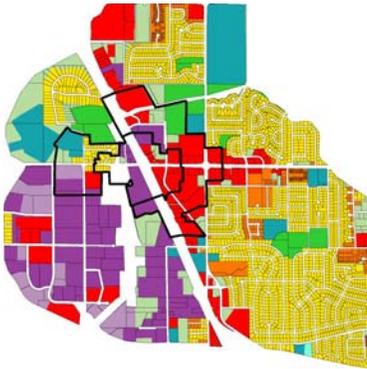




Walkable Routes: Which streets enable walking access to the proposed transit station area?



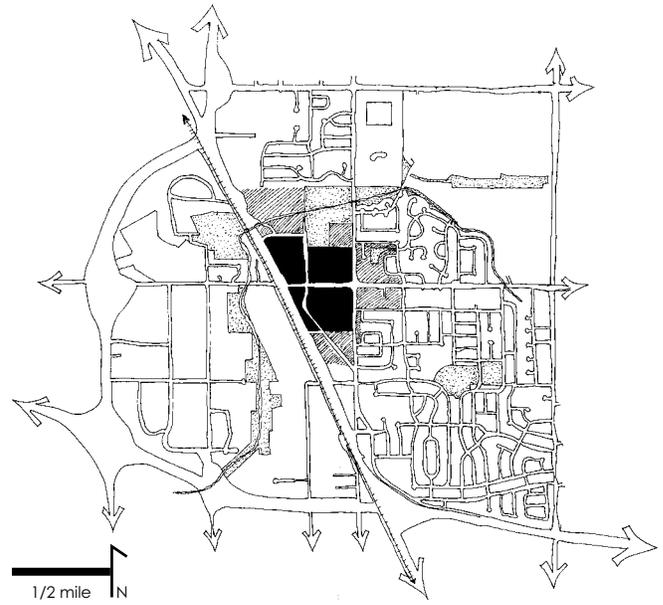
Walkable Areas: Which areas are within convenient walking distance of the transit station?



Mix of Land Uses: What is the mix of existing land uses in this area?



Priority Area and Street Connections: What are the important connecting streets, public spaces, and natural areas in this area?



Possible Transit-Oriented District Configuration: What could this transit-oriented district look like?

Analyzing and Interpreting the Place

Walkability analysis

Using walkable area design analysis, the district was analyzed for potential walkable routes, walking accessible areas, land use mixes, and street network connectivity. Potential transit stop locations were identified and then all possible walking routes within 1/4 and 1/2 mile were identified. The analysis showed that this area is significantly challenged by inadequate street network, large-lot developments, lack of walking accessible residential land uses, and railroad and creek barriers. Highway 81 itself is a major barrier to walkability within the district.

Locating a potential walkable center

Identifying the location of a potential walkable center at this crossroads area involved assessment of several variables, including future land use patterns of the surrounding areas, redesign of the Highway 81 roadway, location of the proposed busway and other transit services, and redevelopment opportunities of existing development in the walkable area. Based on the presence of major barriers on the west side of the intersection, primarily the railroad and creek, the east side offered greater potential for designing a walkable center. Brooklyn Boulevard, rather than Highway 81, should be the district's "Main Street" with the greatest mix of land uses and plentiful road connections developed in this central area.



Existing Conditions



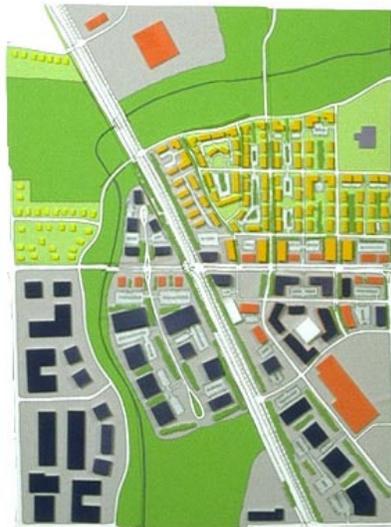
Starlite Retail & Business Center



Shingle Creek Neighborhoods



Creek Haven Business Park



Joyner's Crossing: 45 mph
Community Boulevard scenario

Exploring Design Scenarios

To explore alternative scenarios for future changes, a model of the Brooklyn Boulevard district was built showing existing roads, buildings, land uses, and natural systems. Three design scenarios for the potential walkable area were created for workshop participants to discuss and critique. Each scenario integrated concepts for roadway redesign, new road network connections, changing and mixing land uses, intensifying development, and enhancing natural systems. Specifically, three road design speeds were considered, using their corresponding allowable driveway or intersection spacings: 35 mph (1/8 mile), 45 mph (1/4 mile), and 55 mph (1/2 mile).*

Based upon input from the second workshop regarding the initial three design scenarios, the Design Center created a composite scenario to represent preferred concepts. The composite scenario illustrates a 45 mph roadway design, greatly expanded road network, a connected Shingle Creek Greenway, and a balance of new workplaces, residences, and a clustered retail area. These concepts were articulated in design principles that were reviewed and refined at the third workshop as follows:

Place-Specific Design Principles

Create Shingle Creek Greenway as a connected park and trail amenity to enhance natural vegetation, habitat, drainage, and recreational opportunities.

Redesign the Shingle Creek segment of County Road 81 as a landscaped 45 mph Community Boulevard.

Convert existing auto-oriented retail developments into a pedestrian-friendly retail village to support surrounding residential neighborhoods, business parks, and college campuses.

Expand the district network of streets, bike paths, and sidewalks to improve local access and safety.

Add a "New Candlewood" mixed-use, transit-supportive neighborhood between transit, retail, and Shingle Creek Greenway amenities.

Place larger landmark buildings on the east side of Highway 81 and Brooklyn Boulevard intersection to mark the gateway to the district.

*Protect and Restore
Natural Systems*

*Foster Social
Connections*

*Integrate Land Uses and
Economic Activities*

Provide Travel Options

*Enhance Homes and
Neighborhoods*

*Both Brooklyn Boulevard (CSHA 152) and County Highway 81 (CSHA 81) are county roads that receive state funding assistance and are therefore subject to state standards.

Moving Forward

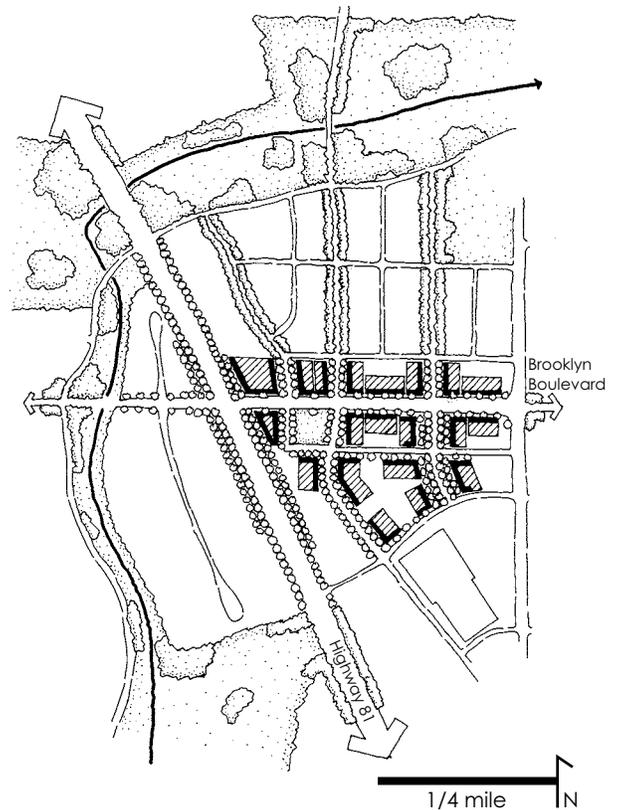
Building upon the concepts of the walkable center urban design scenarios, the next phase of planning will focus on district planning and design with an increased level of leadership and involvement from Brooklyn Park stakeholders. District planning would involve representatives from each of the district's subareas, including the four residential neighborhoods, two college campuses, the industrial business parks, and local retailers. The goal of this planning effort will be to establish a local vision, possibly a small area plan for the district, linked to the city's comprehensive plan. This planning will integrate Brooklyn Park's land use planning and reinvestment strategies with transportation planning at the local, county, and state level, especially regarding roadway redesign of Highway 81.

A preliminary analysis of the fiscal impacts and the traffic impacts of changing land use patterns along the corridor indicates that intensifying and diversifying development patterns can provide positive impacts for local communities. These impacts must continue to be explored and understood to validate the feasibility of implementing new walkable center development patterns.

In order to design a successful corridor, district planning in Brooklyn Park must be coordinated with related district planning along the County Highway 81 corridor to the south and to the north, with the neighboring cities, Hennepin County, the Northwest Corridor Partnership, Metro Transit, and other stakeholders.



As another phase of planning is undertaken, some of the same tools and techniques can be updated and used to generate discussion.



This plan view drawing of a potential walkable center design (approximately 150 acres) for the Brooklyn Boulevard crossroads area illustrates connections and orientations for blocks, streets, buildings, and natural systems. The walkable area is defined as the area within approximately 2,000 feet or a 5-10 minute walk from a possible transit station at the Brooklyn Boulevard & County Highway 81 intersection. Although Highway 81 is envisioned as a landscaped, multi-modal boulevard, Brooklyn Boulevard is seen as the center's "main street" with the highest quality pedestrian designs relating to building, street and public space design. Because the east side of Highway 81 already contains a large retail center and substantial redevelopable land, the walkable center could be located primarily on the east side. The mixed-use core area could be focused on Brooklyn Boulevard east of Highway 81, encompassing approximately 38 acres of land, indicated above by the blocks with building footprints and street frontages.

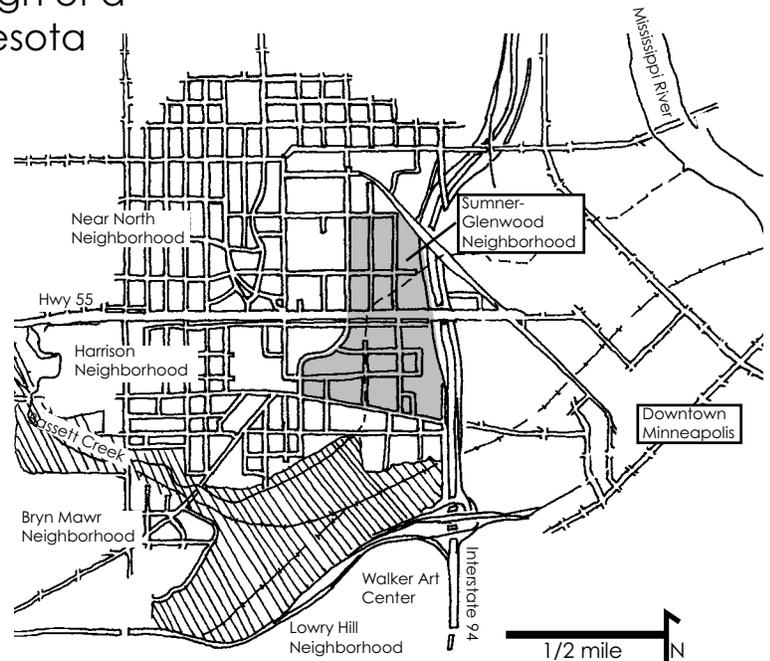
Case Study

Reconnecting a site to its surroundings:

Community and environmental design of a neighborhood in Minneapolis, Minnesota

Assessing the Place

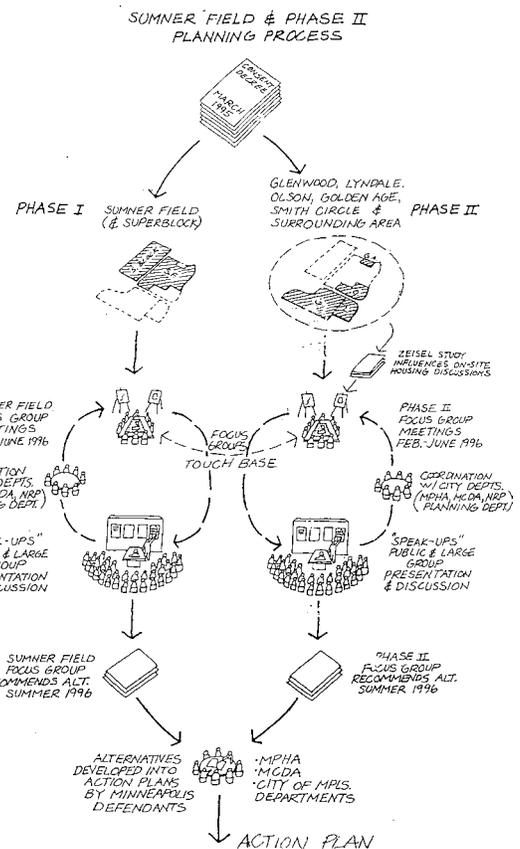
Approximately one mile west of downtown Minneapolis, the Sumner Olson Neighborhood has been the scene of much change and development over the last one hundred years. Originally a stream valley that carried Bassett's Creek to the Mississippi, by the late 1990s the site was entirely public housing projects built between the 1930s and 1960. The target of a lawsuit in 1993, a group of residents and their attorneys argued that the poor condition and concentration of housing in one area was discriminatory to those who had limited housing options. The parties settled the suit, on the premise that an inclusive planning process would make recommendations for a new residential development that would reconnect this isolated piece of the city back into the fabric of the surrounding neighborhood.



Engaging Communities

Initially, the people engaged were a group of residents, the Public Housing Authority and other public officials. Attorneys on both sides were also part of these discussions that set the framework for more detailed planning. As the process moved forward, broader groups of stakeholder representatives were charged with making recommendations about how the project area should be rehabilitated or redeveloped and what criteria should guide that work. The composition of the stakeholder groups (called Focus Groups in the process chart) was negotiated as part of a Consent Decree, and each stakeholder group could appoint their own representative.

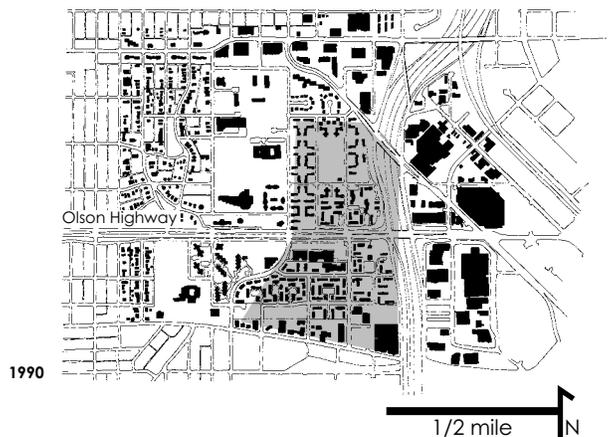
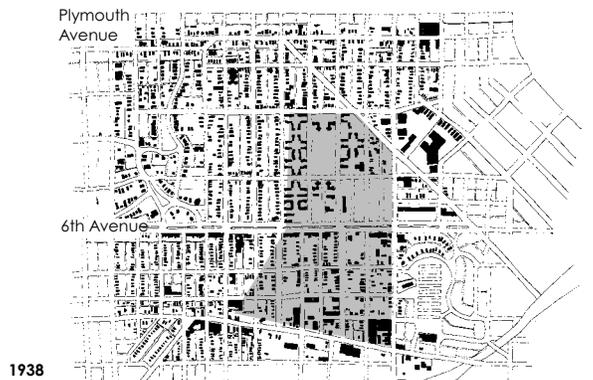
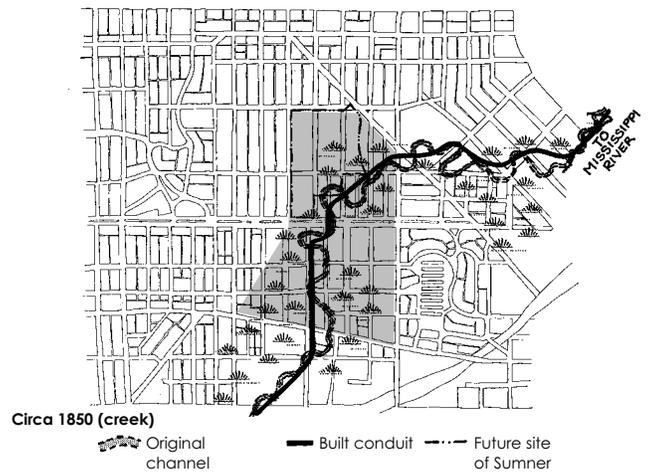
After the stakeholder groups, which eventually met as one group, made their formal recommendations to demolish the existing units and rebuild a mixed-income residential neighborhood, an action planning and implementation phase began, with staff proposing a framework for moving forward, in negotiation with all the parties involved up to that point. In the final design phase the developer's design team conducted another round of community participation events to create a development master plan, guided by the principles established by earlier work.



The initial planning process involved focus groups of designated stakeholder representatives. Public presentations and open forums were also held with public notifications in local newspapers, flyers, and radio spots. Food, day care, convenient after work-day hours, and translators were part of the mix to attract as many people to the discussion as possible.

Taking Inventory of the Landscape

Among other things, the inventory for this project had to answer the question of what environmental factors contributed to the poor quality of life described by residents of the housing projects. A sense of isolation, fear of crime, and chronic maintenance problems had stigmatized the “projects” as the most undesirable in the city’s public housing stock. In addition, the inventory addressed the question of what would constitute a quality environment, by which improvements to the project would be judged. A history of land use changes around the projects, summarized in a series of diagrams, told the story of a public housing complex increasingly cut off from the fabric of the surrounding neighborhoods. The land use history also showed the area was on a creek and flood plain, long buried, but giving clues to the subsurface problems that plagued the area.



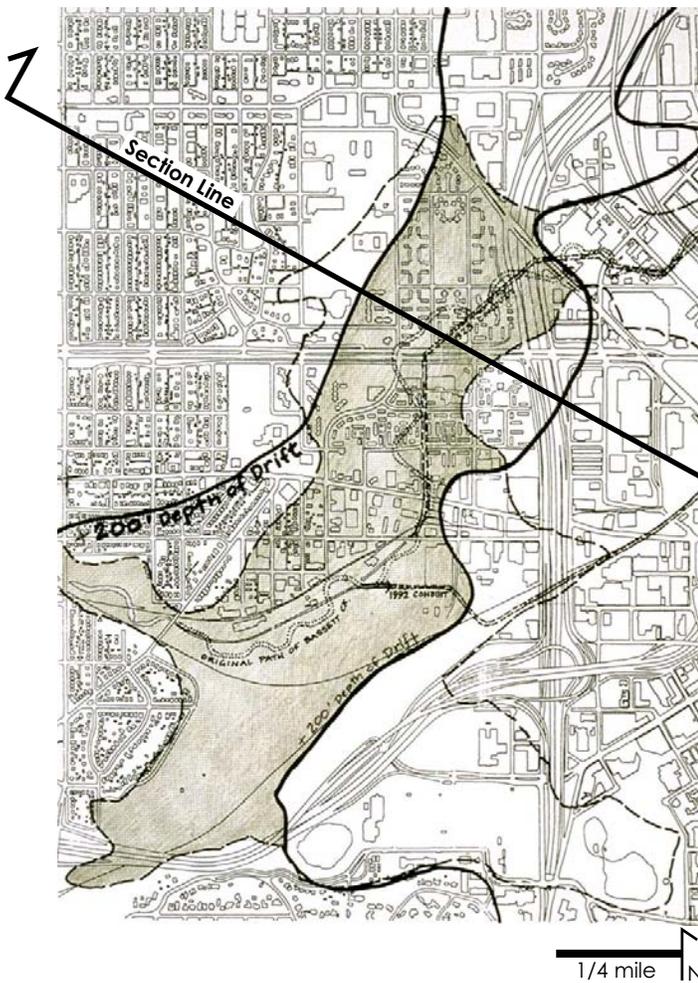
Neighborhood Change Over Time

Circa 1850s The presettlement course of Bassett Creek is superimposed on a turn of the century plat map. A meandering prairie creek is all that remained of an ancient lake that filled with clay sediments from the glacial-melts flowing down the Mississippi River. From the earliest days of Minneapolis, the creek was considered a health menace and an impediment to development.

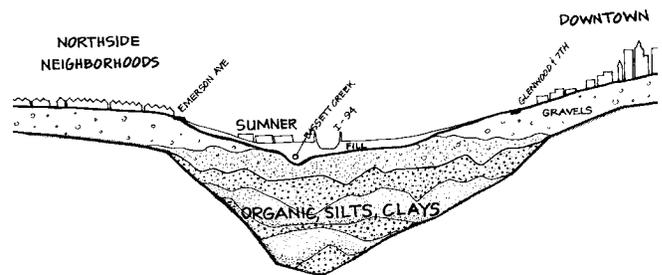
1912 Parts of the creek had been buried and after an initial rush of middle-class suburban development, this neighborhood became a refuge for recent immigrants working in the nearby mill district. By the twenties the Sumner neighborhood was considered one of the worst slums in the city. Blocks were double loaded, with alleys acting as streets and many small manufacturing businesses mixed in with residential units.

1938 This map shows the footprints of Sumner Field Homes, the first public housing project in the state. The neighborhood was also one of the few places in the city where African Americans could find housing. Sixth and Plymouth Avenues were active commercial streets.

1990 Sumner Field Homes became surrounded by manufacturing and a freeway to the east and a superblock to the west with an assortment of schools, housing, manufacturing, and churches. To the south, projects added in the late fifties made this the highest concentration of public family housing units in the city. Sixth Avenue became a highway that divided the neighborhood. Virtually all commercial was gone from Plymouth Avenue after race riots in the sixties.



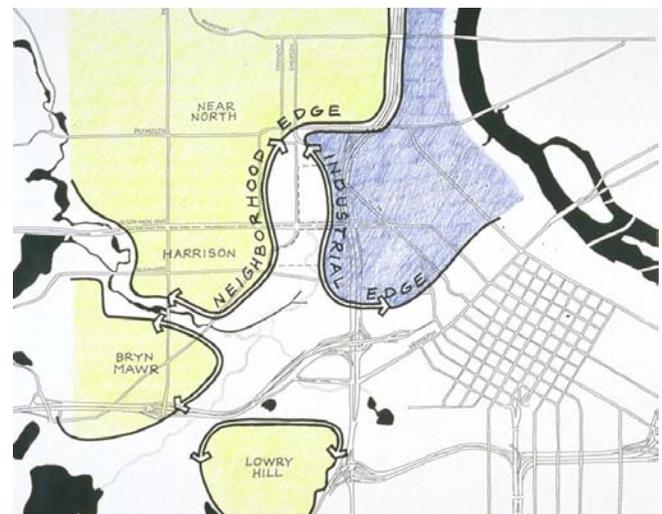
The map on the left was used to depict subsurface conditions that have made building in this area problematic for the past century. Layers of glacial drift, shown in the section below, filled a deep valley incised in bedrock. The clays were particularly unstable, requiring buildings and utilities to be supported by deep pilings in areas throughout the grey zone. In other words, it would be substantially more expensive to rebuild here than in other areas of the neighborhood.



Section

Analyzing and Interpreting the Place

Looking at the underlying soil and water patterns, the analysis focused on the implications of the buried creek and deep valley of poor soils. Working with geotechnical expertise, the team diagrammed the implications for building on the site, showing where more expensive pilings and other precautions would be required, adding expense to the project. The other avenue of analysis focused on what could be done to resurrect the creek as an asset to the neighborhood, because access to water features and open space clearly came up as a prime indicator of quality neighborhoods in the Twin Cities. Analysis diagrams showed how the Harrison and Near North Neighborhoods could relate to the valley as well as similarly situated neighborhoods of Bryn Mawr and Loring Hill.



This diagram shows how the Sumner Neighborhood could be oriented to acknowledge the valley, staying out of the poorer soils, similar to other valley neighborhoods.



Park and ponds dominate, with infill housing overlooking open space.



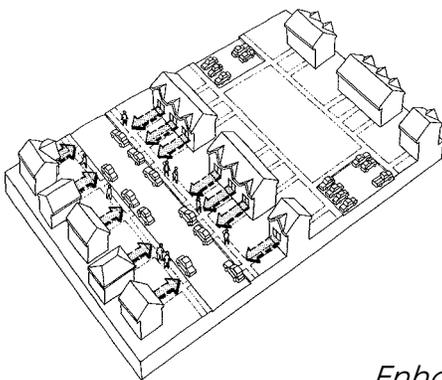
Housing borders a narrower park, with some additional industrial development.



Commercial and industrial business are the predominate re-uses in this scenario.

Exploring Design Scenarios

This series of scenarios is one of over twenty design alternatives that were created over the course of the process. As the decision was made to create a primarily residential neighborhood, the focus of alternatives shifted from land use scenarios such as these below, to more particular scenarios about the arrangement of open spaces, block layouts and the mix of housing. Within all the scenarios, livable community principles were applied, though emphasized differently.



Local, successful neighborhood models were used to develop more detailed guidelines for the new housing. This diagram focuses on the importance of orienting doors toward the street, rather than the layout of Sumner Field Homes where backdoors sometimes faced the street and the relationship between public and private space was poorly defined. More detailed open space and restoration goals were also articulated as part of the Action Planning process.

Foster Social Connections

Provide Travel Options

Enhance Homes and Neighborhoods

Protect and Restore Natural Systems

Integrate Land Uses and Economic Activities

Design Principles

The following principles were summarized from Focus Group recommendations and were quoted in the Action Plan Summary as the starting point for more detailed, subsequent planning and design:

There is a need for connections from the near north side to other neighborhoods, especially to the west and south. Both sides of Olson should be linked with a pedestrian bridge, and bus service should be improved. An at-grade connection should link the parkland amenity to the larger parks system.

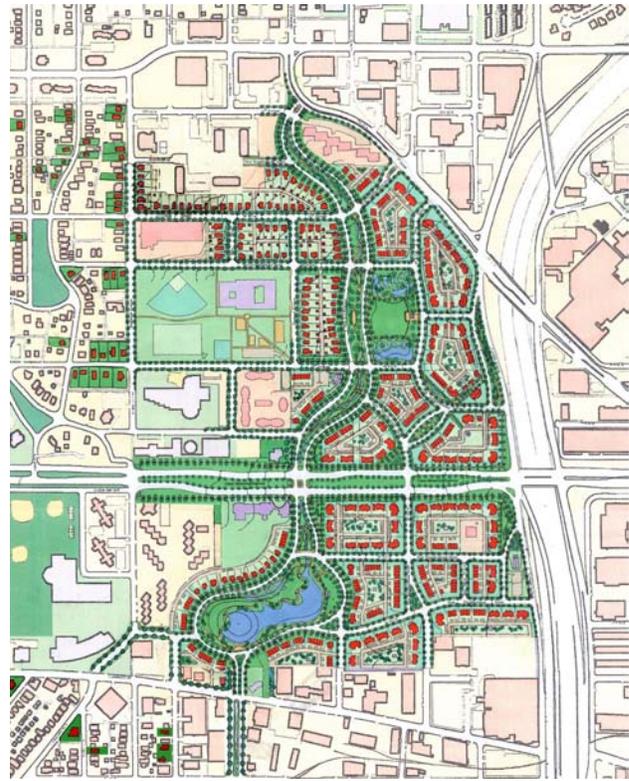
Housing should be built on the better soils on the site. It must be mixed-income housing. Design must emphasize defensible space and safety. Buffers should be provided between housing and non-compatible land uses. All units designed should have a high level of amenities. Housing for elderly people should be provided on-site. The recommended housing income mix is 50% market-rate, 25% housing affordable to families at 60% of area median income (tax credit housing), and 25% public housing. Part of the housing provided should support a Campus of Learners, a HUD program aiming to improve education.

Open space should be created on the worst soils in the area. There should be links between the open space and Bethune School.

Commercial and retail uses should be explored for the Olson/Lyndale area, including the idea of an ethnic or cultural marketplace. Institutional uses should be encouraged as well as similar educational, job training, and social services.

Moving Forward

This process was lengthy, and at many times contentious. The complexity of urban site redevelopment was compounded by the extreme shortage of housing at the time that residents were being relocated out of the projects. Once the decision was made to demolish the existing units, the recommendations of the Focus Groups had to be translated into feasible development plans that had to be carried. The primary strategy for moving forward was an Implementation Committee providing policy oversight and direction, a Community Advisory Committee, and Staff Steering committee. The decision was made to select a lead developer, rather than multiple developers, to build, own, and manage the rental components of the new neighborhood. The result of the many years of negotiation, decision-making, planning, and disruption will be the replacement of 916 public housing units with 900 new residential units, of which 440 units will be rental, 360 for ownership, and 100 units for elderly public housing residents. Two hundred of the rental units will be public housing replacement units. A unique water collection system will reanimate the site with filtered rainwater within a linear open space that aligns along a continuous boulevard that will restore lost connections between north and south Minneapolis neighborhoods.



This plan was prepared by Urban Design Associates for lead developer McCormack Baron & Legacy Management. The three design concepts were: "providing a mix of housing types and designing for social integration" and "to fit in with the existing neighborhood context;" "a street network that links the site to adjacent neighborhoods and complements the park system;" and creating "a strong parks and open space system that provides linkages to adjacent amenities, creates quality housing addresses around an open space network, and designs for sustainability." (*Minneapolis Near Northside Master Plan*, May 2000, prepared by McCormack Baron & Legacy Management, Urban Design Associates and SRF Consulting Group, Inc.)

Key Phases, 1993-2002

(Note: the Design Center for American Urban Landscape was primarily involved in the early phases of the project, through the Action Planning process. Early studies were completed by the Design Center or by consultants with different areas of expertise, such as market analysis, geotechnical, and engineering issues.)

Early Negotiation-establishing planning scope, principles and processes (1993-1995)

- Conduct research on neighborhood history, the project buildings and site plan as well soil conditions.
- Survey residents about housing preferences.
- Design scenarios to remediate site conditions.
- Study surrounding area issues, opportunities, and projects that could impact or be linked to the site.
- Identify potential sources of funds to frame different design scenarios.
- Present and discuss findings with community representatives, and officials using an interactive model.
- Conduct and assemble research on best practices for multi-family and public housing.
- Propose planning principles to guide the planning process and negotiate how process will be conducted. Consent decree signed by all parties.

Focus Group Process- making big picture decisions (1996)

- Two groups consider different areas, each meeting once a month, beginning with a visioning exercise.
- Present information gained in prior years.
- Co-mingle groups because projects are physically co-mingled and cannot be considered separately.
- Make decision on the fate of existing buildings, decide to tear down and start anew.
- Hold an all day land use workshop to determine overall uses and potential planning guidelines.

Action Plan (1997-8)

- Conduct market studies and further soils investigations.
- Develop more detailed scenarios to understand site capacity with program revised, based upon market studies.
- Develop a detailed framework, including implementation dimensions such as funding sources, roles, responsibilities, governance and community involvement.
- Establish firm site boundaries.
- Review draft plan with affected parties, revise and seek necessary approvals.
- Relocate residents and begin demolition.

RFQ and Developer/Design Team Selection (1999)

- Develop a Request for Qualifications and select a design team to design public infrastructure investments to be implemented by city departments. Negotiate agreements and terms.
- Develop an Request for Qualifications for a developer team to implement the housing components.

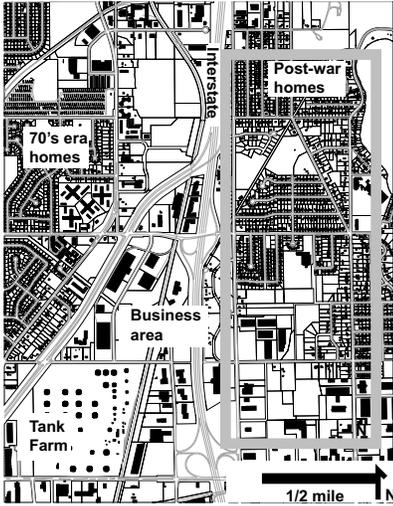
Site Master Planning and Phase I Construction (2000-3)

- Developer design team conducts community workshops to create a more detailed master plan. Feasibility studies and market demand suggest more housing units should be constructed to offset sit preparation costs and to achieve critical mass.
- Plan reviews and completion of relocation and demolition process. Construction of waterway, parks and housing units in phase one area (north of Olson Highway).

Phase II Construction (2003-5)

- Construction in the area south of Olson Highway

Chapter Four: The Town Scale



This inner suburban example is defined by its proximity to an interstate interchange. The borders of three cities converge at this location. The gray box shows the area highlighted in the previous chapter. More information on the area shown in the diagram can be found in *Engaging Communities for Regional Change, North Metro I-35W Corridor Coalition, April 2000*.

The term “town” is used to refer to places that contain multiple neighborhoods or subdivisions that share community features such as a commercial center or corridor, with an area roughly one mile to six miles square. A typical town-scale area includes major transportation corridors that provide access to regional systems, but can also create barriers for local movement and natural resource corridors. Streets that carry larger volumes of traffic are important social and commercial places, but have often been developed piecemeal with little connection between sites. The center of a “town” may be a commercial area or corridor that serves neighborhoods in more than one jurisdiction. Parks are dispersed throughout, but may not offer the full spectrum of open space that makes the community a desirable place to live. While exhibiting great variability themselves, approaches to studying and proposing town-scale changes can be described. The following principles have been synthesized from the case studies that follow and other similarly sized projects. On the next pages, the principles are accompanied by diagrams of an inner suburb example, as well as text describing the underlying rationale for each. Following these principles, three case studies are described, putting the principles to work in a specific place.

Town Scale Principles

Protect and Restore Natural Systems

Preserve and shape natural areas and corridors that link multiple neighborhoods, and protect area water bodies.

Strengthen Social Connections

Develop an interconnected trail and road network that makes connections between neighborhoods, shared open spaces, or community activity centers.

Provide Transportation Choices

Manage auto traffic to maximize existing road capacity and enhance the comfort of commercial and collector streets and thoroughfares for pedestrians, bicyclists, and transit users.

Integrate Land Uses and Economic Activity

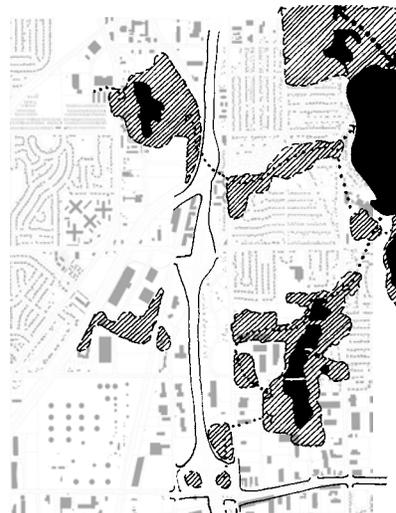
Strategically locate diverse business centers to provide access for multiple neighborhoods as well as regional transportation corridors.

Enhance Homes and Neighborhoods

Create a range of complementary neighborhood types to create a diverse mix of housing and life-cycle housing throughout the town area.

Preserve and shape natural areas and corridors that link multiple neighborhoods, and protect area water bodies.

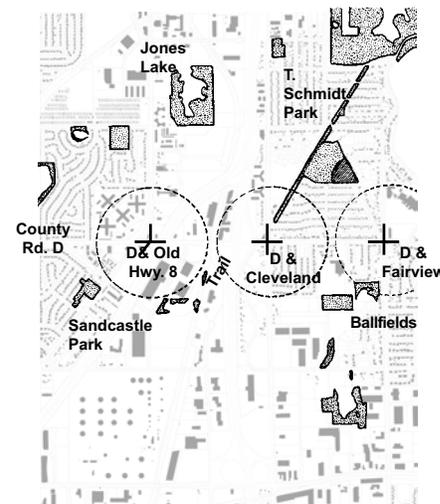
At this scale, a natural resources inventory can be undertaken to understand the dynamics of water and habitat flows between neighborhoods. Town-scale efforts focus on restoring missing links between habitat areas such as wetlands and woodlands and restoring native plant species in existing open spaces. Often these activities can be done in concert with water quality improvement projects to treat runoff from several local neighborhoods that threatens local water bodies.



Neighborhood habitat "stepping stones" of tree cover and understory

Develop an interconnected trail and road network that makes connections between neighborhoods, shared open spaces, or community activity centers.

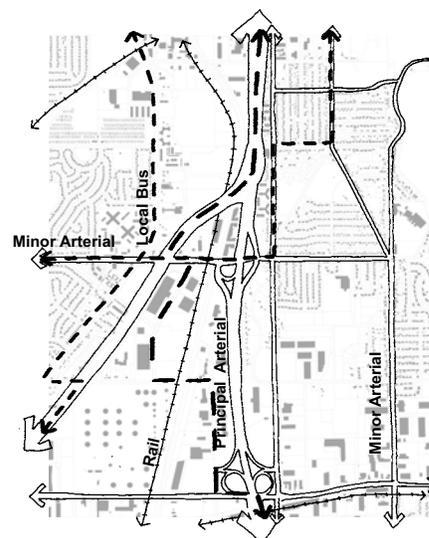
Fostering social connections may involve an assessment of community facilities such as meeting places, recreation centers, and larger park complexes with multiple ball fields or soccer fields. Facilities in one city may attract people from neighboring places, so joint planning and feasibility studies and, at minimum, communication with adjacent communities is necessary. Trail projects that link these services are another livable community activity at this scale of design.



Areas that could be enhanced for use by the surrounding residents and workers

Manage auto traffic to maximize existing road capacity and enhance the comfort for pedestrians, bicyclists, and transit users on busy streets and thoroughfares.

At the town scale, the goal of providing travel options can occur in two ways—by providing the service itself such as a circulator or by concentrating transit supportive development along corridors with existing or potential bus service or rail service. Unless a concentration of likely transit users is located within a quarter mile of a transit, it is difficult to provide frequent and convenient service. An option for more rural communities is the use of park and rides in existing lots that are underutilized during weekday hours such as a church parking area.

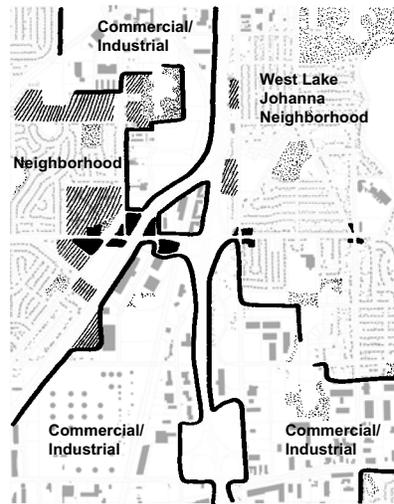


A variety of intersecting transportation systems provides opportunities



Strategically locate diverse business centers to provide access for multiple neighborhoods as well as regional transportation corridors.

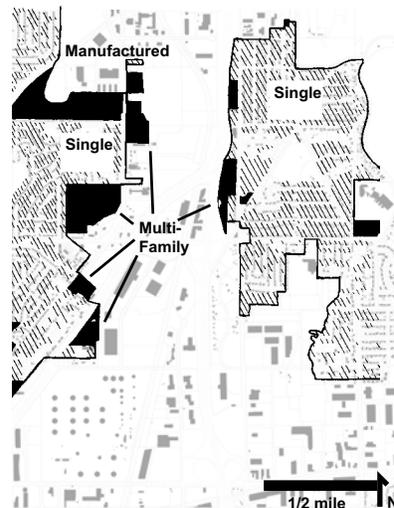
Working toward a more diverse economic base at the town scale means gathering information on existing real estate markets and matching that data with information on different areas in the community that are in transition or are presently undervalued based on current uses. At this scale, cities, either alone or in collaboration with a bordering city, typically focus on older commercial streets that have an aggregation of sites ready to “turn over.”



Generalized land use zones and edges

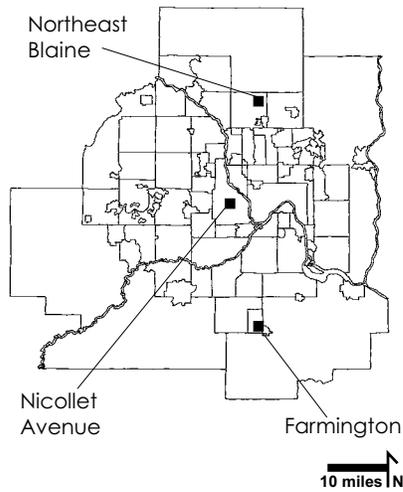
Create a range of complementary neighborhood types to create a diverse mix of housing and life-cycle housing throughout the town area.

While the existing patterns may not be conducive to diversifying at the neighborhood scale, a larger view can reveal opportunities to create that diversity across the town, particularly at the edges between neighborhoods. Edges tend to have inherent diversity that can be encouraged by zoning the area for an even greater variety of uses that attract activity and can be walking destinations for adjacent neighborhoods.



Existing mix of housing types

Town-Scale Case Studies



Three town case studies in the Twin Cities metropolitan region show how cities have the opportunity to approach community design from a metropolitan town perspective, balancing their local and metropolitan identities:

- Farmington
- Nicollet Avenue, Minneapolis
- Northeast Blaine

As a former freestanding rural town now at the southern edge of the Twin Cities metro region, Farmington faces the pressures of major suburban growth all around its small town development pattern. This case study describes how the City of Farmington worked with a subdivision developer to design a new residential neighborhood that is compatible with the features of the natural landscape, the neighboring downtown district, and the surrounding agricultural areas.



Farmington
Building within the community watershed



Nicollet Avenue, Minneapolis
Redesigning a community corridor



Northeast Blaine
Integrating community growth and open space goals

Nicollet Avenue is Minneapolis’s Main Street both downtown, where it is auto-free Nicollet Mall, and through all of south Minneapolis. This case study focuses on Nicollet Avenue from Lake Street to the city’s southern boundary, the segment designated as a “community corridor” in the city’s comprehensive plan. Approximately three miles in length and running through four neighborhoods, this case study describes how the neighborhoods and city planners worked collaboratively to translate a corridor vision and related initiatives into a comprehensive design that balances neighborhood activities and citywide transportation goals.

The City of Blaine’s northeast corner, approximately eight square miles, lies outside the Metro Urban Services Area but within its Urban Reserve—areas reserved for population growth to at least 2040. Already facing urban development pressures, this case study explores possibilities for development types that are more compact, mixed-use, accessible, and ecological than conventional suburban development patterns.

Case Study

Building within the Community Watershed:

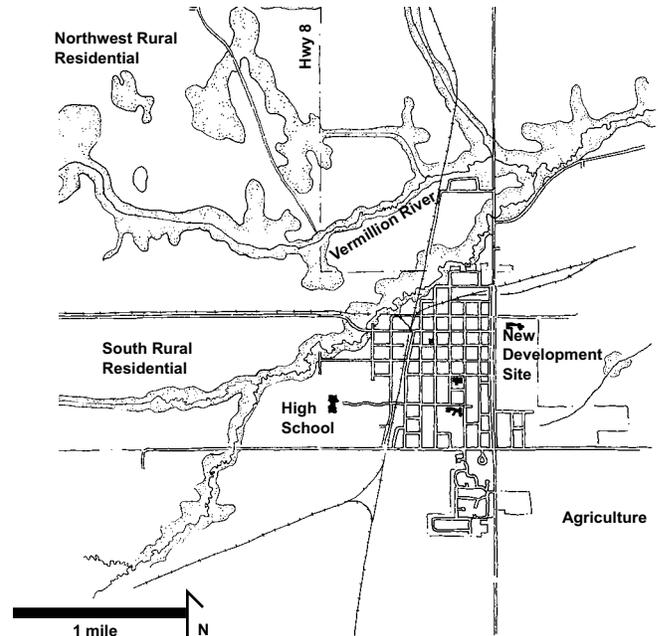
Designing waterways as an environmental framework for development in Farmington, Minnesota

Assessing the Place

Farmington is located approximately twenty miles south of the Twin Cities. Farmington has a distinct community identity built around its rural heritage and its location on a fertile outwash plain between the north and south branches of the Vermillion River. In 1993 the city of Farmington was approached by the Sienna Corporation, a land development group, with a proposal to build a new subdivision across the river in the southeast corner of the city. The developer proposed variances from the zoning codes to build a neo-traditional plan with gridded streets and smaller house lots to accommodate affordable homes—primarily single family. At the same time, the city was in the process of designing a significant flood control project in the vicinity. In the context of these proposals, the challenge was to develop an urban design framework and principles that would best leverage the public and private investments to create a more livable community for existing and future residents, as well as enhance the local natural resources.

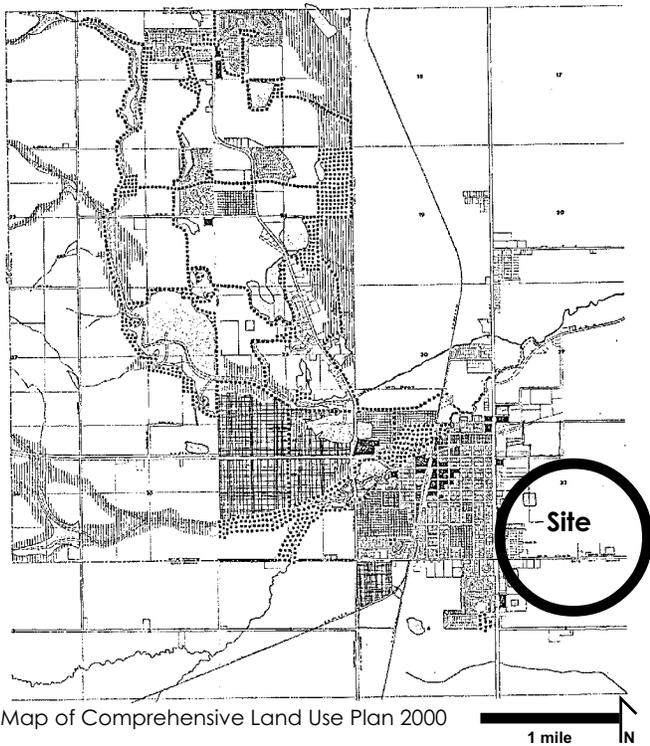
Engaging Communities

The Design Center worked with the City of Farmington Planning Study Committee, comprised of community residents, city staff, and elected officials. In consultation with the committee and the developer's design team, the Design Center proposed a framework and set of design scenarios built around the goals of connecting the new development to adjacent neighborhoods, improving water management for both water quality gains and flood control, and creating an amenity-rich neighborhood that added to the existing parks and open spaces of the community. The scenarios were the vehicle to create specific principles and concepts that would guide development in the southeast corner of town.



A typical railroad town—two lines intersected here—Farmington has the added attraction of the Vermillion River, a vibrant urban forest, and healthy downtown, surrounded by agriculture. Preserving and extending these assets into new development was a goal of both the city and the developer.

For more information on this case study, see *Building Community Across the Corridor*, 1993.



Map of Comprehensive Land Use Plan 2000



Drawing of water-saturated soils

Taking Inventory of the Landscape

In this study, material was not available electronically, but hand-drawn maps can be equally effective for town-scale planning. The following strategies were used to collect and display information.

Walking tour of the city: Members of the Planning Study Committee participated in a walking tour of the city to reacquaint themselves with its important environmental and urban features. Using disposable panoramic cameras, committee members photographed places that they felt were important features of their city.

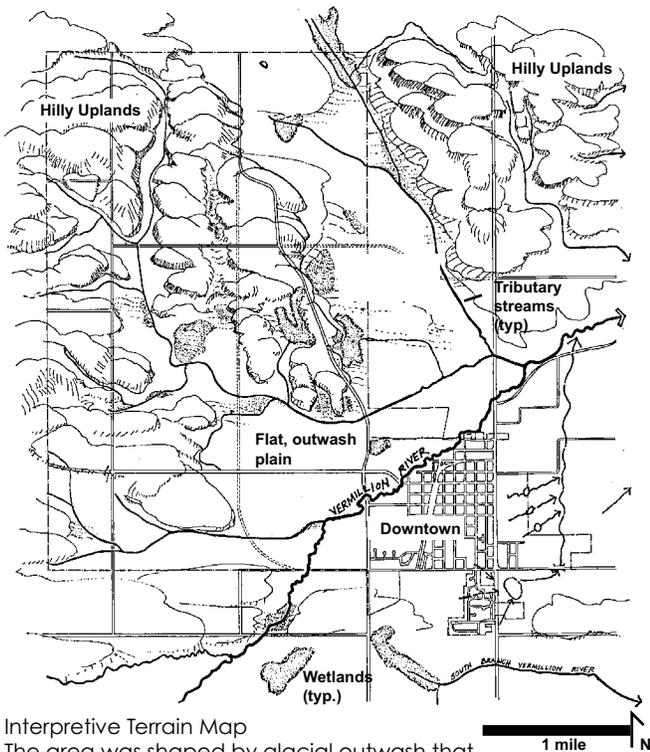
“Bird’s-eye” views of the city: To provide a broader perspective on how natural resources, existing land uses and the built environment form the city’s urban fabric, the town and site was photographed and drawn in ways that emphasized the three dimensional qualities of the place. These overviews also allowed a better perspective on how land uses were situated in relationship to one another and where gaps in the street or habitat network occur.

Current vision for future land uses: The city’s existing comprehensive plan, with its well-thought-out land uses and open spaces was focused mainly on the west side of town. The location of the development site on the map underscored the question of how to extend the town into the new addition.

Mapping water-saturated soils: While many in town were aware of the high water table that caused frequent flooding, this graphic vividly showed that the city was virtually an island surrounded by a below-ground lake with drastically fluctuating water levels.

Study committee members photographed downtown landmarks, residences and the Vermillion River.

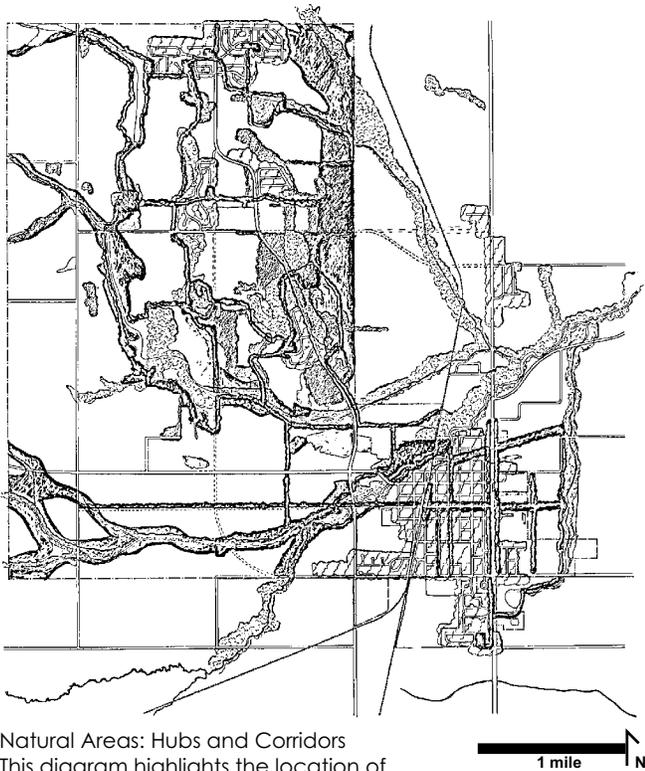




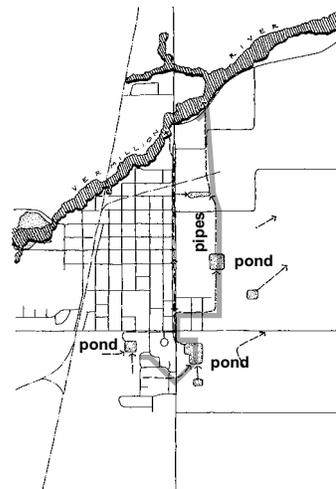
Interpretive Terrain Map
 The area was shaped by glacial outwash that left deposits of gravel and sandy soils after the water receded from the landscape of gentle hills and shallow depressions.

Analyzing and Interpreting the Place

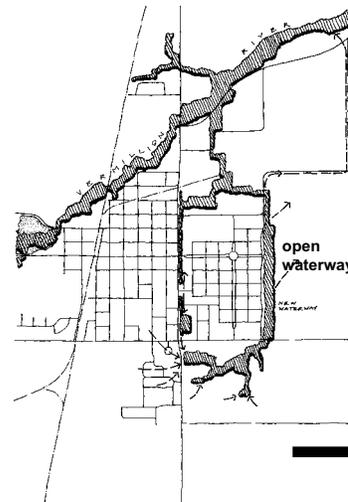
Civic officials, citizens, and staff were accustomed to viewing their city in certain ways. Often, it is helpful to provide a new view that shows relationships and patterns that can go unnoticed until highlighted by someone looking from the outside. For example, the terrain map emphasized the subtle terrain and drainage pattern in the context of the existing land use pattern. The map also shows how a new drainage way to serve the proposed development could fit into the overall pattern. Similarly, the natural areas hubs and corridors map vividly portrays natural resources as a system rather than a series of separate places. This drawing also emphasizes the primary streets and natural corridors that could be extended and connected to the new part of town. Analysis drawings (below) were used to investigate alternative stormwater and flood control strategies, diagrammatically showing how each would appear on the surface.



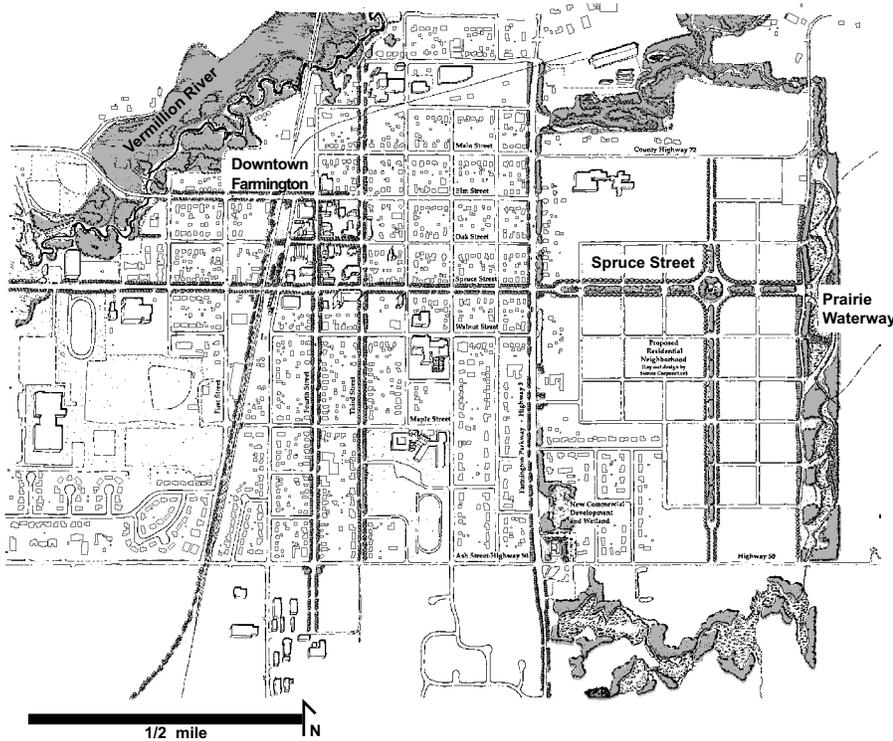
Natural Areas: Hubs and Corridors
 This diagram highlights the location of potential non-agricultural habitat areas where wildlife may nest, live, and forage. Vegetation along rivers and creeks is shaded, as are wetland areas. The hatched lines represent areas of urban tree canopy, places that can play a supportive role for wildlife in the area.



Pipes and ponds. A series of ponds and underground pipes would convey excess water to the Vermillion River.



Prairie waterway. A broad, vegetated depression would carry water to the river, while creating an recreation and habitat corridor that forms a strong edge between town and agricultural fields.



This scenario suggests an easily identifiable system of roads and a waterway to provide community linkages throughout Farmington. Important north/south corridors include the Vermillion River, which forms the western edge of downtown, and the proposed prairie waterway, which defines its eastern edge. Spruce Street has been designated as the most important east/west pedestrian connector because it serves to connect the prairie waterway with the downtown commercial and civic institutions as well as the Vermillion River. Wide bands of vegetation create greenway borders around the wetland systems that lie north and south of the proposed residential development.

Exploring Design Scenarios

A closer view of the proposed urban design framework showed how the new part of town could become a part of the existing town. The following design principles were derived from the existing community landscape and the scenario proposed for the east addition to town. The principles, developed by the Design Center with the planning study committee and the developer, were used to guide the ultimate development plan for this site and could also guide future development in other areas adjacent to town.

Enhance Homes and Neighborhoods **Design Principles**

Use the existing city grid pattern of square or rectangular blocks to shape the layout of new development adjacent to downtown Farmington.

Protect and Restore Natural Systems Construct new residential streets scaled to the existing 31-38 foot wide streets of the downtown area. New streets should be planted with lowland-forest, shade trees which are tolerant of urban street conditions.

Foster Social Connections Use designated streets as pedestrian linkages between environmental corridors or “greenways” and civic places, especially developing pedestrian and bicycle connections between new developments, downtown businesses, and local schools.

Provide Travel Options Rebuild State Highway 3 into a new pedestrian-oriented parkway and residential-scaled street.

Diversify and Increase the Local Economy Use native vegetation or plant forms combined with the stormwater collection ponds and drainage system to create outdoor rooms and corridors for recreation and pedestrian activities, as well as wildlife movement and habitat.

Use native vegetation and highway infrastructure to design unique city “gateways,” which will distinguish Farmington from other locations in the regional area.

Moving Forward

Phase One and most of Phase Two have been constructed and sold, with strong buyer interest in the neighborly feeling of the traditional blocks plus innovative open spaces. The following elements are some of the factors that helped successful implementation of the projects:

- The city and developer continued working with a team of landscape architects, engineers and an ecologist to refine and construct the prairie waterway.*
- The city allowed slightly smaller street widths and created a Tax Increment Financing (TIF) district to support infrastructure investments. TIF is a program of the state legislature that allows a city to capture increased tax capacity from new development within the designated district and apply it toward district development costs, such as installing utilities (Minnesota Journal, 2001).

- The developer worked with builders to design homes that had street appeal and emphasized front door and front porch areas rather than the garage. The developer's design team created an interior common space for each block that also functions as temporary stormwater storage.

* Developer: Sienna Corporation
Layout Concept: Derek Thompson, RLA
Engineering: JR Hill Inc.
Prairie Waterway Concept: DCAUL
Prairie Waterway Design: Balmori and Associates with Paul Barten, hydrologist.



Looking west, Spruce Street makes a visible link to downtown.



The waterway is a sinuous channel, with side ponds that filter runoff from backyards and streets. In a flood event, the entire waterway fills.



The median of Spruce Street is planted with native wildflowers and carries runoff to the Prairie Waterway.



Since these photos have been taken, trails meander along this constructed waterway.

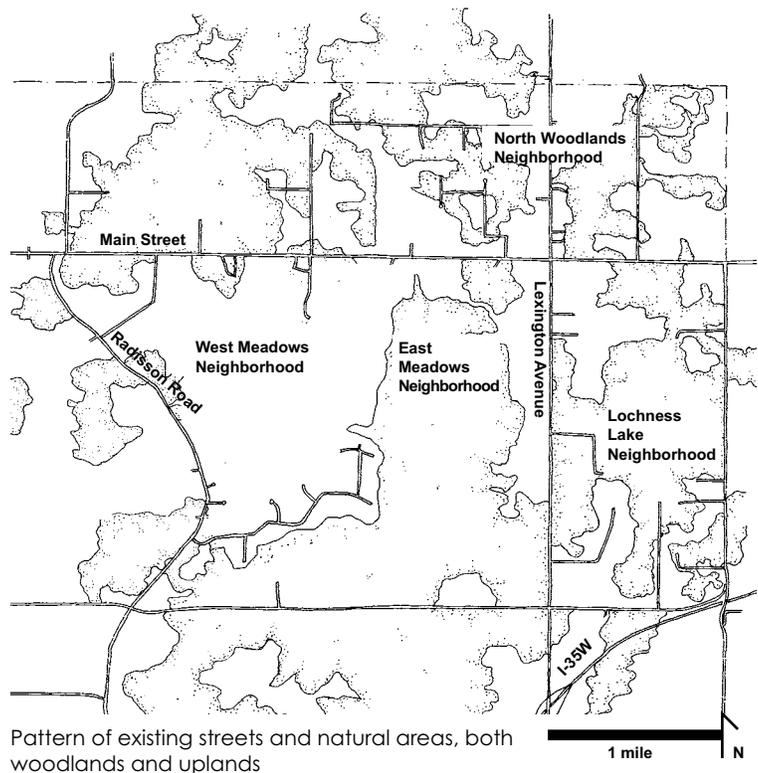
Case Study

A natural-resource based town plan:

Integrating community growth and open space goals in Blaine, Minnesota

Assessing the Place

Located on the edge of the urban service area, this 6000 acre area is fifteen miles north of Minneapolis. Recent trends in the local development market and smart growth policies at the regional level motivated the City of Blaine to reevaluate its previous assumptions about development timing and land use patterns. Recognizing the importance of an area of this size, the City was interested in exploring the potential of the area for a broader mix of land uses and home types than more conventional suburban development pattern. The City and its citizens also recognized the importance of the large wetland complexes and high quality woodlands that had been identified in a recent Natural Resources Inventory.



Pattern of existing streets and natural areas, both woodlands and uplands

Engaging Communities

While more than half the area is comprised of wetlands and extensive sod fields, approximately 190 homes were already located on five to forty acre parcels. Including these landowners in the process was a high priority. Some wanted to know how soon they could develop; others wanted to know how development would affect them; while others were adamantly opposed to any change in the status quo of low-density, un-sewered residential. All were interested in an open process.



The aerial photo shows the subtle terrain of the Anoka Sand Plain: small wooded hills surrounded by wetlands. Many of the wetlands were ditched and drained, now sod fields, while others remain, with rare remnants of pre-European settlement plant species.

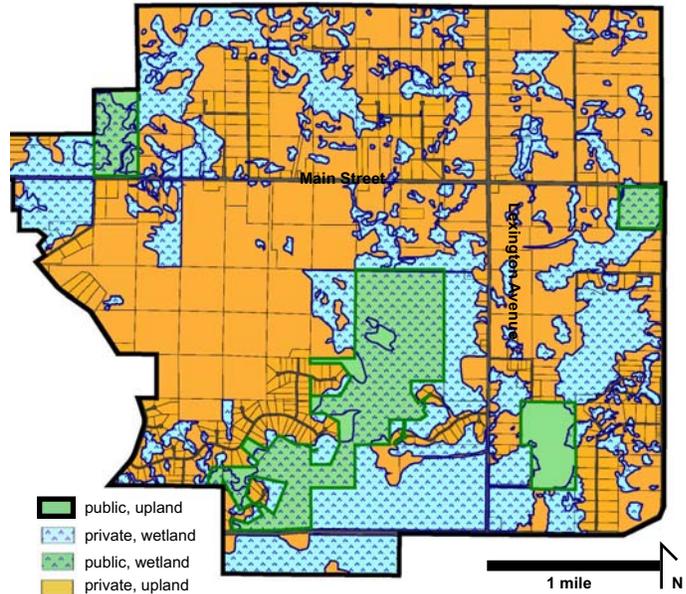


Small groups of citizens worked to create scenarios that clustered residential development.

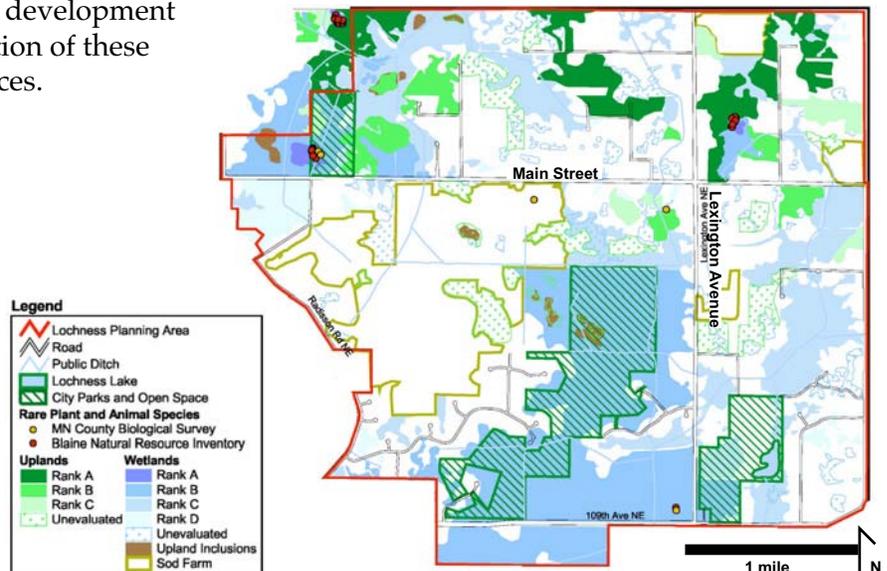
Taking Inventory of the Landscape

Located on the Anoka Sand Plain, this ancient lake bed is characterized by deep sands overlain by wetland soils interspersed with knolls that gently rise above the flat terrain. Gathering data on wetland locations became the key to understanding what could happen in the area, in terms of development potential. Though the area has a relatively high water table, the area can be built on, as long as homes are raised above the 100 year flood elevation. Wetlands are more of a constraint, according to local watershed managers, because if filled, they would need to be replaced at a two for one acre replacement rate.

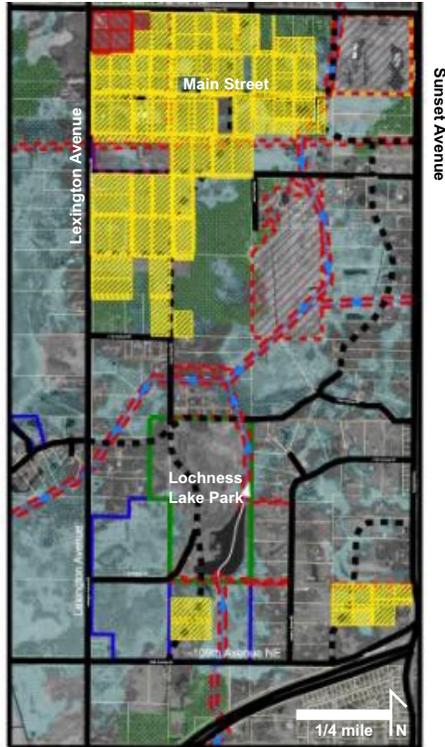
Locating and evaluating the natural resources was critical to this planning process. The city sought and received matching funds for a consulting firm to conduct a natural resource inventory that was to guide future open space and greenway acquisitions in the community. The inventory reviewed historic data, existing maps and field reviewed many parcels that showed potential for harboring high quality natural areas or species. The areas were ranked, based on their resemblance to native plant communities. This information was overlaid on orthophotos, aerial photographs that are scaled for use with mapped data, that were provided at community workshops. Presented in this manner, the development pattern could be shaped by the location of these pre-identified environmental resources.



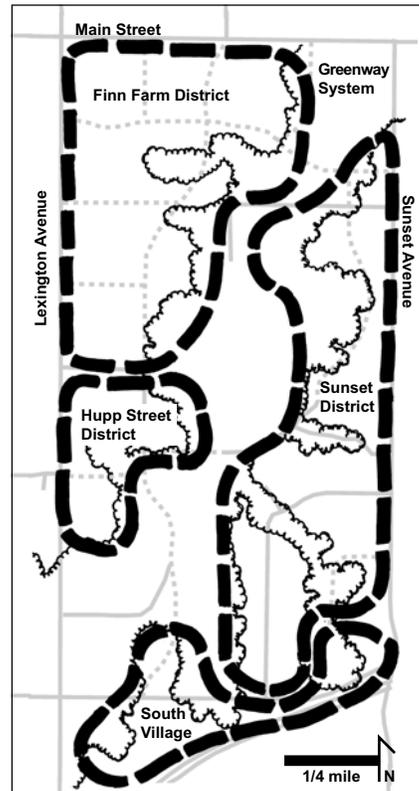
Wetland Inventory. This inventory combined data from various information sources to create the most accurate base map, for planning purposes, of land that was "developable" and land that was protected by wetland regulations. More detailed delineations would be required if a development application was submitted to the watershed district and city. (Source: *City of Blaine Natural Resource Inventory 2000*, Peterson Environmental)



Natural Resource Inventory. This map is one of several information layers from an inventory that identified and rated the quality of remnant natural resources, including both upland and wetland plant communities. (Source: *City of Blaine Natural Resource Inventory 2000*, Peterson Environmental)



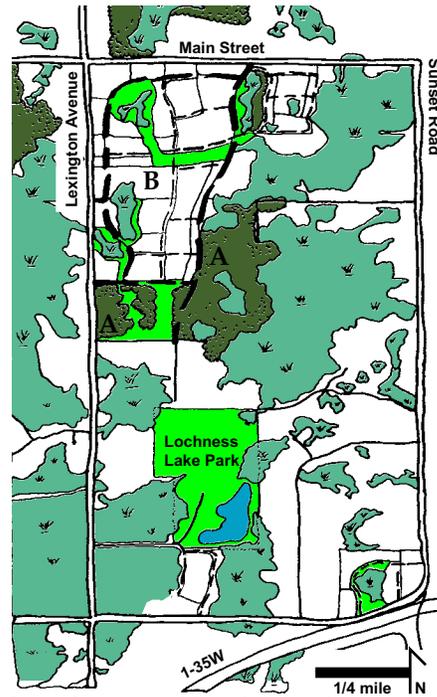
GIS Summary Map. Overlaid on an aerial orthophoto, areas in light hatching are where at least three of the five groups placed development.



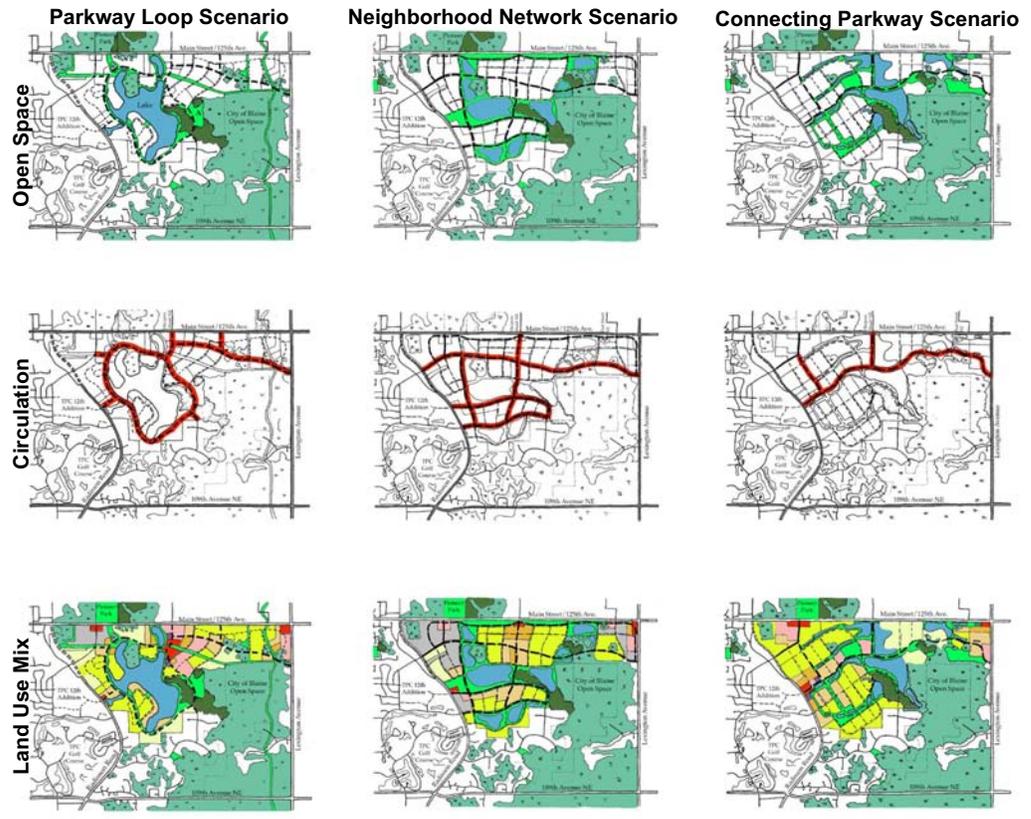
Graphic Summary Map. The GIS data was analyzed and summarized to describe how the groups were generally describing four different districts.

Analyzing and Interpreting the Place

This page shows how different interpretations and representations of data can contribute to a better understanding of different potential design scenarios. Small group work was summarized on a GIS map that served as an underlay for the diagram on the right. This diagram summarizes the small group work in a more graphic way, more in keeping with the imprecise nature of the information gathered. The information gathered became the basis for an open space and road network scenario that carries through the idea of a linear central open space corridor with development clustered on either side of it.



Open Space and Road Network Scenario. The general information gained from the small groups was then used as a base to create several scenarios, such as this example.



Three scenarios. Each column represents a different approach to achieving open space, circulation, and land use goals.

Exploring Design Scenarios

Information gained from the Lochness Neighborhood workshops was applied to the Meadows Neighborhoods by the staff team. Residents and the city council reviewed the illustrations and the design principles that guided each alternative, as well as associated numbers, such as acreage and unit counts. Based upon their discussion of preferences, a composite scenario for this area, as well as the other neighborhoods was proposed along with a set of overarching design principles and more detailed principles for each neighborhood.

Overarching Design Principles

- Protect natural resources.
- Plan for urban services throughout.
- Development pays infrastructure costs.
- Designate areas for commercial/industrial uses.
- Provide a diversity of residential types.
- Situate land uses in ways that support transit.
- Create an interconnected roadway network.

- Protect and Restore Natural Systems*
- Diversify and Increase the Local Economy*
- Enhance Homes and Neighborhoods*
- Provide Travel Options*
- Foster Social Connections*

Moving Forward

The City of Blaine submitted a comprehensive plan amendment that significantly increases the number of homes and businesses compared with their original forecasts that assumed typical, larger lot single family residential platting. By locating roadways and more intense development away from sensitive sites, the overall area can accommodate more people and preserve important natural areas and systems. Key ingredients to achieving the adoption of more sustainable development patterns were the following:

- Citizens had the opportunity to engage in hands-on planning and have an extended, substantive discussion about the future of their community. While some were not happy with the outcome, they were informed and involved in the process, rather than waiting until a public hearing to voice their concerns. A key result for property owners was an agreement by the current council that the costs for infrastructure improvements will be born by the development requesting the hook-up, rather than everyone in the area.
- City staff and elected officials could see how development could look if guided by principles that begin with an open space framework to arrange a diversity of transit-supportive land uses. These principles have guided discussions and negotiations with a large scale development that came forward during the planning process.
- The number of housing units increased and a greater diversity of land uses and housing types was accommodated. The plan proposes to protect tracts of woodlands that are adjacent to primary wetland corridors. Streets are connected, yet do not traverse high quality natural areas.

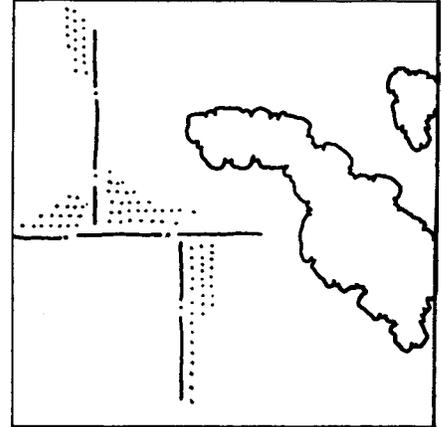
The city used the numbers generated from the design scenarios to formulate infrastructure plans. The scenarios were also used to illustrate a design guide book that was part of the comprehensive plan amendment. The guidebook spells out for each neighborhood more detailed design principles organized into three categories: natural features and open space, movement systems, and land use mix. In future negotiations with developers, the guidebook will be a document that communicates the intentions and desires of the community for each of the four neighborhoods as they develop over time.

Sample Guidelines: West Meadows Neighborhood

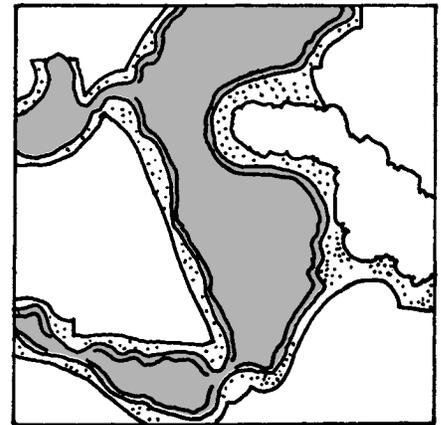
Goal for Natural Features and Open Space:

Space: Design a connected system of preserved and created natural areas and parks throughout all land uses on the site that are accessible by trails linking to other existing open spaces.

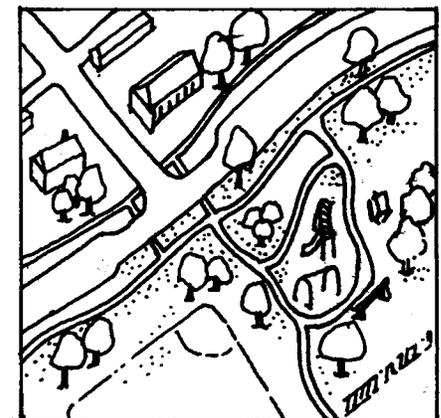
Design Principles:



- Preserve woodlands where possible.



- Create a system of linear lakes and larger ponds that are connected.
- Design a primary park as a central community amenity.
- Allow public access to the water along most edges.



- Locate new neighborhood parks along the roadway system; include dry areas for play.

Case Study

Rethinking a community corridor:

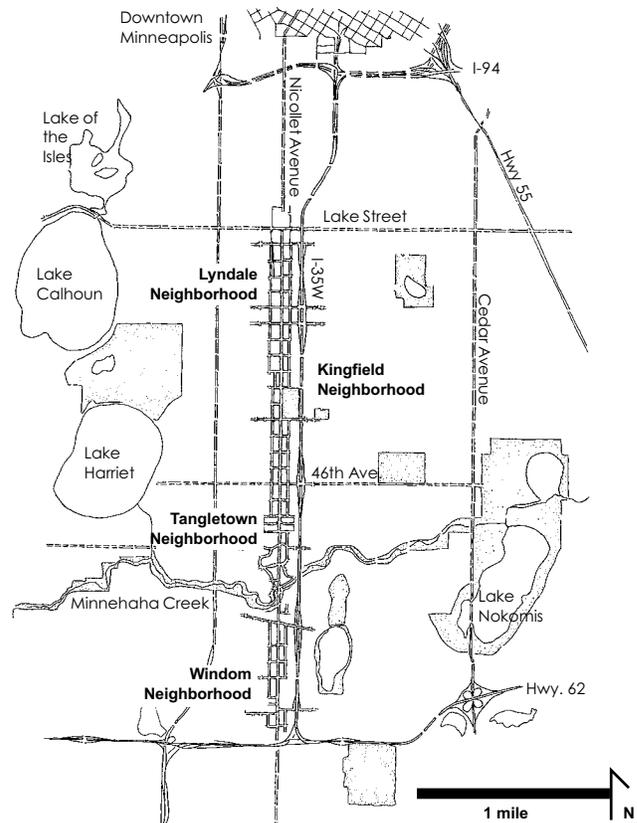
Developing a common vision for Nicollet Avenue in Minneapolis, Minnesota

Assessing the Place

Nicollet Avenue serves south Minneapolis as a community corridor. The roadway provides a north / south connection for automobile traffic, frequent transit service, and a pedestrian environment for surrounding neighborhoods and adjacent businesses. Nicollet also functions as the identity street for four neighborhoods it passes through; Lyndale, Kingfield, Tangletown, and Windom. Nicollet Avenue and its surrounding neighborhoods are likely to be affected by a number of outside forces in coming years. Access ramps to I-35W will be moved a few blocks to the east. A wide array of redevelopment proposals along the corridor have been presented, and there is active planning to reconstruct portions of the avenue. In light of these activities a single comprehensive plan for the entire corridor was needed.

Engaging Communities

A group of concerned residents and business owners, Citizens for a Sensible Nicollet Avenue Plan (CSNAP), formed to advocate for comprehensive and coordinated revitalization of Nicollet Avenue. The Design Center provided technical assistance in this process, as well as an urban design analysis of the corridor. Design recommendations were formulated through review of several iterations of road cross sections, intersection designs, and neighborhood- scaled analyses of the corridor. The CSNAP committee provided initial review and feedback, and then each neighborhood group along the corridor also reviewed and commented on the work.



Members of CSNAP and additional neighborhood residents took a stroll down the avenue to assess existing conditions and concerns.

Taking Inventory of the Landscape

The project started by identifying and reviewing other planning initiatives, both completed and ongoing, related to the South Nicollet Avenue corridor, including: Nicollet Avenue Task Force, Minneapolis Public Works Department, I-35W Access Project, MN DOT Crosstown Commons Project, and neighborhood redevelopment projects.

Guiding plans and designations

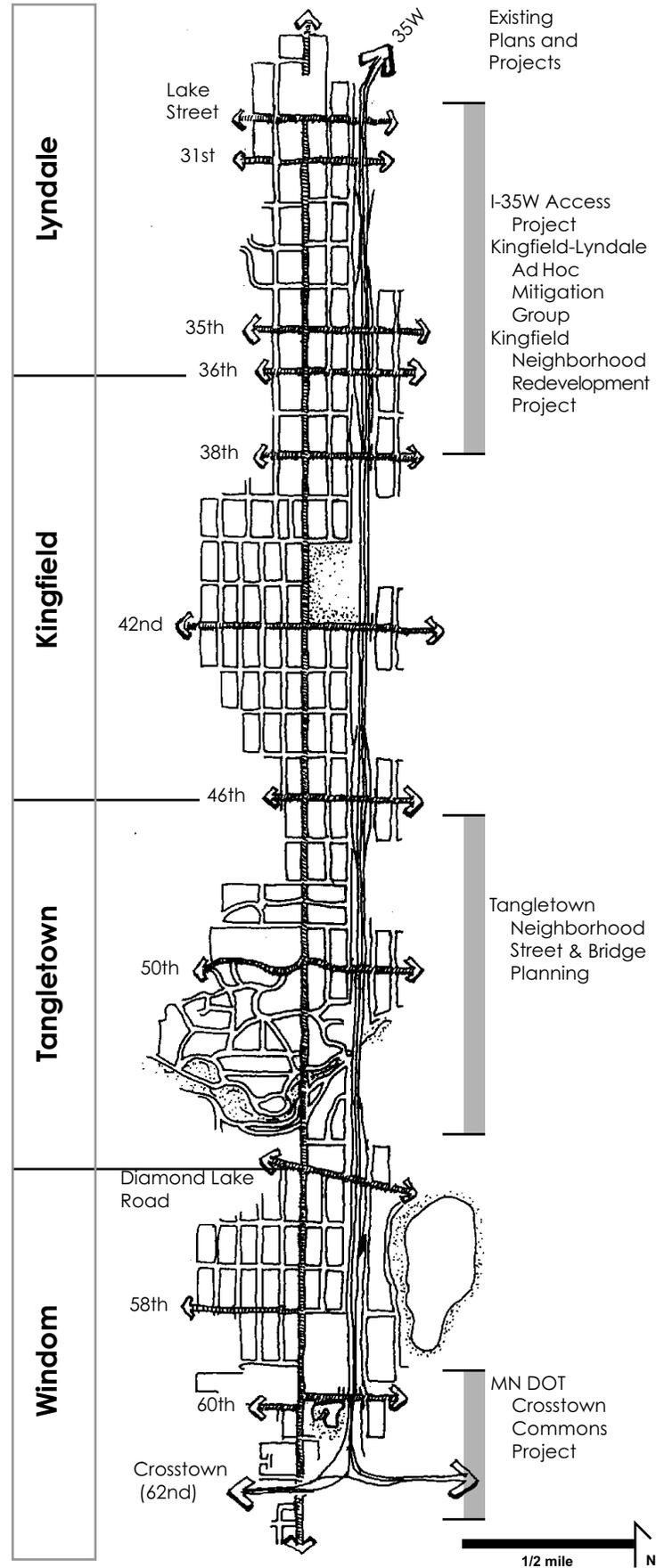
As an important north/south street in the city's fabric, Nicollet Avenue was referenced in many different plans. This project sought out all of these materials to better understand the different constraints, funding and design guidelines that would influence future changes. For example, as part of the Minneapolis Plan, the city's comprehensive plan, Nicollet Avenue was designated as a *Community Corridor* from Lake Street to the city's southern boundary. This corridor designation provided transportation and urban design guidelines. In transportation plans, Nicollet Avenue was classified as a "B" Minor Arterial Road and a Municipal State Aid street. Finally, this work used as its basis the Nicollet Avenue Task Force's Revitalization Plan.

Roadway and traffic conditions

From Lake Street to Highway 62, the road's right-of-way layout and dimensions were inventoried. Existing traffic conditions were obtained from the City of Minneapolis, including existing average daily traffic counts, turning movement counts, spacing of signalized intersections, signal timing, and travel direction.

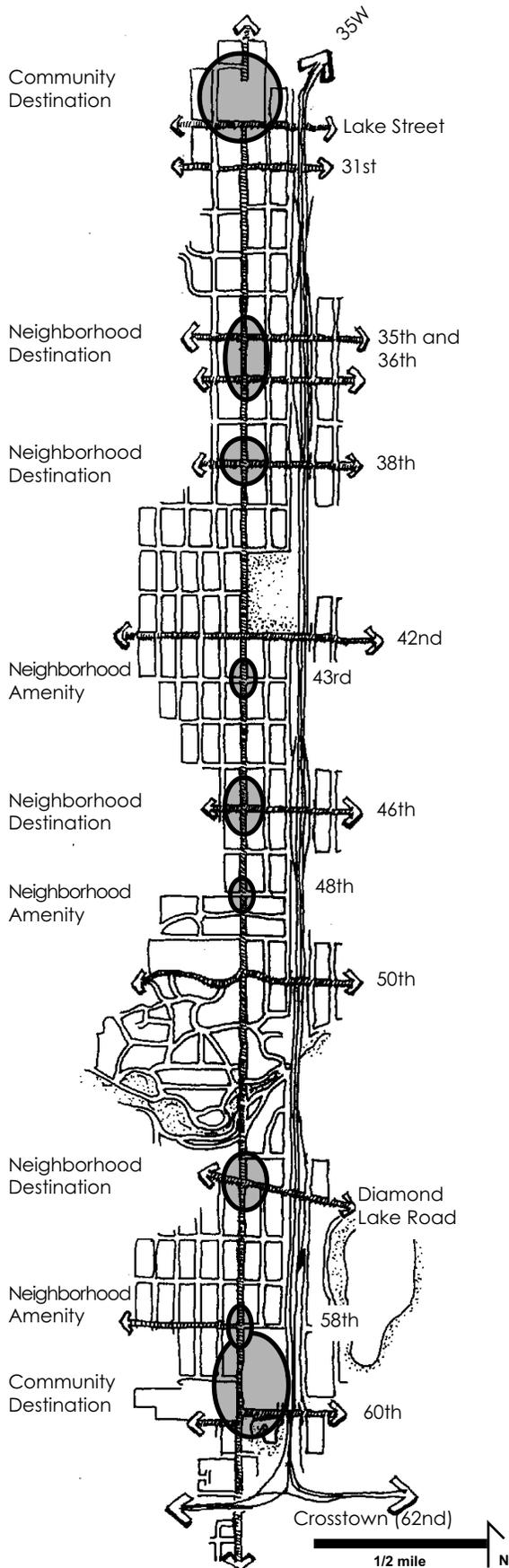
Walking survey of the street corridor

CSNAP members, neighborhood residents, and business owners participated in walking tours of the corridor in order to survey the street's features, challenges, and opportunities as a group. Neighborhood residents from the Lyndale and Windom neighborhoods conducted traffic surveys to better understand the type and volume of automobile traffic and where pedestrian traffic occurred.



Analyzing and Interpreting the Place

This study sought to redesign the roadway by synthesizing urban design and transportation planning into a livable street design. First, a street analysis was conducted focused on movement and activities at key intersections. The street analysis encompassed three street planning areas: roadway, sidewalk, and buildings. Three types of “organizing intersections” were defined and used to categorize the key intersections along Nicollet Avenue. Based upon review of the literature on traffic management and creating safe, desirable pedestrian environments, key design strategies were proposed for each type of intersection:



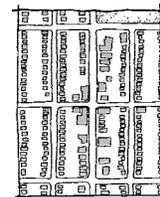
- **Neighborhood Destinations:** Lively business life, especially in early evening and on weekends.



Key Design Strategies

- Facilitate traffic flow to accommodate turning
- Create safe pedestrian crossings
- Maximize sidewalk width
- Organize parking, control access points
- Create a common identity with streetscaping

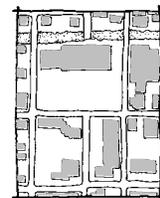
- **Neighborhood Amenities:** Places that blend residential fabric yet have a few notable neighborhood institutions.



Key Design Strategies

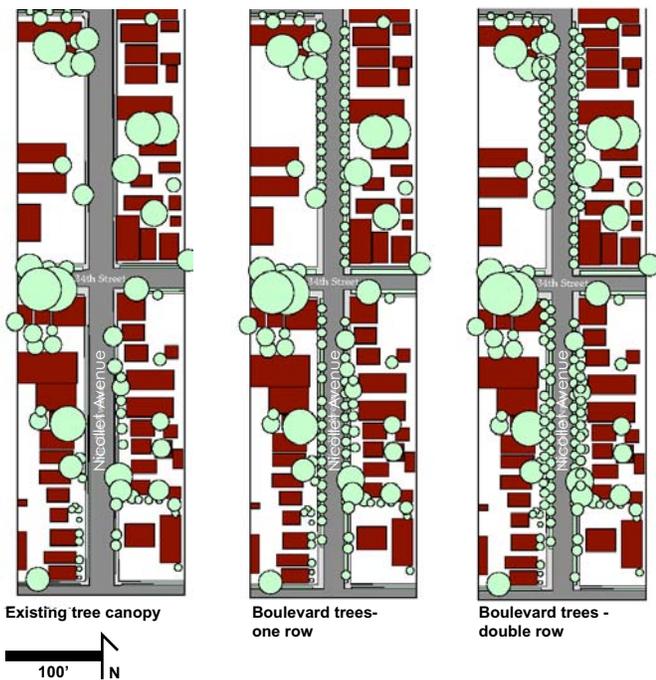
- Calm traffic
- Enhance pedestrian crossings
- Create small areas for conversations and outdoor eating

- **Community Destinations:** Large scale job and shopping hubs that generate high activity levels all week and into the evening.



Key Design Strategies

- Create clear internal circulation networks for pedestrians, bicyclists, and vehicles
- Maximize transit amenities
- Limit access to parking lots



These scenarios examined the implications of adding street trees to the area. Based upon an urban tree modeling program, the biggest improvements in cooling and air pollution reduction occurred with the addition of a single row of trees on either side.

Exploring Design Scenarios

Through a series of meetings with individual neighborhoods and with members of Citizens for a Sensible Nicollet Avenue Plan, those in attendance provided feedback on possible plans for the community corridor. Discussion focused around the satisfaction of several sets of criteria. The City of Minneapolis has formally classified Nicollet as a Community Corridor and as MSA or Municipal State Aid roadway, making it eligible for a certain set of funds. Nicollet is also considered a 'B minor' arterial in the larger transportation network. With each of these classifications comes a set of design guidelines for lane widths, turning lanes, setbacks, reaction zones, and speed suggestions. Of great importance to the residents and business owners were things such as transit access, parking, sidewalks, boulevards, and street trees. The challenge all along the corridor was to enhance the livability of the roadway without compromising its role in moving automobile traffic north and south through Minneapolis.

Ultimately, the CSNAP committee agreed upon a set of overarching design principles that could guide improvements along the entire corridor. The final document described the principles listed below and illustrated more detailed scenarios for how each segment of road section could be retrofitted, using these principles.

- Protect and Restore Natural Systems*
- Foster Social Connections*
- Diversify and Increase the Local Economy*
- Provide Travel Options*
- Enhance Homes and Neighborhoods*

Design Principles

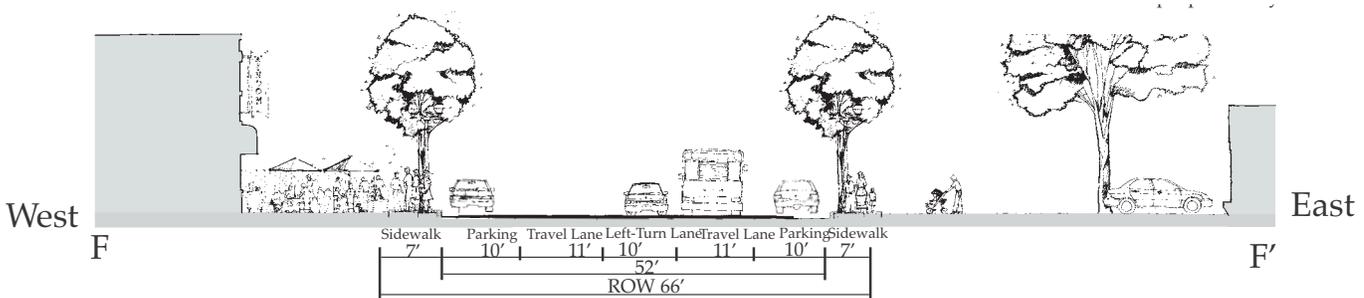
- Enhance the urban forest by greening the avenue.
- Ensure a high-quality pedestrian experience.
- Balance the needs of residents and business enterprises.
- Balance traffic volumes with quality of life along the corridor.
- Provide continuity for the driver, but respect the individual character of neighborhoods and places.

Moving Forward

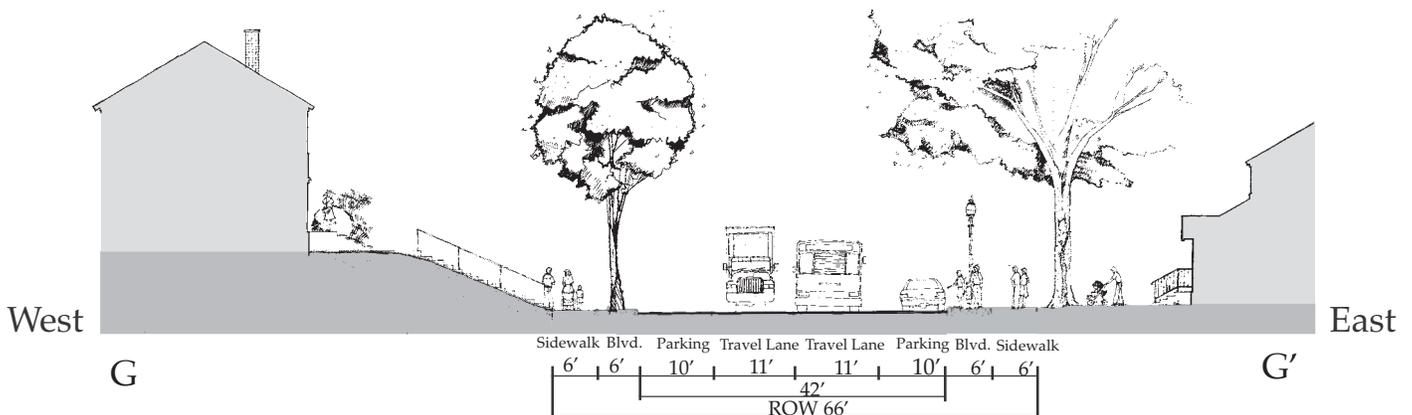
CSNAP felt it was urgent to get in front of these incremental changes with a commitment to a long-range plan. To realize this goal and the more specific improvements recommended in the plan, the committee recommended the following next steps:

- 1) Adopt the CSNAP plan as the blueprint for reconstruction of the avenue.
- 2) Develop and adopt a reconstruction timetable for the avenue that is coordinated with other projects and plans.
- 3) Maintain the integrity of the CSNAP plan by continuing to involve neighborhoods and citizens.
- 4) Select design elements that implement the plan. These include, but are not limited to: street trees, lighting, street furniture, paving materials, and human-scale public art.

Upon completion of this phase of the project, the committee felt that a key to the success of the process and future implementation was the inclusion of not only residents and businesses but also city staff and elected officials. By involving these key players, CSNAP participants could hear about citywide and engineering concerns, and better articulate their livability concerns as a group of neighborhoods with similar goals.



At a neighborhood amenity intersection (58th and Nicollet), elements such as a wider sidewalk and pedestrian scale lighting are the key pedestrian elements, while a center left turn lane and bus pullovers are accommodated within the street itself.



This section shows how a mid-block area could look, minimizing the amount of curb-to-curb paving and gaining room to plant street trees in the boulevard.

Chapter Five: The Subregional Scale



Four cities share a chain of lakes and a freeway system that have shaped development patterns. They face common concerns of sustaining both their economic vitality while preserving the environmental features that attracted homes and businesses to the area. The box outline shows the location of the prototypical town scale example from the previous chapter.

Individual communities can make great strides toward making great places and connecting them, but sometimes critical linkages and programs can only be achieved by a larger vision or action plan. When several communities share a resource such as a transportation corridor, lake or river, they find great benefits working together as a subregion. In the Twin Cities, subregions have been self-defined by the communities themselves. The boundaries also depend upon the issue of concern. The nature of collaboration varies from formal “joint powers agreements” to looser coalitions or partnerships. This handbook highlights case studies from two different subregional efforts that are working toward common goals. They share the view that collective action is more productive than competition for scarce resources for community improvements. The following principles have been generalized from the guiding ideas that have been developed by these two subregions, who in turn have been informed by other coalitions and partnerships across the country. They can be a beginning point for new subregional efforts, and customized for a better local fit. After a description of subregional scale principles, two metro-area case studies follow.

Subregional Scale Principles

Protect and Restore Natural Systems

Identify and protect or restore large scale natural assets and expand linear connections between them where appropriate.

Strengthen Social Connections

Whenever possible, share facilities and services to create connections between civic leaders and professionals, as well as the people who use and staff these programs.

Provide Transportation Options

Leverage investments in road networks, transit systems, and regional trails to maximize the range and efficiency of travel options. Focus on linkages between town-scale and subregional activity centers: places that have or could have a high concentration of commercial, business, and housing.

Integrate Land Uses and Economic Activity

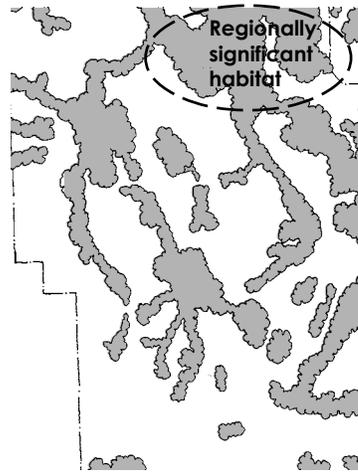
Strive to create a diversity of pedestrian and transit-friendly centers within the subregion, while creating a balance between job-producing land uses and housing.

Enhance Homes and Neighborhoods

Analyze housing and demographic data across the subregion to identify trends, gaps, and potential opportunities for joint projects that support the vitality of homes and neighborhoods.

Identify and protect or restore large scale natural assets and expand linear connections between them where appropriate.

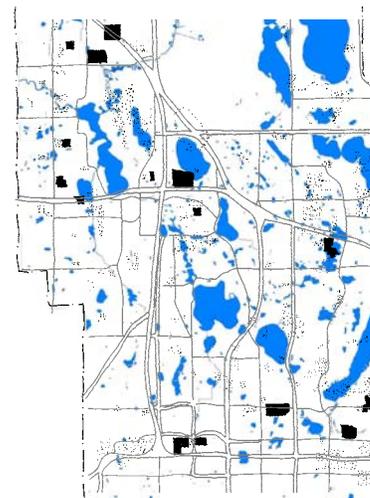
As many subregions seek to strengthen their attractiveness as a business location, proximity of environmental features to businesses and housing can be a strong selling point to potential employers. Though abundant locally, water bodies are often impacted by upstream uses that are under municipal control. Cross-border efforts are sometimes required to preserve or improve quality. Less obvious are the needs of migratory animals such as birds and butterflies that tend to follow river corridors and nearby habitat, without regard for municipal boundaries. While natural resource planning agencies can identify the important regionally significant natural areas, local collective action is required to protect these assets.



Corridors of water and vegetation support the vitality of regionally important resources.

Whenever possible, share facilities and services to create connections between civic leaders and professionals, as well as the people who use and staff these programs.

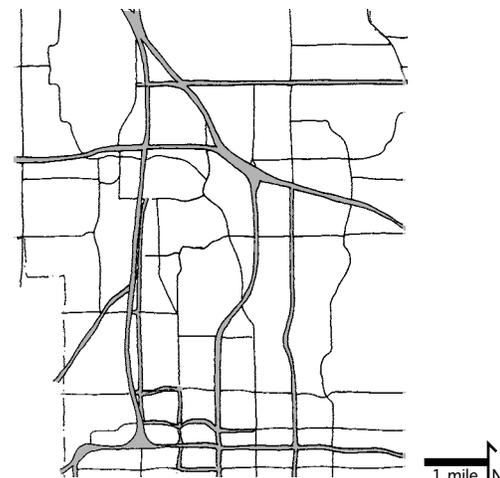
Within a subregion, there is enough critical mass to support arts organizations, jobs, and housing programs. People tend to stay within a geographic sector when making their housing choices. By offering a rich array of cultural and social opportunities, a subregion can retain their citizens, forging lasting ties and bonds to a community. This stability can increase the social capital of an area, in terms of strong volunteerism and participation—a traditional strength of Minnesota communities.



Schools, shown in black, and lakes, toned in gray, are often the centers of community life for area residents.

Leverage investments in road networks, transit systems and regional trails to maximize the range and efficiency of travel options. Focus on linkages between town-scale and sub-regional activity centers: places that have or could have a high concentration of commercial, business, and housing.

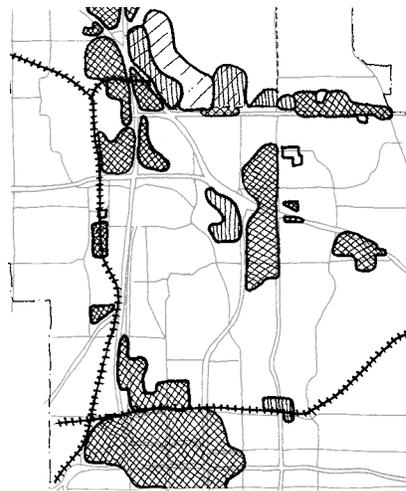
As projects at the neighborhood and town scale become more transit-supportive, the ability to have a more fully integrated transportation system becomes possible. Similarly, transit-supportive towns and neighborhood scale development will result from improvements in transit service.



Major and minor arterials, illustrated above, are primary focus areas for transit improvements.

Strive to create a diversity of pedestrian and transit-friendly centers within the subregion, while creating a balance between job-producing land uses and housing.

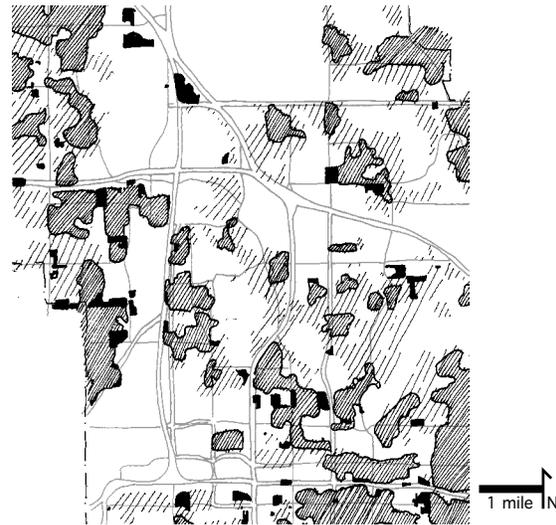
There are few “stand alone” cities in the metro area—most rely on the subregional area to supply the full range of goods, services and housing that a thriving economy needs. These land uses have been established over time, in response to local decisions and regional infrastructure investments such as highways. Communities can be more strategic in their development or redevelopment efforts by knowing what is happening throughout the subregion and targeting a unique niche that complements the development activities of their neighbors.



Areas of redevelopment in each city. The cross hatch is commercial or mixed use, the diagonal hatch is residential and the vertical hatch is civic.

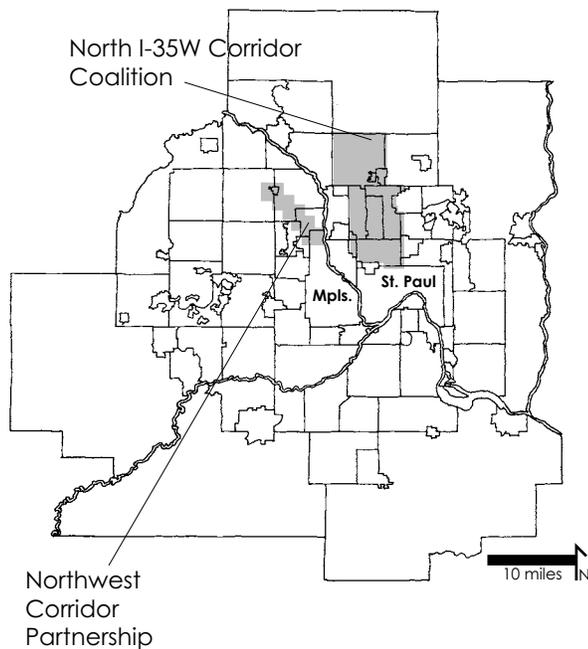
Analyze housing and demographic data across the subregion to identify trends, gaps, and potential opportunities for joint projects that support the vitality of homes and neighborhoods.

An examination of housing and demographic patterns can yield information about a variety of potential interventions that may add livability to these neighborhoods. It may be the addition of may be a home improvement program that encourages renovations or maintenance on a particular housing style that is prevalent, such as the rambler or split-level walkout.



An inventory of existing housing types, with the darkest hatch as multi-family, the medium hatch as medium density, and the lightest hatch as low density residential.

Subregional-Scale Case Studies



This section presents two case study subregions, each pursuing a more coordinated effort to change outmoded land use patterns and bring a more diverse palette of investment and living options to their areas. Both these efforts recognize the need to ensure local or agency autonomy while allowing the work of one entity to at minimum complement another's work and at best create a synergy between the multitude of activities taking place in the landscape.

The North Metro I-35W Corridor Coalition case study describes an initiative begun by seven cities straddling two counties who decided that working together, rather than in competition, would provide mutual benefits. As the name attests the focus was initially on the transportation issues; however the current effort is a more comprehensive look at the entire area comprised by the cities involved. The coalition's work, guided generally by livable community goals similar to the general goals described in this handbook, has a particular focus on transportation, housing, and economic diversification and the synergistic effects between the three.



Northwest Corridor Partnership
Transforming a Highway Corridor into a Metropolitan Corridor of Districts, Walkable Centers, and Greenways

Initiated by county efforts, the Northwest Corridor Partnership is a consortium of cities, the county, and institutional entities along a proposed bus corridor that follows a county highway alignment. The focus of this effort was to convene communities along the corridor, involving citizens and leaders, in a series of visioning and planning steps targeted toward the intersections of each proposed transit stop. The goal was to support the transit system, while creating more humane and diverse environments along a corridor that currently lacks or ignores cultural and environmental features. This process brought together partners for individual transit stop districts, while convening the entire partnership together for the comprehensive view.



North-Metro I-35W Coalition
Charting a new course for a subregion of seven cities

To this point both subregional efforts are relatively young but have already brought rewards to participating communities. The case studies highlight the general organization, physical dimensions, and project results to date of these two efforts to implement strategic changes in land use pattern over a broader landscape.

Case Study

Northwest Corridor:

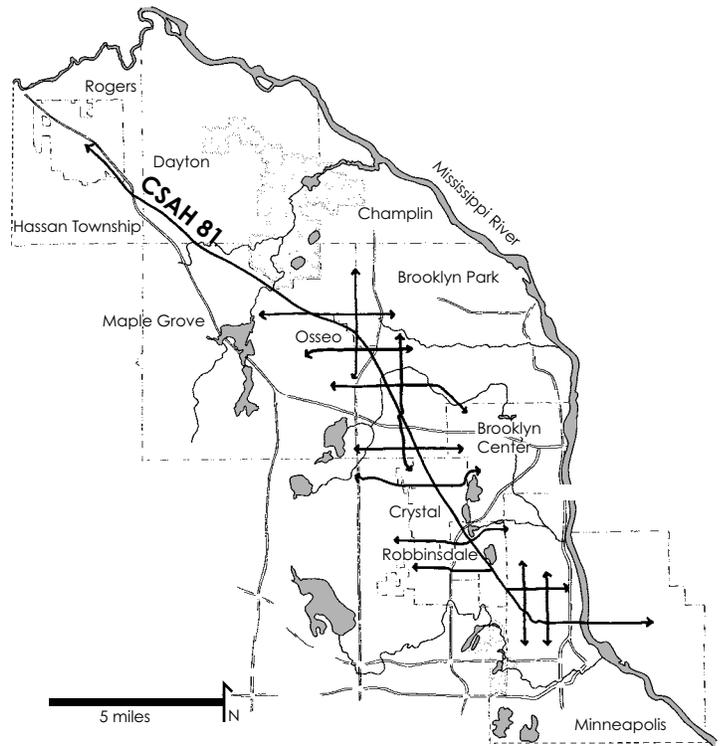
Transforming a highway landscape to a metropolitan corridor of districts, walkable centers and greenways

Assessing the Situation

Originally County Highway 81 was a state highway connecting rural centers with Minneapolis. Now its role has been supplanted by the nearby freeway system and its adjacent landscape a collection of piecemeal, incremental development, with little new investment. With the recent turn-back of the road from the state to the county, an opportunity arose to not only reconstruct the road itself, but to realize long-term visions of the highway as a transit corridor. At the same time, the county and corridor cities wanted to attract new investment and accommodate a share of the projected regional population growth. To reach this potential, a collaborative process explored County Highway 81 as a metropolitan corridor of diverse, walkable centers linked by transit and roads, that leveraged strengths, reclaimed natural resources, offered new housing options, strengthened neighborhoods, and provided new jobs. To coordinate future planning, design and investment in the corridor, an organizational structure emerged and proposed a framework of principles, strategies, and actions.

Engaging Communities

The process was led by the Northwest Corridor Partnership (NCP), and involved local community groups as well as the Design Center and transportation and economic consultants. The Northwest Corridor Partnership is a public-private partnership of corridor interests (see map caption for the list) chaired by a county commissioner. The partnership guided the parameters of reports and studies, the work of committees, and consultants. A community advisory committee, made up of official and unofficial city leaders, appointed by each partner, provided feedback on community issues, complemented by technical advisory committee made up of staff from partnership entities. As part of the larger effort, individual workshops were held in each focus area, with a broader group of local interest groups invited to participate. Public open houses were held on special topics, such as a busway proposal.



The County Highway 81 corridor extends from just north of downtown Minneapolis through the northwest suburbs, somewhat parallel to the Mississippi River. Northwest Corridor Partners include Hennepin County, the cities of Maple Grove, Osseo, Brooklyn Park, Crystal, Robbinsdale, and Minneapolis, as well as the Metropolitan Council, North Metro Mayors Association, four private corporations, and two semi-public institutions.



"Natural systems have been covered by roads and buildings. Leftover frontage roads and at-grade freeway intersections create traffic congestion. Building types from every era are scattered loosely along the highway." (*Northwest Corridor Planning & Design Framework, 2002*).

Taking Inventory of the Landscape

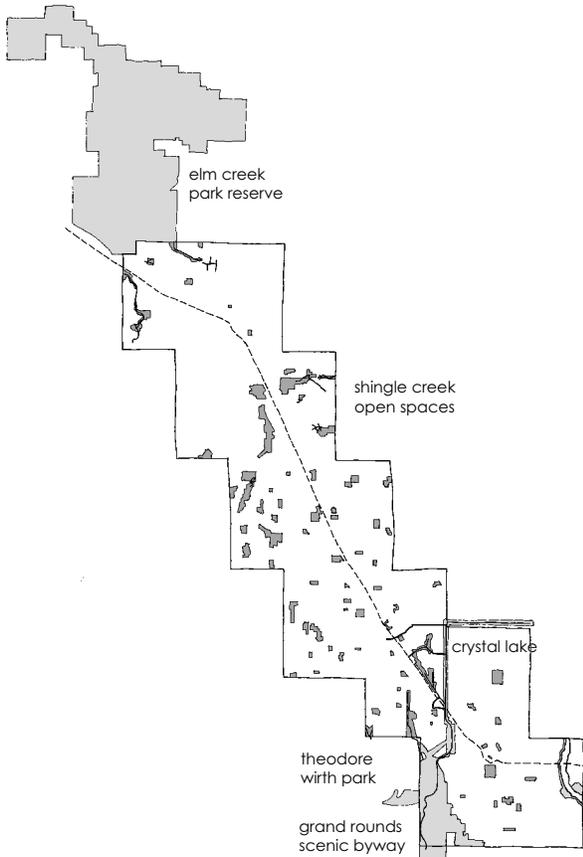
These drawings are two examples of the sub-regional scale inventory that was conducted as part of the Planning and Design Framework. The five categories of data included: natural systems, road networks, transit services, land use patterns and community jurisdictions.

Public open spaces

A survey of the corridor's existing and proposed public parks, open spaces, and trails highlights both assets and opportunities for improvement.

While large regional parks anchor each end of the corridor, the remainder of the corridor contains fragmented parks and natural systems. Corridor redevelopment could reconnect some of these places with the addition of linear open spaces.

A regional trail that connects the large parks is planned to follow along the County Highway 81 alignment. Implementation of the plan requires cities working together in a cooperative agreement with the county park district. Links from the regional trails through redevelopment areas to existing parks would further leverage existing and proposed investments for parks and trails.



Adapted from Metropolitan Council GIS data 2000.

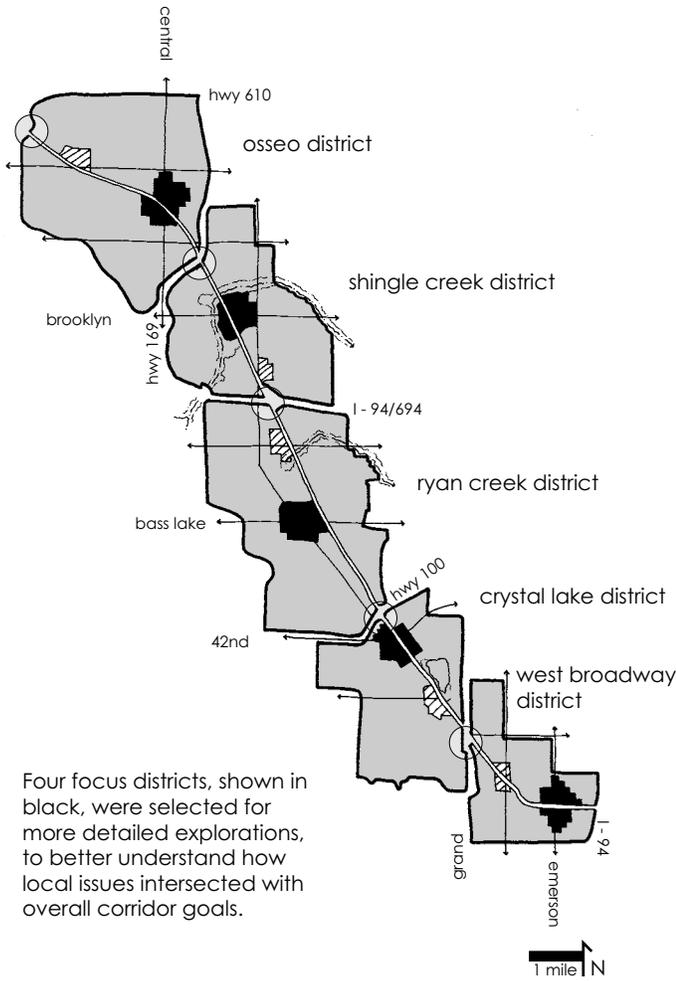


Transit access

An inventory of existing bus routes and services, as well as regional plans for new transit development and service restructuring, identified several opportunities to improve local and corridor transit services. Key opportunities are a proposed exclusive busway, increased suburb-to-suburb connections, and TOD.

Existing bus service on CSAH 81 is minimal with nearby West Broadway Avenue serving as the primary transit corridor, except in Minneapolis when the two roads are one and the same.

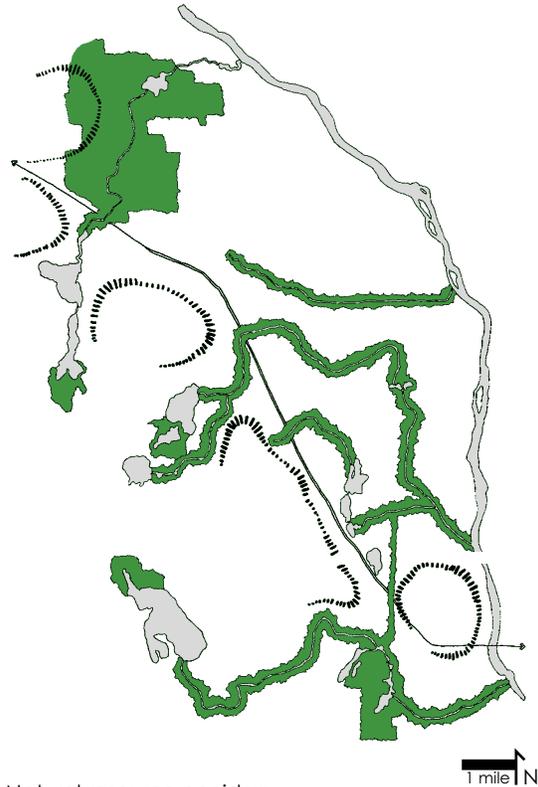
Urban residential densities and the local street system in Minneapolis support the greatest transit services. North of Minneapolis, transit serves regional destinations such as colleges and business parks.



Analyzing and Interpreting the Place

Analysis of the inventory data revealed that access to the corridor is limited by the railroad on the west side of the road, nearby lakes and creeks, and major land uses including the Crystal Airport and industrial areas. Twelve potential crossroad districts represented the highest activity areas along the corridor, including four suburban downtowns and the commercial segment of West Broadway in Minneapolis. Because the corridor stretches across six cities, each potential crossroad district has unique character, issues and opportunities, based upon existing development patterns and each city's future land use plans and reinvestment goals. The study reviewed and compared all twelve districts, then selected four districts to examine in more depth, including the Brooklyn Boulevard case study profiled in neighborhood.

The analysis also revealed the opportunity to reveal many hidden and buried natural resources in the process of redevelopment.



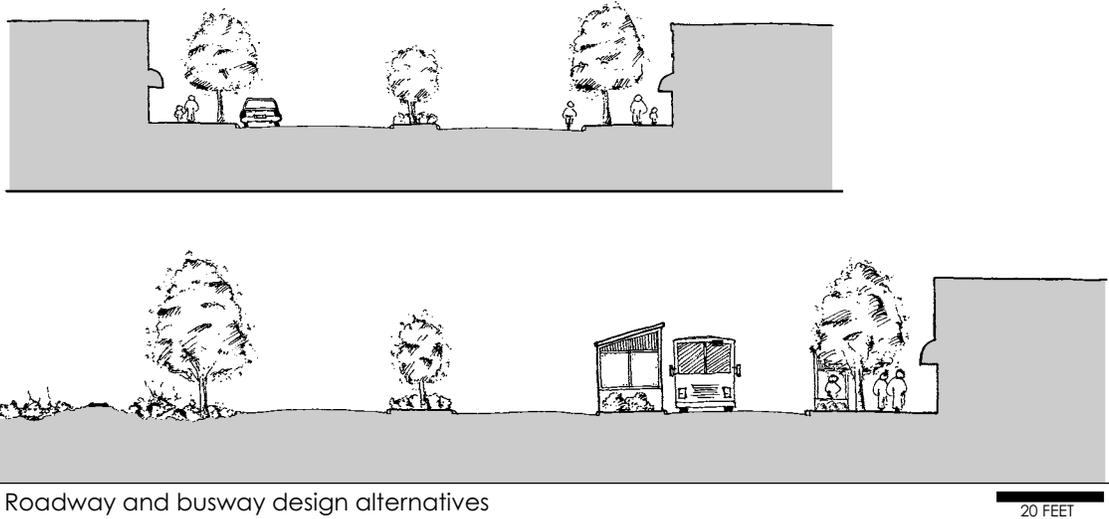
Natural resource corridors that could be highlighted along the corridor.

Exploring Design Options

Design scenarios in this project were primarily focused at the neighborhood or walkable center scale to gain a comprehensive understanding of the diversity of places and issues within this large corridor. Exploration of alternative urban design options at the neighborhood or walkable center scale provided valuable information for the possibilities of the overall corridor. Options for the corridor encompassed:

- A proposed busway with alternative right-of-way alignments and station location,

- Roadway redesigns encompassing roadway speeds, access, lane configurations, drainage, landscaping, etc.,
- Natural systems enhancements including daylighting creeks, greenway development, parks and trails connections, stormwater runoff design, and water quality improvements,
- Patterns and types of redevelopment at strategic locations along the corridor, especially in potential walkable centers at cross-road areas.



*Protect and Restore
Natural Systems*

*Foster Social
Connections*

*Diversify and Increase
the Local Economy*

Provide Travel Options

*Enhance Homes and
Neighborhoods*

Corridor Design Principles

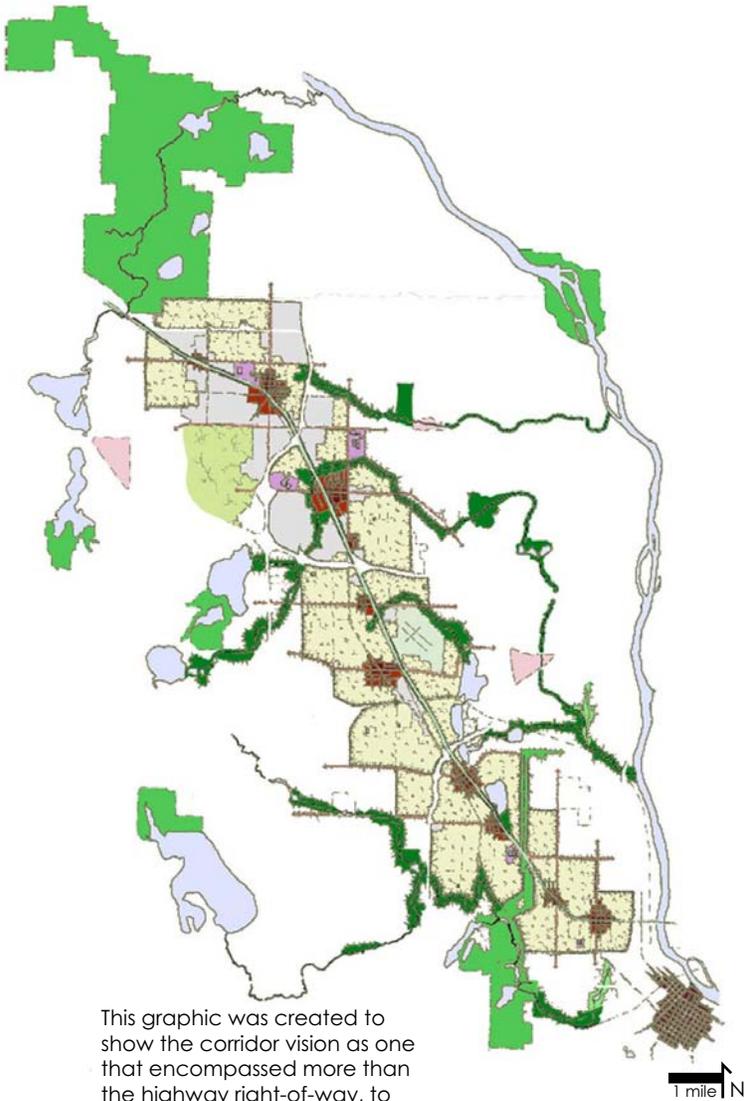
Reclaim, enhance, and connect natural systems to increase local quality of life, sense of place, and environmental quality.

Engage regional and local stakeholder groups in a multi-jurisdictional collaborative process to connect regional system and local place changes.

Create walkable mixed-use district centers at major crossroad areas to improve neighborhood livability, strengthen surrounding areas, provide employment growth, and leverage transit development.

Expand public transit access, options, and connections to support evolving land use patterns.

Redesign County Highway 81 as a landscaped multi-modal boulevard and expand adjacent road networks to increase local connectivity.



This graphic was created to show the corridor vision as one that encompassed more than the highway right-of-way, to include a broader landscape of potential change.

Moving Forward

Over a year long process, the Northwest Partnership crafted a vision to transform County Highway 81 into a metropolitan corridor that would encompass a multi-modal boulevard, unique suburban downtown, and neighborhood walkable centers; and natural systems of creeks, wetlands, lakes, parks, trails, and greenways.

To arrive at this vision, the following components were considered necessary and useful steps:

- An inventory of existing conditions, stakeholders, and plans;
- Design workshops for four focus districts;
- Urban design scenarios that integrated local priorities and opportunities;
- A land use analysis and a fiscal impacts model to measure the effect of development on each city’s budget;
- A summary framework of principles, strategies, and actions for four geographic scales.

Participants identified hurdles such as limited staff and funding resources from smaller cities and limited flexibility in region investment projects. They concluded that to moving this vision forward would need :

- new financing mechanisms;
- new architecture, urban design, and development models that weave walkable centers into existing areas;
- new practices for integrating roads, transit and land use patterns.

Further information on this effort can be found on Hennepin County’s Housing, Community Works and Transit Department website—<http://www.co.hennepin.mn.us/tcw>.

Proposed Long-Term Corridor Planning and Design Process		
Phase	Activities	Products
1	Preliminary analysis & fact-finding	Corridor systems & scales inventory
2	Conceptual alignment of community systems & scales	Corridor planning & design framework
3	Technical studies of community systems	Corridor planning & design framework
4	District and subregional policy planning	Revised city & regional plans
5	Walkable center land use design planning	Specific area & station area plans
6	Project design planning	Revised ordinances & road standards Project design Capital improvements Property assembly & acquisition Funding source
7	Project design planning	New development or redevelopment

Strategies were developed for six placemaking systems: natural systems, road networks, transit systems, land use patterns, and community jurisdictions. The chart on the left shows the proposed strategy to continue this process forward.

Case Study

North-Metro I-35W Coalition:

Charting a new course for a subregion of seven cities

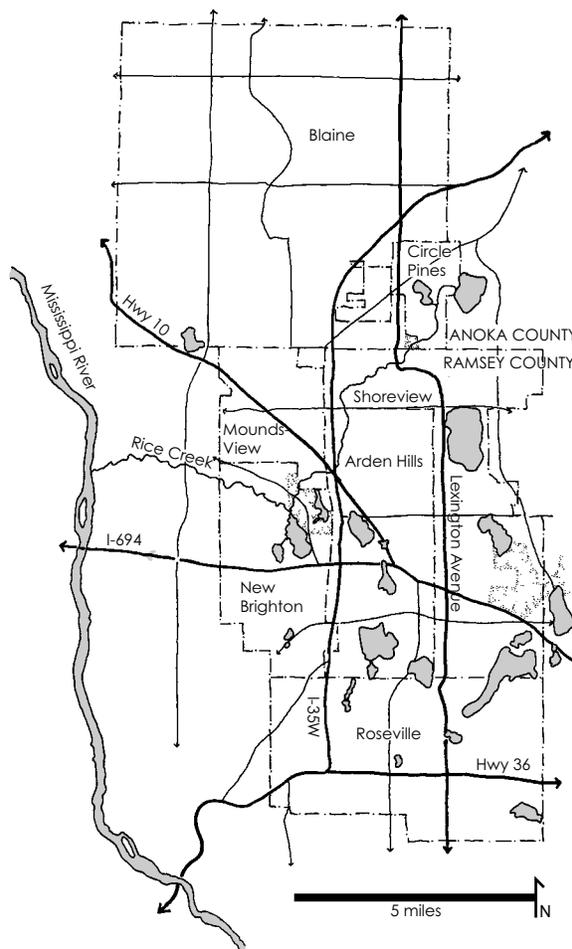
Assessing the Situation

Just north of Minneapolis and St. Paul, seven cities, varying in size, demographic profiles, and land development histories, came together in 1996 to sign a joint powers agreement to “jointly and cooperatively plan for and maximize the opportunities for regional community development, quality growth, and diversification....” The group was spurred to action by similar issues, such as rising congestion, changing demographics, aging housing stock, diminishing environmental quality, and a highly competitive regional economic development market place. Initially coming together over issues related to the interstate that traverses the seven cities, the group quickly realized that their common desire to maintain and enhance their city’s quality of life required solutions that crossed boundaries and defied solutions within the purview of each city. At the same time, the challenges seemed ripe for response with a livable communities approach, in which land use, transportation, housing, social, and environmental issues could be tackled together and in concert with neighboring cities.

Engaging Communities

Coming together as a group was in some sense a formalization of ongoing collaborations in and among the cities as well as counties. Sharing of services and facilities often took place, but in an ad hoc manner. A more formal structure was developed through the leadership of city mayors and managers, who received grants from local foundations and government programs such as the Metropolitan Council’s Livable Community Demonstration Program and collected pro-rated dues from member cities. This seed money enabled the coalition to retain an administrator and work with consultants.

A board, with a rotating chair, was composed of the mayors and city managers and city administrators. This group met and continues to meet regularly to carry out business and workshops on special topics. At the staff level, community development directors met monthly to share



The North Metro I-35W Corridor extends from the northern border of St. Paul in the city of Roseville along actual I-35W Corridor to the city of Blaine, a developing outer suburb. Members include the cities of New Brighton, Roseville, Arden Hills, Shoreview, Mounds View, Blaine, and Circle Pines. Community partners include Minnegasco, Excel Energy, and William Energy Services. Ramsey County and Anoka County have also supported and participated in the coalition since its inception.

information, discuss projects, and review the work of the Design Center and other consultants who researched and formulated proposals for projects and future action. Additional task forces made up of city staff and elected officials focused on topics such as GIS coordination, housing, communications, and transportation. The Coalition Institute was a later addition—a time when all participants could gather and focus on a topic for in-depth discussion not possible at monthly board meetings. In addition, city-level briefings occur periodically to update councils and planning commissions about coalition initiatives.

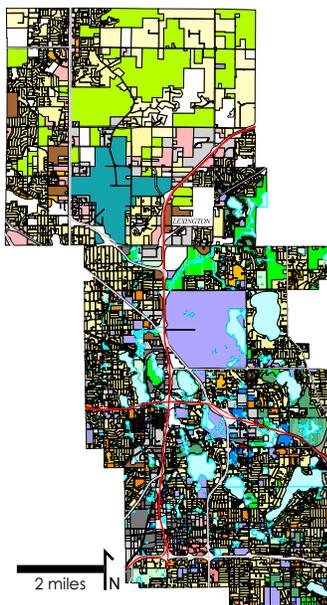
Taking Inventory of the Landscape

Inventories are challenging at the subregional scale, especially when multiple jurisdictions are involved, such as counties and school districts. For instance, in the Twin Cities, counties hold parcel data such as land valuations. While two counties may both use Geographic Information Systems (GIS), they may use different formats that are not compatible or have different rules with regard to access and use of their files. While some of the commonly used data is readily available, such as census tract information, it may be outdated, or not aggregated in a fashion that is useful for integrated land use, natural resource, and transportation planning.

Creating a common data set underpinned the coalition work. The data layers were provided by each city, obtained from public sources, or gath-

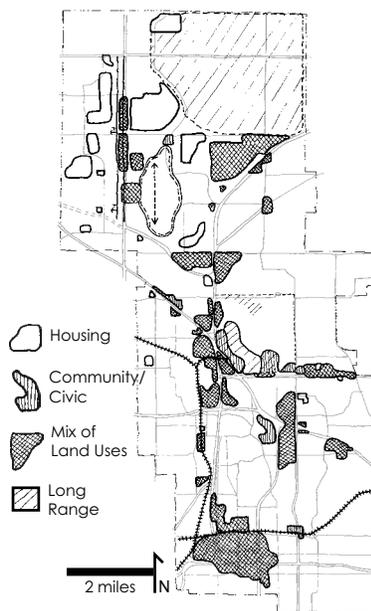
ered as part of the planning process. The inventories became underlays for analyzing where strategic investments could be made or where areas were lacking in amenities that could retain or attract businesses and residents.

There were challenges in creating this shared inventory. For instance, each city used different land use designations. To bring them all together on one map, a global system was created, with each city's designators translated into more general categories. Some of the information was simply not available in digital form, such as current development projects or locations of trails and sidewalks. The inventories below represent some of the inventories that were useful in later stages of planning.



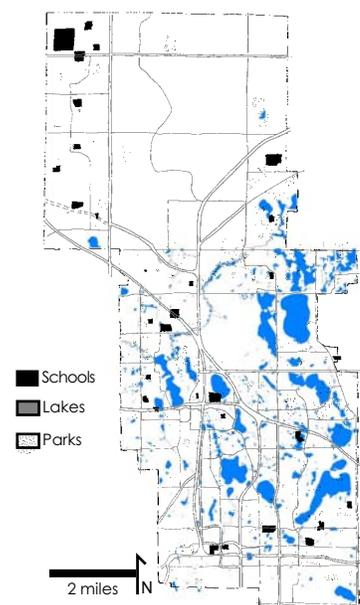
Existing Land Use of the Coalition

This map combined data from each city into one coherent base. The capacity of each city for this work varied widely. Ultimately a consultant was hired to implement the project, with an advisory group of technical staff from the cities and outside advisors.



Proposed or Recent Developments and Redevelopments

This inventory was not drawn from ready-made information. It was based upon discussions and interviews with each city, a time consuming but critical process for future planning. It was later put into electronic format (digitized).

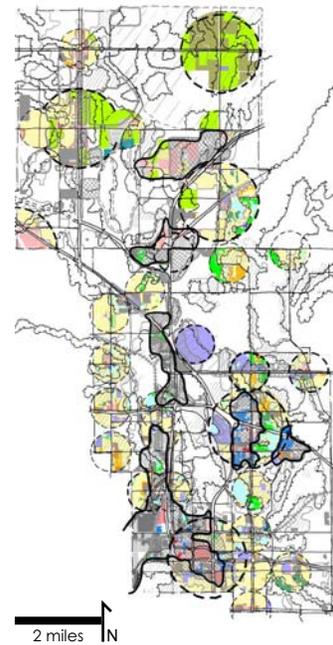


Neighborhood Centers

This inventory brings together features such as parks, lakes, and schools—focal points for community life activity in this subregion. These locations are of particular interest when prioritizing investments for transportation, trail, and street projects, and reviewing their design.

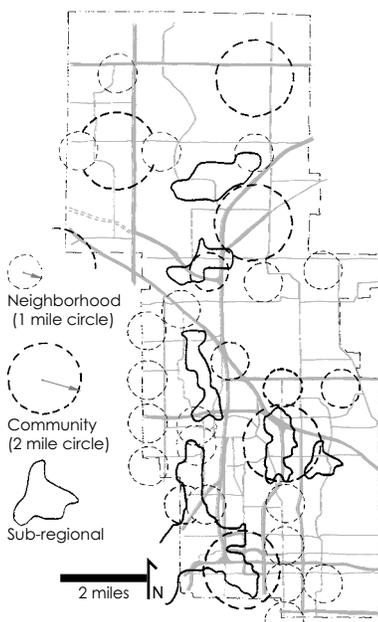
Analyzing and Interpreting the Place

Analyzing the information at a subregional scale involved looking at the general goals of the coalition and starting to answer how future growth and investments could be structured to achieve the goals. The composite opportunity map summarized different analyses of activity areas, natural resources, existing housing, and the proposed redevelopment areas. This picture started to suggest how different scenarios for new growth might be created.



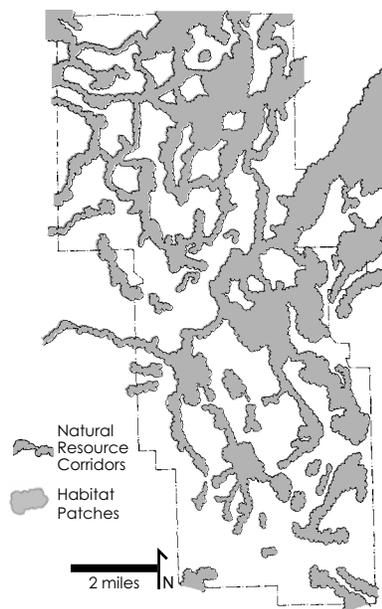
Composite Opportunity Areas

By combining different maps, a composite picture of potential focus areas was created. These outlined focus areas became the starting point for developing alternative future growth scenarios for the coalition.



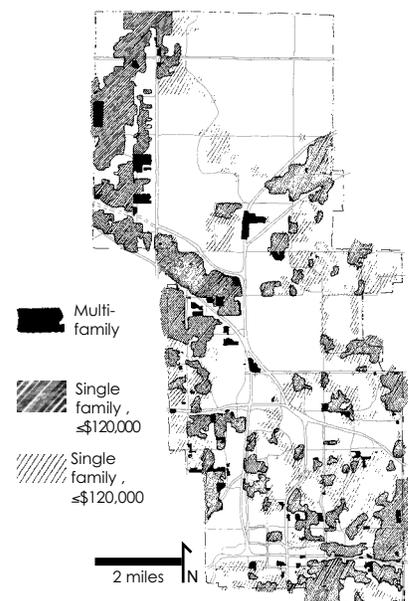
Activity Centers

Existing activity centers that could further be enhanced were identified by using a screening criteria for each scale of activity, including the type of existing land use mix, access to transit or the regional transportation network, and intensity of development.



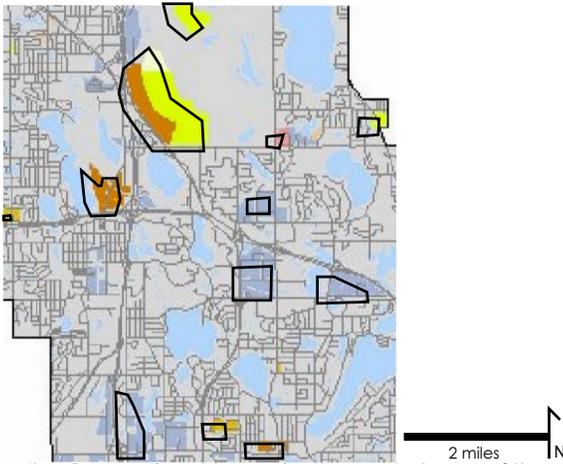
Areas and Corridors of Grasslands, Woodlands, Wetlands and Lakes

Aerial photography showed where water and vegetation remained in the coalition area. This analysis suggested how individual resources could expand or connect in the future, if restoration occurred.

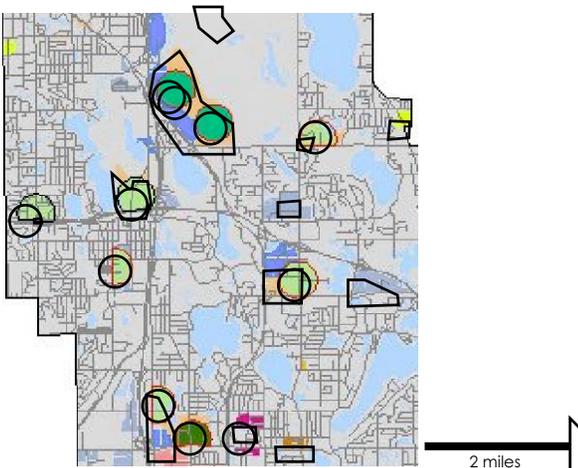


Housing Distribution

This analysis sought to determine where more affordable housing was distributed across the coalition and where higher intensity residential was located. This was used to help determine where activity centers were located.



In the Conventional Scenario, the central area of the coalition held scattered redevelopment sites that had been planned as independent projects.



The Coalition Scenario assumed that redevelopment sites located on transit corridors, represented by the circles, could be more intensely redeveloped.

Exploring Design Options

After determining where development or redevelopment might occur, the study team ran two scenarios for growth to the year 2020. The “Conventional Scenario” was based upon the city’s existing comprehensive plans. Growth was projected as more dispersed, with primarily single-use zoning and an average residential density of three units per acre and predominately single-story commercial buildings that had an FAR of 1. The Coalition Scenario assumed transit-oriented development principles such as: more intense growth along transit corridors, with mixed use zoning, an average housing density of five units per acre, and multi-story commercial buildings with a Floor Area Ratio (FAR) of 1.5. This modeling was developed by the California-based architecture and planning firm Calthorpe and Associates, who worked with the coalition and its partners. The Coalition Scenario resulted in a 13% increase in jobs and 23% more people. If more land was protected as open space, then the same number of people and jobs could be accommodated on less land, if average residential densities increased and FARs increased. In terms of transportation, while both scenarios increased congestion, the Coalition Scenario shows a more efficient pattern of trip making by reducing the length of trips, increasing walking trips and increasing the number of transit trips. The following principles were used to create the Coalition Scenario model:

Coalition Scenario Design Principles

- Protect and Restore Natural Systems*
 - Balance development with natural resources restoration and conservation.
- Foster Social Connections*
 - Focus more intense development in mixed-use center and mixed-housing subdivisions.
- Diversify and Increase the Local Economy*
 - Create a vertical as well as horizontal land use mix.
 - Emphasize walkability.
- Provide Travel Options*
 - Create a high jobs/housing ratio, with excellent accessibility and connectivity.
- Enhance Homes and Neighborhoods*
 - Locate higher densities in the mixed-use centers to increase transit service, lifecycle housing, and a diverse business mix.

Moving Forward

Creating a Collaborative Planning Structure

The coalition has successfully worked together as a group for several years. Many organizations and agencies have given resources to this effort: member cities, foundations, local jurisdictions, regional and state departments, agencies, and partnerships with higher education institutions. Some of the following strategies have created a structure that has survived the challenges of the fluid environment of small city governments.

- A paid, part-time executive director provides continuity.
- Rotating chairs for board and committees avoids burn-out and builds ownership.
- Partnership with the university is mutually beneficial, by providing on-the-ground testing of innovative ideas.
- Tapping into the unique talents of city staffers on committees and task forces improves the quality and usefulness of consultant work.
- Agreeing upon a shared set of goals and principles is a slow process, but a necessary step to develop, prioritize, and evaluate future projects and programs.

Exchanging Information Across Municipal Boundaries

Typically, city staffers and leaders have little time to look outside the boundaries of their city, but the monthly community development committee and board meetings provide a structured setting for an ongoing dialogue with neighbors.

The shared GIS system is another avenue for information exchange now available to large and small cities in the coalition. Each city maintains its own land use classifications that can be folded into a common system. The coalition has also contracted for more detailed and up-to-date demographic information than typical census data. This information is useful in planning joint programs that address common problems, such as housing rehabilitation projects or transit systems, that are difficult to resolve with the resources of only one city.

For more detailed and up-to-date information on this effort, see <http://www.i35w.org>

Creating a Livable Subregion

The coalition and another adjacent city have partnered with a non-profit agency to establish a housing resource center—a one-stop location for information on planning, financing, and completing home renovation projects. Because a majority of housing in the coalition area was built forty to fifty years ago, maintaining and improving this aging housing stock is a key strategy to maintaining metropolitan competitiveness.

Understanding more about the business and employment dynamic has been another important task undertaken by the coalition. Gaining up-to-date information, incorporated with better demographic data, allows detailed analysis of the relationship between jobs, housing, and transit that are important to make the network of livable communities function together.

The coalition also commissioned a build-out study to determine the implications of future growth strategies. This study is paired with a study that refines the regional transportation model used by the metropolitan planning agency to better measure the effects of different land use strategies. Overall, the coalition is gaining a better picture of future alternatives when livable community strategies are deployed across a subregion. The cumulative benefits to all the cities include a larger growth capacity within the same land area, while preserving important green space corridors and open spaces.

Next Steps

As the coalition moves from an organizing and background research mode into an action-oriented organization, work will continue through the “Coalition Institute.” Similar to city council workshop sessions, the institute will cover topics of interest more in-depth than a board or short committee meeting.

The coalition has gained much knowledge about their natural, economic, and human resources. They know how a livable community approach to development and redevelopment can affect their future. Transmitting this information to city councils, planning commissions, and citizens will be the next important step, so that each city’s decisions on individuals will add up.

Glossary

This glossary clarifies terms used in the text and in urban planning and design more generally.

Affordable Housing

Housing that has a sales price or rental value that is accessible to middle moderate, or low income households. Incomes are defined as a percentage of an area's median income, so it varies according to that definition from one area to another. Some subsidies are used to make housing that otherwise wouldn't be affordable, but not all affordable housing developments are subsidized (*Meck, 2002*).

Affordable Housing Development

"Any housing subsidized by the federal, state or local government, or any housing in which at least 20 percent of the dwelling units will be sold or rented at prices within the affordable housing standards, for a period of at least 15 years" (*Meck, 2002*).

Low-Income Housing

"Housing for rental or ownership purposes whose value is within the affordable patterns according to the Federal Department of Housing and Urban Development. The price cannot exceed a specified low percentage of the median gross household income (comparing to the same household size, in the same region)" (*Meck, 2002*).

Middle-Income Housing

Housing for rental or ownership purposes that is for occupancy by households with a gross household income that is greater than a minimum specified percentage but does not exceed the specified maximum comparing to the median gross household income for households of the same size in the same region (*Meck, 2002*).

Moderate-Income Housing

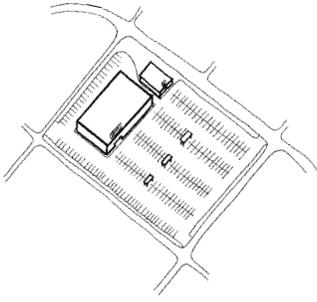
Housing for rental or ownership purposes that is for occupancy by households with a gross household income that is in between a specified moderate percentage of the median gross household income for households of the same size in the same region (*Meck, 2002*).

Auto-Oriented Development

Urban development based on the use of cars as the main transportation system. It commonly includes building orientation to the parking lot and large blocks with wide streets (*Puget Sound Regional Council, 1999*).

Average Daily Traffic (ADT)

"The mean number of vehicles per day passing a given point or using a given stretch of road" (<http://www.planning.org>).



Big Box Retail

Large-scale retail stores, usually one story buildings from 20,000 to 200,000 square feet, with a large, adjacent surface parking lot. These stores offer discount prices, derived from the centralization of the distribution, and draw customers from large surrounding regions. Examples of big box retail include: discount department stores, category killers, outlet stores, and warehouse clubs (*Duany Plater-Zyberk & Company, 1999*).

Brownfield

Abandoned industrial and commercial sites where redevelopment is impeded by real or perceived environmental contamination (<http://www.sustainable.doe.gov/landuse/infill.shtml>).

Bus Rapid Transit (BRT)

A system of buses intended to reduce the travel time as much as possible by prioritizing their use of the road system. They are more frequent than regular buses, stop only on a limited number of strategic points, and force the traffic lights to be green when they pass by (<http://www.mta.com>).

Central Business District (CBD)

The business core of a city where retail, offices, and services are mainly concentrated it is normally referred to as downtown, but can also be called uptown or midtown (*The Department of Research and Planning, 1954*).

Commuter Rail

A rail system using heavy gauge vehicles and tracks that access significant locations like employment centers or residential areas. It may be local or express and it may be accessed by pedestrians and automobiles (*U.S. DOT, Federal Transit Administration, 1994*).

Comprehensive Plan

A document adopted by a local or regional government that sets forth the goals, policies, and guidelines that will direct the future physical, social and economic development of the entire community (*Meck, 2002*).

Core Commercial Area

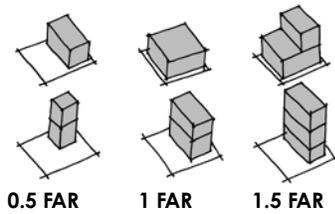
Mixed-use commercial areas immediately adjacent to a transit stop. The core area should provide small retail stores and local services. A larger core may include a wider range of commerce and services. A core commercial area is often associated with a Transit Oriented Development area, but is more generally just a central shopping area (*Calthorpe, 1993*).

Density

A term to describe intensity of development that can be measured in a variety of ways. There are no consistent measures for density and so care must be taken to be sure what is being counted in the land area.

Dwelling Units/Acre

The number of household units per acre of land (*The Department of Research and Planning, 1954*).



Floor Area Ratio (FAR)

The ratio of total building floor area to parcel area not including the street area (*Meck, 2002*).

Gross Residential Density

The number of household units per total land area including streets, parks, and open spaces (*Meck, 2002*).

Net Area

The total area of a residential or non-residential zone excluding street rights-of-way, parks, open space, and other public improvements. It is expressed in acres or square feet (*Meck, 2002*).

Net Residential Density

The number of household units divided by the Net Area in a given area (Net Density=Units/Net Area) (*The Department of Research and Planning, 1974*).

Total Area

The total area of a residential or non-residential zone including street right of way, parks, open space, and other public improvements. It is expressed in acres or in square feet (*Meck, 2002*).

Design Speed

The speed selected by planners for a specific intersection or section of road that considers the relationship between design features and the planned functions for the road. Influencing characteristics include: the density and character of adjacent land uses; the functional classification of the road; traffic volumes expected to use the road; character of the terrain; and economic and environmental considerations (*U.S. DOT, Federal Highway Administration, 1997*).

Greenway

National Definition: A corridor composed of natural vegetation that can be used to create connected networks of open space. Greenways help maintain ecological integrity in human-dominated landscapes and also help preserve biological diversity and high-quality water resources (*Smith & Hellmund, 1993*).

Local Definition: A corridor of open space protected and managed for conservation and/or recreation purposes. They often follow natural land or water features and link natural areas, parks, cultural features, historic sites, and populated areas with each other (*Allmann, 1997*).

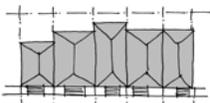
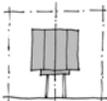
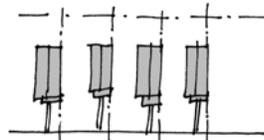
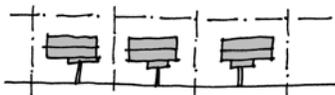
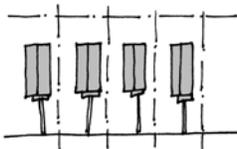
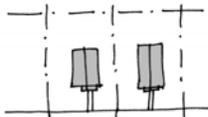
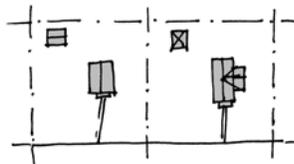
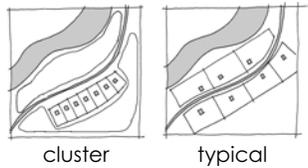
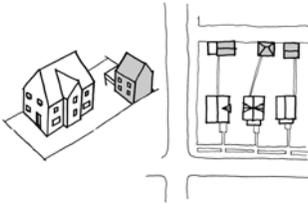
Grayfield

Retail facilities, parking facilities, or areas with a large amount of paving, usually in fairly developed areas, which are in decline and in need of redevelopment (*Congress for New Urbanism and PricewaterhouseCoopers, 2001*).

High Occupancy Vehicle (HOV)

A vehicle carrying two or more individuals. Some highways have dedicated lanes to HOVs during peak commuting hours. HOVs include buses, vanpools, and carpools (*Bragado et al, 2001*).

Housing Definitions



Ancillary Units

A secondary building associated with a residential building on the same lot, or an apartment within a house. The ancillary unit may be rented, but cannot be sold separately. Granny flats, backyard cottages, and garage apartments are different types of ancillary units (*Duany Plater-Zyberk & Company, 1999*).

Cluster Development

Neighborhood development in which the lot size is reduced from standard zoning requirements in order to preserve surrounding open space (*Department of Research and Planning, 1974*).

Large Lot Housing

Single family homes sited on parcels larger than 1 acre resulting in relatively low densities. Many times these developments have on-site septic and water systems.

Live-Work Units

A building in a residential area containing commercial or office spaces located on the ground floor and residential units above. The commercial or office space may be leased to others or a home-based business (<http://www.lcinitiative.org>).

Small Lot Housing

A good way of increasing density is to develop small lot housing. The size of the housing unit may be the same as in a regular large lot situation, but the reduction of the lot size permits a more efficient use of land. There are several examples of small lot housing: narrow-lot, wide-lot, twin-homes, and zero-lot-line.

Narrow-Lot Concept

The narrower side of the lot and consequently the narrower side of the house are facing the street.

Wide-Lot Concept

The wider side of the house and consequently the wider side of the lot face the street.

Zero-Lot-Line

One side of the house is attached to the side lot limit (*Arendt, 1994*).

Twin-Homes

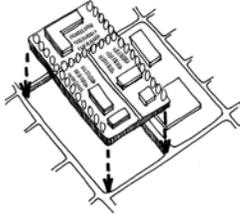
Two individually owned houses are placed on the limit of the lots and share a wall (*Arendt, 1994*).

Town Homes

A single family house that shares walls on the side lot lines. The facades of several homes are continuous as a single street wall and are sometimes served by alleys on the backside.

Household

The individual or individuals (related or not) living in a common dwelling unit (*Meck, 2002*).



Infill Development

The development of new homes, commercial and retail buildings, and public facilities on unused or under-utilized lands in pre-existing urban communities (*Urban Land Institute, 2000*).

Land-Use

A classification of a portion of land based on the buildings and/or the activities on it. "Usually classified as either residential, commercial, industrial, public, or open space" (*SNO-TRAN, 1993*).

Light Rail Transit (LRT)

High speed, high capacity, and frequent rail service of shorter passenger train units. This rail system has shorter units on lighter gauge rails than the heavy gauge rail system (*Tri-Met, 1995*).

Livable Communities

A community that possesses many of the characteristics of livability (see below) (*National Academy Press, 1997*).

Livability

Characteristics in a community that affect quality of life such as adequate and affordable housing, safe neighborhoods, a clean and healthy environment, sustainable employment, transportation options, recreational opportunities, and a sense of place (*Transit Cooperative Research Program, 1997*).

Mixed-Use Development

Development that assembles various land-uses into the same area in order to increase density, reduce the use of cars, bring a more diverse group of users, and increase transit ridership (<http://www.sustainable.doe.gov>).

Natural Areas

A natural site largely unaltered by modern activity where native vegetation is distributed in naturally occurring patterns (*Allman, 1997*).

Neighborhood

- a) A geographic area delineated by physical boundaries that contains contiguous residential lots where people live in close proximity each other
- b) The social interaction of people who live in close proximity and also participate within the same social institutions (*The Department of Research and Planning, 1974*).

Neighborhood Center

The focal point of an urban neighborhood. The neighborhood center comes in various shapes and sizes, but is generally a neighborhood with a mixed development including housing, local businesses, and jobs.

Overlay District

A zoning process in which the allowable land uses are modified or replaced by specific requirements in addition to established ones in order to get specifically oriented development. This new district is overlaid on existing zoning - hence the name (*Bragado et al, 2001*).

Parking Management

Active management of the supply, operation, and parking demand in a given area (*SNO-TRAN, 1993*).

Parking minimums and maximums

Parking Minimums

The amount of parking developers are required to provide as specified by zoning codes (*Metropolitan Council, 2000*).

Parking Maximums

Limits the amount of parking developers may provide as specified by zoning codes (*Metropolitan Council, 2000*).

Parking Types

Buildingside Parking

Parking adjacent to the building which it serves (*Duany Plater-Zyberk & Company, 1999*).

Park-n-Ride

Facilities that provide a large amount of parking for transit users. They are usually located along major arterial roads, and close to transit hubs (*U.S. DOT, Federal Transit Administration, 1994*).

Shared Parking

Parking facilities shared by multiple users during different periods of the day or week. The several users' need for the parking space is coincidental in location but not in time, so their interests in sharing it are assured (e.g. church and office building) (*U.S. DOT, Federal Transit Administration, 1994*).

Street Parking

A single line of parking along a curb, between the street and the sidewalk, and accessible directly from the traffic lane (*Duany Plater-Zyberk & Company, 1999*).

Structured Parking

Two or more decks of parking either alone or integrated into a building. Structured parking greatly increases parking density over surface lots and frees up land for other uses (*U.S. DOT, Federal Transit Administration, 1994*).

Pedestrian Oriented Development (POD)

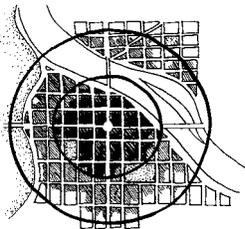
Process of urban development in which the main concerns are to give pedestrians enough street quality for walking and to provide public transit as an alternative to driving (*SNO-TRAN, 1993*).

Ped Shed

A mapping of the area accessible within a five or ten-minute walk from an activity center or transportation stop (<http://www.cnu.org>).

Planned Unit Development (PUD)

An area that is planned with a mix of uses or intensities that vary from a single zoning designation. PUDs are intended to allow enough flexibility to gain environmental or other quality of life benefits that wouldn't be possible with standard zoning classifications (*Meck, 2002*).



Public Housing

Public housing provides safe and sufficient rental housing for eligible households including low-income families, the elderly, and the disabled. The U.S. Department of Housing and Urban Development (HUD) gives funds to local housing agencies and they manage housing for residents in need of public housing (<http://www.hud.gov>).

Public Space/Use

Land used for recreation by the public. This space can help give a community identity and has both economical and aesthetic benefits. Some examples of public space include: playgrounds, sports fields, parks, beaches, and public gardens (*Western Australian Planning Committee, 1997*).

Residential Areas

Areas dominated by housing.

Right-of-Way (ROW)

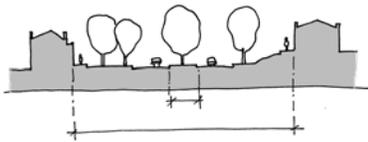
The portion of public land reserved for road circulation, rail service, or other utility services (*U.S. Department of Transportation, Federal Transit Administration, 1994*).

Roads

Boulevard

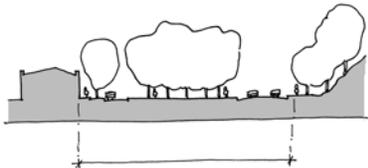
a) A large street usually with green medians and flanked by parking, sidewalks, and parkways (*Duany Plater-Zyberk, 1999*).

b) The strip of land between the edge of the street and the sidewalk that is often planted with grass, trees, and other types of vegetation is also called boulevard or parking strip (*Duany Plater-Zyberk, 1999*).



Parkway

Public roadway planned as an extensive park. It serves both the route function and the recreational one. Its right-of-way width may vary and be wider than a typical street to accommodate more greenspace in a median or along the side of the road. Typically truck or bus traffic is not allowed (*The Department of Research and Planning, 1974*).



Sense of Place

A sense of place includes the unique physical and sound qualities that set one place apart from other parts of the world (<http://www.smartgrowth.org>).

Setback

The distance between the property line and the edge of a building. It is generally regulated by local zoning codes (*Bragado et al, 2001*).

Shopping Center

A large building incorporating multiple stores with shared side walls and with at least one anchor store. The surface parking is usually located between the building and the street. More generically, a shopping center can be a cluster of shops (*SNO-TRAN, 1993*).

Power Center

A large shopping center, ranging from 250,000 to 750,000 square feet, with large stores taking up from half to all of the center (*SNO-TRAN, 1993*).

Lifestyle Center

An open air shopping center, ranging from 150,000 to 500,000 square feet, with at least 50,000 square feet devoted to national chain stores. Many of these centers do not have an anchor store and attempt to recreate a marketplace or “Main Street” atmosphere (<http://www.icsc.org>).

Regional Center

A very large shopping center, usually over 400,000 square feet, including at least two anchor stores. Regional malls usually have two or three floors, and the arcades are enclosed. Regional malls are usually located near a major freeway and offer a large range of parking (SNO-TRAN, 1993).

Strip Mall

Auto-oriented, single-story shopping center located along a major arterial road. Strip malls offer a large amount of parking in front of the building strip (SNO-TRAN, 1993).

Single Occupancy Vehicle (SOV)

A vehicle carrying one person, usually a private vehicle (Bragado et al, 2001).

Smart Growth

Process of urban planning based on taking advantage of the infrastructures, protecting the natural environment, propelling public transit, getting cities to sharing interests, and engaging people from the various fields of interest in the process of planning (Metropolitan Council, 2000).

Sprawl

Urban development usually around the edges of metropolitan areas. Sprawl generally contributes to increases in congestion and vehicle miles traveled because the distances between homes and services or commerce are extremely great, forcing people to rely solely on automobiles for transportation (Bragado et al, 2001).

Standard Land Use Colors

A typical palette for land use maps is yellow and orange for residential, with yellow typically representing single family and shades of orange representing higher densities. Red represents commercial. Gray represents industrial and blue represents public or quasi-public uses such as churches. Green shades represent such categories as parks, open space, and agriculture (Urban Planning and Design Criteria, 1982).

Streets

Arterial Streets

A street for high volumes of vehicular transit with controlled access and prohibited on-street parking. The right-of-way may be 80 to 100 feet wide.

Collector Streets

Streets that connect minor streets and arterial streets or highways and sometimes provide on-street parking depending on the street’s width. The right-of-way may be 50 to 80 feet wide (U.S. DOT, Federal Transit Administration, 1994).

Local Streets

Streets that are mainly used to access neighboring properties and buildings, usually providing on-street parking. The right-of-way may be 50 to 60 feet wide (*U.S. DOT, Federal Transit Administration, 1994*).

Street Furniture

Public amenities, such as lights, benches, signs, bus shelters, kiosks, and the like, which line streets (*Department of Research and Planning, 1974*).

Suburban Downtown

Commercial and residential districts that are built new or redeveloped to resemble city downtowns at a smaller scale (<http://www.mnsmartgrowth.org>).

Superblock

A neighborhood layout where the street grid is removed to create large open spaces between the buildings (*Salama, 1999*).

Sustainability

There are many definitions of sustainability but they generally involve the equitable preservation of quality of life for all the residents in a specific area through a focus on the sense of place, transit, walkability, and healthy development of the area and achieved by planning and maintaining over time (<http://www.mnplan.state.mn.us>).

Traditional Neighborhood Development (TND)

Development based on human scale design with concerns for walkability, increasing density, a mix of uses, and reducing automobile usage (*State of North Carolina Department of Transportation, 2000*).

Transit**Bus Transfer Station**

Transfer station in which users make connections from bus to bus (*Calthorpe and Associates, Mintier and Associates, 1996*).

Mass Transit

Transportation services that move large numbers of people. Routes usually follow established schedules.

Transfer Station

A transit stop in which users shift from one type of transportation to another (*Calthorpe and Associates, Mintier and Associates, 1996*).

Transit Stop

A bus transfer station, a light rail stop, or a local transit center.

Transit Oriented Development (TOD)

Development that encourages more efficient use of land and public infrastructure in order to get people to walk or take transit. For TOD to work, distances between homes, commerce, and services must be within a quarter-mile walk of a transit stop and include mixed-use development (*Calthorpe, 1993*).

Trip

A one-way movement from a starting location to a final destination (U.S. DOT, *Federal Transit Administration, 1994*).

Trip Ends

The total number of trips entering and leaving a specific place in a given period of time (U.S. DOT, *Federal Transit Administration, 1994*).

Trip Generation

The total number of trip ends produced by a specific place (U.S. DOT, *Federal Transit Administration, 1994*).

Trip Linking

A trip that includes stops in several intermediate locations before reaching the final destination. Smaller trips included in a major one (U.S. DOT, *Federal Transit Administration, 1994*).

Urban Development

Development at an intensity such that land can no longer be considered usable for agriculture or other natural resource-based production (Meck, 2002).

Urban Growth Area

A specific area where urban development is encouraged with concerns for future compatible uses. It usually follows the directions of a comprehensive plan. Urban development is discouraged outside the delimited urban growth area (Calthorpe and Associates, Mintier and Associates, 1996).

Urban Growth Boundary

The perimeter delimiting an urban growth area (Meck, 2002).

Urban Services

Centralized facilities and utilities such as sewer and water that are provided to meet the needs associated with urban development (Meck, 2002).

Vehicle Miles Traveled (VMT)

An average number that translates the total number of miles traveled in an automobile per individual in a given area. The higher the VMT value, the more pollution and traffic. In the past twenty years, VMT has increased significantly as auto-oriented development has become predominant in metropolitan areas (U.S. DOT, *Federal Transit Administration, 1994*).

Walkability

The provision of safe and comfortable walking facilities for pedestrians, such as sidewalks, as well as block configurations that allow a network of connections through a neighborhood rather than auto-oriented superblocks (<http://www.smartgrowth.org>).

Walkability Analysis

This analysis measures “the actual area within a five-minute walking distance as a percentage of the theoretical area within a five-minute walking distance” of a town center or transit stop. “The theoretical five-minute walking distance is shown as a circle with a radius of a quarter mile (1320 feet) drawn around a particular center. This is an area of 125 acres. Calculating a ten-minute walking distance, the radius used is half a mile or

2640 feet, resulting in a circle with an area of 500 acres. The higher the percentage, the better the walkability of an urban area. A good target for a walkable catchment is to have 60% of the area within a five-minute walking distance, or within ten minutes in the case of major transit stops." To make the calculation, starting from the center point of the half-mile radius, measure one quarter mile down the center lines of streets and mark. Shade areas within blocks that have access to these marked streets, and calculate the area (*Transportation Tech Sheets, Congress for the New Urbanism*).

Walkable Area

An area that ensures the interests of pedestrians by providing the necessary conditions for walking without obstacles (*The Department of Research and Planning, 1974*).

Wetland

"Wetlands" means lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this subpart, wetlands must: (1) have a predominance of hydric soils; (2) be inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in saturated soil conditions; and (3) under normal circumstances, support a prevalence of hydrophytic vegetation (*Minnesota Rules, chapter 8420.0103 subp. 52*).

Wildlife Corridors

"An area of continuous vegetation designed to promote movement of wildlife between isolated natural areas"; "a sense of patches of natural vegetation that may serve as "stepping stones" that provide cover and promote movement of wildlife between natural areas" (*Allman, 1997*).

Woodland

A large portion of land containing mainly trees and woody shrubs, grass and other types of vegetation. Woodlands are smaller than forests and might be inside urban areas (*The Department of Research and Planning, 1974*).

Zoning

"The division of a community by ordinance into zones or districts, primarily for the purpose of regulating the use of land. (...) Zoning is generally undertaken by local governments under the authority of police power for the purpose of promoting the health, safety, and general welfare of the people of the community" (*Department of Research and Planning, 1974*).

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Additional Helpful Web Links:

Innovative Stormwater Management – Metropolitan Council
<http://www.metrocouncil.org/environment/Watershed/bmp/manual.htm>

Minnesota Planning Model Ordinances – MN Planning Environmental Quality Board
<http://www.mnplan.state.mn.us/pdf/2000/eqb/ModelOrdWhole.pdf>

Tree Ordinance – International Society of Arboriculture
<http://www2.champaign.isa-arbor.com/tree-ord/index.htm>

Shoreland Management – DNR
<http://www.dnr.state.mn.us/shorelandmgmt/index.html>

Neighborhood Wilds program – DNR
http://www.dnr.state.mn.us/neighborhood_wilds/index.html

Natural Resource Assessment – DNR
<http://www.dnr.state.mn.us/greenways/worthprotecting.html>

Natural Areas: Protecting a Vital Community Asset – DNR
<http://www.greatplains.org/resource/1999/natural/natural.htm>