Antrim Benzie Grand Traverse Kalkaska Leelanau Wexford

THE GRAND
TOOLBOX

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Section	Page

Introduction

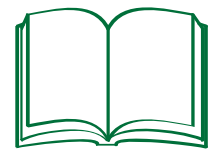## ...it's important to choose the right tool for the job

Welcome to the Grand Vision Toolbox—a collection of implementation tools for citizens and local elected and appointed officials. It's written to be user-friendly and understandable to the lay-planner and interested resident. The guidebook is organized by sections based on the guiding principles of the Grand Vision.

The color-coded sections offer an introduction page for the topic followed by a collection of tools. The tools were selected carefully based on the goals of the Grand Vision and the resources of the region. They represent a variety of opportunities available for implementation but the list is by no means exhaustive.

In many cases, the tools will work toward the goals of several different categories. For example, readers may find a tool listed in the Housing section that will also support Village and Transportation goals. The categories provide an organizational guide but the tools may not be exclusive to one goal.

Each tool is organized in a consistent manner. The topic description is a brief overview of a larger topic. It provides a basic understanding of the concept to a reader who is unfamiliar with the topic. On the left side of the page is a statement about its link to the Grand Vision. Resources are listed in the toolkit for each tool including standard reference books, links to on-line resources and links to successful projects examples from around the country. In most cases, additional resources are included in the electronic toolbox that is provided as a CD at the back of this document. When available, model ordinance language is provided in the electronic toolbox. Tools that include model zoning ordinance language are designated with the book icon:

Metrics, timeframe, and cost are listed on the right side of the page for each tool. Metrics are a way of quantifying progress related to the tool. The metrics selected are measureable indicators that are part of an available data set or indicators that can be counted. They are not a checklist for the actions but some ways to measure their results. The list is not exhaustive but provides examples.

Timeframe is given in terms of short-, mid-, and long-term actions. Short-term refers to actions that could be addressed in one year, mid-term refers to tasks that could be addressed in 2-5 years, and long-term projects are those that will take place 5-10 years after they initially become a community goal. This doesn't mean that every tool with a short-term action should be addressed in year one. Instead, it provides a first-step action to take when that tool becomes a local or regional priority. Many of these actions call for an amendment to the community's Master plan and adjustments to local zoning regulations. Here, Master plan amendments are listed as short-term and zoning regulation changes are listed as mid-term to indicate the order in which action should be taken.

Cost is presented in terms of low-, medium-, and high-cost associated with different actions. Low represents actions that can be taken without making any adjustment to an annual budget. Master plan updates that are done as part of the regular review process are listed as low since the task is already part of the regular planning process. Medium-cost items are those that can be paid out of a municipal operating budget but will have to be incorporated into future budget years. High-cost items are those that cannot or will not be covered by a municipal operating budget and will require grant funding, special assessments, or loans to finance. These categories are loosely defined and are intended as a general reference.

Whether the task at hand is economic development, transportation, housing, villages, agriculture, natural resource conservation, or energy, it's important to choose the right tool for the job. The Grand Vision toolbox is filled with ideas and resources for people and communities who want to take steps toward a positive future.

Growth & Investment $

Increasing employment opportunities and economic security

A central theme of the Grand Vision, including the economic goals, is to locate new growth in the region's cities and villages—in areas where there is already urban development. Locating new housing and employment as well as retail, services and public institutions in cities and villages creates opportunities to strengthen the local economy.

In order to match investment with the growth goal of directing new development to the region's cities and villages, a geographic boundary for urban investments can be established in a community and supported by a collection of policy and investment strategies. The investment area is the focus of public investment in infrastructure and amenities, development incentive programs and physical design cues. It is supported by coordinated land use incentives and regulations. Urban investment areas can be defined through a combination of tools including the local master plan, zoning ordinance, capital improvements plan (CIP), and tax-increment financing (TIF) district. Investment areas are not an urban growth boundary but a priority area for growth and investment.

Mixed use development is another tool to strengthen the local economy. Unlike traditional "Euclidian" zoning provisions that separate residential and commercial uses into different geographic districts, mixed-use provisions allow a wide range of residential and commercial development to co-locate within a multi-story building or within a designated area. The housing and jobs bring people to the area all day and through the evening creating a sense of energy and security for people and businesses. The opportunity to fill space with a variety of uses gives mixed-use development the advantage of changing tenants to meet market demands.

Brownfield redevelopment is another tool to strengthen the local economy. In Michigan, brownfields are defined by state law as properties that are contaminated, blighted or functionally obsolete. Brownfield sites may be abandoned or under-used and they may be industrial or commercial properties. Brownfield sites detract from the visual appearance and economic health of the community. Brownfield redevelopment is a tool to convert these sites to a productive use, which benefits both the environment and the economy.

Growth & Investment

Tools

- Mixed-use development
- Support for agri-business development
- Urban gateways
- A defined urban core area for development and investment
- Support the redevelopment of brownfield sites
- Attract a talented workforce—create walkable urbanism

New housing units in and near cities and villages can serve as a magnet to attract new businesses to the area. The number of "rooftops" within a set distance from a proposed business location is an essential factor in the location equation. Retail or service industries will locate in a community only after the population concentration reaches an established threshold. Whether it's a hard and fast formula of a national chain or a rule-of-thumb approach from an independent business, population centers attract business.   When housing is concentrated in and near the urban center, businesses will be attracted to main street.

The development pattern chosen by the residents in the six-county region will also support the attraction of a talented workforce. There will be a competition for talented workers for several decades to come as baby-boomers retire and the workforce shrinks in size. Young workers who are educated and skilled in the knowledge economy can choose where they want to live first and then find a job. Where do they want to live? Today's talented knowledge workers want to live in places with urban living options and lively walkable urbanism.

To compliment efforts that direct new growth and development to urban areas, the Grand Vision also celebrates food and farming as a definitive part of the economy. The agricultural economy is a critical part of the local, regional and state economy. Actions to support and strengthen the region's agri-business operations in the region will bolster both the regional economy and farmland preservation efforts. Agriculture Processing Renaissance Zones and Innovation grants are two tools offered by the State of Michigan that can be used in the region.

Many of the transportation and land use decisions that are made around the region will support the Grand Vision's goal of increasing employment opportunities and economic security in the region. The tools introduced here are explored in more detail in the following pages.

Mixed-use development

Traditional "Euclidian" zoning provisions put residential and commercial uses into different districts, which separate them geographically. Conversely, mixed-use provisions allow a wide range of residential and commercial development to co-locate within a multi-story building or within a designated area. The mix of housing and jobs bring people to the area all day and through the evening. This creates a sense of energy and security for people and businesses. The opportunity to fill space with a variety of uses gives mixed-use development the advantage of changing tenants to meet market demands.

The short distance between jobs, employment and services create opportunities for people to shift away from vehicle trips to walking, bicycle and transit trips. Parking requirements can be lowered based on shared parking and lower trip generation allowing building densities to increase in terms of floor area ratios (FAR). This higher density also creates an opportunity for more effective transit service. The increase in multi-modal opportunities is an important component of the transportation vision for the region.

Since the area is more walkable, pedestrian infrastructure is an important part of the transportation network as human-scale design is important in development standards. Design standards or form-based codes are also used to balance the appearance and scale of the buildings. Form-based codes are addressed separately in the Villages section of the toolbox.

Many local zoning ordinances currently do not allow for mixed-use development. Master plans and zoning regulations need to be examined and revised as needed to support and encourage mixed-use development. Incentives may be appropriate in addition to regulatory permission. Mixed-use development is essential in central urban areas from downtowns to village centers to main streets. Mixed use locations include existing development nodes and major intersections. This supports increased density for transit service and expands opportunities to retrofit or infill existing activity center developments.

Link to the Grand Vision:

The Grand Vision's goal of dense, walkable urban centers is strengthened by locating a mix of housing, retail, and services within walking distance of each other. Mixed-use zoning districts allow and encourage higher density, walkable urbanism.

Growth & Investment

In addition to the regulatory and transportation parts of mixed-use development, there is a financial aspect to be considered. Although beyond the land use and transportation focus of this study, the work of Chris Leinberger of the University of Michigan and the Brookings Institute considers the financial barriers to mixed-use development. Local programs to support project financing may be an essential component to getting mixed-uses built.

Example resources

Smart Codes Model Land-Development Regulations by Marya Morris, Published by APA's Planning Advisory Service, 2009 (List Price: $72.00)

The SmartCode at SmartCode Central http://www.smartcodecentral.org/

Municipal Research and Services Center of Washington—Mixed Use http://www.mrsc.org/Subjects/Transpo/MixedUse.aspx

In the toolbox:

Section 4.3 Model Town Center Zoning Ordinance *Model Smart Land Development Regulations* Interim PAS Report, © American Planning Association, March 2006

From Policy to Reality, Updated Model Sustainable Development Ordinances, Suzanne Rhees, Cunningham Group, Funded by a Minnesota Pollution Control Agency Sustainable Communities Grant, 2008:

Villages Mixed Use District

Downtown Mixed Use District

Metrics

Applications for mixed-use development

Occupied storefronts in urban core

Timeframe

Short-term modifications to the Master Plan and then Zoning Ordinance

Mid-term enhancement to pedestrian infrastructure

Cost

Low-cost modifications to the Master Plan and Zoning Ordinance

Mid-range costs for sidewalk or streetscape improvements

Support for agri-business development

The Grand Vision places an emphasis on locating new growth in existing development areas including cities, villages and main streets. The preservation of existing agricultural and rural lands compliments the growth plan. At the same time, the Grand Vision promotes increasing employment and economic security in the region and also celebrates food and farming as a definitive part of the economy.

The agricultural economy is an important part of the local, regional and state economy. According to the Michigan Department of Agriculture (MDA), in 2008 agriculture was the second largest economy in Michigan after tourism. The MDA Director Don Koivisto was quoted as saying this about agri-business: "It's a cutting edge, growing business industry generating nearly more than $38 billion in direct economic activity, $64 billion in total economic activity, and employs 1 million people." A 2006 study by Michigan State University's Product Center projected that from 2006 through 2011, the state could see an additional $1 billion economic boost from Michigan's agri-food sector and create up to an additional 23,000 new jobs annually. Actions to support and strengthen the region's agricultural economy will bolster both the economy and farmland preservation efforts.

There are several specific tools that can be used independently or collectively to encourage and promote the development of agri-business operations in the region including Agriculture Processing Renaissance Zones and Innovation grants. Local zoning regulations can also support agri-business by permitting them in designated agricultural areas. The length of the review process and amount of permitting fees can also support or discourage agri-business development.

The Michigan Economic Development Corporation (MEDC) offers several industry-specific renaissance zones including Agricultural Processing and Forest Products Processing Renaissance Zones. These zones offer the benefits of a Renaissance Zone regardless of location. Facilities in Renaissance Zones are exempt from state and local taxes for up to 15 years. Processing activities include operations that transform, package, sort or grade products. Graceland Fruit, Inc. in Frankfort is a designated Renaissance Zone. The USDA Rural Development Business Program offers several revolving loan fund programs to provide capital funds for business start-up and expansion.

Growth & Investment

Local land use regulations in agricultural areas should consider the impact of local regulation on agricultural processing activities. Processing uses are usually regulated by a Special Use Permit because their off-site impacts can vary widely. Local units of government can look at ways to reduce barriers for the applicant during the review process while at the same time using operating conditions as needed.

Example resources

Michigan's Agri-Food Industry: A Year of Agri-Economic Success 2008, An Annual Report of the Michigan Department of Agriculture

USDA Rural Business Development Program
http://www.rurdev.usda.gov/rbs/

The Michigan Advantage (Michigan Economic Development Corporation)
http://www.michiganadvantage.org/

Three examples of agricultural businesses from the six-county region:

Graceland Fruit, Inc. online http://www.gracelandfruit.com/

Black Star Farms online http://www.blackstarfarms.com/

The Cherry Republic online http://www.cherryrepublic.com/

(See also: Agricultural Zoning Approaches, a tool in Food, Farming and Rural Development)

Metrics

Number of agri-business start-ups

Number of agri-businesses jobs

Economic impact of agri-business

Timeframe

Short-term: Make contact with USDA office for more information about the Rural Development Business Program.

Short-term individual revisions (as needed) to local land use guidelines, regulations, review processes and permit fees.

Cost

Low cost: investigate agri-business incentives

Low: recognize area agri-business

Urban gateways

How do you know when you've arrived somewhere? Gateways provide visual clues to define the approach and arrival into a new place. The Grand Vision describes a regional development pattern of dense development along main streets, in villages, and in cities coupled with a rural landscape. Future development types include only a limited amount of suburban residential and corridor commercial development. Gateways create a sense of anticipation and arrival into an area of higher density. They help to create a defined edge of urban development and introduce a transition between two areas.

Gateways can be defined using tools such as landscaping, road design, public art, signs, streetlights, benches and banners. Gateway approaches are created by a change or an addition in the visual landscape. Street trees or streetlights with decorative banners appear at regular intervals next to the road, a curb and sidewalk appear next to the road, flower planters are on the street corners, the speed limit changes, houses are closer together or a few commercial buildings appear. Gateway nodes or entry points are created at a single location by a monument sign; a plaza or traffic circle; or public art on display. Both the transition and the entry define a gateway.

Once a traveler passes through a gateway, the changes on the other side are not unexpected. A change to urban form—building location and height, traffic calming measures and the appearance of on-street parking—seem a normal part of entering a village.

In order for there to be a gateway, there needs to be a transition between two separate places. A transition provides a difference in landscape, land use, architectural style or some other physical characteristic. The entry into an historic neighborhood or a main street area is already defined to some extent by a distinct change in land use patterns and architectural structure. Additional gateway features such as a welcome sign or a distinctive streetlight can enhance the entry.

Link to the Grand Vision:

The Grand Vision proposes a regional growth pattern where new residential and employment growth is concentrated in cities and villages around the region and agricultural, forest and other rural lands are protected from urban development. Urban gateways are created with visual cues to define or differentiate between rural and urban areas.

Growth & Investment

A community gateway can create economic benefits by creating excitement about arriving in a new place. Visitors to the area understand that they have arrived in a new place. It creates interest and may prompt thoughts that this destination might be a good place to take a break. It might be a good place to stop and find a restaurant, shop, explore or stay for the night. Gateway areas can also promote safety. Transition areas provide visual clues to motorists at the entryway to urban areas. Drivers become aware that they will be entering an urban area; that there will be changes in road conditions; that there will be an increase in bicycle and pedestrian activity; that there will be changes in speed; that there will be more access points and traffic controls. Travelers anticipate that they will need to change their travel behavior.

Example resources

PAS Memo, Michael F. Barrette, *Rethinking Urban Gateways*, November 1992

Understanding Flexibility In Transportation Design Summary Document, Washington State Department of Transportation, WSDOT and Norton-Arnold Company, December 2005

Main Streets: Flexibility and Design and Operations, Caltrans, January 2005

63rd Street Corridor Land Use & Development Plan, Planning, Preservation & Urban Design Division, City Planning & Development Department, Kansas City, Missouri, November 2002

Elm Avenue Improvement Plan, Gould Evans Affiliates, San Antonio, TX, January 2002

The 1998 Annapolis Comprehensive Plan. Chapter 10, Urban Design (now retired) http://www.ci.annapolis.md.us/info.asp?page=2959

Metrics

Corridor gateway plan adopted (plan should include implementation metrics)

Corridor gateway improvements constructed

Timeframe

Short: Evaluate existing gateway. Include gateway language in planning documents.

Medium: Create a corridor plan with designated gateway elements

Long: Install physical improvements along gateway corridor

Cost

Low: Evaluate the existing community gateway

Medium: Design an enhanced gateway

High: Construct new gateway features

A defined urban core area for development and investment

Urban investment areas, sometimes called Business Investment Districts (BID), can be defined through a combination of tools including the local master plan, zoning ordinance, capital improvements plan (CIP), and tax-increment financing (TIF) district. Through each of these tools, the local unit of government can define the geographic limit of the central urban area. This is not an urban growth boundary but a priority area for growth and investment. The boundary lines or limits placed by each tool should be coordinated with each other and based on existing conditions and projected future growth.

How is the area defined? While there is no absolute rule, there are several likely indicators that should be considered. One consideration is the existing conditions including water and sewer infrastructure underground and completed streetscape projects. They also include existing TIF district boundaries that establish a specific area where tax capture funding can be reinvested. Existing building patterns and uses are another consideration. Places that generate traffic including municipal buildings, institutional buildings, anchor commercial buildings and high-density residential units should be considered for inclusion in the district. The BID should also be limited in geographic area. A pedestrian shed (one-quarter to one-half mile radius) is a good rule of thumb so that the area can be compact and walkable.

Master plans may indicate a future expansion of the area to reflect future growth but tools that have direct impacts such as zoning regulations and TIF district boundaries should have a more limited geographic area based on the notes above. The goal is to focus initial public and private investments into a defined, central area. With a focused investment strategy, the combined impact should create an improved public space in a central core area and encourage private investment to follow.

Link to the Grand Vision:

The Grand Vision emphasizes locating new growth in existing growth areas including downtowns, villages and main streets around the region. In order to achieve walkable urbanism, the geographic area needs to have edges or limits. Boundaries for these areas need to be specifically defined in order to coordinate land use regulations, development incentives and public investment areas.

Growth & Investment

Example resources

Downtown Traverse City (Traverse City DDA) http://www.downtowntc.com/

Downtown Cadillac http://www.downtowncadillac.com/

Michigan Main Street Program
http://www.michigan.gov/mshda/0,1607,7-141-54317_34474---,00.html

Scottville, MI Mainstreet Program http://scottvillemainstreet.org/

Harrisburg Downtown Improvement District
http://www.harrisburghello.com/

James Street Improvement District
http://www.downtownlancaster.com/did.htm

Metrics

Revenue collected from TIF district

Reinvestment dollars in BID area

Timeframe

Short: Define investment area

Mid: Streetscape enhancements

Long: Utility improvements

Cost

Low: Review economic and land use planning tools

Mid: Aesthetic enhancements

High: Infrastructure Improvements

Support the redevelopment of brownfield sites

In Michigan, brownfields are defined by state law as properties that are contaminated, blighted or functionally obsolete. Brownfield sites may be abandoned or under-used and they may be industrial or commercial properties. Brownfield sites detract from the visual appearance and economic health of the community. Brownfield redevelopment is the conversion of brownfield sites to a productive use offering both environmental and economic benefits to the community.

Brownfield redevelopment is a task for a Brownfield Redevelopment Authority (BRA) which may be a county or local board. Any local unit of government (city, village, township, or county) can establish a BRA. There are several resources that may be available to local units of government who are interested in more information or support for establishing a BRA. Support may be available from county and regional planning offices; economic development organizations at the county, regional or state levels; and State of Michigan offices of environmental quality.

A BRA may be governed by the governing board of an existing Economic Development Corporation, Downtown Development Authority, or Tax Increment Finance Authority, or may be governed by a completely new board. Local units of government may also join in an existing county program through a location resolution rather than creating a local BRA.

A BRA is a financial resource that may use tax increment financing to assist with the redevelopment of eligible brownfield properties. Tax increment financing is the capture of increased property tax revenues, under an approved brownfield plan, resulting from the investment in, and redevelopment of, eligible property. BRA projects may include clean up of environmental contamination, demolition, lead or asbestos abatement, and in some cases infrastructure improvements, or site preparation.

A BRA must adopt a brownfield plan that meets the requirements specified in The Brownfield Redevelopment Financing Act—Act 381 of 1996. A brownfield plan describes the proposed activities of the BRA, the funding methods and the duration of the plan. A BRA can be an effective tool to encourage redevelopment of brownfield properties around the region.

Link to the Grand Vision:

The Grand Vision emphasizes locating new growth in existing growth areas including downtowns, villages and main streets around the region. At a parcel level, this means placing new growth on vacant or underused parcels in existing urban areas or on greenfield parcels close by. Brownfield parcels are not immediately available for redevelopment and so are preventing a new use on the property.

Growth & Investment

Example resources

Grand Traverse County Brownfield Redevelopment Authority
http://www.co.grand-traverse.mi.us/departments/brownfield.htm

Leelanau County Brownfield Redevelopment Authority
http://www.leelanau.cc/BRAintro.asp

Michigan.gov—Brownfield Redevelopment Authorities
http://www.michigan.gov/deq/0,1607,7-135-3311_4110_23246---,00.html

ICMA (International City/County Management Association): Brownfields
http://icma.org/main/topic.asp?hsid=1&tpid=19

Brownfields Conference (ICMA / EPA)
http://www.brownfieldsconference.org/en/index.aspx

Technical Assistance to Brownfield Communities (TAB)
http://www.engg.ksu.edu/CHSR/outreach/tab/

Metrics

Establish a local BRA to aid in the redevelopment of existing brownfield sites if this is a local issue.

Timeframe

Short-term action to create the BRA and mid- to long-term action to redevelop the property

Cost

Low: Establish a BRA

Mid: Adopt a BRA Plan

Attract a talented workforce—create walkable urbanism

National demographic trends predict that there will be a shortage of workers for the next several decades as baby-boomers retire from the workforce. As a result, young workers—especially those educated and skilled in the knowledge economy—are choosing where they want to live first and then finding or creating a job there.

Where do they go? Today's talented knowledge workers are moving to urban places with urban living options and lively walkable urbanism. In a 2008 article for the Dallas Business Journal, Chris Leinberger of the Brookings Institute wrote: *The Ozzie and Harriet drivable suburban vision of the American Dream is being supplemented by the Seinfeld vision of "walkable urbanism." Led by late-marrying young adults and empty-nester baby boomers, many households are looking for the excitement and options that living and working in a walkable urban place can bring. Current demographic trends promise continued demand.*

Next Generation Consulting (NGC) creates an annual Next Cities™ list, which includes the 80 best cities for young professionals in the United States and Canada. According to NGC, *Next Cities™ are places with the assets and amenities that attract and retain a young, educated work force. They have bustling city centers, walkable neighborhoods, diverse career opportunities, and vibrant art and music scenes.*

The built environment is a large contributor to talent attraction. Some of the specific components of walkable urbanism include a place to live, a safe and interesting route to walk and interesting destinations including stores, restaurants, and entertainment. Housing, density, pedestrian infrastructure, attractive streetscapes, building design standards and public spaces all contribute to the creation of walkable urbanism. These features are directly tied to land use planning and capital improvement investments.

It's not all physical design. Other components like broadband internet service, an active late-night, and cultural diversity, tolerance, and a connected social scene are also important. But design is a part of the equation and something to consider when making land use and transportation decisions in the region.

Link to the Grand Vision:

Goals of the Grand Vision include both a strong economy, an entry into Michigan's new economy, and employment in emerging green energy fields. A talented workforce in the region is essential to meeting these goals.

Growth & Investment

Example resources

Walk Score™ Find a Walkable Place to Live http://www.walkscore.com/

Promoting Active Communities
http://www.mihealthtools.org/Communities/

Michigan Municipal League—Center for 21st Century Communities
http://www.mml.org/resources/21c3/about.html

Project for Public Spaces http://www.pps.org/

Fast Company Magazine http://www.fastcompany.com/

Next Generation Consulting http://nextgenerationconsulting.com/

Leinberger, Christopher. *The Option of Urbanism*, Island Press, 2008

Metrics

Median age

Median income

Educational attainment

Timeframe

Short-term: Find your walk score

Mid: Guidelines for urban form

Long: Adopt sidewalk master plan

Cost

Low: Plan for walkable urbanism

Mid: Sidewalk improvements

$

Villages

A group of unique villages that together form a region

One central theme of the Grand Vision is to locate new growth in the region's cities and villages. The cities and villages need to be places that are attractive to residents and businesses. They need to be places that "feel good." People will be attracted to cities and villages by a combination of different features.

One of the attraction factors will be the look and the feel of the area.   The physical form of buildings and the amenities provided between them—the road, sidewalks and public plazas--combine to create the public space or the public realm. The public space can be designed to create a feeling of security and interest in an urban area that makes people feel good about being there. Both form-based codes and streetscape enhancements are tools that can contribute to the built environment.

Another attraction factor will be an activity level created by people and activity in the area. Housing and jobs in the cities and villages put people in the cities and villages in both the day and evening. People living and working in urban areas will attract new businesses, and conversely, those new businesses will attract people. People will enjoy urban nodes when there are gathering places like restaurants and coffee shops and destination places like grocery stores and banks within a short, comfortable walking distance. Higher density development patterns will put more people and jobs and businesses within a pedestrian "shed" and create a more sustainable urban place. A pedestrian "shed" is a small geographic area defined by how far people are willing to walk. The core area of a pedestrian "shed" is typically within a five minute walk and the limits are a 10 to 15 minute walk.

Although there will be increased opportunities for walking and biking trips, the road network will still be a central part of the transportation network. The walkable urban centers need to interact comfortably with vehicle traffic. Traffic calming measures can accomplish a balance between the needs of vehicles, bikes and pedestrians. Parking spaces are a necessary part of a vibrant downtown or village area but their location and quantity can be calibrated to fit the unique needs of urban areas.

Tools

- Increase the number of dwelling units in and near the urban core area
- Form-Based Codes (FBCs)
- Revise parking standards
- Regional tax base sharing
- Streetscape improvements

The Grand Vision emphasizes the location of new development in the region's cities and villages rather than in a sprawling development pattern on the urban fringe. This means concentrating public investment in urban areas and restricting development in rural and "fringe" areas. All of this requires a cooperative, regional approach to development. The economics of the tax revenue structure and local provision of services encourage each local unit of government to think within their geographic boundaries. Local units of government receive revenue from the people and businesses located within their jurisdictional boundary and usually limit services to that area as well. Each local unit of government is operating independently and municipal costs and benefits are directly associated with land use decisions. The strip commercial development that spills into a township is also a source of tax revenue for the community. Regional tax sharing of revenue and shared service provisions are tools that can balance the equation and help local decision-makers to think regionally.

Increase the number of dwelling units in and near the urban core area

Many businesses look at demographics and "count rooftops" within an established distance from a proposed location as a pre-requisite to opening a business. Think of new housing as magnets to attract retail and service businesses. Retail or service industries will locate in a community only after the population concentration reaches an established threshold. Whether it's a hard and fast formula of a national chain or a rule-of-thumb approach from an independent business, businesses will locate near population centers.   If the new housing is located in and near the urban center, the best market location will be in the village center or on main street near the customer base.

As a side note, this is not about building more housing overall in the region. Rather, it is about concentrating the same amount of new housing so that more of the new housing is built in a higher density pattern close to urban centers.

In addition to providing new retail and service jobs in a village based on higher density housing patterns, the population density may be appealing to employers in manufacturing fields looking for a dependable labor force.

Master plans can set the stage for a move towards an increase in residential density as an economic development goal and as a housing goal. Zoning ordinances can be reviewed and revised as necessary to provide opportunities for mixed-use and multi-family residential development in the urban center and higher density residential development types near the center. Each of these tools is addressed as a tool in other sections of this report. It is included here to emphasize the economic benefits to this approach.

Higher density housing in core urban areas can be a development incentive on its own or can be combined with financial development incentives for affordable housing. Other incentives from local units of government such as fee waivers or streamlined review processes could also support new housing development in preferred areas.

Link to the Grand Vision:

The Grand Vision emphasizes locating new growth in existing growth areas including downtowns, villages and main streets around the region. As new housing opportunities are provided in the urban areas, new businesses and employers will follow to serve residents.

Villages

Example resources

Downtown Austin Plan, Austin, TX
http://www.ci.austin.tx.us/downtown/downtownaustinplan.htm

City of San Jose, CA, Increased Housing Initiative http://www.sanjoseca.gov/
planning/gp/special_study/housing_initiative/default.asp

Greensburg, KS: Sustainable Master Plan http://www.greensburgks.org/

Visualizing Density from the Lincoln Institute of Land Policy
http://www.lincolninst.edu/subcenters/visualizing-density/

The Corridor Development Initiative—Housing Density http://www.
housinginitiative.org/15/index.php?option=com_content&view=article&id=7
5&Itemid=88

Metrics

Urban population

Average FAR for housing

Average size of new housing units

Timeframe

Short: Address housing goals in Master Plan

Mid: Increase residential density regulations

Mid: Incentives for high density housing

Cost

Low: Policy change in Master Plan

Low/Mid: Zoning amendment

Low/Mid: development incentives

Form-Based Codes (FBCs)

The Form-Based Codes Institute begins a definition of FBCs this way: *Form-based codes foster predictable built results and a high-quality public realm by using physical form (rather than separation of uses) as the organizing principle for the code. These codes are adopted into city or county law as regulations, not mere guidelines. Form-based codes are an alternative to conventional zoning[1].*

FBCs are prescriptive in stating what is allowed rather than what isn't allowed. FBCs recognize that the form of each building and its location on the lot has an impact on the public space and the "feel" of the area. FBCs also work from the perspective that the building will remain in place while uses will change over time. "Rather than separate and regulate uses, FBCs address and regulate building form with much less emphasis placed on uses.

FBCs begin with the end in mind. There is considerable effort placed up front as regulations are developed and then drafted to support a community vision through the code. FBCs use lots of graphics and less text to communicate standards. FBCs have a regulating plan—a map of where each standard applies instead of a zoning map. There are also public space standards and building form standards in addition to administrative standards and definitions. Once the code is in place, it is typically easier to administer and the development review process is usually shorter. Some communities allow staff to review and approve commercial development proposals that meet all code requirements.

Local units of government with land use authority should consider whether a FBC is appropriate for all or part of the community. FBCs can be applied to a sub-area, a whole community or a region.

Link to the Grand Vision:

The Grand Vision emphasizes locating new growth in existing growth areas including downtowns, villages and main streets around the region. Form-Based Codes are a tool to provide predictable results from the built environment.

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[1] Form-Based Codes Institute Website at http://www.formbasedcodes.org/definition.html

Villages

Example resources

City of Grand Rapids, MI
http://www.grand-rapids.mi.us/index.pl?page_id=109

City of Fremont, MI http://www.cityoffremont.net/web/planzone.htm

City of Marquette, MI http://www.mqtcty.org/plan.html

Form Based Codes Institute http://www.formbasedcodes.org/

Smart Code Central http://www.smartcodecentral.org/

Michigan Chapter of the Congress for the New Urbanism, Form-Based Codes in 7-Steps: The Michigan Guidebook to Livability
http://www.cnu.org/michigan

Metrics

Discussion of FBCs by Planning Commission

Adoption of FBC

Timeframe

Short: Consideration of FBCs as a tool

Mid: Adoption of FBC

Cost

Low: Consideration

Medium: Adoption of a FBC

Revise parking standards

Parking requirements in zoning codes are provided through calculations for land uses based on assumptions that often don't fit compact, urban development patterns. The calculations are designed for a suburban scenario where single-occupancy vehicles are driven to each specific destination and parked on-site during the visit. Compact urban development patterns like those proposed in the Grand Vision differ from this scenario in several ways.

There are some design changes that support the reduction of parking spaces. From an urban design standpoint, surface parking lots take up valuable space in the urban core area that could be used for a building instead. Parking lots are also hostile to the pedestrian environment, especially when they are located between the sidewalk and the building entrance. From a development standpoint, it is expensive to build parking spaces. Reducing the number of parking spaces also reduces the project cost for developers.

There are some transportation changes that support the reduction of parking spaces too. Ridesharing, transit, walking and biking trips will all reduce the number of single-occupancy vehicle trips and change the need for parking. More walkable housing and employment opportunities will increase the number of walking trips to local jobs, shops and services. The opportunity to park once and walk to multiple destinations further reduces the need for on-site parking. Urban street design will often provide some on-street parking and municipal parking areas are an alternative to on-site parking requirements.

There is no single "model parking" ordinance that will work for all communities at all times. However, there are some that provide guidance on concepts and approaches. Communities will need to calibrate parking standards to fit changes in demand as they occur. Parking requirements should include calculations for shared-parking options and credit for public parking.

Local governments or public-private partnerships may provide shared, municipal parking areas with a variety of opportunities for funding including public sources or a "fee-in-lieu" fee system from private developers.

Link to the Grand Vision:

The goal of the Grand Vision is to locate new growth in compact development patterns in places where development already exists and to expand mobility choices in the region. Conventional parking standards tend to require too much parking, which works against the Grand Vision's goals for density and mobility choices.

Villages

Example resources

Morris, Marya, *Model Land-Development Regulations*, Smart Codes (PAS 556), Published by APA's Planning Advisory Service, 2009 - includes model on-site access, parking, and circulation ordinance and model shared parking ordinance

Essential Smart Growth Fixes for Urban and Suburban Zoning Codes, EPA Smart Growth (includes all of the following references)
http://www.epa.gov/dced/essential_fixes.htm

Shoup, D, *The High Cost of Free Parking*, Planners Press, American Planning Association, 2005, Chapter 20

Metropolitan Transportation Commission, *Developing Parking Policies to Support Smart Growth in Local Jurisdictions: Best Practices*, April 2007, pp. 14-18 http://www.mtc.ca.gov/planning/smart_growth/parking_study/April07/bestpractice_042307.pdf

U.S. EPA, *Parking Spaces / Community Places: Finding the Balance Through Smart Growth Solutions*, February 2006, EPA 231-K-06-001
http://www.epa.gov/smartgrowth/parking.htm

Litman, T. *Parking Management: Strategies, Evaluation, and Planning*, Victoria Transport Policy Institute, November 2008, p. 15
http://www.vtpi.org/park_man.pdf

Victoria Transport Policy Institute, "Parking Maximums," *TDM Encyclopedia*
http://www.vtpi.org/tdm/tdm28.htm#_Toc128220478

Metrics

Zoning ordinance amended

Parking district identified and mapped

Community parking built

Timeframe

Short: Review/revision of parking requirements

Mid-term: Creation of a municipal parking district

Long-term: Construction of community parking facilities

Cost

Low: Review/revision of parking requirements

Medium: Creation of a municipal parking district

High: Construction of community parking facilities

Regional tax base sharing

The American Planning Association report *Growing Smart* (Chapter 14) identifies a disparity in revenue-raising capacity between local governments and notes that local governments throughout the country rely on local property taxes for revenues for their general operation. As a result, the revenue-generating characteristics of land uses receive strong consideration in development decisions. These characteristics can become the driving factors behind the zoning map designations and the zoning approval process. The practice of using the zoning power to achieve fiscal objectives rather than purely land-use objectives is known as "fiscal zoning."

Competition for tax base engenders intergovernmental conflict. In some instances, this becomes a conflict over annexation. In other instances, it can be a bidding war between communities competing for a company that has chosen to locate in the region. In the six-county region, it can be the basis for rural communities allowing (and even encouraging) residential, commercial, and manufacturing development although there is a desire to remain rural.

Two regions in the U.S. have specialized legislation that shares revenues from real property taxes: the Twin Cities metropolitan area in Minnesota and the Hackensack Meadowlands area in New Jersey. This approach works when there is widespread regional agreement that communities need to work together to support sensible development patterns and reduce fiscal disparity. The Grand Vision may provide that base of agreement.

On a smaller geographic scale, Michigan has legislation authorizing local governments to enter into interlocal agreements to share revenues from development. These were developed as a way to encourage intergovernmental cooperation and forestall attempts by cities to annex unincorporated territory. They are a tool that can be used among local governments within a smaller subsection of the region. They may work effectively to encourage rural townships to redirect new development to adjacent cities or villages in exchange for a portion of the tax revenue.

Villages

A revenue sharing tool—either regionally or locally—can be used along with opportunities for joint planning initiatives to think outside of jurisdictional boundaries and lessen the appeal of "fiscal zoning." This concept should be discussed locally and included in Master Plan documents as appropriate.

Example resources

Growing Smart, Legislative Guidebook: Model Statutes for Planning and the Management of Change, American Planning Association, Washington D.C. 2002 http://www.planning.org/growingsmart/

The Urban Cooperation Act of 1967, Act 7 of 1967 (Ex. Sess.)

Fiscal Disparities: Tax Base Sharing in the Twin Cities Metropolitan Area
http://www.metrocouncil.org/metroarea/FiscalDisparities/index.htm

New Jersey Meadowlands Commission http://www.njmeadowlands.gov/

The Michigan Government Finance Officers Association (MGFOA)
http://www.migfoa.org/MGFOA/

Michigan Suburbs Alliance
http://www.michigansuburbsalliance.org/resources/publications/

Metrics

Interlocal agreement concept or tax sharing included in community master plan

Interlocal agreement adopted to support land use policies

Timeframe

Short: Explore and discuss options

Mid: Construct an interlocal agreement

Long: Create a regional revenue sharing system

Cost

Low: exploration and discussion

Medium: Interlocal agreement

High: Regional revenue sharing system

Streetscape improvements

Streetscape improvements are part of the equation for encouraging people to walk, bike and use transit for transportation. Other parts of the design equation are traffic calming on the street side and land development patterns on the building side. On the sidewalk, people are encouraged to walk when the trip is safe, comfortable and interesting. Streetscape improvements address all three of these aspects. They are design and aesthetic enhancements that typically are done on main streets in urban centers but can include other areas with high pedestrian traffic.

Pedestrian safety is created by an environment that is designed for people rather than for cars. It is supported by sidewalks that are in good condition with curb cuts and other design features to serve people of all mobility levels at every age. They also have buffer features that separate pedestrians from the road. Buffers can include trees, benches, bike racks, planters and light poles. Pedestrian infrastructure in the road such as curb bump-outs and raised medians improve pedestrian safety for street crossings. Pedestrian safety is also addressed through building design that reduces or eliminates conflict with design features such as doors swinging outward or protruding light fixtures.

Pedestrian comfort is enhanced through both sidewalk design and pedestrian amenities. Sidewalk width is important to comfort. An eight foot sidewalk width in neighborhoods is a standard width based on passing space for two pedestrians walking in each direction. Main streets are more comfortable with an additional buffer area between the road and more passing space but the actual width will depend on existing conditions and right of way width. Amenities such as adequate lighting, bus shelters, benches, trash receptacles, public clocks, bicycle racks and fountains are decorative and also provide comfort to people on the sidewalk.

Pedestrian interest is created through visual cues and activities connected to the public street. Most of this is not directly connected to a streetscape project but is rather the result of creating a place where people feel safe and comfortable. It can be enhanced through plazas or other public spaces. Pedestrian interest is also created in part by other people on the street. Whether it's people watching or seeing friends and neighbors, people on the street create energy and connections. Buildings with shop windows at eye

Link to the Grand Vision:

The goal of the Grand Vision is to locate new growth in compact development patterns in places where development already exists and to expand mobility choices in the region. Streetscape improvements improve the physical design and appearance of the public realm to improve the comfort and safety of people walking, biking and taking transit.

Villages

level are interesting and amuse people during their walk. Compare that window shopping experience to walking in front of a blank building wall or surface parking lot. Sidewalk cafes, street vendors and sidewalk sales add interest through retail activity. Public art and street performers add interest and a shared culture. These activities need to be balanced with safety and mobility factors but they need not be exclusive. When balanced, the combination of safety, comfort and interest creates an identity and a unique sense of place.

Example resources

American Planning Association, Characteristics and Guidelines of Great Streets http://www.planning.org/greatplaces/streets/characteristics.htm

Front Street, Traverse City - recognized by the American Planning Association as one of America's great streets in 2009

Streets as Places: Using Streets to Rebuild Communities, Project for Public Spaces, Inc. New York, New York, 2008

City of Portland's Pedestrian Master Plan, June 1998

Healthy Communities Toolkit, Michigan Department of Community Health (MDCH)

The following resources are available to members of the American Planning Association and require login for access:

Jonathan Barnett, FAICP, *Great Streets*, APA Planning Magazine, December 2008
http://www.planning.org/planning/2008/dec/streets.htm

Ruth Eckdish Knack, AICP, *Great Streets, What Makes them Special*, Planning - January 2008
http://www.planning.org/planning/2008/jan/greatstreets.htm

Metrics

Dollars invested in streetscape

Linear feet of streetscape completed

Timeframe

Short: Identify areas for future streetscapes

Mid: Add streetscape items (benches, banners)

Long: Complete streetscape with road project

Cost

Low: Identify areas for future streetscapes

Mid: Add streetscape items (benches, banners)

High: Complete streetscape with road project

Transportation

Improving the region's transportation network

The central theme of the Grand Vision's transportation goals is to provide expanded transportation choices in the region while providing a safe and efficient transportation system. This multi-modal transportation approach begins with maintaining and improving the existing road system and adds more pedestrian, bicycle and transit options. At the same time, some new road construction is anticipated. The Grand Vision encourages new road lanes to be designed for multi-modal use and new street segments to be strategically located to improve connectivity in the road system. The Grand Vision's land use policy is coordinated with the transportation policy.

The road system is central to the regional transportation network. Maintenance and repair of the existing road system is a priority Grand Vision goal for safety and efficiency. In many cases, maintenance and repair activities can also improve the functionality of the road. When space is available within the right of way, streets can sometimes be reconfigured so that they are inclusive of all transportation modes through a "complete streets" approach. Adjacent to the right of way, access management tools can increase safety and efficiency of traffic movement. Land use policies to prevent strip commercial development outside of urban centers can provide another form of access management.

Another transportation goal of the Grand Vision is to increase public transportation service and ridership. Increased transit service will increase mobility for residents of the region, reduce congestion on the road and reduce energy used by private automobiles. A regional transit study can consider transportation needs and connections across jurisdictional boundaries. At the same time, land use policies can guide the built environment in a pattern that can be efficiently served by transit.

Yet another transportation goal of the Grand Vision is to expand transportation infrastructure serving pedestrians and bicyclists. The expansion includes planning activities, design tasks and construction. The TART Trails organization is a regional bicycle and pedestrian advocacy group with a focus on both trail building and programming. They are well-positioned to coordinate, educate and advocate for non-motorized transportation

Tools

- Reduce VMT for home to work trips in the region

- Access management

- Context Sensitive Solutions (CSS) and Complete Streets

- Take a regional approach to transit

- Transit Oriented Design (TOD) and station area planning

- Pedestrian / bike master plans

- Walkability audits

in the region. Planning for non-motorized transportation can also be done by local units of government, the regional planning office, school districts, or recreation authorities.

Walkability audits are an adaptable tool for assessing existing pedestrian infrastructure and pedestrian/bike master plans offer a more formal planning option for the future. Here again, urban design can have a significant impact on walking and biking through density, building form and location.

Throughout the Grand Vision, rail service was part of the equation for moving people and goods in and out of the region. The Northwest Michigan Council of Governments prepared a report in October 2002 titled *Preserving Options: Maintaining Rail Corridors in Northwest Michigan*. The report considers the benefits of keeping the railway corridors intact as well as the negative impacts if they are lost. Benefits include transportation, economic development and tourism. The paper strongly recommends that the northern Michigan rail system and right-of-way be protected and maintained in its entirety and that the community be prepared to make sure it happens.

Reduce VMT for home to work trips in the region

As technology and the economy change, the traditional workplace is making room for more opportunities to work from home. Whether it's a home-based business, a "once a week" arrangement with a local employer, or a home-base for a telecommuting arrangement, there are rising opportunities to work from home. Communities can support this arrangement by allowing low-impact home-based businesses with a simple permitting review and affordable permitting fees. Communities can also expand broadband service to allow for more home-based business activity. In addition to allowing home-based businesses, communities can also allow live-work structures in urban centers. These structures are designed to provide office, studio or small retail space on the ground floor at the sidewalk with residential space behind or above.

The regional Vehicle Miles Travelled (VMT) is a measure of the number of miles travelled by all personal vehicles for all trips in an area. The miles travelled for work trips can be reduced by placing housing and jobs closer together. Higher densities, mixed-uses and more housing units in and near urban centers are all tools that will increase opportunities to live and work in the same area (see the Housing and Employment sections of this toolkit for more information). In areas or systems with a Euclidian zoning approach (uses separated by zones), communities can look for opportunities to shorten the distance between homes and jobs with local street connections. Communities can also look for opportunities to provide new housing near existing employment centers through targeted infill or redevelopment.

In addition to design approaches, there are operational approaches to reduce the VMT associated with home to work trips in the region. One example that is already underway is the annual commute-to-work week and associated activities. Public and private initiatives can encourage individuals to carpool to work. Employers, transit providers or a private service can offer vanpool service to an employer or to an employment center. Employers and transit providers can also work together to offer free or reduced-fare transit passes. Workplace initiatives or other local programs can recognize employees who don't drive alone.

Transportation

Example resources

Smart Commute Week TC http://www.smartcommutetc.org/

Northwest Michigan Ride Share http://www.nmride.net

West Michigan Rideshare http://wmrideshare.org/

Mid-American Regional Council—Rideshare resources
http://www.marc.org/rideshare/

RideShare—serving Central Virginia and the Central Shenandoah Valley
http://www.rideshareinfo.org/

Dallas Area Rapid Transit Employer Vanpooling program
http://www.dart.org/about/employerrideshare.asp

The Live Work Institute http://www.live-work.com/lwi/

Florence Lofts, Sebastopol, CA
http://www.ibisbuilds.com/florence/florence_lw_flrplns.html

Dock Street Communities http://www.dockstreetcommunities.com/

Metrics

Target VMT reduction goals at 5-years, 10-years and beyond

Journey to work statistics

Number of Home-based businesses

Participation in Smart Commute week

Timeframe

Short: support Smart Commute week

Mid: allow live-work units and home based businesses

Cost

Low: Promote Smart Commute week

Low: Zoning revision to permit live work units

Medium: Support a community vanpool

Access management

Access management is a set of techniques that state and local transportation agencies and governments can use to control access to highways, major arterials and other roadways. The benefits of access management include improved movement of traffic, reduced crashes and fewer vehicle conflicts. These all work to make the existing road system more efficient and safe. Access management can be proactive to address undeveloped areas and it can be corrective in developed areas.

Some specific tools within the roadway include access spacing (increasing the distance between traffic signals), driveway spacing (fewer driveways spaced further apart), safe turning lanes, median treatments and right-of-way management. Access management also considers land use development regulations outside of the right-of-way.

Access management plans address a geographic area—usually along a single corridor and a contributing buffer area. In developed areas, proposed improvements within the right-of-way are noted specifically—often on aerial photographs. This may include notations of driveways to be closed and locations for raised medians. Along more rural road sections, the access management plans provide access standards to prevent problems from occurring.

Access management also includes provisions for land uses and lot development outside of the right of way. Land use provisions can include zoning district designations and requirements related to lot width, joint driveways, access roads and shared parking. Access management plans can be incorporated into local zoning ordinances to streamline the development review process and increase the ability to enforce the plan.

The State of Michigan has developed a standard reference guide on the subject and supported a series of access management plans on sections of state trunklines.

Link to the Grand Vision:

The goal of the Grand Vision is to locate new growth in compact development patterns in places where development already exists. Transportation investment in the region will place a primary emphasis on maintaining and improving the existing road system. Access management limits the addition of new access and conflict points on a road corridor making the road function more efficiently.

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Example resources

MDOT's Access Management Program including
definitions, sample RFPs and links to four completed plans
http://www.michigan.gov/mdot/0,1607,7-151-9621_11041_29705---,00.html

Links to state access management resources (by state)
prepared by Transportation Research Board AHB70
http://www.accessmanagement.info/AM2005/StateWebpages.htm

Washtenaw County Access Management Plan, 2008, prepared
for the Washtenaw Area Transportation Study (WATS)
http://www.miwats.org/WATS/leftside/other/wcamp/WCAMP_home.htm

Improving Driveway & Access Management in Michigan (MDOT Guidebook)

*Reducing Traffic Congestion and Improving Traffic Safety in Michigan
Communities: Access Management Guidebook*, Chapter 8, model ordinance
language for access management prepared for the Michigan Department of
Transportation by the Planning & Zoning Center, Inc.

Ten Principles of Access Management website with text from
Transportation Research Board (TRB) Access Management
Manual, 2003 and graphic animation by www.teachamerica.com
http://www.accessmanagement.info/10principles.html

Metrics

Crash data

Number of driveways

LOS rating

Timeframe

Short-term: Add access
management tools to zoning
ordinance

Mid-term: adopt access
management plan

Long-term: Construct
roadway improvements

Cost

Low-cost: access
management tools in zoning
ordinance

Mid-range: access
management plan

High: Construct roadway
improvements

Context Sensitive Solutions (CSS) and Complete Streets

Both Context Sensitive Solutions (CSS) and Complete Streets are methods to consider streets as more than just a way to move cars around quickly. Both tools give highway and road designers permission to create a road in response to the conditions, needs and interests of the community being served.

CSS is a process that involves a wide variety of stakeholders in the early road planning and design activities. Through the process, the road is designed to "fit" its location with consideration given to aesthetics, history, community, and the area's environmental resources while at the same time addressing safety, mobility and infrastructure conditions. The CSS approach is supported nationally by the Federal Highway Administration and other transportation organizations. Michigan's Governor and the Michigan Department of Transportation (MDOT) have expressed support for CSS as well. The MDOT website has a page devoted to CSS, which includes this statement: *A cooperative spirit and an awareness of community interests help achieve the ultimate goal--projects that fit their surroundings while effectively serving transportation needs.*

"Complete Streets" is a complimentary approach to CSS but rather than focusing on coordination with the community around, it focuses on a multi-modal design of the road itself. In the book *Complete Streets: We Can Get There from Here*, authors John LaPlante, P.E., and Barbara McCann write: *A Complete Street is a road that is designed to be safe for drivers; bicyclists; transit vehicles and users; and pedestrians of all ages and abilities. The Complete Streets concept focuses not just on individual roads but on changing the decision-making and design process so that all users are routinely considered during the planning, designing, building and operating of all road ways. It is about policy and institutional change.*

Walk and Bike Lansing! is a campaign to engage and mobilize Lansing residents, businesses and others to make Lansing an accessible and walk and bike friendly city. It's a "Complete Streets" initiative. A direct result of the efforts of Walk and Bike Lansing is the adoption by the City of Lansing of Section 1020.13 of the Lansing Codified Ordinances titled "Walkable-

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bikeable complete streets." The ordinance was adopted August 17, 2009, and defines complete streets as a design principle to promote a safe network of access for pedestrians, bicyclists, motorists and transit riders of all ages and abilities.

In the six-county region, the Grand Vision transportation group can look for tools to encourage and support both CSS and Complete Streets processes at the state, county and local levels. An independent advocacy coalition may be the best organization of this initiative. Educational initiatives through a speaker's bureau or a guidebook could help raise awareness with the public, elected officials and technical professionals. Local boards and commissions could adopt a local ordinance in support of a CSS and Complete Streets policy and incorporate them into road planning and design activities.

Example resources

Federal Highway Administration Context Sensitive Solutions website
http://www.fhwa.dot.gov/context/index.cfm

MDOT Context Sensitive Solutions - Includes links to other state websites, national resources and a lengthy literature review
http://www.michigan.gov/mdot/0,1607,7-151-9621_41446---,00.html

ContextSensitiveSolutions.org - Includes links to projects and case studies around the country http://www.contextsensitivesolutions.org/content/gen/

National Complete Streets Coalition http://www.completestreets.org/

Michigan Complete Streets Coalition http://www.micompletestreets.org/

City of Lansing http://www.lansingmi.gov/

Walk and Bike Lansing http://www.walkbikelansing.com/index.html

Metrics

Strength of advocacy coalition (members, budget, presentations)

Number of participants in a CSS public involvement process

Number of local complete streets ordinances

Timeframe

Short-term: Organize an advocacy coalition

Mid-term: Create educational material; initiate advocacy campaign; incorporate CSS and Complete Streets for new road design

Cost

Low: Organize advocacy coalition

Medium: Guidebook creation and publication

High: Road reconstruction projects using complete streets approach

Take a regional approach to transit

Link to the Grand Vision:

In the six-county Grand Vision region, each county has its own public transit service ranging from rural dial-a-ride to urban fixed-route service. The Grand Vision takes regional perspective on transportation solutions including a regional approach to public transportation service.

The Grand Vision takes a regional approach to coordinated transportation and land use planning. A regional approach to transit is one way to support the Grand Vision's regional and multi-modal transportation goals. Regional transit advocacy can be a function of community advocacy outside of the existing transit organizations or it can be a new, cooperative approach to transit by existing transit organizations or both. Examples of regional transit groups in Michigan are found around the state including the following two in the Detroit and Grand Rapids Metro regions.

The Rapid in Grand Rapids is an interurban transit partnership and its board of directors is made up of representatives of all six municipalities in The Rapid service area. The Rapid coordinates a range of transportation services including fixed-route, dial-a-ride, rideshare, airport and university service. At the same time, the Disability Advocates of Kent County, a non-profit group working for equal access for all, advocates for better public transit as part of its work in the area.

In Southeast Michigan, Transportation Riders United (TRU) is a non-profit organization dedicated to improving transit access and mobility in greater Detroit. TRU works to restore urban vitality, ensure transportation equity and improve quality of life through education, advocacy and watchdog activities. The Get Michigan Moving Coalition is a statewide transit advocacy group supported by the Michigan Municipal League, the Detroit Regional Chamber of Commerce, the Grand Valley Metro Council and others.

The county transit agencies in the Grand Vision study area already provide regional transit service in their respective counties. The largest of these is the Bay Area Transportation Authority (BATA) serving Grand Traverse and Leelanau Counties. These organizations are central to expanding regional transit connections. The topic of regional transit was explored by the Michigan Land Use Institute (MLUI) in an October 2009 report entitled *Expanding Transportation Choices in the Grand Traverse Region*.

The transportation working group of the Grand Vision is well positioned to advance the conversation about regional transit. A first step may be a regional transit summit to explore opportunities for a coordinated regional transit system.

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Example resources

Bay Area Transportation Authority http://www.bata.net/

The Rapid, Grand Rapids, Michigan http://www.ridetherapid.org/

Transportation Riders United (TRU) http://www.detroittransit.org/index.php

Get Michigan Moving Coalition
http://www.getmichiganmoving.org/index.html

The Michigan Land Use Institute Public Transit Initiatives
http://www.mlui.org/transportation/trans.asp?key=8&sub=31

Expanding Transportation Choices in the Grand Traverse Region, October
2009 http://www.mlui.org/downloads/transitreport10-09.pdf

Metrics

Create a Grand Vision regional transit group

Hold 1st Annual Transportation Summit

Conduct a Regional Transit Study

Timeframe

Short-term: Organize a regional transit providers group

Mid-term: Hold an annual transportation summit

Mid-term: Conduct a regional transit study

Cost

Low: Organize regional transit providers group

Low/Medium: Hold an annual transportation summit

High: Regional transit study

Transit Oriented Design (TOD) and station area planning

Transit Oriented Design (TOD) increases density and walkability around transit stops. TOD works to make transit efficient, pleasant and safe so more people choose transit.   Basic principles associated with TOD include the integration of transportation and land uses along transit corridors, mixed-use development, public input on the TOD provisions, development orientation toward public transit, and easy access to transit facilities. Compatible land uses include medium- and high-density residential development and pedestrian oriented commercial and service businesses.

Station area plans can be conceptual or specific plans for areas around transit stations. In either case, they include basic components such as zoning, design standards and parking, in addition to transit service access and non-motorized circulation plans. They are especially effective when there is a large amount of land available for development or redevelopment (such as a large surface parking lot).

Real estate investment finds more security with rail service than with bus service since bus routes can be changed. But planning combined with public infrastructure investments can signify a more permanent commitment to a development node. This might be done in the form of a tax-capture district or other funding stream to support TOD development incentives and improved municipal infrastructure. It might also be done through the construction of amenities to support a transit stop such as an enclosed waiting area, a bicycle parking area and an informational kiosk.

Local master plans and zoning ordinances should consider TOD provisions for existing or anticipated transit stops and along transit corridors. In villages or on main streets, these will be similar to the town center provisions but will add some additional design components. A "transit district" or "transit village" overlay zone can be applied in the local zoning ordinance. Alternatively, a floating TOD overlay zone can be ready when the need arises. Incentives such as expedited permitting, reduced parking requirements, and fee waivers should be considered to encourage TOD design.

Link to the Grand Vision:

The goal of the Grand Vision is to locate new growth in compact development patterns in places where development already exists. Transportation investment includes increased public transportation services. TOD is a tool that places a unique set of land use regulations within walking distance of transit stops.   Station Area Planning is a sub-area plan for an area around an existing or proposed transit stop or along transit corridors.

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Example resources

Mission Meridian Village, South Pasadena, CA
http://www.challc.com/ProjMMS.html

Highlands Garden Village, Denver, CO
http://www.highlandsgardenvillage.net/

Bay Area Rapid Transit (BART) Fruitvale Village at the Fruitvale Station, Oakland, CA http://www.unitycouncil.org/fruitvale/index.htm

The Crossings, Mountain View, California
http://www.epa.gov/dced/case/crossing.htm

Douglas Porter, *Transit Focused Development: A Synthesis of Practice*, (Washington, D.C.: Transportation Research Board, National Research Council, 1997) http://onlinepubs.trb.org/onlinepubs/tcrp/tsyn20.pdf

Transit-Oriented Design (TOD) for Chittenden County, Guidelines for Planners, Policymakers, Developers and Residents, Chittenden County Regional Planning Commission, South Burlington, VT, 2002 (Appendix) http://www.ccrpcvt.org/

The Marin Pedestrian and Transit-Oriented Design Toolkit, Transportation Authority of Marin, September 2007
http://www.tam.ca.gov/Modules/ShowDocument.aspx?documentid=2118

Metrics

TOD reference in Master Plan

TOD provisions/ language in zoning ordinance

Infrastructure improvements to enhance transit stop locations

Timeframe

Short-term: Revise planning tools

Mid-term: Infrastructure investment as needed

Mid-term: Regional transit plan

Cost

Low: Revise planning tools

Mid/ high: Infrastructure investments as needed

High-cost: Regional transit plan

Pedestrian / bike master plans

Communities may develop a pedestrian master plan, a bicycle master plan or a single plan that combines the two topics. In each case, the non-motorized plan reflects a planning process similar to that of a land use master plan. While there are no specific legal requirements for the plan, a non-motorized master plan contains chapters to address existing conditions, community preferences and vision for the future, gaps between the two, funding opportunities, an action plan and maps for visual support. The master plan may also include technical specifications or design guidelines. In some cases, land acquisition may be part of the planning focus. A discussion of mobility for all people is important to the conversation as the non-motorized network serves a variety of people and conditions.

A non-motorized master plan may be developed by a local unit of government, a county or a regional authority. Those produced at the local level with a more limited geographic area can produce a plan with a more detailed focus on sidewalks and other urban infrastructure. They can also connect directly to the capital improvement planning for the municipality. These might be done by a city or village or as a sub-area plan for a township with a main street area.

A plan created at the county or regional scale provides a vision for connections between communities with pathways or along county and state roads. In the Grand Vision region, the activities of TART Trails, Inc. are important to all other non-motorized planning in the region. Also, the Northwest Michigan Council of Governments (NWMCOG) has written a regional plan titled Northwest Michigan Regional Non-Motorized Strategy. It was funded by the Michigan Department of Transportation and includes 13 counties in Northwest Michigan. Planning at both scales serves a separate but complimentary purpose. In a region with extensive public lands, coordination with county, state and federal agencies should also be considered. For instance, the National Parks Service is planning for the Leelanau Scenic Heritage Route Trailway that will be a trailway in the National Lakeshore property.

Transportation

Non-motorized plans, like land use plans, should consider connections to and coordination with adjacent communities. Local plans for urban nodes can also look for a connection to transit service, which will be a connector between urban areas, for coordination with land use planning that identifies walkable and bikeable areas, and for coordination with street or road construction projects.

As part of the land use master plan process, counties and local units of government should consider whether a pedestrian, bicycle or combined master plan is a goal or a priority action item. In some cases, a sub-area plan to focus on a central development node may be a first step in a larger process. In other cases, a less-detailed walkability audit may be appropriate. When a non-motorized master plan becomes a priority item in the land use master plan, then funding and support opportunities can be pursued.

Example resources

Northwest Michigan Regional Non-Motorized Strategy 2008, developed by the Northwest Michigan Council of Governments (NWMCOG)

Planning for Pathways, NWMCOG for New Designs for Growth, June 2009

The National Center for Bicycling and Walking http://www.bikewalk.org/

Albany (New York) Pedestrian Master Plan—this site contains project information and also a folder with links to many other pedestrian master plans http://albanypedmasterplan.webexone.com/default.asp?link=plans

Access Minneapolis is the City of Minneapolis' transportation action plan that includes pedestrians and bicycles. http://www.ci.minneapolis.mn.us/public-works/trans-plan/index.asp#TopOfPage

Charlottesville (Virginia) Bicycling and Pedestrian Master Plan http://www.charlottesville.org/Index.aspx?page=1309

Metrics

Pedestrian and/or bicycle master plan discussed as part of land use Master Plan

Pedestrian and/or bicycle master plan adopted

Timeframe

Short-term: Include discussion of non-motorized planning in land use Master Plan update

Mid-term: Create pedestrian or bicycle or combined non-motorized master plan

Long-term: Construct pedestrian and bicycle infrastructure

Cost

Low: Discuss non-motorized planning in land use Master Plan update

Medium: Create pedestrian or bicycle or combined non-motorized master plan

High: Construct pedestrian and bicycle infrastructure

Walkability audits

A walkability audit is an evaluation of the walking environment at any scale. Walkability audits were initially created by Dan Burden who is a nationally recognized expert in walkable communities. The general purpose of an audit is to identify concerns for pedestrians including safety, access, comfort and convenience. An audit can also identify potential alternatives or solutions. It can be done by an individual volunteer, a community group, or a trained professional consultant. In any case, it should be performed by a partisan evaluator.

A walkability audit is performed to evaluate connections between residential, commercial and institutional locations and identify gaps in the existing pedestrian infrastructure as well as potential solutions. The focus may be a single block, a neighborhood, the area around a school or a whole community. Improvements to pedestrian infrastructure will likely shift some of the shorter trips from automobile to walking trips.

According to information presented in the "Healthy Communities Toolkit" developed by the Michigan Department of Community Health (MDCH), nearly 25 percent of all trips in the United States are one mile or less yet 75 percent of these short trips are made by automobile. One potential reason cited for the driving trips is "inadequate walkability" or the absence of a safe, accessible, comfortable, convenient pedestrian system. The Healthy Communities Checklist was also created by the MDCH and offers a series of questions related to how a community is positioned to support walkability and other community health issues.

The Safe Routes to School (SR2S) program strives to make it safe, convenient and fun for children to bicycle and walk to school and is a resource for both information and funding. It is part of the federal transportation policy—SAFETEA-LU. Every state now has dedicated dollars to help with infrastructure improvements (e.g. new sidewalks and traffic calming projects) to encourage and enable students to walk and ride to school. The SR2S program includes a series of community walkability audits and the SR2S toolkit contains a collection of related resources.

Link to the Grand Vision:

The goal of the Grand Vision is to locate new growth in compact development patterns in places where development already exists. Transportation investment in the region will expand transportation options and relieve congestion on the existing road network. Walkability audits are a planning tool for pedestrian infrastructure.

Transportation

Example resources

Northwest Michigan Regional Non-Motorized Strategy, 2008, written by Northwest Michigan Council of Governments

The Pedestrian and Bicycle Information Center (PBIC) is a national clearinghouse for information about health and safety, engineering, advocacy, education, enforcement, access, and mobility for pedestrians (including transit users) and bicyclists. http://www.walkinginfo.org/

Center for Disease Control Walkability Audit for the workplace
http://www.cdc.gov/nccdphp/dnpao/hwi/toolkits/walkability/index.htm

Robert Wood Johnson Foundation supports healthy environments and active living projects. http://www.rwjf.org/

Safe Routes to School http://www.saferoutesmichigan.org

Michigan Trails and Greenway Alliance http://www.michigantrails.org/

Completed Walkability Audits:

> A walkability audit was performed by Dan Burden as part of the Bayfront Study by Michigan State University.

> A walkability audit was performed by Dan Burden for the City of Cadillac and the City of Boyne City in July 2009. This audit was part of a program offered by the Michigan Department of Transportation across the state in partnership with the Michigan State Housing Development Authority, Michigan Department of Environmental Quality and the Michigan Department of Community Health.

Metrics

Number of walkability audits performed

Number of community visits by educational or audit group

Dollars in CIP designated for pedestrian improvements

Timeframe

Short-term to complete an informal walkability audit

Mid-term to complete a formal walkability audit

Cost

Low: Walkability audits performed by volunteers

Mid: Walkability audits done by trained professionals

Low/Med/High: Pedestrian improvements

Housing Choices

Expanding housing choices in the region

A central theme of the Grand Vision's housing goals is to locate new growth in the region's cities and villages—in areas where there is already urban development. The current housing stock in the six-county region offers very little choice other than single family homes. The price difference in the housing market is based on the age and location of the home. Only a small percentage of houses in the six-county region are within walking distance of jobs, services and schools. A goal of the Grand Vision is to expand housing choices in the region. New housing options will offer more choices for both type and cost to meet the projected future housing demand and to achieve the density levels needed in urban areas.

Higher density housing patterns will provide the smaller urban footprint and the walkable urbanism described in the Grand Vision. The current pattern of single-family residential homes on one- and two-acre lots in urban areas needs to be diversified to offer more options for higher density housing. These include single-family homes on smaller lots, cottage-style development, duplexes, townhomes and apartments. Higher density housing units can range in price from below-market subsidized housing to high-end luxury units and meet the needs of a variety of residents.

Housing in the Grand Vision study area is also directly connected to the transportation goals of the project. One of the goals of the Grand Vision is to provide housing options in areas where development already exists—in the region's cities and villages. As the program title suggests, "Live where you work" programs encourage people to live near their place of employment. These programs result in a reduced commuting trip length, which can encourage walking and biking to work or shorten the driving trip.

There is a current and projected need for more affordable housing units in the six-county area. One tool that has been used effectively to support the creation of affordable housing is an Affordable Housing Trust Fund. Housing trust funds are distinct funds established by city, county or state governments that receive ongoing dedicated sources of public funding to support the preservation and production of affordable housing. In July 2008, the National Housing Trust Fund created a permanent federal program with a dedicated source of

Tools

- Housing Trust Funds (HTFs)
- Higher density housing options
- Live where you work programs (home morgage incentive)
- Transfer of Development Rights (TDR)

funding not subject to the annual appropriations process. According to the 2007 Housing Trust Fund Progress Report produced by the Center for Community Change, there are now 38 states with housing trust funds, as well as the District of Columbia, and more than 550 city and county housing trust funds in operation. Six states, including Michigan, have created housing trust funds legislatively but do not currently have public revenues committed to the funds.

While urban communities focus on maintaining and expanding housing resources, rural communities can compliment the effort through actions that restrict new housing in some locations. Both the Purchase of Development Rights (PDR) and Transfer of Development Rights (TDR) are tools for permanent agricultural land conservation that protect the land from development while providing the land owner with compensation for the land development rights.

Housing Trust Funds (HTFs)

Housing Trust Funds (HTFs) provide a unique tool for the support of housing initiatives because, by definition, they have a dedicated source of public funding. The funding is committed by resolution, ordinance or legislation. A certain percentage or amount of public funding is designated to be automatically deposited in the housing trust fund each year. They are also a flexible tool that can be defined by the creating entity to address the priority housing needs of the service area.

At the national level, the Housing and Economic Recovery Act of 2008 establishes a Housing Trust Fund to be administered by the Department of Housing and Urban Development (HUD). According to the Center for Community Change, there are now 38 states with housing trust funds, as well as the District of Columbia, and more than 550 city and county housing trust funds in operation. The *Housing Trust Fund Progress Report 2007* produced by the Center for Community Change reported that the most common revenue source collected by state housing trust funds is the real estate transfer tax used in eleven states. Other dedicated funding sources include document recording fees and the unclaimed property fund.

The State of Michigan has established the Michigan Housing Trust Fund (MHTF) but has not yet established a dedicated funding source. The State of Michigan has also not adopted any specific enabling legislation for regions, counties or local units of government to create a HTF. Nonetheless, in Michigan, the Cities of Ann Arbor and Kalamazoo both have HTF programs.

The Northwest Michigan Council of Governments is a leading housing advocate for the region. At their request, the Citizen's Research Council of Michigan developed and released a report in December 2009 titled *Housing Trust Fund Barriers and Opportunities*. The report recommends that the state consider empowering county and regional authorities to use local resources and expertise to create and support HTF. The Community Housing Choices program is also housed at the NWMCOG, which is a clearinghouse for housing information and a center for program activity.

Link to the Grand Vision:

The Grand Vision's goal of meeting the housing and transportation needs of the residents of the region means providing affordable housing units in urban centers around the region. The increased housing in urban areas puts dwelling units within walking distance of employment, shopping and service destinations as well as transit stops. Housing Trust Funds are one tool to support affordable housing projects.

Housing Choices

Example resources

Community Housing Choices http://www.communityhousingchoices.org/

Housing Affordability Strategies: Economic Resources
Housing Trust Funds, NWMCOG, Community Housing Choices
http://communityhousingchoices.org/downloads/HousingTrustFund.pdf

Center for Community Change: Housing Trust Fund Project
http://www.communitychange.org/our-projects/htf

Housing Trust Fund Progress Report, 2007, Mary E. Brooks, Housing Trust
Fund Project, Center for Community Change, Frazier Park, CA 93225

National Affordable Housing Trust http://www.naht.org/

Housing Trust Funds: Barriers and Opportunities,
Citizens Research Council of Michigan December 2009
http://www.crcmich.org/PUBLICAT/2000s/2009/rpt358.pdf

Prospects for an Affordable Housing Trust Fund in Michigan, Christine
Hall, Justin Linker, and Chris Shay, Michigan State University, October 2001
https://www.msu.edu/~cua/pubs%20hsg%20report/hsg%20trust%20
report3.htm

The Housing Trust for Columbus and Franklin County, Ohio
http://www.thehousingtrust.org/index.asp

Massachusetts Affordable Housing Trust Fund (AHTF) https://www.
masshousing.com/portal/server.pt?mode=2&uuID=%7BAEC3205D-953D-
4243-AC65-C4F521932104%7D

Jackson Hole Community Housing Trust http://www.housingtrustjh.org/

Metrics

Dollars dedicated to HTF

Median cost of housing

Timeframe

Short: Review master
plan and zoning ordinance
for provisions to support
affordable housing efforts.

Mid: Awareness and support
for regional and state efforts
to support Housing Trusts

Long: Dedicated local
financial support of Housing
Trust Funds once established

Cost

Low: Raise awareness of
HTFs

Med: Identify dedicated
funding source for HTF if
created

Higher density housing options

The current housing market is almost exclusively single family homes and only a small percentage are within walking distance of jobs, services and schools. Higher density housing patterns will meet the diverse needs of the growing six-county population while providing the smaller urban footprint and the walkable urbanism described in the Grand Vision. The current pattern of single-family residential homes on one- and two-acre lots in urban areas needs to be diversified to offer more options for higher density housing.

Higher density housing types include single-family homes on smaller lots, cottage-style development, duplexes, townhomes, apartments and live-work units in addition to mixed-used developments with a residential component. Threshold densities to support transit should be considered within a 15 minute walk from the central urban node or nodes in larger urban areas.

Outside of the core pedestrian shed, high-density housing options are an important way to provide increased housing choices for reasons other than transportation choices. Many households are occupied by only one person with a preference for a smaller dwelling unit. Others choose high-density housing in order to have a low-maintenance lifestyle or because of the energy efficiency offered by a smaller home. Others may enjoy the community offered by a development with front porches, walking paths, common areas, playgrounds or other amenities.

High-density housing units can meet a variety of needs for lifestyle preferences and price-points in the housing market. High-density housing units can range in price from below-market subsidized housing to high-end luxury units and options in-between. But they are a change in physical form for communities around the Grand Vision region. This change is height and bulk can prompt concerns and objections. Visual examples of high-density housing can be used to explore density with elected officials, planning commissioners and citizens. This can be done through graphic presentations or by visiting locations with high density housing examples.

Link to the Grand Vision:

The central key to achieving the Grand Vision, including the housing goals, is to locate new growth in the region's cities and villages—in areas where there is already urban development. New housing needs to be located in cities, villages and near main streets and offer a variety of choices for both type and cost in order to match housing demand and to create the walkable urbanism of the Grand Vision.

Housing Choices

Example resources

National Multi Housing Council http://www.nmhc.org/

Myths and Facts about Affordable and High Density Housing, a report from the California Planning Roundtable
http://www.abag.ca.gov/services/finance/fan/housingmyths2.htm

Visualizing Density, Lincoln Institute of Land Policy
http://www.lincolninst.edu/subcenters/visualizing-density/

The Compact Development Compact Disc (CD2), a compact disc published by the California Local Government Commission
http://www2.lgc.org/bookstore/detail.cfm?itemId=33

"Understanding Density and Floor Area Ratio through Development Examples, Boulder, CO" http://www.bouldercolorado.gov/index.php?option=com_content&task=view&id=1427&Itemid=1714

Creating Great Neighborhoods: Density in your Community, September 2003, USEPA http://www.epa.gov/smartgrowth/pdf/density.pdf

Case studies from around the country (from Creating Great Neighborhoods):

> Belmont Dairy: Urban reuse and infill Wellington Neighborhood: Moderately priced housing
>
> The Crossings: Transit-oriented development
>
> Aggie Village: University mixed use infill
>
> Addison Circle: Suburban town center
>
> New Holly Urban Village: Redesigned affordable housing
>
> Third Street Cottages: Rural infill
>
> River Station and Heritage Landing: Mixed use urban infill
>
> Courthouse Hill: Suburban residential infill

Metrics

Number of high-density housing units built

Density per square mile

Timeframe

Short: Review Master Plan and Zoning Ordinance

Medium: Explore density options; revise planning documents; evaluate infrastructure

Long: Improve infrastructure

Cost

Low: Review of planning documents

Medium: Revise Master Plan; design infrastructure improvements

High: build infrastructure improvements

Live where you work programs (home mortgage incentive)

Housing in the Grand Vision study area is also directly connected to the transportation goals of the project. One of the Grand Vision goals is to provide housing options in areas where development already exists—in the region's cities and villages. As the program title suggests, "Live where you work" programs encourage people to live near their place of employment through low-interest mortgage loans or other incentives.

These programs have been titled "Live where you work" (LWYW) or "Live near your work" (LNYW). Delaware, Maryland, and Minnesota all have state-sponsored programs to support housing selection near employment in some areas. These programs are designed to address the higher cost of housing that often goes along with housing near central business districts and employment. Living near work reduces the daily commuting trip length, which can encourage walking and biking to work or shorten the driving trip. Either way, it reduces the cost of commuting. For the community, a LNYW program encourages neighborhood stabilization and puts more pedestrian traffic in business districts.

In Delaware, the LNYW program funding comes from a combination of employer, state and local unit of government where each provides a minimum $1,000 grant. Employees must be eligible under program guidelines and purchase a home within a designated area, within a 3-mile radius of the employee's worksite. The Maryland LNYW program provides a minimum $3,000 to home buyers moving to designated neighborhoods. Participating employers set eligibility requirements, promote the program to their employees and provide matching resources.

In several locations in Baltimore, employer Johns Hopkins secured grant funding to increase the program benefit to as much as $17,000. In Minnesota, Minneapolis Homebuyer incentives of up to $10,000 are available for qualifying buyers of single family homes in the University District.

In New Jersey, the LWYW program is administered through the State's Housing and Mortgage Finance agency and offers low-interest mortgage loans to homebuyers. The loans are directed to areas designated as "smart growth locations" in the state.

Link to the Grand Vision:

The Grand Vision combines transportation and land use strategies to reach a preferred future for the region. The opportunity to live near employment shortens the driving trip between home and work and increases opportunities to use non-motorized transportation. This supports the transportation, housing and energy goals of the Grand Vision.

Housing Choices

In the six-county region, this tool could be very effective in cities and villages with support from major employers. Private support from employers and financial institutions should be explored. Support from one or two major employers could get a pilot program started in the region. Local units of governments can provide information about priority investment areas and other land use planning initiatives to coordinate between program goals. The Community Housing Choices program located at the NWMCOG would be well-positioned to coordinate the regional conversation about a LNYW initiative.

Example resources

Live Near your Work: Smart Growth and Neighborhood Conservation in Maryland http://www.dnr.state.md.us/education/growfromhere/lesson15/mdp/LNYW.HTM

Baltimore City Live Near Your Work Program http://www.livebaltimore.com/resources/incentives/employerprograms/livenearyourwork/

Live Near Your Work, Delaware State Housing Authority http://www.destatehousing.com/services/hb_lnyw.shtml

Johns Hopkins 'Live Near Your Work' Program http://www.jhu.edu/news/univ08/sep08/lnyw.html

Live Near Your Work, University District Partnership Alliance, University of Minnesota, Minneapolis campus http://www.livenearyourwork.net/index.php

State of New Jersey Live Where You Work (LWYW) Program http://www.state.nj.us/dca/hmfa/consu/buyers/close/live.html

Vital Communities Toolbox http://www.tompkins-co.org/planning/vct/3.html

Metrics

Average commute to work time

Number of houses purchased through a LNYW program

Timeframe

Mid-range to begin a program

Long-term to reach housing purchase goals

Cost

Low-Mid depending on financial incentives offered

Transfer of Development Rights (TDR)

Like PDR, the Transfer of Development Rights (TDR) is based on the concept that property ownership is a bundle of rights that can be separated and sold individually. The idea of selling mineral rights to a property is a familiar example of this practice. A Planned Unit Development (PUD) also uses this concept to redistribute overall development density from one location to another within a single project.

A TDR program involves a "sending" zone and a "receiving" zone. "Sending" zones are areas that a community or region has designated for the preservation of agriculture, natural resources or historic purposes. When development rights are "sent" from a parcel, a permanent conservation easement is put in place. "Receiving" areas are city or village areas that are suitable for increased densities. When development rights are applied to a receiving parcel, the development density of that parcel is increased. Unlike PDR programs that are funded with public dollars, TDR programs are funded through private development activity.

There are both opportunities and challenges to a TDR program. One challenge to the program is that it is technically complicated and conceptually abstract. It is difficult and time consuming to develop and administer the program. Another challenge is that it may not be well received by the general public without extensive outreach and education activity. It has not been tested in the Michigan court system so it could run into legal challenge from opponents. It also depends on development pressure in the real estate market to drive participation and investment. According to the American Farmland Trust, only fifteen TDR programs in the country have protected more than 100 acres of farmland, half of the programs have not protected any farmland, and three have been revoked.

Nonetheless, there are benefits to a TDR approach that may outweigh the challenges. The TDR system is voluntary and paid for with private funds rather than public funds. TDR permanently protects farmland and environmentally valuable lands while leaving landowners with other ownership rights. TDR promotes orderly development in areas best suited to accept it through increased density. TDR (and PDR) programs provide compensation for restricting development rights, which relieves the takings challenge.

Link to the Grand Vision:

The Grand Vision proposes that new development locate in existing cities and village around the region through complimentary incentive and preservation programs. A TDR program "sends" development rights from agricultural land to urban "receiving" areas. Agricultural lands are protected while urban density is increased.

Housing Choices

The most successful program in the country based on acreage is Montgomery County, Maryland, where the TDR program has protected 52,052 acres of agricultural land out of a total of 72,353 acres in permanent conservation on the fringe of Washington D.C. The agricultural preservation office is housed in Montgomery County's Department of Economic Development.

In the six-county Grand Vision region, the *Benzie County Open Space & Natural Resource Protection Plan* includes a discussion of TDR as a tool for land conservation and also includes a model TDR ordinance. Communities, counties or regions interested in TDR can gather information and begin dialogues with potential program partners. Even without a program in place, communities can begin to identify areas suitable for "sending" and "receiving" areas in planning documents.

Example resources

Benzie County Open Space & Natural Resource Protection Plan, April 2002

American Farmland Trust, Farmland Information Center, Fact Sheet, Transfer of Development Rights (Appendix)

Smart Communities Network, Transfer of Development Rights http://www.smartcommunities.ncat.org/landuse/transfer.shtml#top

Montgomery County, Maryland, Department of Economic Development - Agricultural Services http://www.montgomerycountymd.gov/agstmpl.asp?url=/content/DED/AgServices/agpreservation.asp

Field Guide to Transfer of Development Rights (TDRs), National Association of Realtors http://www.realtor.org/library/library/fg804

Metrics

TDR ordinance adopted

Number of acres in permanent preservation

Timeframe

Short: Investigate interest in TDR program

Mid: review zoning documents for density and preservation revisions

Long: adoption and administration of TDR ordinance

Cost

Low: discussion of TRD

Low: identification of sending and receiving areas in planning tools

Food & Farming

Celebrating food, farming and rural development

The Grand Vision proposes a development pattern for the six-county region where new development is located in compact, connected patterns in cities and villages around the region. The concentration of urban development compliments the goals of agricultural land preservation in the region. The Grand Vision built its transportation and land use goals on the underlying values of the region. This section describes tools as well as initiatives that celebrate agriculture's role in making the region a beautiful, healthy and prosperous place.

Agri-tourism is the combination of agricultural activity and tourism. Agri-tourism includes a "pick-your own" orchard, a corn maze, a cider mill, or a road-side farm-market. Agri-tourism gives the proprietor an opportunity to earn additional income and may provide income at different times during the year than the agricultural products. The increased income can offer a variety of positive ripple effects for the owner. It is also a benefit to the region's tourism economy and rural charm.

In addition to being part of the local economy, agriculture is a part of the regional culture. Local celebrations raise awareness and support for agriculture as an industry and a way of life in the region. Once a year, visitors from around the state and beyond come to participate in a celebration of cherry production at the annual Cherry Festival. Other festivals abound throughout the year to celebrate asparagus and local wines and lots of other products. The festivals offer opportunities for people to connect with neighbors and the agricultural tradition of the region.

Throughout the year, there are opportunities to bring local agricultural produce and products into a daily diet. Farmer's markets, grocery stores, restaurants, and school purchasing programs all create opportunities for residents to enjoy local produce. An emphasis on local food expands the sales market for local producers and offers people access to fresh, healthy food. Beyond the economic impact, these experiences speak to the culture and the shared values in the region.

Tools

- Agricultural zoning districts
- Purchase of Development Rights (PDR)
- Promote agri-tourism
- Festivals and local food (Agri-CULTURE)
- Urban and community gardens

Urban gardens offer the opportunity to bring agricultural into the urban scene. They can be grown on balconies, porches, yards, and in shared garden areas. In some instances, abandoned urban lots are made available for gardens offering the dual benefit of providing an attractive and useful purpose to the property. Through urban gardens, residents can learn about the challenges and rewards of growing food, flowers and other plants firsthand. It provides another source of local, healthy foods and brings rural beauty into urban areas. Urban gardens also provide an opportunity for people to connect with neighbors in a shared environment.

Defined urban gateways are visual cues through which people recognize the entrance to an area. Gateways can be created with entrance signs and a variety of streetscape treatments such as wider sidewalks, streetlights, planters, street trees and benches. They can also be cued through changes to road design including roundabouts, roadway medians, change in lane width and addition of bicycle facilities. The creation of a defined entrance point to the city, village or main street area can be an effective physical tool to support conceptual land use plans to increase the density and range of permitted uses in the urban area. Conversely, it can also support land use plans to decrease density and limit permitted uses outside of the urban core.

Around the region, the Grand Vision proposes nodes of concentrated development surrounded by rural areas. In between, the density and development pattern will transition or step down in a concentric pattern. In the rural areas, there are agricultural zoning tools that may be selected to support a rural development pattern that protects both existing agricultural operations and natural areas from suburban development patterns. This section includes a discussion of specific zoning approaches and provides model ordinance language for agricultural zoning districts.

Agricultural zoning districts

Agricultural zoning districts define areas for agricultural uses and limit or restrict other uses. A build-out analysis considers what will happen in a community if the maximum numbers of permitted uses are built on the minimum permitted lot sizes. Communities that allow a single-family home on a one or two acre lot will not maintain a rural character or its active agriculture in a build-out scenario. In other words, the one- and two-acre lots leave the door open for suburban-style development.

Agricultural zoning refers to provisions or regulations in local zoning ordinances that protect agricultural land by limiting or preventing residential development in agricultural zones. Agricultural zones are designated in areas where farming is active and supported by physical conditions such as soil quality and an absence of incompatible land uses. Future land use plans consider whether the agricultural areas are expected to continue in the future or transition into other uses. Agricultural zoning districts are a tool to preserve agricultural viability and rural character over the long term.

When addressing residential uses in an agricultural zone, there are several specific zoning tools that have been used including exclusive agricultural zoning, large-lot zoning and sliding scale zoning. In an exclusive agricultural zone, there are no uses permitted other than those directly associated with an agricultural operation. The idea behind this approach is fairly straightforward. If only agricultural uses are allowed, then there will be no incompatible uses and the land will remain in agriculture. Large lot zoning permits new residential uses but requires a large minimum lot size, which can be 20, 40, 60 or more acres. The idea behind this approach is that over time there will be fewer new homes—one rather than 20.

Sliding scale zoning allows a range of new dwelling units based on the size of the existing parcel of land. The approach might allow one new residential lot from a ten-acre parcel and three from a twenty-acre parcel. Here again, the idea is to restrict rather than prohibit new residential development in agricultural areas. Other approaches that have been used include limited zoning districts with most uses permitted only through a Special Use Permit and a Scoring System approach where uses are only permitted if they earn a minimum number of points in an established scoring system.

Link to the Grand Vision:

The Grand Vision proposes a regional growth pattern where rural lands remain rural and new houses and jobs are located in the region's cities and villages. Agricultural zoning districts are a zoning tool that can be used to limit urban growth in rural areas.

Food & Farming

Communities may also opt to take a tiered approach to agricultural districts and designate multiple agricultural zones or districts. This approach is probably more familiar as a tool in residential, commercial or industrial districts (R-1, R-2 and R-3, for example). An A-1 Exclusive Agricultural zone could be established separately from an A-2 Rural Agricultural zone, for example.

Agricultural zoning districts offer both benefits and limitations to land owners. They offer some assurance that agriculture will be protected from incompatible land uses and will remain possible over time. This can help support additional investment in agricultural operations and associated business activities. Agricultural zoning provisions can also limit landowners by restricting or removing options for subdivision development. Either way, it is essential that communities lay the foundation for zoning decisions in the master plan document.

Example resources

Zoning Techniques for Farmland Preservation (LSL project with category links)
http://www.vbco.org/planningeduc0007.asp

Model Agricultural Zoning Ordinance, Lancaster County, Pennsylvania
http://www.smartcommunities.ncat.org/codes/agzon.shtml

Farmland Information Center, American Farmland Trust
http://www.farmlandinfo.org/

Smart Communities Network, Land Use Planning Strategies--Agricultural Land Protection http://www.smartcommunities.ncat.org/landuse/agricult.shtml

Metrics

Minimum lot size in agricultural districts

Number of acres in agricultural districts over time

Timeframe

Short: Include agricultural preservation in Master Plan

Mid: Adopt agricultural zoning district standards as appropriate

Cost

Low: Master Plan update with agricultural preservation

Low to Medium: Zoning ordinance amendment

Purchase of Development Rights (PDR)

A popular explanation of PDR is one of land ownership as a collective "bundle of rights." The practice of selling the mineral rights to property is a familiar practice. A PDR program uses this concept. A land owner may voluntarily sell the right to develop land for residential, commercial, or industrial purposes while maintaining all other ownership rights. Another term for PDR is PACE (Purchase of Agricultural Conservation Easement Programs).

A PDR program for the State of Michigan started in 2000 with the creation of the Michigan Agricultural Preservation Fund and the Agricultural Preservation Fund Board as a part of the Natural Resources and Environmental Protection Act. The money in the fund is available to qualified applicants (land owners) on a competitive basis in eligible counties.

The point system is indicative of the best management practices for farmland preservation in Michigan. For example, the scoring system awards points for large parcel sizes, for contiguous blocks of land, for local matching funds, for cooperative intergovernmental arrangements supporting farmland preservation, and for planning commissioners who have attended planner training.

The Grand Traverse County Board of Commissioners adopted the Farmland and Open Space Development Rights Ordinance in June 2004 making the county eligible for funding. The six-county region is home to the first PDR program in the state—the Peninsula Township PDR program. Peninsula Township has identified specific agricultural parcels for permanent protection in its planning documents and residents have voted two different times to increase local property taxes to fund the purchase of development rights on those properties. Citizens of Acme Township have also voted for a ten-year millage increase to purchase the development rights on agricultural property and the PDR program is underway.

The Grand Traverse Regional Land Conservancy has been involved in the PDR program in Peninsula Township, is working with Acme Township, and is an available resource to other local units of government. Communities interested in pursuing a Purchase of Development Rights approach to conservation will find a wealth of resources in the region.

Link to the Grand Vision:

The Grand Vision proposes a growth pattern where new development is not located on the rural and agricultural land. Purchase of Development Rights is a tool where agricultural landowners can sell the development right to the agricultural land and retain ownership and other rights to the property. It is both a permanent conservation tool and an economic equalizer for agricultural landowners.

Food & Farming

Example resources

Grand Traverse County Farmland and Open Space Development Rights Ordinance, passed by the Grand Traverse County Board of Commissioners on June 30, 2004 (Appendix)

Peninsula Township, Grand Traverse County
http://www.peninsulatownship.com/

Acme Township, Grand Traverse County http://www.acmetownship.org/

Grand Traverse Regional Land Conservancy Farmland Protection Program
http://www.gtrlc.org/protection/farmland.php

American Farmland Trust, Farmland Information Center http://www.farmland.org/programs/protection/farmland-information-center.asp

Kent County, Michigan, Purchase of Development Rights
http://www.accesskent.com/YourGovernment/BOC/PDR/

Montgomery County, Maryland
http://www.montgomerycountymd.gov/govtmpl.asp

Lancaster County, Pennsylvania
http://www.co.lancaster.pa.us/lanco/site/default.asp

Boulder County, Colorado
http://www.bouldercounty.org/lu/planning_division/

King County, Washington Transfer of Development Rights http://www.kingcounty.gov/environment/stewardship/sustainable-building/transfer-development-rights.aspx

Metrics

Increase local score on PRD application annually

Increase acreage of land in permanent conservation annually

Timeframe

Short: Review compatibility of land use plans with best practices set forth by PRD scoring system

Mid: Support a county PDR program

Long: Identify dedicated funding for PRD program

Cost

Low: Review of planning documents and practices

Mid: Support a county PDR program; establish funding for PDR program

Promote agri-tourism

Link to the Grand Vision:

The Grand Vision seeks to celebrate food and farming in the six-county region as an important part of the region's culture and economy. Agri-tourism is an opportunity for people to visit an agricultural operation for recreation or education. The product sales and event activities provide entertainment to the visitor and also offer an economic opportunity for the proprietor.

The Michigan Agricultural Tourism Advisory Commission was created by PA 46 of 2005, effective June 16, 2005. The nine member commission was created under the Michigan Department of Agriculture (MDA). Four of the members represent agricultural tourism enterprises, and two represent local government. The primary purpose of the commission was to study the impact of local zoning on agricultural tourism businesses and to remove restrictions that might be found. To this end, a guidebook including model zoning ordinance language was created by the Advisory Commission. The guidebook includes this definition of agri-tourism:"*Agricultural Tourism*" means the practice of visiting an agribusiness, horticultural or agricultural operation...for the purpose of recreation, education, or active involvement in the operation, other than as a contractor or employee of the operation.

Why the emphasis on Agri-tourism? Because is it has a significant impact on Michigan's economy. The *Agricultural Tourism Local Zoning Guidebook* reports that agriculture and tourism are recognized as Michigan's second and third leading industries. According to the State of Michigan's Agricultural Tourism webpage, over one million Michigan residents are employed in the food and agriculture sector and the current and potential impact on Michigan's economy is $60.1 billion and growing. As a value-added marketing opportunity, agricultural tourism is considered increasingly important to Michigan's economic health and diversification. Opening up farms to visitors is a way for Michigan growers to create a dependable source of revenue to ride out the uncertainties of weather, disease and crop prices.

There are other economic benefits to agri-tourism including keeping the family farm in the family, allowing for continued farming, keeping a farm viable, generating additional income or offseason income, capitalizing on a hobby or special interest, increasing and diversifying a market, responding to a need or opportunity in the market, and interacting with and educating customers/visitors about farming.

Food & Farming

The "Festivals" tool in this section includes information about specific agricultural festivals that are held around the six-county region. They are a part of promoting agri-tourism in the area as they bring people to the region to celebrate locally grown products. The region has also been successful at branding itself as the "Cherry Capital" as well as a premier producer of wine in the state and nation. The Tasty Traverse self-guided Foodie Tour introduces visitor and residents alike to local cherries, wine, fish, cheese, chocolate, beer and more.

Example resources

Agricultural Tourism Local Zoning Guidebook and Model Zoning Ordinance Provisions, January 2007, prepared by the Michigan Agricultural Tourism Advisory Commission http://www.michiganfarmfun.com/Ag%20Tourism%20Zoning%20provisions%20Guidebook.pdf

State of Michigan's Agricultural Tourism webpage http://www.michigan.gov/agtourism/

Michigan Farm Bureau http://www.michiganfarmbureau.com

The Michigan Department of Agriculture http://michigan.gov/mda

Michigan State University Extension (MSUE) http://www.msue.msu.edu/portal/

Michigan State University - Project GREEEN http://www.greeen.msu.edu

Michigan State Horticultural Society http://www.mihortsociety.org

Michigan's Cider Makers' Guild http://www.ciderguild.org

Michigan Grape & Wine Council http://www.michiganwines.com

Metrics

Number of Agricultural Tourism businesses

Dollar sales from Agricultural Tourism

Timeframe

Short: Include agri-tourism in Master Plan

Mid: Amend zoning ordinance provisions for agri-tourism

Cost

Low: Include agri-tourism in Master Plan

Mid: Review agri-tourism provisions in zoning ordinance

Festivals and local food (Agri-CULTURE)

Festivals and local food initiatives are two different tools to raise awareness and recognition of the agricultural products produced in the region. Festivals are events that range from one day to one week with a focus on a particular product. Festivals attract people from outside the region as well as local residents. The community celebration reinforces agriculture as an integral part of the region's culture. Local food initiatives connect local producers to local consumers through farm markets, highlight local produce on menus and grocery tags, and develop new markets in the region.

Festivals range in size, location, and focus but they are a part of the culture throughout the region. The largest annual festival with agricultural connections in the region is the National Cherry Festival. Since its beginning in 1926, the festival has grown to a week-long extravaganza attracting 500,000 people to its 150 activities. The regional economic impact of the festival is estimated to be $26 million. Other festivals with agricultural ties around the region include the Empire Asparagus Festival, the Leelanau Wine, Food and Music Fest, the Cadillac Chestnut Harvest Festival, the Mesick Mushroom Festival, the Traverse City Wine & Art Festival, the Traverse City Microbrewery & Music Festival. The Buckley Old Engine Show includes tractors and other farm equipment. Many events around the region celebrate the fall harvest season with color tours, hayrides and corn mazes.

"Local food" is a national movement that has found traction in the six-county region. There is no industry definition of what makes food "local." Rather, it is a concept that emphasizes purchasing foods that are produced as close to home as possible. Local food programs support the local agricultural economy and offer fresh, healthy food to residents. The "Taste the Local Difference" program is part of the Michigan Land Use Institute (MLUI) Food and Farming Initiative and it's moving the local food agenda forward in the region.

While the idea of a weekly farmer's market is familiar to most, community supported agriculture (CSA) may not be as widely visible. CSA is growing in popularity around the country as a tool for people to buy a season's share of agricultural produce from a local farmer. In return, shareholders receive seasonal produce each week throughout the farming season.

Link to the Grand Vision:

The Grand Vision is a regional vision for the future that supports the protection of agriculture as a land use that is incompatible with urban land uses, as an economic engine for the region and as a part of the culture at the heart of the region's identity. Festivals and local foods recognize and celebrate agriculture in the region.

Food & Farming

Local festivals and food are part of the region's culture and heritage with impacts reaching into local economic development, public health and beyond. Local foods contribute to a healthy diet and a local identity. Local festivals attract tourists and build community at the same time. These elements contribute to land use decisions that impact agriculture in the region.

Example resources

Traverse City Convention and Visitor's Bureau (Festivals)
http://www.visittraversecity.com/

Taste the Local Difference http://www.localdifference.org/

Northwest Michigan's Farm Factor: Economic Impacts, Challenges, and Opportunities

Doug Krieger, Natural Resource Economist, Washington State University, February 2009 (Commissioned by the Michigan Land Use Institute)

Local Harvest http://www.localharvest.org/

Sustainable Table http://www.sustainabletable.org/home.php

Michigan Farmer's Market Website http://www.farmersmarkets.msu.edu/

Great Lakes Fruit, Vegetable and Farm Market EXPO http://www.glexpo.com

Learn Great Foods http://www.learngreatfoods.com

MSU Student Organic Farm http://www.msuorganicfarm.org/home.php/
A 4-season farm, initiated by students, dedicated to teaching the ideas and principles of organic farming via an organic farming certificate program, and community supported agriculture

Urban and community gardens

Urban and community gardens offer the opportunity to build connections to our agricultural "roots"; to fresh produce and flowers; and to other people in the community. Urban gardening programs have been developed in some communities through a land bank as a response to blight issues posed by vacant lots. In the Grand Vision region, interest in community gardens comes from connections to agriculture, fresh produce and neighbors.

For urban gardeners, some benefits include lowering the weekly grocery bill and enjoying healthy, fresh produce. Sometimes, the produce can be sold at the local farmer's market to generate income. The gardening experience is a hands-on learning opportunity. Gardening also strengthens a sense of community by promoting teamwork, connections and awareness among gardeners in an area.

Gardening programs can reach out to neighborhoods, schools, community groups and families. Communities can support the program with supplies such as starter seed kits or small plants and educational support. Fresh produce opens the door to better nutrition if people know what to do with it. To this end, cooking and nutrition programs offering tasty ways to prepare the produce may be interesting to the same urban gardening audience.

Urban gardening programs are offered in several communities around Michigan. The Michigan Land Bank Fast Track Authority administers the Garden for Growth program by leasing land bank properties for gardening. In Detroit, the Greening of Detroit initiative offers land lease opportunities, education and supplies. In Washtenaw County, the organization "Growing Hope" organizes and supports a variety of urban gardening programs.

In the Grand Vision region, there are already resources in place to support urban and community gardening. The Northwest Michigan Food and Farming Network is working in part to identify, link, and promote community gardening efforts in the region. The Network is also an educational resource. The Traverse City Community Gardens are located in the Grand Traverse Commons. It seems fitting that they are located in an area that was

Link to the Grand Vision:

The Grand Vision welcomes new growth in the region's cities and villages while protecting the agricultural land and farming activities. Urban and community gardens provide an opportunity for urban residents to enjoy a connection to the land, to agricultural production and beauty and to the associated community values.

Food & Farming

historically a working farm associated with the old state asylum. As part of the property today, there are plots available for people to rent for a nominal fee. The Michigan Land Use Institute's "Get Farming" initiative is another regional resource for urban gardening. The project includes workshops and a website with links to other training and resources for both beginning and experienced farmers.

Example resources

Urban Gardens (DLEG)
http://www.michigan.gov/dleg/0,1607,7-154-34176-200357--,00.html

Growing Hope http://www.growinghope.net

Traverse City Community Gardens
http://traversecitycommunitygardens.blogspot.com/

Food and Farming Network http://foodandfarmingnetwork.org/

The Northern Michigan Small Farm Conference serves as a vehicle to promote and build a local vibrant agriculture community, to equip the small farm community with the tools to be successful, and to be a forum for the open exchange of ideas within the small farm community. http://smallfarmconference.com/

Grown in Detroit: Garden Resource Program Collaborative
http://www.detroitagriculture.org

The Promise of Gardens: How Gardens Build Community, Feed Us All, and Reconnect us to Nature http://www.mlui.org/downloads/promise.pdf

Nuestras Raíces Community Gardens, Holyoke, MA
http://www.nuestras-raices.org/en/home

Metrics

Number of community garden plots; number of community participants

Timeframe

Short: Create new community gardening clubs; raise awareness of existing resources.

Medium: Offer plots on publicly owned land for community gardens; establish stands at farmer's market for urban produce

Cost

Low: Promote existing community gardening programs

Low/Mid: Offer community garden plots on public land

Natural Resources

Protecting and preserving the water, forests, natural areas, and scenic beauty of the region

The Grand Vision for the six-county region began by exploring community values and creating a public vision for the future. These factors preceded and guided the planning process. This tool grew out of the community values explored in the Values Research Report of November 2008. After several months of research, the staff at Harris Interactive reported on the importance of local natural beauty and access to outdoor recreation. In part they found that:

> The core value system of the Grand Traverse Region centers on a sense of peace or peace of mind, personal happiness, and personal security. These values are grounded in knowledge that they live in a scenic area whose beauty they can access and enjoy, that the area is safe for them and their families and that there are people around them, their family and friends, to help, support and enjoy.

When researchers summarized the results, *Scenic Beauty & Access to the Outdoors* was found to be the key orientation for about one-third of Grand Traverse Region residents. Thirty percent (30%) of those participating associated themselves with this 'values ladder' which was the highest of any category. More specifically, this values ladder was based on natural beauty, outdoor recreational opportunities, the clean lakes and rivers and open space that lets residents lead a healthier, outdoors lifestyle. As a result, they can feel more relaxed and enjoy a greater peace of mind and personal happiness.

Later, the staff at Harris Interactive followed up with a quantitative survey to confirm the results. They found that when asked which elements have the most significant impact on their quality of life, residents mention the area's scenic beauty most often (39%). Preservation of the region's scenic beauty and access to recreational opportunities for residents both helped to shape the guiding principles of the Grand Vision. They helped shape ideas about the protection and preservation of natural resources and they also support economic, housing, village development, rural development and energy principles.

As communities plan for more dense development patterns, several tools are available to protect the natural environment and resources. Some tools in this section describe opportunities to include environmental

Tools

- Provide access to nature
- Greenway plans
- Low Impact Development (LID)
- Regional conservation data
- Viewshed protection

considerations into the planning process at the community and site level. Another tool addresses the preservation of viewsheds and another explores benefits and tools that provide access to nature.

Low impact development (LID) is a tool that considers a broad range of development techniques to reduce our impact on nature during the construction process. For instance, new roads and buildings can be designed to have less impact on the natural stormwater filtration process. Techniques such as porous pavement, green roofs and native plantings can all contribute. Communities can encourage or require the use of these tools through local land use and building regulations.

In the community planning process, considerations related to natural resources begin with good base data. There are several sources of conservation and natural resource data around the region that are available in a Geographic Information System (GIS) format. Once the data is collected, it can be used to develop a community's Master Plan and a more detailed greenway plan. A greenway plan identifies existing natural corridors and establishes conservation goals to protect and preserve them.

The physical beauty of the region is highly valued by residents and visitors alike. The beauty may be experienced as a scenic view or as a recreation activity. Scenic views are enjoyed as people sit, walk, bike, or drive. They are a resource that can be protected through easements and development guidelines. The natural world can also be enjoyed through a picnic in a park, a walk along a trail, or a variety of other outdoor activities. Part of the Grand Vision initiative will include protecting and increasing recreation and natural areas. Another part is maintaining and improving access to them through a variety of transportation connections.

These tools will help communities identify and pursue opportunities to protect and preserve the natural resources and the scenic beauty of the region while accommodating population growth and economic development.

Provide access to nature

Residents who enjoy access to nature also enjoy a multitude of benefits offered by a connection to the outdoors and accessible recreational resources. Residents of the six-county region seemed to recognize this intuitively. Harris Interactive documented the value of recreational opportunities in the Values Research report done as part of the Grand Vision project. The report findings read in part: *Residents value natural beauty, outdoor recreational opportunities, the clean lakes and rivers, and open space that lets them lead a healthier, outdoors lifestyle. As a result they can feel more relaxed and enjoy a greater peace of mind and personal happiness.* The value of public recreation has also been reported in the academic community, the public health community and the economic development community.

Providing access to recreation can be approached through community planning and local recreation plans and in cooperation with school districts, public health agencies, economic development initiatives, and county, state and federal programs. Local units of government may provide some access to recreation through a local parks program but should be aware of other providers and resources. The local government can coordinate the many recreational opportunities available to residents through the Master Plan and identify gaps in services. A community recreation plan approved by the Michigan Department of Natural Resources (now MDNR-E) is another tool for local recreation planning.

Gaps in recreation resources can be identified through analysis of the existing recreation inventory using industry standards. There are several standards listed in the State of Michigan's recreation planning guidebook. Gaps can also be identified through a survey of public opinion. Once gaps are identified, the local government can look for ways to meet the identified need either independently or cooperatively with others. Gaps may address limited access to geographic areas or to specific age groups.

Because public recreation offers a variety of benefits, there are also a variety of potential funding sources for recreation projects. The State of Michigan recognizes a variety of regional or multi-jurisdictional recreational authorities for state recreation funding and provides funding

Natural Resources

directly through the recreation funds. Funding is also available through transportation funds like the Safe Routes to School program and through grants to support universal access and public health. Private foundation grants are also available in some cases.

Example resources

Guidelines for the Development of Community Park, Recreation, Open Space and Greenway Plans, Michigan Department of Natural Resources, Grants Management Division, February, 2009

Mertes, J. D. and J. R. Hall, *Park, Recreation, Open Space and Greenway Guidelines,* Alexandria, VA: National Recreation and Park Association, 1995 http://www.prm.nau.edu/PRM423/recreation_standards.htm

Lancaster, R.A, (Ed.), *Recreation, Park, and Open Space Standards and Guidelines* Ashburn, VA: National Recreation and Park Association, 1990

Promoting Active Communities http://www.mihealthtools.org/communities/

The National Center for Bicycling and Walking http://www.bikewalk.org/

Michigan's Safe Routes to Schools http://www.saferoutesmichigan.org/

Metrics

Acres of parkland

Budget for parks and recreation

Timeframe

Short: Address access to recreation in Master Plan

Med: Adopt or update 5-Year Parks and Recreation Plan

Med: Create joint or regional recreation authority

Med/ Long: Fill gaps in recreation system

Cost

Low: Incorporation into Master Plan

Low: Community survey

Mid: Local recreation plan

Mid/High: Additional recreation resources

Greenway plans

Greenways are corridors of undeveloped land that can be located along a river, a wildlife corridor or other natural feature or they may connect urban areas or cultural resources. Greenways are natural areas that provide environmental protection and are often available for recreational uses as well. They are linked together as a green network.

Greenways first appeared in American planning history in 1858 when Frederick Law Olmstead created a plan for Central Park in New York City. Greenway planning returned to the national spotlight as a central part of the future vision created by the U.S. President's Commission on American Outdoors for the United States (1987). Since then, greenways have continued to gain attention in publications and projects. Greenways are widely supported because they contribute to environmental quality, provide economic benefits and enhanced quality of life.

Greenways provide a buffer to protect environmentally sensitive areas including water, steep slopes and forested area. For instance, protected corridors along rivers and streams provide a natural greenway and protect water quality as well as wildlife corridors. In the six-county Grand Vision region, there are lots of environmentally sensitive lands that could be included in a greenway plan.

Greenways have been linked to economic benefits in a variety of studies. A report by the National Parks Service (NPS) titled "Economic Impacts of Protecting Rivers, Trails, and Greenway Corridors, a resource book" (1995) provides a comprehensive summary of reports that connect greenways to economic benefits. Some of the chapters address real property values and expenditures by residents and tourists. The purpose of the report was to provide local trail advocates with economic information to build support for greenways.

Greenways also provide scenic beauty and contribute to a higher quality of life. The 1995 NPS report referenced above includes sections on corporate relocation and retention, quality of life, employee health and other benefits of greenways. The Values Research conducted as a part of the Grand Vision study documented people's connection between access to nature and scenic beauty and their enjoyment of life and peace of mind.

Link to the Grand Vision:

Greenways connect to the Grand Vision initiatives in three separate areas. Greenways enhance the region's environmental quality which connects to the Grand Vision's principles related to natural conservation and scenic beauty. They also provide economic benefits and enhance the quality of life in urban places which connect well with the guiding principles for the economy and unique villages.

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Example resources

Charles Little, "Greenways for America" (Little, 1990)

Economic Impacts of Protecting Rivers, Trails, and Greenway Corridors, a resource book. Rivers, Trails and Conservation Assistance, National Park Service, 1995, Fourth Edition, Revised

President's Commission on Americans Outdoors (U.S.), (1987), *Americans outdoors: The legacy, the challenge, with case studies : the report of the President's Commission*, Washington, D.C.: Island Press

A Greenway Plan for New York City, 1993
http://www.nyc.gov/html/dcp/html/bike/gp.shtml

Pennsylvania Greenways: An Action Plan for Creating Connections
http://www.dcnr.state.pa.us/brc/greenways/gwplan.pdf

Pennsylvania's Greenway Clearinghouse http://www.pagreenways.org/

Metrics

Acres included in greenway plans

Timeframe

Short: Include a greenway plan in Master Plan

Medium: Create a six-county regional greenway plan

Cost

Low: Include greenway in Master Plan activity

Med: Regional greenway plan

High: Purchase property for greenway links

Low Impact Development (LID)

LID techniques are a collection of best management practices (BMPs) in design and construction to reduce or eliminate the impact of development on the site's hydrology—the way water is distributed and circulated. New buildings and parking areas displace a natural system of plants and soils that manage stormwater runoff through a natural system of storage and filtration. New development can cause stormwater to flow more quickly and carry sediment and contaminants along with it. LID techniques work to manage stormwater runoff close to its source and mitigate the impact of new building, pavement and other infrastructure. A LID approach begins with a site assessment and then uses best management practices for non-structural and structural tools.

The site design process is both an exploration of the site itself and the site as it relates to the larger watershed. As part of the initial considerations, LID practices include an inventory of the site's hydrological functions. LID also includes an examination of the site to understand its connections to the larger watershed and other natural systems.

Using information from the inventory process, non-structural BMPs aim to prevent stormwater runoff from happening through the design process. This is achieved by planning the site around the natural features that have the highest impact on the site's hydrological function including wetlands, woodland areas, and hydric soils. Disruption of habitat is a major contributor to the loss of biodiversity, so the LID approach also helps to maintain the level of biodiversity which is turn supports a healthy ecosystem.

Another step in LID is to use structural BMPs to manage any stormwater run-off that is created as a result of the proposed development. Some tools are designed to increase filtration rates like pervious pavement; some tools are designed to reduce runoff volumes like green roofs; some tools are designed to improve the water quality of runoff like a constructed wetland. Selecting the correct combination of tools for the site is part of the LID practice.

Link to the Grand Vision:

Low impact development (LID) reduces the impact of development on the region's water quality. This connects to the Grand Vision's principle of protecting and preserving water resources. Some Implementation tools for LID also support other resource preservation principles. LID techniques are best management practices to balance economic and conservation goals of the Grand Vision.

Natural Resources

A resource titled "The Low Impact Development Manual for Michigan: A Design Guide for Implementers and Reviewers" was produced by the Southeast Michigan Council of Governments (SEMCOG) in 2008. This resource and others created by SEMCOG provide a comprehensive resource to communities interested in promoting LID. A collection of resources are available for download from the SEMGOG website including a model LID stormwater ordinance.

Example resources

The Watershed Center, Grand Traverse Bay http://www.gtbay.org

A Natural Solution, LID Guidebook Direct Download (6.07 MB) http://www.gtbay.org/downloads/low_impact_development_guidebook_small_2.pdf

Watershed Protection Plan http://www.gtbay.org/plandoc.asp

Conservation Resource Alliance http://www.rivercare.org/

SEMCOG Low Impact Development website
http://www.semcog.org/lowimpactdevelopmentreference.aspx

The Low Impact Development Center, Inc.
http://www.lowimpactdevelopment.org/links.htm

Low Impact Development Design Strategies, an Integrated Design Approach, Prince George's County, Maryland Department of Environmental Resources Programs and Planning Division, June 1999
http://www.lowimpactdevelopment.org/pubs/LID_National_Manual.pdf

Ecological Society of America http://www.esa.org

Metrics

Maintain or improve water quality

Maintain or reduce site run-off

Timeframe

Short: Reference LID in Master Plan with community support

Mid: Adopt stormwater provisions into zoning ordinance

Long: Implement LID features into community facility sites

Cost

Low: Incorporate into Master Planning

Medium: Adopt appropriate zoning regulations

Medium/High: LID features for community facilities

Regional conservation data

ESRI is the industry leader for the collection of products that create a geographic information system (GIS). On their website, ESRI defines GIS this way: *A geographic information system (GIS) integrates hardware, software, and data for capturing, managing, analyzing, and displaying all forms of geographically referenced information.* More than just a mapping system, GIS is a data management system that allows the user to attach data fields to spatial layers on a map. With the information in place, users can manage and analyze the data attached to the map through spatial queries. This means that a GIS system will allow the user to select an area on a map and then determine quantities and features of the area.

A county planning map may have data layers for soils, slope, water, tree cover and land use. A city may use GIS to record utility data for sanitary and storm sewer and water lines. Equalization offices often use GIS to manage parcel information including assessed value, dimensions, and school district. The 911 system may use GIS to manage information about parcel locations, addresses, hazardous materials and business uses. A road agency may use GIS to inventory the existing and proposed road network including lane width, base material, road conditions and traffic controls. The Grand Traverse Regional Land Conservancy (GTRLC) has data on private lands that have been permanently protected through voluntary conservation easements; nature preserves owned by GTRLC; and public parks and natural areas that have been protected with assistance from the GTRLC. Information on wildlife corridors, birding and other habitat information may also be available through GIS data from local and regional sources.

A variety of agencies have a collection of information available through a GIS system. Local units of government and others should be aware of information that has already been collected that may be available for use in a planning project. A regional reference of available data could be created as an additional tool. In some cases, a municipal GIS data system may be a cost effective solution to local data management needs.

Link to the Grand Vision:

The Grand Vision plans for growth in the region while at the same time planning for the protection of the region's abundant natural resources. Data about the region's natural resources is available from a variety of sources and can be used as a starting point for a variety of planning activities.

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Example resources

Northwest Michigan Council of Governments http://www.nwm.org

Land Information Access Association (LIAA) http://www.liaa.org

Grand Traverse Regional Land Conservancy http://www.gtrlc.org

Antrim County GIS http://www.antrimcounty.org/gis.asp

Benzie County http://www.benzieco.net/dept_equalization.htm

Grand Traverse County http://www.co.grand-traverse.mi.us/departments/
Equalization_G_I_S_/Geographical_Information_Systems.htm

Kalkaska County http://www.kalkaskacounty.net/equalization.asp

Leelanau County http://www.leelanaucounty.com/government586854.asp

Wexford County
http://www.wexfordcounty.org/Services/GIS/tabid/6658/Default.aspx

Leelanau Conservancy http://www.theconservancy.com/

Metrics

GIS use in conservation or preservation efforts allows quantifiable goals to be set and measured.

Conservation acreage increases by 15%

Native plantings cover 10% of new commercial landscapes

Buffer areas from established floodplain mapped as overlay zone

Timeframe

Short: Investigate existing GIS data sources

Mid: Evaluate opportunities for GIS use

Long: Create a regional GIS resource guidebook

Cost

Low: Exploration of current GIS data systems

Mid: Contract for GIS project services, creation of regional guidebook

Viewshed protection

Viewsheds are the view from a single vantage point. That vantage point may be from along the road, from a park or a scenic overlook. Scenic views or viewsheds also have a scenic focal point which may be an archeological, cultural, historic, natural, recreational or scenic feature. Scenic viewsheds contribute to a sense of place and the quality of life in the region for residents and to the regional tourism economy. Scenic views or viewsheds may be protected through land development restrictions or through the placement of a scenic easement.

Viewsheds should be identified and recorded in a community Master Plan or natural resource preservation plan based on public input and professional assessment.   They are usually mapped as a polygon shape showing all the locations visible from a specified viewpoint. A photo can also be provided.

Peninsula Township includes an action statement in its 2009 Master Plan that reads: Adopt planning tools that direct development away from wetlands, ridge lines, flood plains, scenic views, steep slopes, and hydric soils (from the Peninsula Township Master Plan, 2009). A map in the Master Plan shows scenic viewsheds. The Benzie County Open Space & Natural Resource Protection Plan also includes a map of scenic views.

Zoning tools for viewshed protection include restrictions on ridgeline development, retention of natural vegetation and the use of cluster development to minimize the impact of development on the public view. The New Designs for Growth Development Guidebook contains a section titled "Scenic Views and Development," which is an excellent guide on this subject.

Viewshed protection can also be achieved through a scenic easement which is similar to a conservation easement. It is a legal agreement not to develop a portion of privately owned property in order to protect a scenic viewshed. Funding for viewshed protection projects is included as part of the National Scenic Byways Program administered by the U.S. Department of Transportation. In 2009, the Leelanau Scenic Heritage Route Trailway Project received funding through this program.

Link to the Grand Vision:

The Grand Vision includes preservation of the region's scenic beauty in one of its guiding principles. Viewshed protection places land development restrictions on locations identified as a scenic viewshed. The importance of scenic views was identified by residents of the six-county region as a regional value that contributed to enjoyment of life in the region.   It also contributes to the tourism economy.

Natural Resources

Example resources

National Scenic Byways Program (part of the Federal Highway Administration) http://www.bywaysonline.org/program/us_code.html

I-69 Planning Toolbox: Complete Toolbox A-Z
(includes Scenic Viewshed Protection resources)
http://www.in.gov/indot/div/projects/i69planningtoolbox/list.html

Scenic Michigan (an affiliate of the national non-profit organization Scenic America) http://www.scenicmichigan.org/

Benzie County Planning Department website (includes link to
Benzie County Open Space & Natural Resource Protection Plan)
http://www.benzieco.net/dept_planning.htm#osnrpp

Peninsula Township Master Plan (including Scenic Views Map #7)
http://www.peninsulatownship.com/masterplan/masterplan.php

Scenic Viewsheds in Peninsula Township: An Interview and Photo Tour
http://www.yourplacegrandtraverse.org/200611peninsula.asp

Metrics

Scenic viewsheds mapped in planning documents

Scenic byway funding received

Scenic viewshed easements recorded

Timeframe

Short: Include scenic viewsheds in Master Plan

Mid: Include BMPs for viewshed protection in zoning regulation

Long: purchase viewshed easements

Cost

Low: Scenic views in Master Plan

Med: BMPs through zoning provisions

Med/High: purchase of viewshed easements

Energy

Incorporating a sustainable energy focus into building, transportation, and economic development

Sustainable energy was a frequent topic of public input from residents of the six-county Grand Vision region. Why? Because a healthy, sustainable future for the region includes a focus on sustainable energy. Sustainable energy efficiency is a part of transportation, housing, and economic development in the Grand Traverse region and this section provides several tools for the task.

Car Sharing is a system of automobile rental that is designed to substitute for private vehicle ownership. Through a car sharing program, cars are available for rent from a variety of central locations at an hourly rate. It is an affordable option for rental vehicles that also encourages people to minimize driving and rely of other modes of transportation. Car sharing services can be non-profit or for-profit organizations. Compact urban development patterns and transit options are important to support successful car sharing programs. Some programs began as a volunteer effort and have grown to successful regional operations. The Grand Vision pattern of dense population nodes may lend itself to this type of program.

Conservation development standards or conservation development is a flexible design process where unique site features are identified and preserved in perpetuity. The concept was pioneered and promoted by Randall Arendt and has been a successful tool to achieve development density, preserve rural character, and protect natural resources all at the same time. Both a hamlet design with residential units and village design that includes commercial development have been developed. Conservation development differs in several ways from cluster development or planned unit development because of its approach to design and its standard for preserving a higher rate of quality open space. This tool offers energy conservation opportunities for buildings and transportation while also preserving natural resources.

An energy audit is a review, inspection, and evaluation of sources and uses of energy in a building to evaluate energy efficiency and look for ways to reduce waste. An audit will pinpoint where a building is losing energy, determine the efficiency of the heating and cooling systems, and may also identify ways to conserve hot water and electricity. The "Energy Star" program—a joint program of the U.S. Environmental Protection

Tools

- Car sharing
- Conservation development standards
- Energy audits
- Green building incentives
- Pricing incentives for transportation

Agency and the U.S. Department of Energy—is aimed at promoting energy efficient products and practices for home and business and is a central resource on the subject. The Michigan Energy Demonstration Center at Northwestern Michigan College and Traverse City Light and Power both offer local resources for energy audits.

Green Building or sustainable building is the practice of creating structures and using processes that are environmentally responsible and resource-efficient throughout a building's life-cycle.   Green buildings are designed to reduce the impact of the building through an efficient use of energy, water and other resources. They are also designed to support the health and productivity of occupants and reduce waste and pollution. The LEED rating system developed and regulated by the U.S. Green Building Council (USGBC) has set an industry standard for green buildings. Communities can promote Green Buildings in several ways: leading by example, providing public education, and offering development incentives.   Examples abound through established organizations and municipal success stories.

Pricing incentives are tools to reduce congestion by altering the behavior of the people using the system rather than changing the system itself. People may decide not to take a trip if it takes too long, or costs too much for gas, or if it will be impossible to find parking. Pricing incentives encourage people to take their trip at a different time or in a different way by making it more or less expensive. For example, Orange County, California increases prices for the toll-road express lane to $8.25 on Friday afternoon at 4 o'clock. The pricing rate helps shift enough trips to a different time or route to keep traffic flowing in the express lane. The six-county region can apply the same concept to parking or incentive programs.

Car sharing

Car Sharing is a system of automobile rental that is designed to substitute for private vehicle ownership. Through a car sharing program, cars are available for rent from a variety of central locations at an hourly rate. Rental costs cover maintenance, fuel, and insurance costs. It is an affordable option for rental vehicles that also encourages people to minimize driving and rely of other modes of transportation.

The popularity of car sharing is growing in the United States. Between 2007 and 2008, car sharing membership increased 51.5 percent in the United States, according to Susan Shaheen, researcher and co-director of the Transportation Sustainability Research Center at the University of California, Berkeley. As of July 2009, 26 U.S. car sharing programs claimed 323,681 members sharing 7,772 vehicles, according to Innovative Mobility Research (IMR).

Car sharing organizations can be cooperatives or private businesses. PhillyCarShare, for example, was started in 2002 by five individual volunteers with two vehicles. Today it is still a non-profit organization. City CarShare is another non-profit organization serving the San Francisco Bay area. It was started in 2001 by a group of self-proclaimed transportation activists in cooperation with several non-profit organizations and the cities of San Francisco, Oakland, and Berkeley. It currently operates in direct competition with for-profit companies who have entered the market since 2001. Car share programs have been used by municipalities and universities. The website *eartheasy sustainable living* offers, among other things, a list of car share providers in the United States and around the world (www.eartheasy.com).

Walkable urban design, bicycle infrastructure and public transit are all important to making a car sharing program work. People can chose car sharing when they have other transportation options for other trips. The Victoria Institute of Transportation reports that car sharing services are usually located in urban areas with a variety of travel options.

Link to the Grand Vision:

The guiding principles of the Grand Vision incorporate a sustainable energy focus into transportation. Energy efficiency in transportation is achieved by increasing mobility choices and reducing vehicle miles travelled in the six-county region. Car sharing is a tool that has proven effective in other areas of the country and is well-suited to the energy efficiency goals of the Grand Vision.

Energy

Example resources

Innovative Mobility Research (IMR) http://www.innovativemobility.org/

Victoria Transportation Policy Institute http://www.vtpi.org/

City Car Share, San Francisco, CA http://www.citycarshare.org/

PhillyCarShare™ http://www.phillycarshare.org/

Car Sharing Takes Off by Joseph Pisani, Published: Friday, 4 Dec 2009 | 2:23 PM ET http://www.cnbc.com/id/34257797/

Metrics

Car share rental hours

Reduced VMT

Timeframe

Mid: Work-group to investigate car share program options

Long: Test car share program

Cost

Low: work group exploration

Mid/High: Test car share program

Conservation development standards

The State of Michigan's Zoning Enabling Act, Act 110 of 2006, Section 506, requires that each local zoning ordinance include an option for open space preservation but it also includes a list of limitations, conditions and exceptions. Local units of government who want to consider zoning provisions that go beyond this minimum standard may want to look at the conservation development tool.

The Conservation Development Tool was pioneered and promoted by Randall Arendt, former director of planning and research at the Center for Rural Massachusetts, who now consults privately. His firm, Greener Prospects, offers a collection of on-line resources. Conservation development uses the concept of flexibility in design standards similar to those in cluster development and Planned Unit Developments tools. Conservation development distinguishes itself with higher standards for protection of open space and preservation of natural resources. A Natural Features Inventory complements this approach by documenting the many valuable natural assets of the area.

Conservation development standards typically strive to protect 50-70% of the land which is higher than the thresholds usually set for cluster development. Also, conservation development applies preservation thresholds to land without development constraints in order to preserve quality open space. Wetlands, floodplains and other sensitive environmental areas are excluded from the open space calculation. Other flexible development tools typically allow non-buildable or unusable areas to be used to meet area requirements for open space preservation.

Another signature of conservation subdivision design is a four-step design process that begins with an inventory of existing resources which maps all of the special characteristics of the property. The first step identifies open space in terms of "primary" and "secondary" conservation areas. Remaining property is then identified as potential development areas. The second step is to locate approximate sites for houses. The third step is to align streets and trails. The fourth step is to draw in the lot lines.

Link to the Grand Vision:

Conservation development is a flexible design process where unique site features are identified and preserved in perpetuity. In addition to natural resource preservation, conservation development provides unique opportunities to design for energy efficiency in site design and building location. It also offers opportunities to promote transportation efficiency in rural settings by offering non-motorized pathways and density for transit service.

Energy

This process could easily include design considerations to promote energy efficiency such as building orientation to maximize the efficiency of solar panels or use of shade to reduce cooling costs. Energy efficiency goals of the Grand Vision for transportation can also be incorporated through internal trail systems and designs that incorporate planning for transit service. This tool also coordinates well with the Low Impact Development and Greenway planning tools in the Natural Resources section.

Example resources

Randall Arendt's Greener Prospects website
http://www.greenerprospects.com/

Includes online access to:

Conservation Design in the Chesapeake Bay Watershed, Randall G. Arendt, Natural Lands Trust, November 2000

Growing Greener, Putting Conservation into Local Codes, Michael Clarke and Randall G. Arendt, Natural Lands Trust, Inc. November 1997

Model Conservation by Design Ordinance for Pennsylvania, Model Ordinance version 2.0, Randall G. Arendt, Natural Lands Trust, Inc. revised 2008

A Design Guidebook for Towns and Villages in Cattaraugus County, Smart Development for Quality Communities Series, Cattaraugus County, New York, April 2001
http://www.cattco.org/planning/planning_info.asp?Parent=12302

Conservation Subdivisions: Good for the Land, Good for the Pocketbook, Steve Wright, *On Common Ground*, Winter, 2006

Metrics

Acreage in permanent conservation

Timeframe

Short: discuss conservation design for Master Plan and Zoning Ordinance

Mid: Adopt Conservation Design zoning tool

Mid: Public and developer education initiatives

Cost

Low: topic exploration and incorporation into Master Plan

Mid: Develop and adopt Conservation design tool

Energy audits

An energy audit is a review, inspection, and evaluation of sources and uses of energy in a building to evaluate energy efficiency and look for ways to reduce waste. After the review, a report is provided that identifies ways to increase energy efficiency. The next step after the audit is to implement some or all of the recommendations. When implemented, the changes are designed to reduce energy use or waste and save money over time. An audit will pinpoint where a building is losing energy, determine the efficiency of the heating and cooling systems, and may also identify ways to conserve hot water and electricity. Individual homeowners can perform a simple energy audit independently or have a professional energy auditor carry out a more thorough audit.

One source of information and resources for individuals and business owners is the "Energy Star" program—a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy aimed at promoting energy efficient products and practices for home and business. According to the project website, the program results in 2009 included energy reductions of greenhouse gas emissions in an amount equal to those from 30 million cars and savings for Americans that reached nearly $17 billion from reduced utility bills.   This program provides a central resource for information on energy audits.

Michigan's Clean, Renewable, and Efficient Energy Act requires electric utilities to develop and implement plans to reduce the consumption of electricity. The State of Michigan's Energy Office (DLEG) supports the "Michigan Energy Demonstration Centers" located throughout the State including the Michigan Energy Demonstration Center at Northwestern Michigan College. These centers promote energy efficiency, renewable energy, green building and sustainable living solutions for Michigan residents and businesses and are a regional resource for energy initiatives. Also, Traverse City Light and Power offers an on-line energy audit tool called "Energy Advisor" and will also arrange for an on-site Home Energy Analysis for a nominal fee.

Link to the Grand Vision:

One of the guiding principles of the Grand Vision is to incorporate a sustainable focus into buildings in the region. More specifically, buildings will be encouraged to be energy efficient in their location, design, and use. This tool provides information about how energy audits can support this goal for residential and commercial buildings.

Energy

Groups interested in promoting energy efficiency have a wealth of resources available. Public education outreach may be combined with financial incentives for implementation to encourage energy audits in homes and businesses around the region.

Example resources

Michigan Energy Demonstration Center at Northwestern Michigan College
http://www.nmc.edu/ees/energycenter/

Traverse City Light and Power http://www.tclp.org/

DDA Energy Conservation Program (Ann Arbor, MI) http://www.a2dda.org/current_projects/downtown_energy_saving_grant_program/

State of Michigan Department of Labor and
Economic Growth Bureau of Energy Systems
http://www.michigan.gov/dleg/0,1607,7-154-25676---,00.html

New York State Energy Research and Development Authority (NYSERDA)
http://www.getenergysmart.org/

USDOE Energystar Website
http://www.energy.gov/energyefficiency/energystar.htm

USDOE Energy Audits http://www.energysavers.gov/your_home/energy_audits/index.cfm/mytopic=11160

Do-it-yourself Home Energy Audit Tool http://hes.lbl.gov/hes/

Metrics

Annual energy use in municipal buildings

Regional energy use per public utility provider

Timeframe

Short: Raise public awareness of energy audit resources

Med: Create municipal Energy Office (can be self-funding over time)

Med/Long: Improve energy efficiency in municipal buildings

Cost

Low: Raise awareness of energy audit resources

Med: Energy efficiency improvements in municipal buildings

Green building incentives

Link to the Grand Vision:

One of the guiding principles of the Grand Vision is to incorporate a sustainable focus into buildings in the region. Further, buildings will be permitted and encouraged to be energy efficient in their location, design, and use. This tool provides information about how communities can provide incentives to make buildings more energy efficient and more sustainable overall.

Green building or sustainable building is the practice of creating structures and using processes that are environmentally responsible and resource-efficient throughout a building's life-cycle.   Green buildings are designed to reduce the impact of the building through an efficient use of energy, water and other resources.   They are also designed to support the health and productivity of occupants and reduce waste and pollution. Communities can promote Green Buildings in several ways: leading by example, providing public education, and offering development incentives.

The definition has been institutionalized through the LEED rating system developed and regulated by the U.S. Green Building Council (USGBC). Separate LEED standards have been created for new buildings, building renovations, schools and others and several levels of certification are available in each category. In each case, LEED standards work to improve metrics on energy savings, water efficiency, CO_2 emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts.

Several national organizations offer information and support on green building. One of these is ICLEI-Local Governments for Sustainability (ICLEI)--a membership association of local governments committed to advancing climate protection and sustainable development. Another is the National League of Cities which collects and shares information related to green building policies in cities around the country. In California, Build it Green is a non-profit membership organization whose mission is to promote healthy, energy efficient and resource efficient building practices in California. In Michigan, the Michigan Municipal League has developed the Michigan Green Communities Challenge - *An Energy Efficiency and Conservation Strategy*.

In Michigan, the City of Grand Rapids is a leader in green building initiatives. Grand Rapids leads by example by requiring that all new municipal construction and major renovation meet LEED certified standards. Grand Rapids also offers incentives and education to private commercial projects. As a result, Grand Rapids today has more LEED Certified buildings per capita than any other city in the country.

Energy

Example resources

US Green Building Council (LEED) http://www.usgbc.org/

ICLEI-Local Governments for Sustainability (ICLEI) http://www.icleiusa.org/

National League of Cities website http://www.nlc.org/

Michigan Municipal League http://www.mml.org

Build it Green http://www.builditgreen.org/

Community Sustainability Partnership http://www.grpartners.org/

Sustainable Grand Rapids http://www.sustainablegr.com/

City of East Lansing, Michigan adopts green building policy http://www.cityofeastlansing.com/Home/Departments/Communications/MediaRoom/articleType/ArticleView/articleId/121/East-Lansing-Adopts-Groundbreaking-Green-Building-Policy/

Metrics

Number of LEED certified buildings

Timeframe

Short: Join a green building membership organization

Mid: Adopt development incentives for green building projects

Mid: Adopt green building standards for municipal buildings

Cost

Low: Membership in a green building organization

Low: Adopt local green building incentives into review and permitting process

Low: Adopt green building policy for municipal buildings

Pricing incentives for transportation

Pricing incentives are one of many demand-side tools associated with travel demand management (TDM). This approach takes steps to manage the amount of traffic on the road at any given time by altering the behavior of the people using the system. Contrast this with supply-side strategies of TDM that manage congestion by building additional infrastructure.

Demand-side tools are based on the concept that people make travel decisions based on things like how long a trip will take, how comfortable the trip will be, and how much the trip will cost. If trips are simple and inexpensive, it's an easy decision to take the trip. When trips get more difficult or expensive, people think about different options. For example, when gas prices increased significantly in 2008, travel patterns shifted immediately in response to the change in cost. People began to carpool, eliminate unnecessary trips, and transit use increased dramatically in cities around the country.

Pricing incentives are a tool used by a transportation agency, a local government or an employer to bring about a change in travel behavior by imposing an increased cost, offering a reduced cost, or providing a financial bonus for desired behavior. In areas where tolls are charged on roads or bridges, higher costs at peak hours encourage people to shift travel times.

In the six-county region, pricing incentives can be scaled to fit the community or region. For instance, parking costs can be adjusted to be higher when demand is high. Conversely, lower costs or windows of "free" service can encourage people to travel during off-peak hours. An event or festival might reduce congestion by offering free parking to people who arrive early or by providing transit service free from a remote parking lot.

Private businesses and employers can participate as well. Employers might allow employees to shift their schedule to avoid the peak hour travel time. Priority parking; free or reduced transit passes; or cash incentives to employees who don't drive (or don't drive alone) to work are other tools that have been effective around the country. The national "Best Places to Work for Commuters" program encourages a series of best practices.

Energy

Example resources

Clean Cities (US Dept of Energy, Energy Efficiency and Renewable Energy) http://www1.eere.energy.gov/cleancities/

Transportation Demand Management - Victoria Transport Policy Institute http://www.vtpi.org/tdm/

Center for Urban Transportation Research (CUTR) http://www.cutr.usf.edu/

Triangle Best Workplaces for Commuters (North Carolina) http://www.trianglebwc.org/

SR 91 Express Toll Lanes http://www.91expresslanes.com

Tri-State Transportation Campaign (the Port Authority of New York & New Jersey) http://www.tstc.org

Metrics

VMT measurements

Average cost of public parking

Peak hour traffic counts

Timeframe

Short: Note peak travel times (congested traffic) and determine causes

Mid: Develop public, private or joint incentive programs to reduce peak hour trips

Long: Establish a fee-based system for public parking

Cost

Low/Mid: Local 7-day travel demand report for major roads

Low/Mid: Implement transportation pricing incentive programs

Mid/High: Install parking meters or other fee-based parking system