

Staff Memorandum

To: Evansville Plan Commission

From: Brad Sippel, Interim Community Development Director

Date: August 28, 2014

Subject: WisDOT USH-14 Corridor Management Plan

Evansville Plan Commission,

I have placed a discussion about the recently released Corridor Management Plan released by the Wisconsin Department of Transportation on the agenda for the September 2 meeting of the Plan Commission. Further information regarding the plan is below. I encourage you to browse through the plan before the meeting as it will also influence some of our discussion on the transportation chapter of the Smart Growth Plan update. The plan is posted on our website in the right-hand column on the homepage and also on the *Documents, Agendas, and Minutes* page under "Plans."

Snapshot of Some Important Findings

- The plan cites Evansville's support for a bypass around Evansville due to the suggestions in the Comprehensive Plan. This support for a bypass should be reevaluated.
- WisDOT is freezing access to USH14 as parts of construction projects and new development. Future projects cannot remove access without the owner's consent, and new access along the corridor is restricted.
- The management plan states that access control has been completed between 92 and Evansville, and between Evansville and Janesville, but it has not been completed in Evansville.
- J. Lindemann and USH-14 was identified as a deficient intersection in need of improvements.
- WisDOT stated the intention is to preserve USH-14 as a two lane corridor, but there are several sections that may warrant consideration of additional lanes.
- WisDOT recommended that all pedestrian crossings along USH-14 in Evansville be upgraded to meet WisDOT and ADA standards as part of any improvement projects.
- WisDOT recommended that communities in the USH-14 corridor work with County and State officials to develop bicycle facilities to meet the communities' needs.

Some Potential Discussion

- Does the City of Evansville still support the creation of a bypass around the city?
- If the City desires bicycle improvements on USH-14 within the city limits it should be addressed in the transportation chapter of the plan.
- The effect of access control on USH-14 on the rest of the transportation network in the city and its effect on economic development.
- USH-14 is the only road that directly connects the downtown to the east side, if this is not addressed as the city and region grows it could serve as a bottleneck that funnels both local and through traffic onto a single road.
- Bicycle and pedestrian facility improvements need to be considered to maintain bicycling and walking as both safe and convenient methods of transportation as traffic increases.

Regards,

Brad Sippel

Interim Community Development Director

City of Evansville

COMPREHENSIVE PLAN IMPLEMENTATION EVALUATION

HOUSING SECTION

Housing Goal #1					
Enhance the environmental assets and residential atmosphere of the City so that it continues to be an attractive place to live.					
Related Elements	Supporting Objectives	Champion / Partner	Potential Funding Source	Milestone Date	2010 Status
Agricultural, Natural & Cultural Resources	1. Encourage "low impact" development within the City that can help reduce storm water runoff and flooding. This type of development can also serve as a buffer between the City and rural town areas.	WDNR	NA	Continuous	Ongoing, as part of the development review process
Transportation	2. Consider pedestrian access and amenities as part of any housing development. This includes considering location choices for developments catering to seniors and families (children) that provide opportunities to walk to important destinations like <u>schools, parks, and shopping</u> .	City Planner & Public Works Committee	WDNR Recreational Trails Grant Program	Continuous	Ongoing, as part of the development review process
Land Use	3. Make green space an integral part of residential neighborhoods, including multimodal access to nearby parks and the creation of tree-lined streets.	Park Board	NA	Continuous	Ongoing, as part of the development review process
Intergovernmental Cooperation	4. Coordinate with the Town of Union to establish extra-territorial zoning, boundary agreements or other tools to direct development to the City in order to protect surrounding farmland and natural areas, while efficiently utilizing urban infrastructure (e.g., water, sewer).	City Administrator & Public Works Committee	City Budget	Continuous	Ongoing, through the E-U Implementation Advisory Committee of the Plan Commission; No agreement todate on ETZ or a boundary agreement.
	Encourage shared driveways and alley-loaded garages to reduce vehicle and pedestrian conflicts and create more useful yard space, especially near the downtown.				NEW
Housing Goal #2					
Maintain housing values over time.					
Related Elements	Supporting Objectives	Champion / Partner	Potential Funding Source	Milestone Date	2010 Status/2014 STATUS
Implementation	1. Conduct an internal review of City codes and	City Planner and	City Budget	2007, 2012,	Completed 2009; Ongoing amendments

	ordinances every 5-years to consider amendments to address housing concerns.	Building Inspector		2017, etc.	through the ULDC
Land Use	2. Educate residents about the importance of property maintenance by developing and distributing a brochure highlighting property maintenance techniques and benefits. Information should also be provided on the City of Evansville Web Site.	City Administrator, City Planner, Building Inspector & Evansville Historic Preservation Committee (HPC)	City Budget	2009	Ongoing: 1) City has purchased DVD's for public use on historic renovations. 2) HPC is setting up joint meeting with Janesville HPC. PROPERTY MAINTENANCE BROCHURE COMPLETED FOR HISTORIC PROPERTIES.
Land Use	3. Establish a program to recognize property owners for maintenance achievements.	City Administrator & Mayor	City Budget	Continuous	Ongoing
	Consider adopting an ordinance requiring a minimum level of property maintenance.				NEW
Cultural Resources	Consider an ordinance strengthening the enforcement ability of the Historic Preservation Commission.				NEW-Could also fit under Goal#4
	Consider the adoption of an ordinance requiring minimum landscaping standards for new residential development.				NEW-Could also fit under Goal#4
Housing Goal #3					
Provide a variety of housing types, designs, densities, and price ranges to meet the needs of residents of varying incomes, ages and lifestyle preferences and to support economic development.					
Related Elements	Supporting Objectives	Champion / Partner	Potential Funding Source	Milestone Date	2010 Status
Land Use	1. Evaluate (through survey and Census Data) and monitor the need for affordable housing for residents with incomes between 60% and 80% of the City median household income and senior housing.	WI Housing & Econ. Dev. Authority (WHEDA) and Evansville Housing Authority	WHEDA Foundation Housing Grants	2011	Accomplished by WHEDA and Rock County
Land Use	2. Consider adopting a policy and supporting ordinances to require a percentage of affordable housing units be included in future developments.	City Planner & Administrator	City Budget	2009	Considered, but determined to be unnecessary. Evansville has an adequate inventory of affordable housing stock.
Land Use	3. Review and possibly update existing development controls to encourage housing that is easily adaptable for seniors and residents with disabilities and that policies do not prohibit affordable housing development.	City Staff	City Budget	2009	Considered in 2007 and turned down.

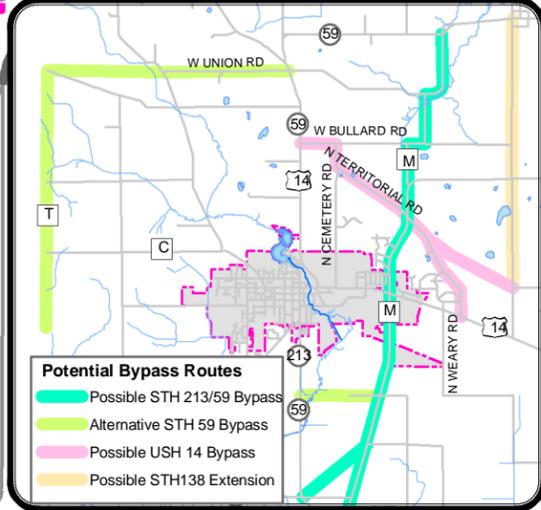
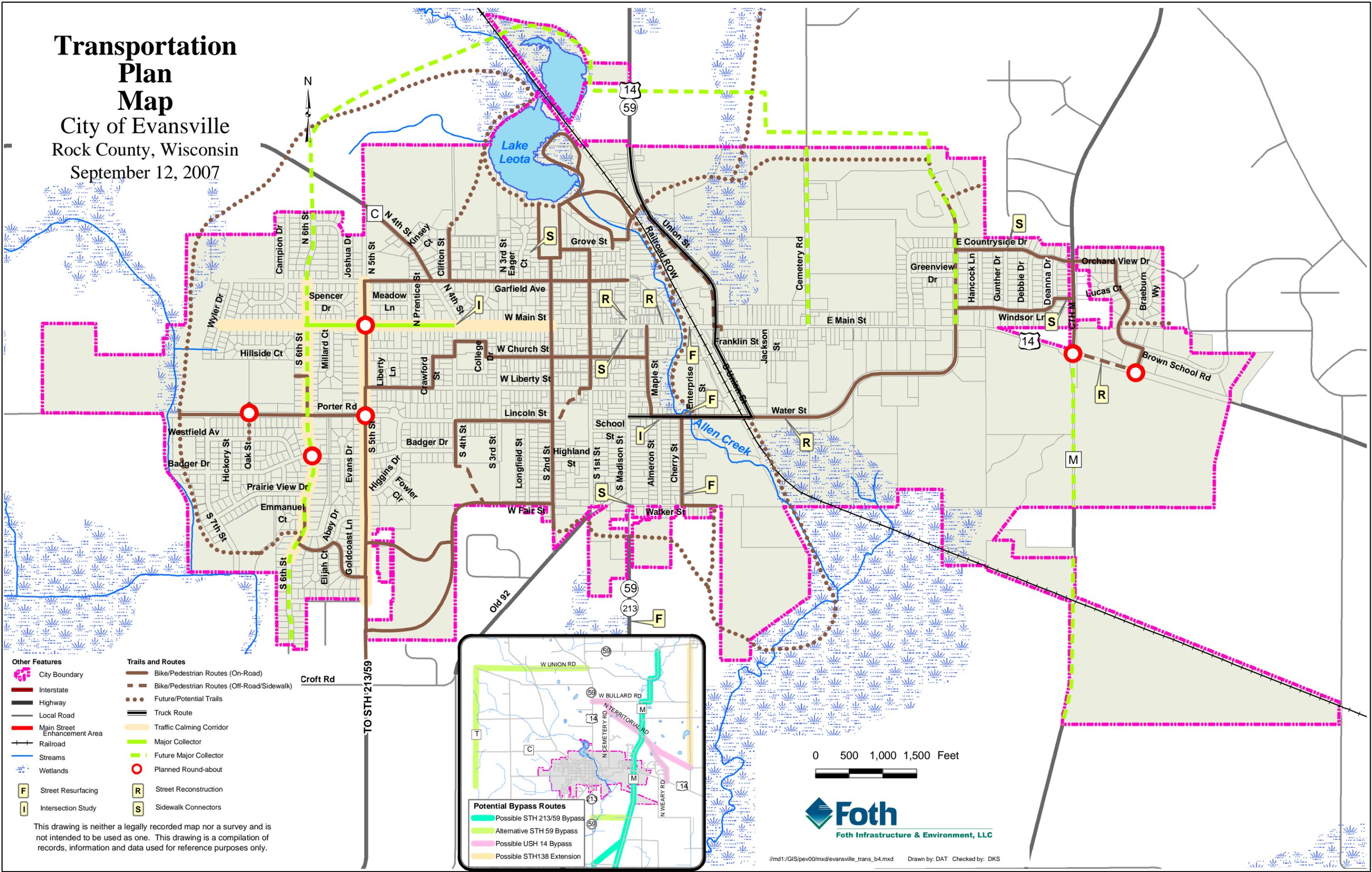
Land Use Implementation	4. Revise the R-2 Zone to remove provisions for smaller lots. Use the R-2 as a district for duplex development. Accordingly, create a new residential zone for smaller lot residential development in accordance with new urbanism design for walkable neighborhoods.	City Planner	City Budget	2005	Accomplished
Land Use Implementation	5. Promote mixed development throughout the City.	City Planner		Continuous	Partially accomplished through PUD zoning
Implementation	6. Encourage developers to mark on plats of new residential subdivisions the lots on which conditional use permits for two-family dwellings have been granted in advance so potential purchasers of single-family lots will know where two-family dwellings might be located.	City Planner	Private Developers	Continuous	Accomplished through the development review process
	Reevaluate residential zoning code provisions and consider reducing minimum setback and minimum lot size requirements to allow for more dense and more variation in single-family housing choices.				NEW

Transportation Plan Map

City of Evansville

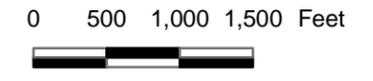
Rock County, Wisconsin

September 12, 2007



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|------------------------------|--|
| Other Features | Trails and Routes |
| City Boundary | Bike/Pedestrian Routes (On-Road) |
| Interstate | Bike/Pedestrian Routes (Off-Road/Sidewalk) |
| Highway | Future/Potential Trails |
| Local Road | Truck Route |
| Main Street Enhancement Area | Traffic Calming Corridor |
| Railroad | Major Collector |
| Streams | Future Major Collector |
| Wetlands | Planned Round-about |
| Street Resurfacing | Street Reconstruction |
| Intersection Study | Sidewalk Connectors |

This drawing is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, information and data used for reference purposes only.



TRANSPORTATION SECTION

Transportation Goal #1					
Maintain and improve City roads in a timely and well-planned manner.					
Related Elements	Supporting Objectives	Champion / Partner	Potential Funding Source	Milestone Date	2010 Status
Implementation	1. In accordance with state law, using PASER, continue to update road ratings, as required. Seek to increase local funds for road maintenance to support PASER recommendations.	Public Works Department	City Budget	Bi-annual	Accomplished
Land Use	2. Review the <i>Transportation Network Map</i> every five (5) years to ensure that it accurately reflects changes indicated on the City's <i>Official Map</i> and current development plans.	Public Works Department & City Engineer	City Budget	2005, 2010, 2015, 2020	Review will occur in 2010 as part of the Comp Plan Amendment and WisDOT study of USH 14 Corridor
Implementation	3. Research and consider creating a transportation utility to finance road maintenance and system improvements.	City Administrator & Public Works Committee	City Budget	2009	Ongoing
Transportation Goal #2					
Promote a multi-modal transportation system for efficient, safe and convenient movement of people, goods, and services.					
Related Elements	Supporting Objectives	Champion / Partner	Potential Funding Source	Milestone Date	2010 Status
Intergovernmental Cooperation	1. Consider opportunities for establishing a bicycle trail on the old rail bed extending to Beloit.	WisDOT	WisDOT Transportation Enhancement Program	Continuous	Not accomplished todate
Intergovernmental Cooperation	2. Seek to encourage county, state, and private investment in the establishment of a commuter rail link along the abandoned portion of the Union Pacific Railroad, north of the City of Evansville to Madison.	WisDOT	WisDOT Transportation Enhancement Program	Continuous	Not accomplished todate
Intergovernmental Cooperation	Seek opportunities for new freight use of existing rail corridors. Preserve the corridors for future freight rail service.	WisDOT	WisDOT Transportation Enhancement Program	Continuous	Ongoing
Intergovernmental Cooperation	3. To capitalize on its proposed proximity to the Ice Age Trail and potential regional trails, Evansville should coordinate with Rock County, the Town of Union, Town of Magnolia and the WDNR to pursue trail connections between the Ice Age Trail and the City of Evansville and the development of other regional trails.	Parks Board	WDNR Recreational Trails Grant Program	2009	To be reconsidered in 2010 and 2011

Intergovernmental cooperation	4. Coordinate with Rock County and WisDOT so when improvements/reconstruction of county and state roads are scheduled, appropriate consideration is given to the development of bike paths and trails in accordance with adopted plans.	Public Works Dept. & Parks Board	WDNR Recreational Trails Grant Program	Continuous	Ongoing
Utilities & Community Facilities	5. Consider widening the roads in Leonard-Leota Park so that bicycle and jogging lanes can be striped on the roads.	Public Works Dept. & Parks Board	WisDOT Transportation Enhancement Program	2009	Considered in 2007 and turned down.

Transportation Goal #3

Create and maintain a uniform and safe system of sidewalks in Evansville.

Related Elements	Supporting Objectives	Champion / Partner	Potential Funding Source	Milestone Date	2010 Status
Land Use	1. Update the inventory of all sidewalks in Evansville.	Public Works Committee	WisDOT Transportation Enhancement Program City Budget Special Assessments	2005	Accomplished.

Transportation Goal #4

Become an active partner in transportation improvements made in the City and surrounding area by Rock County and WisDOT.

Related Elements	Supporting Objectives	Champion / Partner	Potential Funding Source	Milestone Date	2010 Status
Intergovernmental Cooperation	1. Provide copies of this plan and subsequent updates to WisDOT and Rock County.	City Clerk	City Budget	2005	Accomplished. Ongoing as amendments are approved.
Intergovernmental Cooperation	2. Coordinate with Rock County during the development of the Rock County Comprehensive Plan to ensure that Evansville interests are represented, particularly with respect to road improvement schedules, public transit choices and trail development.	City Administrator	City Budget	Before 2010	Mayor attended most County Smart Growth meetings

Transportation Goal #5

Develop the transportation network in accordance with adopted land use plans, economic considerations, physical constraints, and community

Related Elements	Supporting Objectives	Champion / Partner	Potential Funding Source	Milestone Date	2010 Status
Land Use	1. Classify and design the road network according to the function (or type of traffic) that each road is serving as well as the physical environment in which it is constructed.	Public Works Committee & City Engineer	City Budget	Continuous	Continuous.

Implementation	2. Adopt at Heavy Traffic Route Ordinance that identifies and enforces said requirements through the City.	City Administrator & Public Works Committee	City Budget	2005	Accomplished in 2006
Land Use	3. Ensure that adequate road systems are planned or in place before approving development plans (e.g. plats for new residential subdivisions).	City Planner	NA	Continuous	Ongoing, as part of development reviews
Land Use	4. Adopt financing plans for an additional east-west corridors to collect and move traffic through the City to reduce the "bottleneck" effect downtown.	City Administrator, Public Works Committee, WisDOT & Rock County	City, County & State Budgets	2010	Partially accomplished in 2008 with Water Street improvements.
Intergovernmental Cooperation	5. Coordinate with Rock County to upgrade nearby county roads (i.e. CTH M and CTH C) to accommodate additional local traffic as important area collector streets.	Public Works Committee	County Budget	2008	Accomplished.

Transportation Goal #6

Support the long-term viability of USH 14.

Related Elements	Supporting Objectives	Champion / Partner	Potential Funding Source	Milestone Date	2010 Status
Land Use	1. Require larger setbacks along the highway right-of-ways, so if expansion is needed, space is available. This will likely require revisions in the Zoning Code to create an overlay zone.	City Planner & City Administrator	City Budget	Continuous	Will be considered as part of the WisDOT study of the USH 14 Corridor in 2010-2011.
Intergovernmental Cooperation	2. Urge the Wisconsin Department of Transportation to reduce the speed limits on USH 14 between the north City limit and Elmer Road to 45 mph.	Mayor and Public Works Committee	NA	2005	Accomplished in 2007
Land Use	3. Ensure that proposed new developments along USH 14 include a local parallel street to USH 14 so that USH 14 is not used as a local street.	City Planner	NA	Continuous	Will be considered as part of the WisDOT study of the USH 14 Corridor in 2010-2011.

Transportation Goal #7

Seek to establish bypasses for USH 14, STH 59 and STH 213.

Related Elements	Supporting Objectives	Champion / Partner	Potential Funding Source	Milestone Date	2010 Status
Land Use	1. Coordinate with WisDOT, Rock County, area property owners, and local businesses to designate potential routes for such bypasses and truck routes.	City Administrator & City Planner	NA	2010	Will be considered as part of the WisDOT study of the USH 14 Corridor in 2010-2011.

Utilities & Community Facilities	2. In the interim, continue to support the efforts of law enforcement officials to achieve heightened enforcement for required stops and speed limits along USH 14, STH 59, and STH 213.	City Police Department	City Budget	Continuous	Accomplished. Ongoing enforcement reviews.
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Transportation Goal #8

Keep residents informed of transportation improvements.

Related Elements	Supporting Objectives	Champion / Partner	Potential Funding Source	Milestone Date	2010 Status
Issues & Opp.	1. Provide information about road improvements at public meetings.	Public Works Committee	City Budget	Continuous	Ongoing
Issues & Opp.	2. Provide information about transportation improvements on the City's web site, including work schedules and plans.	City Administrator	City Budget	Continuous	Ongoing
Implementation	3. Encourage WisDOT to notify residents and businesses of anticipated transportation projects, as well as, provide regular work schedule updates to the fullest extent feasible.	City Engineer	NA	Continuous	Ongoing

Transportation Goal #9

Improve transportation amenities downtown.

Related Elements	Supporting Objectives	Champion / Partner	Potential Funding Source	Milestone Date	2010 Status
Land Use	1. Complete a parking study.	Evansville Chamber & Public Works Committee	Local Business Contributions	2007	Accomplished in 2007
Land Use	2. Study and pursue alternative parking accommodations for downtown businesses (e.g., rear access parking and parking lot creation).	Evansville Chamber & Public Works Committee	City Budget	2005 - 2007	Accomplished in 2007
Land Use	3. Replace sidewalks and curbing. If timing permits, try to coordinate this effort with the planned improvements by WisDOT in 2005-2007.	Public Works Committee	WisDOT Transportation Enhancement Grant	2005 – 2007	Accomplished in 2005, 2007-2008
Land Use	4. Provide trail access points to the downtown to connect the downtown with other areas of the City, as well as, regional trail networks.	Park Board, Evansville Redevelopment Authority (ERA), and Civic Groups	WDNR Recreational Trails Grant Program	2012	Ongoing

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TRANSPORTATION ELEMENT

Introduction

A diversified, well-balanced transportation system is a major factor in the growth of a community. The transportation system exists to move people, goods and services both through and within the community. Planning for the extension of the various modes of transportation is one of the most important aspects of planning for City expansion.



Entrance to Evansville from the North along USH 14

Evansville's transportation system consists of local streets, state highways, railroad corridors and a network of sidewalks. USH 14 is the principal arterial connecting the City to the greater region and areas beyond.

This chapter examines the transportation network, including a summary of existing transportation plans, studies, and assessments, as well as a series of recommendations to address future transportation needs and desires.

Wisconsin's Smart Growth Law includes 14 goals for local comprehensive planning. Evansville believes that those goals listed below specifically relate to planning for transportation:

- Encouragement of neighborhood designs that support a range of transportation choices.
- Encouragement of coordination and cooperation among nearby units of government.
- Providing an integrated, efficient and economical transportation system that affords mobility, convenience and safety and that meets the needs of all citizens, including transit dependent and disabled citizens.

Transportation Vision

In 2025, Evansville provides a well-connected system of local streets and highways that provide for the safe and efficient mobility of people and goods. Residents take advantage of organized transit choices and infrastructure that connect Evansville with Madison, Janesville and areas beyond. Trails and sidewalks are an integral part of the transportation network - providing connections between neighborhoods, neighboring communities, schools, parks, and the greater region.

Inventory of Existing Transportation Facilities

This section profiles the different transportation choices available in Evansville. Generally speaking, transportation facilities in Evansville provide a mix of choices for residents depending on their destination. Opportunities for safe pedestrian travel are abundant given sidewalks through most areas of the City. Presently, residents rely on their personal automobiles to meet most of their transportation needs. Other modes of transit, including light rail, are not available in Evansville, but the desire for organized transit and methods to promote these choices are discussed later in this chapter.

PEDESTRIAN FACILITIES

Pedestrian movements and facilities are often overlooked in many plans, yet an essential part of most trips require walking. It is generally accepted that sidewalks perform an important safety function in populated areas. Sidewalks separate pedestrians from motor vehicle traffic and provide a safe surface for walking, non-motorized cycles, and play. Sidewalks are especially important since the majority of students within the City limits walk to school.

Modern planning approaches recommend:

Walkable neighborhoods to promote social interaction, community safety and physical fitness.

Ideally, walkable neighborhoods should be within a quarter mile, or a five- to ten-minute walk, of a destination point (e.g., school, shopping, park, church, etc.).

Generally, there are two classifications of walkers: people who walk for recreation/exercise and people who walk for transportation purposes. People who walk as their primary transportation choice are usually without alternatives (e.g., seniors and youth who cannot drive). Most people walk when it is convenient. Generally, walking is considered to be a convenient choice when destinations are within 10-15 minutes (1/2 mile or less). Given the layout, more particularly the central location of major facilities like schools, shopping, churches, parks, the library and post office, walking is a convenient option for many in Evansville.

Evansville provides many amenities to make walking a safe option for residents of all ages. The City requires sidewalk installation in new residential developments and is seeking to complete missing sidewalk connections between developments. The City's *Land Division Ordinance* requires the installation of sidewalks on both sides of collector and arterial streets and on at least one side of local streets. These regulations have been complied with in the most recent subdivisions. However, there are some areas of the City that do not have sidewalks.

Furthermore, not everyone in Evansville thinks the current provisions of the Municipal Code requiring sidewalks in new subdivisions are sufficient. In the community survey, 44% of respondents indicated they want to keep the current policy, which requires developers of new subdivisions to pay for sidewalks on both sides of collector streets but only on one side of non-collector streets, and requires property owners in existing subdivisions to pay for the same. 50% of respondents indicated they would prefer sidewalks on both sides of all streets, but they differed on who should pay this cost. 35% indicated they want developers and property owners to pay for sidewalks on both sides of all streets. 15% indicated they want city tax dollars to be used to pay for sidewalks on both sides of all streets.

CYCLING OPPORTUNITIES

Bicycle usage falls into two categories - utility and recreational. For recreational biking, Evansville is a part of Rock County's Bikeway System and the Wisconsin Bikeway that runs from Kenosha to La Crosse. Utility biking or biking as a form of transportation is most common for children.

- **Local Trails**

Presently, there are no trail routes through the City. This situation presents some challenges to cyclists. Cyclists either have to share the sidewalks with pedestrians or share the roadways with vehicles. Sidewalk width is not adequate in all areas to simultaneously accommodate the needs of pedestrians and cyclists. Similarly, it is not advisable for cyclists to share the roadways with motor vehicles, particularly along the highway corridors that traverse the City given high traffic volumes and speeds.

Local trails are needed to complement the sidewalk system and provide additional choices for pedestrians, cyclists and outdoor enthusiasts. Ideally, trails would traverse the City to link together residential areas, parks and recreation facilities, schools, and the downtown. Potential trail routes are illustrated on the *Transportation Network Map*.

To address this issue, the City of Evansville developed a *Trailways Plan*. This plan seeks to provide a combination of trails, sidewalks, and bicycle routes to:

- Connect school facilities to City parks;
- Link City parks to shopping areas; and
- Create a ring trail around the current perimeter of the City.

The location of these planned trails is illustrated on the *Transportation Network Map* as well as the *Future Land Use Maps* of this Plan.

There is the potential to establish additional trails - particularly in newer areas of Evansville that have greenspace dedicated for stormwater management. Through the subdivision review process, Evansville has worked with developers to locate these areas adjacent to one another. Over the long-term the vision is to create a network of greenways through Evansville. While the primary purpose of these corridors is to control stormwater, secondary opportunities include their use as wildlife corridors and as a potential greenway trail network.

As the Ice Age Trail is completed (see below), Evansville should consider opportunities to provide local trail connections to it. An interlinked network of trails would provide residents opportunities for a wider array of trail-oriented recreational pursuits, such as hiking and biking, as well as safe and convenient access to major local activity centers.

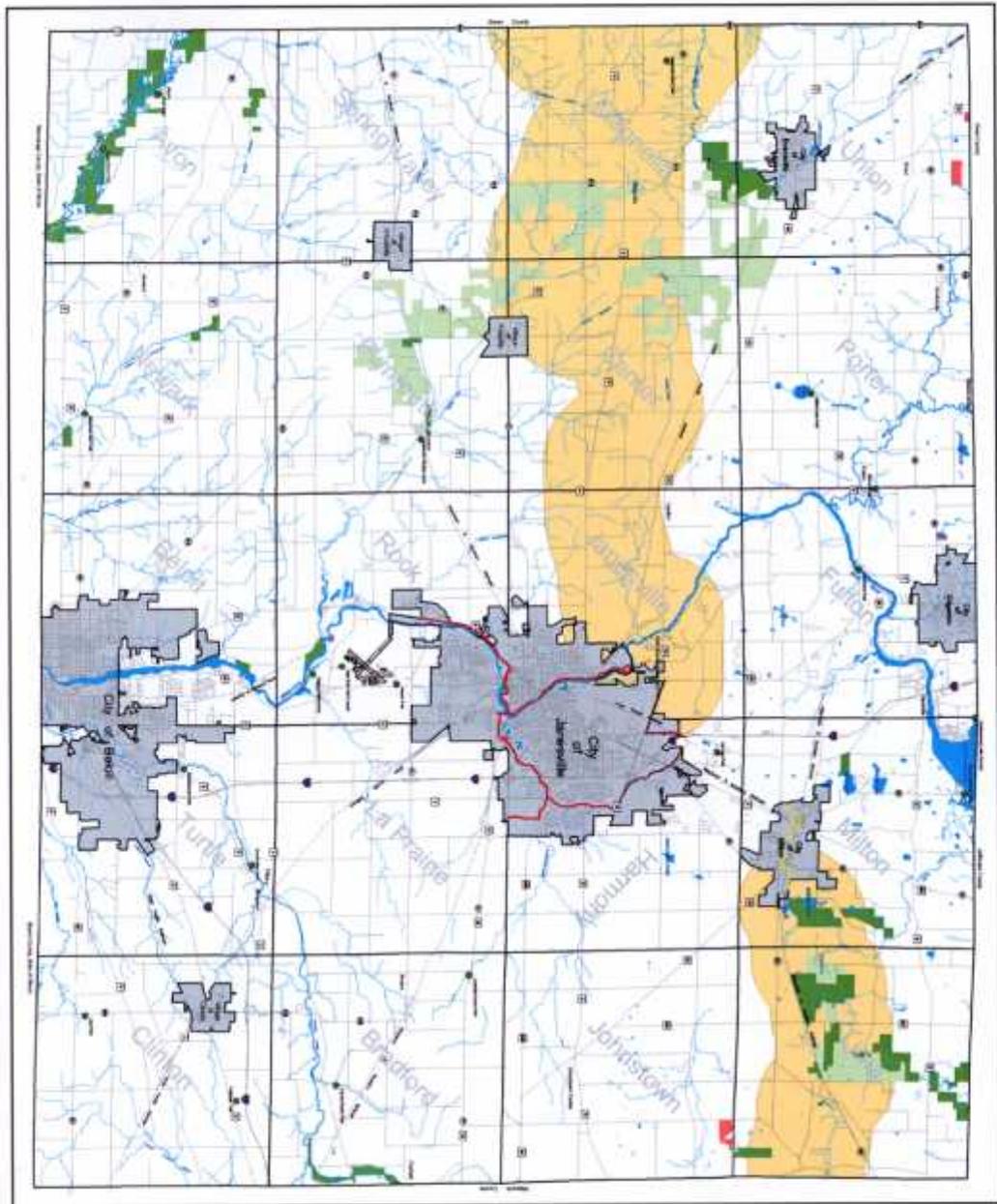
- **Ice Age National Scenic Trail**

The 1,000-mile Ice Age National Scenic Trail passes through Rock County. Currently portions of the trail are completed in Janesville. An east-west corridor is being considered that would pass south of Evansville through the Town of Magnolia and the Town of Center into Janesville. Beyond Janesville, the proposed trail would extend in a northeasterly direction toward Milton and on to Walworth County.

The completed trail will be a valuable recreational and tourist amenity within close proximity to Evansville.

Rock County Ice Age Trail Corridor Plan

Part of the Parks, Outdoor Recreation, and Open Space Plan
 Sub-Element of the Agricultural, Natural, and Cultural Resources Element of the Rock County Comprehensive Development Plan



Rock County Comprehensive Development Plan
 and Northland Project

- Proposed Ice Age Trail Segment
- Existing Ice Age Trail
- City of Janesville Ice Age Trail
- County Rejuvenation Area
- Proposed Ice Age Trail Study Corridor
- Public Land - DMV Lands
- Public Land - Federal Land

Map prepared by HNTB for Rock County
 on 10/15/2013. All rights reserved.



HNTB

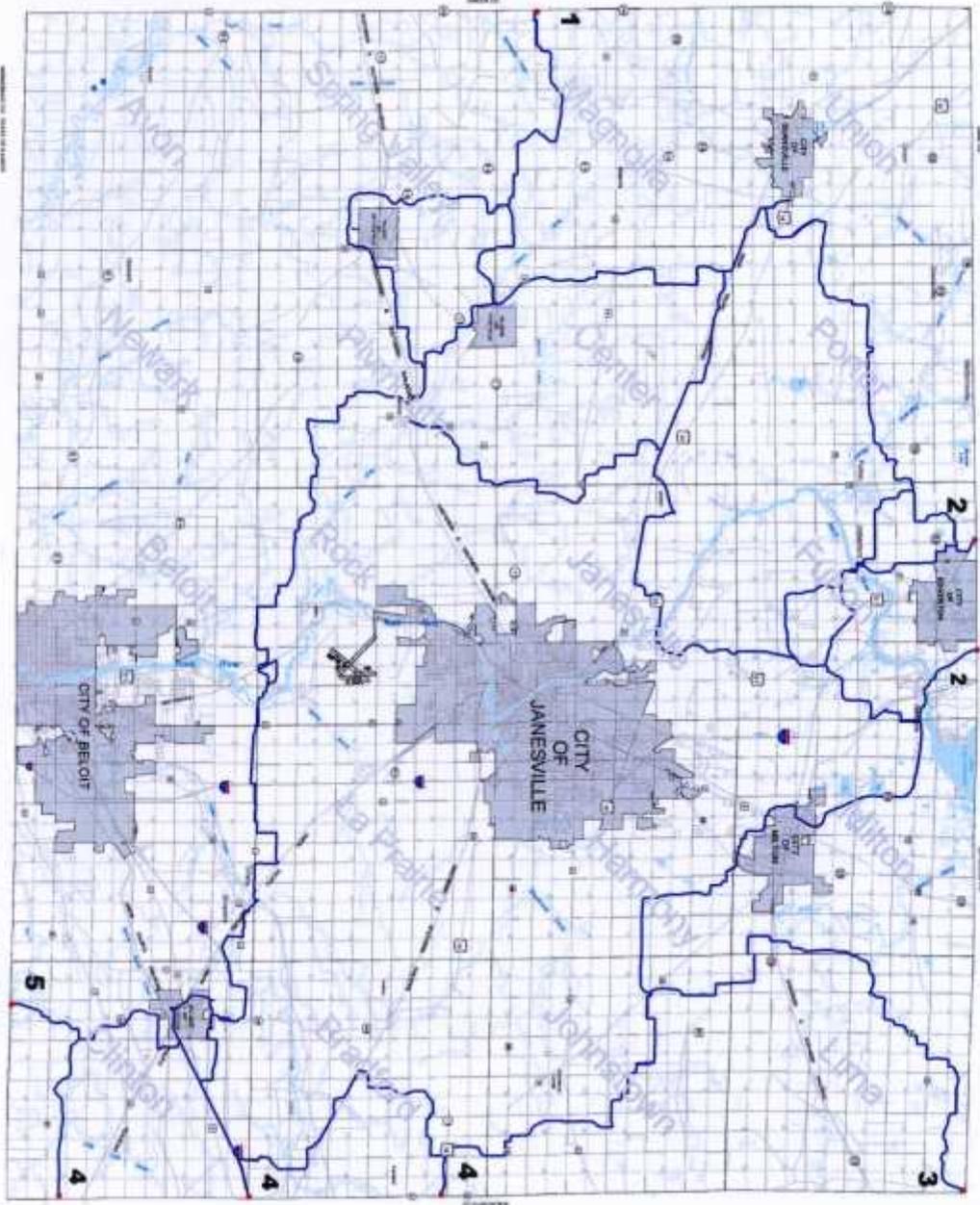
HNTB is the leading provider of transportation planning and engineering services for the public sector.



Rock County, Wisconsin
 10/15/2013

Snowmobile Trail Plan

Part of the 2006, Outdoor Recreation, and Open Space Plan
 and Element of the Regional, State, and County Recreation Elements of the Rock County Comprehensive Development Plan



Rock County Comprehensive
 Development Plan
 www.rockcountycwi.gov

 Rock County Snowmobile Trails

Trail Connections

- 1 - Sugar River State Trail
- 2 - Dane County Trail
- 3 - Walworth County Whitewater Trail
- 4 - Walworth County Trail
- 5 - State of Illinois Gateway Trail

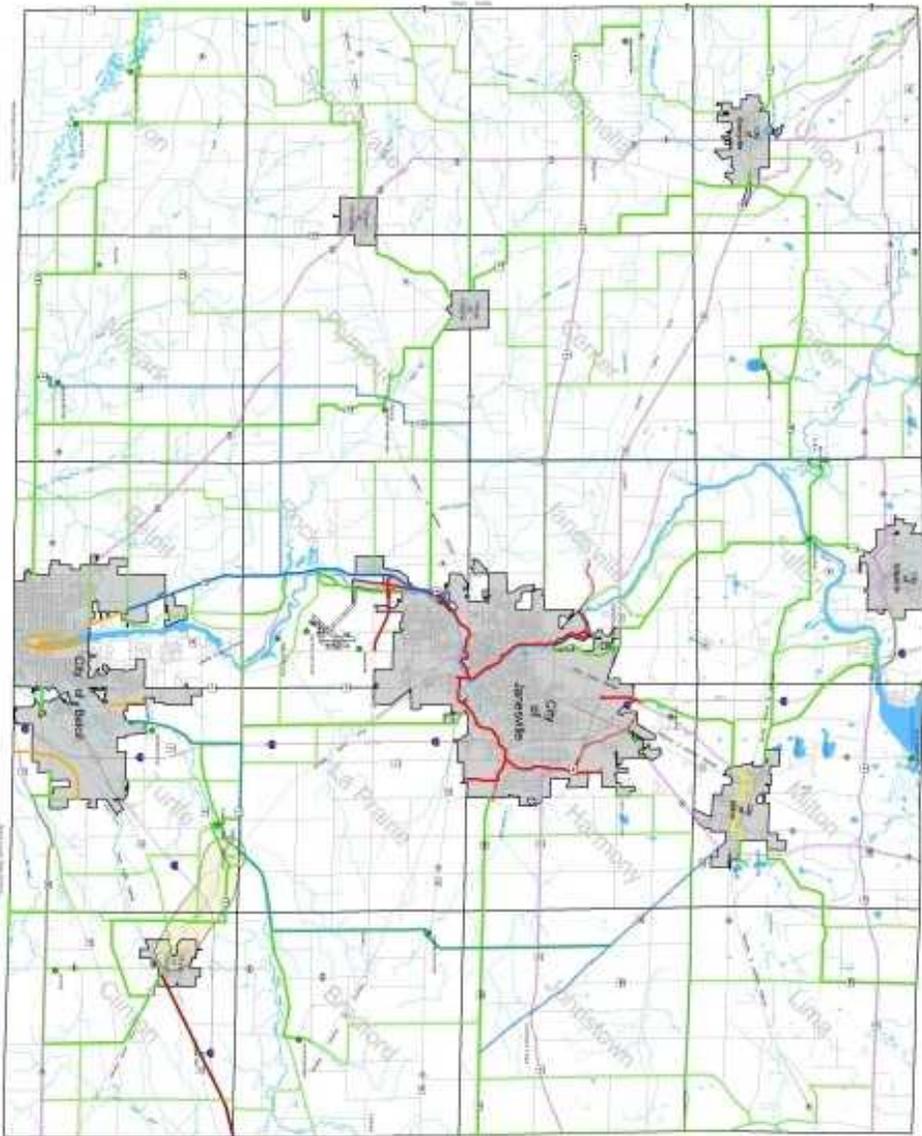
Scale: 1 inch = 1 mile



Rock County Engineering & Planning, Inc. 2006

Rock County Bicycle and Pedestrian Routes and Trails Plan

Staff Director of the Transportation Element of the Rock County Comprehensive Development Plan
 Staff Director of the Planning, Outdoor Recreation, and Open Space Plan
 Staff Director of the Agriculture, Natural, and Cultural Resources Element of the Rock County Comprehensive Development Plan



Rock County Comprehensive
 Development Plan
 Transportation Element

- County Park/Recreation Area
- Existing Rock County Bicycle Route
- Proposed Rock County Bicycle Route
- Existing Designated Bicycle Lane
- Proposed Designated Bicycle Lane
- Existing Bicycle / Pedestrian Trail (Off Road)
- Existing City of Janesville Bicycle Trail
- Proposed City of Janesville Bicycle Trail
- City of Beloit Bicycle Trail
- City of Watkinsville Age Trail
- Madison Avenue Trail
- Three 5-Min Bridge Trail Corridor



State of Wisconsin
 Department of Transportation
 Wisconsin Department of Transportation
 Wisconsin Department of Transportation
 Wisconsin Department of Transportation

TRANSPORTATION NETWORK CITY OF EVANSVILLE



Regional Trails

Evansville is participating in discussions with Rock County about regional trails. Providing off-road, off-sidewalk routes for cycling will become increasingly important as traffic pressures increase.

The potential exists to work with neighboring communities and Dane County to establish a regional trail route with connections to Brooklyn and Oregon. The abandoned portion of the Union Pacific Railroad north of the City is one option for such a trail route. However, the use of this corridor as a regional trail would eliminate the potential for the rail line to reopen for freight use. The reopening of the rail corridor would boost the City's economic development. A better option for a regional trail extending to the north of Evansville would be along Allen Creek.

The potential also exists to develop a regional trail extending south on the abandoned railroad corridor toward Beloit.

The *Transportation Network Map* on page 58 illustrates the recommended locations for recreation trails through Evansville, including those documented in the *Evansville Trailways Plan*. An in-depth study, considering such pertinent factors as topographic constraints, stormwater conveyance, and minimum right of way requirements should be conducted to determine the precise location and type of trail facility to be provided.

SNOWMOBILE TRAILS

A snowmobile trail begins at the far eastern edge of Evansville. Soon after, the trail splits to provide snowmobilers with a north and south route. The north route moves toward Edgerton and connects to trails in Dane County. The southerly route passes through the Town of Center and provides connections to Footville and areas beyond. Minimal snowfall amounts in recent years have decreased the use of these trails.

RAILROAD CORRIDORS

The Union Pacific Railroad line extends across the City of Evansville (Refer to the Transportation Network Map). This line is abandoned north of the City limits. However, within the City and to the southeast, this rail corridor is an active freight line. The continued viability of this line is crucial to Nelson Young Lumber, Southern Wisconsin Grain and to Evansville's long-term industrial growth.

As part of the "Grow Wisconsin" initiative to spur economic growth and make strategic investments in the state's transportation network, Governor Jim Doyle approved nearly \$6.8 million in Freight Railroad Infrastructure Improvement Program (FRIIP) loans. In Evansville, Southern Wisconsin Grain was given a loan for slightly more than \$1.5 million to construct one 500,000 bushel; one 200,000 bushel; and four 40,000 bushel grain storage bins. In 2002, the Southern Wisconsin Grain facility was awarded \$1.25 million loan to construct two 500,000 bushel grain bins. The projects are expected to generate an additional 425 rail carloads per year, providing freight savings for area farmers.

If the abandoned portion of the railroad corridor, north of the City, were ever to be reopened, the City of Evansville would support active use of that corridor. Currently, the Village of Oregon

and City of Fitchburg (owners of the 15-miles of abandoned railroad corridor north of Evansville) are working toward an intergovernmental agreement to develop a joint business park along the corridor. This project would include re-opening the railroad corridor, possibly as soon as 2005 from the joint business park north to Madison. A study has already been completed indicating this railroad reopening would cost approximately \$1 million dollars.

If the abandoned rail corridor were reopened all the way from Evansville to Madison, this line might be served by the Wisconsin & Southern Railroad (WSOR) rather than the Union Pacific Railroad (UP). The WSOR has a reputation of being willing to move smaller volumes of goods for individual businesses than the UP, and consequently WSOR service to Evansville might allow additional existing and future Evansville businesses to substitute rail-delivery for truck-delivery of goods.

The Wisconsin Department of Transportation is in the process of planning a possible new high-speed passenger rail connection between Chicago and the Twin Cities (Minneapolis and St. Paul). One possible route for this high-speed rail line would connect Chicago, Milwaukee, Madison, Lacrosse and the Twin Cities. Another possible route would connect Chicago, Janesville, Madison, Eau Claire, and the Twin Cities (the I-90/94 corridor), and would pass through Evansville. The City would support having a high-speed rail line pass through Evansville if it included a stop in Evansville.

STREETS AND HIGHWAYS

Streets and highways are classified according to their primary function, either to move vehicles or to serve adjacent land. Arterials accommodate the movement of vehicles, while local roads are designed to provide direct access to individual parcels of land. Collectors serve both local and through traffic by providing a connection between arterials and local roads. The descriptions of the functional classes provided below are from the *Transportation Planning Resource Guide*, prepared by WisDOT in March 2001.

- **Principal Arterials.** Serve interstate and interregional trips. These routes generally serve all urban and other areas greater than 5,000 population. USH 14 is the principal arterial in Evansville.
- **Minor Arterials.** In conjunction with principal arterials, minor arterials serve cities, large communities, and other major traffic generators providing an intra-regional and inter-area traffic movements. STH 59/STH 213 is a minor arterial in Evansville. Based on the Evansville Municipal Code classification system, Main Street (east of Union Street) is also an arterial street.
- **Major Collectors.** Major collectors provide service to moderate sized communities and other intra-area traffic generators, and link those generators to nearby larger population centers or higher function routes. CTH M, CTH C, and Main Street (west of Union Street) are major collectors in Evansville.
- **Minor Collectors.** These types of roads collect traffic from local roads, and provide links to all remaining portions of smaller communities, locally important traffic generators, and higher function roads. 6th Street and North Water Street are minor collectors in Evansville.

- **Local Roads.** The remaining roads in Evansville are local. They provide direct access to residential, commercial and industrial uses.

All the roads described in this section are illustrated by their proposed functional classification on the *Transportation Network Map*. Available traffic volume information at key intersections is also provided on the *Transportation Network Map*.

The extension of the road network is critical to the development. For this reason, Evansville has adopted an *Official Map* to preserve corridors for street extension. The *Official Map* needs to be updated to keep pace with development that has recently taken place.

MASS TRANSIT

The state operates a commuter van from Evansville to Madison and back each weekday. The van is used by state employees, but non-state employees can ride it as well. The van picks up riders near the City's parking lot on Montgomery Street. No other mass transit via a regular bus route, high-speed train, or the like is currently available in Evansville. However, during the planning process, residents expressed an interest in:

- Improved transportation choices for seniors potentially provided by area governments, or more likely, private entrepreneurs
- A potential mass transit choice (e.g., high speed rail, train, or bus route) between Evansville, Madison and Janesville to accommodate commuting traffic
- A private ride-share taxi program
- A park & ride with connection to area trails

WATER TRANSPORTATION

Allen Creek is not deep enough or wide enough to support water-based transportation opportunities. There are no other streams or rivers for water-based transportation. Residents used to enjoy water-based recreation opportunities on Lake Leota. The lake is not usable now. Lake Leota is discussed more in the Agricultural, Natural and Cultural Resources Element of this plan.

TRUCK TRANSPORTATION

The highway corridors extending through Evansville are important truck routes. WisDOT has officially designated the state highways and USH 14 as truck routes. This designation is based on the design of the roadway to withstand truck weight and traffic. Local truck traffic is found on several other roads in Evansville, but it is much more limited in volume than the truck traffic on these highways.

Truck traffic is a common concern by residents. Residents are concerned about their speed, noise and volume. Ideally, different types of motorized vehicle traffic, such as truck and automobile, could be separated. It is not possible to totally separate trucks from automobile traffic, because many trucks serve local businesses. However, there are steps Evansville can take to focus the truck traffic to streets that are suitable for heavy traffic. The goals and objectives in this chapter discuss this concept in more detail.

Wisconsin Statutes permit a municipality to designate certain streets in the municipality as routes for "heavy traffic," defined as any vehicle with a gross weight in excess of 6,000 pounds, and to prohibit heavy traffic from using any street in the municipality that is not designated a heavy traffic route, except for soliciting orders and making deliveries. The statutes mandate that a municipality may not prohibit heavy traffic from using a state trunk highway that passes through the municipality. A municipality that adopts such an ordinance must erect appropriate signs to give notice of the ordinance. Consequently, the City could designate USH 14 and STH 59/213, plus any other streets the City chooses to designate, as heavy traffic routes, and heavy traffic would be prohibited on all other City streets, except for soliciting orders and making deliveries. The City will enact such an ordinance in 2005.

AIRPORTS

There are no airports in Evansville and no plans to establish any in the future. The nearest commercial airports are in Madison, WI, Janesville, WI and Rockford, IL. These airports meet resident travel and business freight needs. They are expected to continue to meet local needs over the next 20 years and beyond.

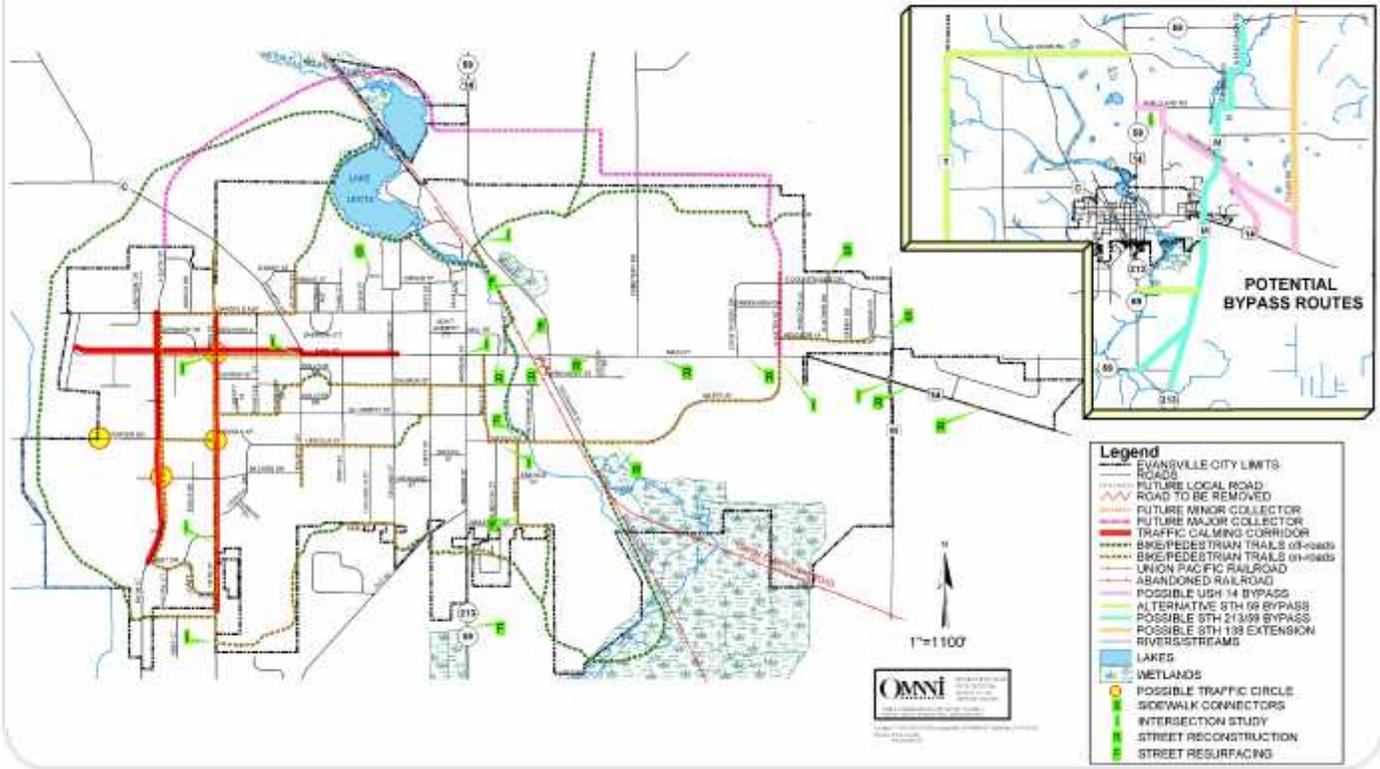
Recommended Road System Improvements

Table 14 below describes road improvement projects anticipated within the 20-year planning period in Evansville. The projects, along with potential local street connections are identified on the *Roadway System Plan*. The potential future roads are illustrated for planning purposes only. Actual paths of future major roads are subject to change. Exact alignment, width, etc. will be reflected on the City's Official Map. Additional information about area transportation improvements is provided in the “Summary of Existing Transportation Plans” section of this chapter.

TABLE 14 ROADWAY SYSTEM IMPROVEMENTS			
Facility	Anticipated Improvement Date (if known)	Segment	Recommended Improvement
USH 14	2005	From City Limits to City Limits	Reconstruction to include: <ul style="list-style-type: none"> Improved turning radius at intersection with Union and Main Streets. Decorative lighting and a sidewalk will be added to the west side of Union Street. Street trees will be planted on the west side of Union Street and both sides of East Main Street (east of Union Street). Sidewalks will be extended on the south side of E. Main Street to the intersection of USH 14/CTH M and on the north side to the intersection of USH 14/J. Lindemann Drive. Stoplight installed at the intersection of USH 14 and CTH M.
Main Street	2005	From Union Street to Allen Creek	Reconstruction of the street, curbs, gutters, sidewalks, and replacement of underground infrastructure. NOTE: This project will span from storefront to storefront.
Main Street	2007	From First to Allen Creek	Reconstruction of the street and sidewalks on both sides of the street and replacement of the bridge over Allen Creek. NOTE: This will be a storefront-to-storefront project.
STH 59/213	2008	From City Limits to USH 14	Reconstruction and resurfacing
Main Street		Intersections with Sixth, Fourth, and CTH M	Complete intersection studies to consider the need for lane improvements to accommodate turning traffic (e.g. turning lanes, traffic signals, roundabouts). Study should include turning movement counts during peak hours for analysis.
Fifth Street		Entire Corridor	Reclassify as a Collector
N. Water Street		North of USH 14	Develop as a Future Collector with access provided to USH 14
By-Pass / Alternative Access Route to USH 14		East Side of Evansville using CTH M & Territorial Road	Coordinate with the Town of Union, Rock County and WisDOT to develop a route for commuters and truck traffic to bypass the City
Park & Ride		Near USH 14 and Main Street	Develop a Park & Ride Lot that can also accommodate parking needs for the downtown and trail users.
USH 14		Corridor Study	Coordinate with the Town of Union, Rock County and WisDOT to plan for the orderly connection of public streets to the highway corridor between CTH M and Union, including the future collector (N. Water Street) and any proposed by-pass routes

TRANSPORTATION PLAN MAP

CITY OF EVANSVILLE



Summary of Existing Transportation Plans

WISDOT STATE HIGHWAY PLAN 2020

Wisconsin's State Trunk Highway system, consisting of approximately 11,800 miles of roads, is aging and deteriorating at the same time traffic is increasing. In response to this critical issue, WisDOT, in partnership with its stakeholders, has developed the *WisDOT State Highway Plan 2020*, a 21-year strategic plan which considers the highway system's current condition, analyzes future uses, assesses financial constraints and outlines strategies to address Wisconsin's preservation, traffic movement, and safety needs. The plan is updated every six years to reflect changing transportation technologies, travel demand and economic conditions in Wisconsin.

The plan indicates that USH 14 already is experiencing moderate congestion (including the segment through Evansville) and congestion will increase if improvements are not made. STH 59 and STH 213 are not expected to experience significant additional congestion. Accordingly, WisDOT has no planned expansions or major improvements to these corridors.

To implement the *WisDOT State Highway Plan 2020*, a six-year capital improvement plan is prepared by WisDOT. This plan is updated annually to identify project priorities. *WisDOT's 2003 – 2008 Highway Improvement Program* identifies the following projects in the City of Evansville. No other WisDOT improvements are planned at this time in the City of Evansville.

- Between 2005 and 2007 reconstruct a 1.28-mile stretch USH 14 between Main and Exchange Streets.
- Between 2005 and 2007, install streetscape improvements along Union and Main Streets, including decorative lighting, information kiosks, and landscaping.
- Between 2005 and 2007 resurface Madison Street. (WisDOT has delayed this project until 2008 at the request of the City).

In 2007, WisDOT also plans to reconstruct USH 14 from STH 138 (near Oregon) to STH 92 (near Brooklyn) on a new, straighter right-of-way. The roadway will be constructed as a 2-lane highway, but enough right-of-way is available for a 4-lane divided highway. Eventually the other 2-lanes will be added. These improvements will decrease commuting times between Evansville and Madison.

COMPARISON TO STATE AND REGIONAL PLANS

Generally, there is a division in jurisdiction related to transportation facilities and services (e.g., County Roads, State Highways, and City Roads). The transportation network in the City of Evansville requires coordination between these jurisdictions to work efficiently. Therefore, in developing this plan, Evansville invested a significant amount of time researching and coordinating with county, regional and state transportation plans, policies and programs. As a result, Evansville's transportation goals, policies, objectives and programs seek to compliment state and regional transportation goals, objectives, policies and programs by providing local transportation facilities and services that connect to county/regional and state facilities.

PAVEMENT SURFACE EVALUATION AND RATING (PASER)

In 2003, Evansville completed a Pavement Surface Evaluation and Rating (PASER) for all Evansville roads in accordance with WisDOT requirements. PASER is a visual inspection system to develop a condition rating for community roads. PASER is an important tool for planning because it gives a picture of road conditions on all roads and can identify candidates for maintenance and rehabilitation. Surface defects, cracking and potholes are all examined during a typical PASER evaluation. Paved roads are rated 1 – 10 based on their condition.

TABLE 15 PASER RATINGS AND MAINTENANCE NEEDS	
Paved Road Ratings	Need(s)
9 & 10	no maintenance required
7 & 8	routine maintenance, crack sealing and minor patching
5 & 6	preservative treatments (seal coating)
3 & 4	structural improvement and leveling (overlay or recycling)
1 & 2	reconstruction

Table 16 provides a summary of the PASER ratings in the City. In total, there are approximately 21 miles of roads in Evansville under the jurisdiction of the City. There are no unpaved roads in the City.

According to the PASER manual, it is recommended that communities strive to attain a rating of 7 for all roads. To achieve this goal, the City’s annual appropriation for road maintenance will have to be increased significantly.

The City Council should continue to use the PASER results (and if desired the recommendations of PASERWARE) during its annual update of the *City of Evansville Capital Improvements Plan and Budget* to effectively plan for road improvements in relation to other City spending needs.

TABLE 16 ROADWAY BY PASER RATINGS		
2003 PASER RATING	Number of Miles	% of All Roads
1	0	0
2	0	0
3	0.150	0.70%
4	1.800	8.46%
5	1.820	8.56%
6	1.570	7.38%
7	4.300	20.22%
8	6.600	31.03%
9	1.450	6.82%
10	3.578	16.82%

Source: 2003 PASER Rating System Report, City of Evansville

Transportation Issues, Concerns and Opportunities

IMPROVING MASS TRANSIT CHOICES

Evansville also has an opportunity to work with surrounding communities to utilize the Union Pacific Railroad Corridor, which extends north of Evansville into Dane County. This same line extends south of Evansville into Janesville. Currently the abandoned corridor segment, north of the City, is owned by Fitchburg and Oregon. The corridor could be developed into a regional trail route to support alternative transit (i.e. cycling). A more ambitious opportunity involves using this corridor to establish a commuter rail service utilizing the tracks that are still in place. This would also potentially leave open the possibility of using this line for freight services during non-peak travel hours. This opportunity will require a significant financial investment and marketing initiative to encourage ridership. However, given the number of daily commuters between Janesville and Madison - there is a clear opportunity for this type of commuter rail service.

There is also an opportunity to establish a park and ride, with connections to local trails, in Evansville to support commuters that want to carpool.

MAINTAINING FREIGHT SERVICE

The Union Pacific Railroad corridor is a vital part of the City's transportation network. It provides the infrastructure necessary to support several existing businesses and is one of the City's most important assets for attracting new and expanded economic development. Accordingly, freight service must remain in Evansville. Service can be further improved if efforts are successful to restart freight service to the north. This corridor would re-establish an important economic link between Evansville and Madison.

LOCAL STREET CONNECTIVITY

Because of Evansville's natural and man-made geography, there are few corridors for moving traffic from certain sectors of the City to other sectors of the City. For example, a new street around the north end of Lake Leota connecting USH 14 near the City's northern limit with CTH C near the City's northwestern limit would alleviate traffic congestion at the intersections of Main and Madison Streets and Madison and Union Streets. In addition, completing 6th Street so that it is continuous from Croft Road in the south to CTH C in the north would aid traffic flow on the developing west side. Similarly, if residential development begins along Cemetery Road, there will need to be a better street connection from Cemetery Road to USH 14 near the City's northern limit.

Evansville is a community that is bisected by state and interstate highway corridors and a railroad corridor. Lake Leota and wetlands also present development limitations. This situation results in issues of connectivity throughout the community. Of particular concern, is the fact that the road network essentially directs traffic from west-side subdivisions onto Main Street and from there onto area highways. This situation is creating a "bottleneck" of traffic downtown.

If this pattern of development continues, Evansville will become a linear community (stretching east-west with little growth to the north or south). There is a need to loop roads and develop internal connectivity to take pressures off the highways and Main Street. Development, and connecting roads on the north side of Evansville will be important in this effort.

In an attempt to address some concerns, the *Roadway System Plan* illustrates a new alternative route to connect development on the east side of the City to USH 14. Accordingly, the *Future Land Use Maps* recommend additional development on the east side of the City, as opposed to only the west side. This recommendation is based on environmental and man-made limitations (e.g. railroad) that effectively prevent the development of a north side connection route to USH 14 for residents living on the west side of the City. The final design and alignment of any new roadway would still be necessary, but this map should serve as a guide for determining where connections could be provided.

REGIONAL HIGHWAY CONNECTIVITY

As new residential development in the City and the towns of Union and Porter increase the population and population density in the area around the City, some township roads will need to be upgraded to support the traffic volumes and speeds of county highways. Truck routes may need to be redirected by switching some county highways to state highways and vice versa. In addition, new major roads may need to be created to connect areas of new development to existing highways. For example, Territorial, Bullard and Tolles Roads in the Town of Union probably will need to be upgraded. Parts of these roads could become a USH 14 bypass around the City, if the Town of Union prohibits additional residential development along them so in the future the state can obtain the necessary right of way at a reasonable price. CTH M from south of the City to USH 14 could become STH 213 or STH 59/213, which would allow the City to remove truck traffic from Madison Street. Finally, a new road linking CTH M directly to Water Street would take some of the truck traffic to and from the City's industrial area off of East Main Street.

In the Community Survey, residents were asked whether they support a bypass for USH 14 and whether they support a bypass for STH 59/213. A third question asked whether they support establishing a required truck route to concentrate truck traffic away from downtown. The responses to these three questions, taken together, suggest there is broad support for doing what needs to be done to concentrate truck traffic away from the downtown.

52% of respondents said they strongly support or support a bypass for USH 14, while 48% said they oppose or strong oppose such a bypass. However, 75% of respondents said they strongly support or support a required truck route to concentrate truck traffic away from the downtown, and only 7% of respondents indicated they oppose or strongly oppose a required truck route (the other 17% said they neither support nor oppose a required truck route). The survey instrument did not inform respondents that because USH 14 is a federal highway, the City lacks authority to divert trucks off of the highway, so a bypass is the only way to divert trucks off of Union Street and the part of East Main Street that is USH 14. Of the respondents who indicated they oppose a USH 14 bypass, 55% indicated they strongly support or support a required truck route, and only 9% indicated they oppose or strongly oppose a required truck route (24% indicated they neither support nor oppose a required truck route). Even among the respondents who indicated they strongly oppose a USH 14 bypass, 45% indicated they strongly support or support a required truck route, and only 15% indicated they oppose or strongly oppose a required truck route (39% indicated they neither support nor oppose a required truck route).

34% of respondents said they strongly support or support a bypass for STH 59/213, while 66% said they oppose or strong oppose such a bypass. As discussed above, a sizable majority of respondents indicated strong support for a required truck route to concentrate truck traffic away

from the downtown. The survey instrument did not inform respondents that because STH 59/213 is a state highway, the City lacks authority to divert trucks off of the highway, so a bypass is the only way to divert trucks off of Madison Street. Of the respondents who indicated they oppose a STH 59/213 bypass, 72% indicated they strongly support or support a required truck route, and only 9% indicated they oppose or strongly oppose a required truck route (19% indicated they neither support nor oppose a required truck route). Even among the respondents who indicated they strongly oppose a STH 59/213 bypass, 52% indicated they strongly support or support a required truck route, and only 17% indicated they oppose or strongly oppose a required truck route (31% indicated they neither support nor oppose a required truck route).

Given the broad public support for establishing a required truck route to concentrate truck traffic away from downtown, the City should ask its state legislators to work to have bypasses of USH 14 and STH 59/213 around Evansville added to the list of bypasses to be studied by the state Department of Transportation. The process of adding a bypass to this study list, waiting for the study to start, completing the study, waiting for the project to be funded in some future year or years, waiting for the scheduled start date to arrive (after inevitable delays), and constructing the project can take 20 years or more. Furthermore, the City should consider undertaking some of the study work itself to speed up the process.

The growth in population in the City of Evansville and in nearby municipalities such as the City of Stoughton is resulting in increased traffic between these communities. The Town of Porter has urged WisDOT to keep STH 138 from Cooksville (where it intersects with STH 59) to Stoughton as a state highway, and the City of Evansville supports the Town of Porter on this issue. The Town of Porter also has requested that WisDOT convert North Tolles Road from Cooksville to USH 14 into an extension of STH 138, and the City of Evansville also supports that request. As discussed above, the City of Evansville believes that the south end of North Tolles Road might become part of a USH 14 bypass around Evansville, so a possible intersection between an extended STH 138 and a USH 14 bypass should be included in any planning for either project. Planning for a possible intersection between these highways and a possible STH 59/213 bypass east of Evansville also should be considered.

TRANSPORTATION FOR SENIORS

American society is getting older. People are living longer, couples are waiting longer to have children, couples are having fewer children, and the baby boomers (persons born between 1940 – 1955) are reaching retirement age. These factors are responsible for the phenomenon known as the “graying of America”. It is unlikely that Evansville will escape from this trend over the long term. As residents age, they will need access to transportation to get to shopping, medical care, and other services.

The “graying of America” demonstrates a growing market for private transportation ventures. City residents expressed a limited availability of transportation choices for seniors as a concern at the on-set of the planning process. Evansville and Rock County provide funding for Twin Care, a senior transportation service within the City, and Rock County sends transport vans to Evansville.

Additional transportation for seniors will require investment of private organizations (e.g., churches, senior housing providers, entrepreneurs), as well as the efforts of volunteer networks. The City of Evansville supports the efforts of these groups and individuals to meet senior transportation needs.

SIDEWALK CONNECTIONS

The many highways that traverse the community have traffic volumes that present a challenge to pedestrians and cyclists. Evansville has a designated walking tour, complete with a printed guide, of the historic district. As Evansville continues to grow, considerations for safe pedestrian access to local amenities must be considered. During this planning process, concerns were raised that sidewalk connections are not continuous throughout Evansville. Specific examples cited include:

- No sidewalks are provided on USH 14 going to and from Piggly Wiggly, McDonalds and Stoughton Trailers.¹
- A general lack of sidewalks on the southeast side of the City.

To remedy this situation, the inventory provided in the City's *Sidewalk Plan* should be updated to include a more current list of sidewalks that are in disrepair or areas where sidewalk is not currently provided but needed. The City should also consider the need for wider sidewalks (e.g., 6' or 8' wide) to be installed along collectors, arterials and other popular areas where walkers and cyclists share sidewalks. In addition, the City should consider striping bike lanes on streets where bicycles and pedestrians share sidewalks and there is low demand for parking on the street (since on-street bike lanes usually require removing parking), or where the street is wide enough to accommodate parking, bicycle lanes, and traffic lanes. These improvements will become increasingly important as development continues on the outer fringes of the community.

Evansville does not currently have a sidewalk maintenance program. While sidewalk installation is important, maintenance is just as important. Currently, sidewalks in disrepair are maintained based on complaint. A more comprehensive process is needed to determine sidewalk installation and maintenance priorities.

MULTI-USE TRAIL DEVELOPMENT

As described elsewhere in this chapter, trail development is a priority. In fact, 56% of residents indicated in the community survey support for the City using local tax dollars for walking and bicycle trails through and around the City. Trails are needed to complement sidewalks because:

- Sidewalk connections do not cover all areas of Evansville.
- Sidewalks are situated, for the most part, along streets and roads. In contrast, trails may be located adjacent to natural areas. As a result, trails provide a more scenic and peaceful recreation environment.
- Sidewalk connections are not as direct as trail connections in some areas, particularly to gain access to regional parks.
- Sidewalks end at the City Limits. Cyclist and pedestrians need trails to continue through the region.
- Sidewalks on S. 5th Street do not extend all the way to the high school.

WHAT IS A MULTI-USE TRAIL?

Multi-use trails are designated routes for pedestrians, bicyclists and roller bladers.

Ideally, trails are located in off-road locations, but trails may be located within the right-of-way (e.g. sidewalks and on-road striped bike lanes). The Freedom Trail in Boston, MA is an example of a historic trail route located almost entirely on sidewalks. Similarly, bicycle routes are a form of trails which pass through a community.

¹ This issue will be addressed as part of the USH 14 project in 2005.

SAFETY

During the planning process residents raised some concerns with respect to safety.

- The fact that the intersection of USH 14 and CTH M is uncontrolled and with no additional turning lanes²
- Pedestrian crossings of USH 14³
- Traffic congestion downtown
- Parking on school grounds during athletic events

To begin to address these concerns, this plan recommends sidewalk improvements, the establishment of local and regional trails, the creation of additional corridors to support east-west traffic flow to USH 14, installation of necessary safety improvements, and the potential establishment of a regional commuter rail system to help reduce traffic volumes.

The state should improve USH 14 from the intersection with STH 92 (Brooklyn Corners) to Evansville. Many traffic fatalities have occurred along this stretch of highway, and more may occur as the population in and around Evansville increases, unless the highway is improved. USH 14 from Oregon to Evansville has many curves. The state plans to reconstruct USH 14 on a new, less curvy right of way from Oregon to Brooklyn Corners. The state should do the same from Brooklyn Corners to Evansville. In the meantime, the state should construct drive-by lanes to allow traffic to safely go around vehicles waiting to turn left from USH 14 onto intersecting roads such as West Holt Road, Union Road, West Butts Corner Road, West Green Bay Road, and West Elmer Road

TRANSPORTATION BUDGETING

Another long-standing transportation issue in Evansville is the ever-present concern of road maintenance and improvement costs. These present a major expense and can consume a large share of the limited City budget. The City has a capital improvements plan and budget to help effectively anticipate transportation costs over time. It is strongly recommended that the City continue to use this tool during the life of the plan and beyond.

Another option the City may want to investigate to finance transportation improvements is a transportation utility. A transportation utility is similar in concept to a stormwater utility, but deals specifically with transportation infrastructure. That includes design, construction and reconstruction, operation and maintenance of streets, sidewalks, street lighting, signalization and signage in rights-of-way. These are all on-going activities that Evansville currently pays for with special assessments for new street construction, limited state and federal aids and general revenue from local property taxes. The transportation utility raises revenue by charging all property owners based on the amount of traffic their property generates.

RESIDENTS OFFER OPINIONS ABOUT TRAFFIC AND SAFETY

In the community survey, residents are concerned about increased amount of traffic in Evansville.

- 28% were very concerned
- 29% were concerned
- 33% were not concerned

71% of respondents favor adding stop lights at the busiest intersections in the City. 75% support the establishment of a required truck route to concentrate truck traffic away from the downtown.

² Per WisDOT, traffic light to be added in 2005 with planned USH 14 improvements.

³ This issue may be addressed as part of the USH 14 project in 2005.

TRANSPORTATION IMPROVEMENTS

During the development of this plan (as well as the last Evansville plan) transportation improvements were listed as a priority.

- Designating a commercial truck route
- Main Street is congested from development west of Fifth Street and the increase in classroom capacity on the Evansville Community School District's Grove Campus, including the construction of the new high school on the campus.
- The City needs to consider an alternative route for Main Street to accommodate traffic from the west
- The Union Street and Main Street intersection is a bottleneck⁴
- Sidewalk and street repair is needed on Main Street
- The City should consider the traffic impact of each new residential subdivision on nearby streets and highways, and if necessary require the developer to take action to mitigate this impact, during the subdivision approval process.
- Encourage new condominiums and apartments to be located near stores, so empty nesters and the elderly can walk to shopping instead of driving or paying someone else to drive them.

Ideas to address these concerns are reflected on the *Roadway System Plan* as well as in the Goals, Objectives and Policies of this element. With the last two bulleted items listed above, the local solutions are addressed on the *Future Land Use Maps*.

EVANSVILLE AS A WALKABLE COMMUNITY⁵

The City of Evansville is fortunate to have the basic elements of a walkable community (see definition in box). Furthermore, *Evansville Trailways Plan* seeks to enhance the City's "walkability" by providing sidewalks and trail connections to schools, parks and shopping areas. Moreover, this plan includes a ring trail around the community. The City can further improve its "walkability" through the following actions:

1. **Revitalization of the downtown**, to improve its design, mix of businesses, and the provision of housing in and adjacent to the downtown.
2. **Maintaining the City's network of neighborhood parks, open spaces and schools.** This effort must include a commitment to continuing to provide these spaces in new neighborhoods and access to existing facilities via trails and sidewalks. New school facilities should be integrated into the community to maintain a compact design whereby at least 40% of the children attending a school can access it by walking or biking.

What is a Walkable Community?

Walkable communities are desirable places to live, work, learn, worship and play, and therefore a key component of smart growth. Their desirability comes from two factors. First, walkable communities locate goods (such as housing, offices, and retail) and services (such as transportation, schools, libraries) that a community resident or employee needs on a regular basis within an easy and safe walk. Second, by definition, walkable communities make pedestrian activity possible, thus expanding transportation options, and creating a streetscape that better serves a range of users -- pedestrians, bicyclists, transit riders, and automobiles.

SOURCE: Smart Growth Network, 2004.
Available on-line at www.smartgrowth.org

⁴ This intersection will be improved as part of the USH 14 project in 2005, but the intersections of Main Street/Madison Street and Union Street/Madison Street also are bottlenecks that need to be addressed.

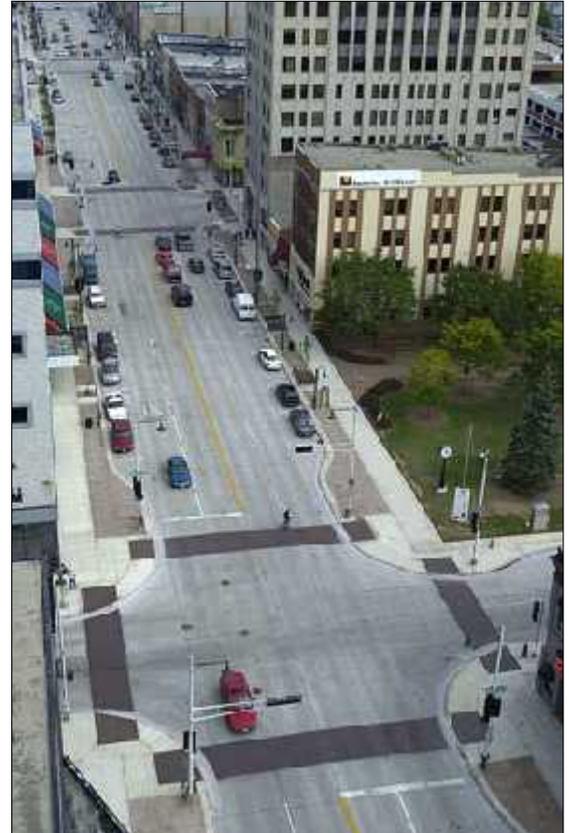
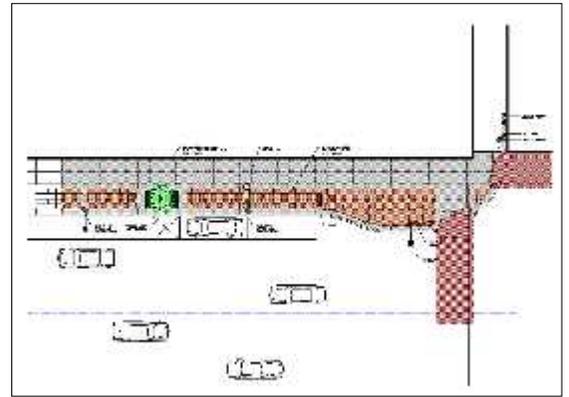
⁵ Based on the information available from Walkable Communities, Inc., as prepared by Dan Burden, a nationally recognized authority on bicycle and pedestrian facilities and programs.

3. **Providing many linkages to neighborhoods (including sidewalks, trails, and roadways).** People need to have choices for traveling. From the perspective of providing connectivity, well-maintained sidewalks are critical on both sides of arterial and collector roadways. Ideally, sidewalks would also be provided on both sides of most neighborhood streets (Current City policy requires a sidewalk on the north and east sides of new streets, unless the street is designated as a major street – then sidewalks are required on both sides.⁶). Bike lanes should be provided to traverse the community (refer to the *Roadway System Plan Map* for recommended routes). Curbs must be improved to provide good Americans with Disability Act (ADA) access to and from each block in all directions.

4. **Designing at a scale to allow residents to walk to local destinations** (i.e. schools, shopping, parks). Walkable communities are designed so most residents have the choice of walking (¼ to ½ mile) to arrive at a community destination (i.e. shopping, schools, parks). In Evansville, as the City has experienced growth in a linear fashion (east-west) walkability has been impaired. Residents living at the outer limits of the community are challenged to walk to destinations within the community. Accordingly, they often prefer to drive. To address this issue, infill development must occur.

5. **Continuing to enforce low speed streets (in downtown and neighborhoods - 15-25 mph common).** To promote a walkable community, motorists must obey speed limits in all areas, but particularly in the downtown, near schools, historic neighborhoods, parks and other public areas, yielding to pedestrians.

6. **Providing convenient, safe and easy street crossings.** Successful downtowns have frequent, convenient, well-designed street crossings. Pedestrians using these areas rarely have to walk more than 150 feet from their direct lines-of-travel to reach crossings. People crossing at intersections, whether signalized or not, rarely wait more than 30 seconds to start their crossings.



The diagram above is a plan for a bump out at a street intersection. Rather than having street corners intersect at a right angle, a bump out creates a widened circular area at the intersections which decreases the width of street a pedestrian has to cross. The photo above illustrates an intersection with bump outs and colored concrete walkways.

⁶ The Community Survey included a question (#18) regarding the City’s current sidewalk policy. Half of the respondents support requiring sidewalks on both sides of the street. 44% of respondents support keeping the current City sidewalk policy in effect.

The primary challenge in Evansville is not traffic speed, but rather the volume of traffic along USH 14, Main Street, and STH 59/213. These high traffic volumes can be intimidating to pedestrians. Improved crossings (i.e. bump outs to reduce pedestrian crossing width, mid-street crossing downtown (away from the traffic on USH 14 and STH 59/213), and surface treatments (i.e. colored/stamped concrete to clearly demarcate crossing locations, lighting, and paint striping) can help to address these issues.

7. **Providing inspiring and well-maintained public streets.** Streets in a walkable community are attractive, balanced, colorful, with sidewalks, planter strips, and handle a diversity of needs. Many streets allow on street parking and larger volume streets often include bike lanes. Homes and buildings are brought forward, relating to the street. These amenities and design elements provide an attractive, inviting place for walking. Evansville's street and sidewalk maintenance budget will need to be increased to achieve the street maintenance necessary to achieve these goals.
8. **Land use and transportation are integrated.** In walkable communities, residents understand and support compact development, urban infill, integral placement of mixed-use buildings, and mixed income neighborhoods. People understand that small, local stores help create community as well as convenience. Residents desire and find ways to include affordable homes in most neighborhoods. All residents feel they have choice of travel modes to most destinations. Most people live within walking distance - 1/2 mile (with the majority within 1/4 mile) - of 40% of the services and products they need on daily or weekly basis. These services include small grocery, pharmacy, hardware, bank, day care, dry cleaning, post office and other essential services.

During the public workshops held on January 15, 2004, many Evansville residents, business owners and other community stakeholders expressed support for these principles. Specifically, they supported notions of compact development, improved local business choices to meet basic needs, and mixed use neighborhoods.

Coordination with Other Required Plan Elements

ISSUES AND OPPORTUNITIES

The Issues and Opportunities Element establishes the framework for planning – the overall future vision – the ideal from which this plan has been developed. That vision will impact the way Evansville considers and approves changes to the transportation network. It will also guide Evansville's participation in activities sponsored by WisDOT and Rock County. To realize the vision, and support the transportation vision presented in this chapter, Evansville will seek to maintain its quality roads and expand pedestrian amenities, including trails.

HOUSING ELEMENT

Evansville has a history requiring subdivision streets be built to minimum standards and requiring developers to comply with local requirements. These controls, as well as Evansville's commitment to sidewalk development, are important to the success of the transportation network and the local quality of living. Providing well-connected residential areas, including trails and sidewalks, invites people to move into and through the community.

AGRICULTURAL, NATURAL AND CULTURAL RESOURCES

Evansville has abundant areas of wetlands and floodplains, as well as, man-made park facilities. These amenities contribute to the character of the community and quality of living. To provide access to these areas and to enhance enjoyment for residents, trail development is encouraged in this chapter. Evansville also has a guided walking tour of the historic district. Sidewalks must be well maintained to accommodate the walking tour.

UTILITIES AND COMMUNITY FACILITIES

There is a close relationship between the Transportation Element and the Utilities and Community Facilities Element. This may be due to the fact that transportation facilities are one type of community facility. For instance, in this chapter, local trails and sidewalks are encouraged. Likewise, the location of trail routes should be coordinated with utility easements and recreational amenities identified in the Utilities and Community Facilities Element. Additionally, stormwater management policies and practices are profiled in the Utilities and Community Facilities Element. Roads and other hard-surface transportation improvements (e.g., sidewalks, parking areas, etc.) have the potential to impact stormwater runoff. These examples illustrate the close relationship between these two elements. As a result, it was necessary to coordinate the development of these two elements repeatedly to ensure compatibility.

ECONOMIC DEVELOPMENT

Providing a quality transportation system is important to the success of any business. This is especially true as it relates to quality rail and highway access – two of Evansville’s most important resources for attracting economic development.

Just as businesses need good access, employees also want to be able to efficiently access their places of employment. Lack of access to employment opportunities may affect individual decisions to seek employment or live in a community. In the City of Evansville, these issues were carefully considered, particularly with respect to the location of new commercial and industrial development. The local solutions to these issues are reflected on the *Future Land Use Maps*.

Rock County has identified the STH 59/213 corridor from Evansville, through Orfordville, to Beloit as a scenic drive. This corridor presents an opportunity to promote tourism between Beloit and Evansville. Visitors along the route have the opportunity to drive to Evansville and take advantage of its restaurants, parks, and other amenities. The community is not capitalizing on the opportunity at this time.

Similarly, the establishment of regional trails, particularly a bicycle trail on the old rail bed between Evansville and Beloit is another potential tourist opportunity. Such a trail would not only improve local recreational choices, but would also generate economic spin-off effects for local businesses with tourist use of the trail. Likewise, a walking trail could be established to link new commercial development along the west side of Union Street and the downtown. Shops on the west side of Union Street could have two storefronts: one facing Union Street and the other facing the walking path along the railroad tracks. The shops on the west side of Union Street could pull drivers off USH 14 and the walking trail could direct them to the downtown to do more shopping and eat at local restaurants.

LAND USE

While transportation improvements generally respond to changes in land use, they also have the potential to directly and indirectly affect land development either by inducing new development or altering the pattern of existing development. However, land use changes are dependent on other factors as well. These include local plans, zoning, taxation, and the provision of public services.

What steps will be taken to ensure that transportation decisions and land use decisions are compatible? Although transportation is not the only influence on land use, it is important to be aware that decisions regarding the transportation system may impact land use both directly and indirectly. Direct impacts that are caused by the construction of a new transportation facility, changes to an existing facility, and/or decision to change traffic patterns along a facility. These may result in positive or negative impacts. Efforts were made to plan accordingly for land uses along the highways. The result of these efforts is reflected on the *Future Land Use Maps*.

The Land Use Element also addresses the concept of the effect of transportation facilities on the aesthetics of Evansville. Aesthetics refer to the “appearance and character” of an area. Generally speaking, beyond meeting the traffic demand and structural requirements, a road should reflect the aesthetics of an area. For Evansville the aesthetic character varies significantly from one area to the next. The historic downtown has a much different character than the developing state highway corridors.

INTERGOVERNMENTAL COOPERATION

The transportation network in Evansville consists of many elements that are not controlled locally. For example, county trunk highways, state highways, and air transportation choices are all provided by other agencies and organizations. To ensure that transportation choices remain, Evansville will continue to coordinate with these agencies and organizations. Coordination will help ensure that transportation improvements and maintenance is well planned and timely. The City should consider supporting any requests by the nearby townships for state or county funding to upgrade township roads, such as Territorial, Bullard and Tolles Roads, that are carrying heavier traffic volumes due to residential development in the townships and the City.

IMPLEMENTATION

By using a capital improvements plan and budget, the costs of transportation improvements identified in this chapter can be addressed. The City’s *Capital Improvements Plan* can be further improved by not only listing expenditures, but also grant and low interest loan opportunities that may exist to fund needed improvements. Another opportunity that can also be pursued to finance maintenance of the transportation network is a transportation utility.

Transportation Goals, Objectives and Policies

The goals provided in Chapter 12 are related to actions that Evansville can control. Evansville will work, in accordance with the Intergovernmental Cooperation Element of the Wisconsin “Smart Growth” Law, with Rock County and WisDOT to ensure that adequate community transportation facilities are available to serve the area. Supporting transportation policies are provided below.

TRANSPORTATION POLICIES

To the fullest extent feasible, obtain transportation improvement funds (e.g., acceleration lanes, etc.) needed to safely accommodate new development directly from developers.

Provide a broad range of transportation choices, including quality roads, highways, sidewalks and trails to meet the diverse needs of residents.

Require sidewalks and/or bicycle paths be installed with all new development.

Support private transportation providers that serve the elderly.

Provide a transportation network that will strengthen access between interdependent land uses such as commercial, industrial, residential, and recreational yet, keep the majority of traffic on arterial and collector streets.

Improve connections between developments by encouraging grid-like street patterns as opposed to multiple cul-de-sacs and dead end roads.

Discourage the development of roadways in environmentally sensitive areas such as wetlands, floodplains, prime agricultural lands, scientific areas, and on soils with severe engineering limitations.

Discourage unnecessary improvements or construction of a road network that will necessitate the destruction or removal of historically significant buildings, structures, or sites.

Schedule street improvements according to the analysis of existing physical street conditions and accompanying economic considerations.

To protect the viability of the Union Pacific Rail Line through the City and support efforts to reopen the line north of the City.

Install handicapped ramps at street intersections when curbs are being replaced.

Communicate and coordinate transportation improvements and plans with WisDOT and the Rock County Highway Department at any opportunity presented.

Use the maps and topics discussed in this Comprehensive Plan as a guide for considering improvements along the corridor.

Continue to support the efforts of law enforcement officials to achieve heightened enforcement for required stops and speed limits, particularly along USH 14.

Budget Year	Principal	Est. Rate*	Interest	Total	Estimated Equalized Value (TID OUT)	Estimated Equalized Tax Rate	Annual Cost for \$150,000 Home**
2015	230,000	0.60%	146,963	376,963	309,075,700	\$1.22	\$182.95
2016	230,000	0.75%	145,583	375,583	312,166,457	\$1.20	\$180.47
2017	235,000	0.85%	143,858	378,858	315,288,122	\$1.20	\$180.24
2018	235,000	1.10%	141,860	376,860	318,441,003	\$1.18	\$177.52
2019	235,000	1.40%	139,275	374,275	321,625,413	\$1.16	\$174.55
2020	240,000	1.70%	135,985	375,985	324,841,667	\$1.16	\$173.62
2021	245,000	2.00%	131,905	376,905	328,090,084	\$1.15	\$172.32
2022	250,000	2.15%	127,005	377,005	331,370,984	\$1.14	\$170.66
2023	255,000	2.30%	121,630	376,630	334,684,694	\$1.13	\$168.80
2024	260,000	2.45%	115,765	375,765	338,031,541	\$1.11	\$166.74
2025	265,000	2.60%	109,395	374,395	341,411,857	\$1.10	\$164.49
2026	275,000	2.80%	102,505	377,505	344,825,975	\$1.09	\$164.22
2027	280,000	3.00%	94,805	374,805	348,274,235	\$1.08	\$161.43
2028	290,000	3.50%	86,405	376,405	351,756,977	\$1.07	\$160.51
2029	300,000	3.60%	76,255	376,255	355,274,547	\$1.06	\$158.86
2030	310,000	3.70%	65,455	375,455	358,827,293	\$1.05	\$156.95
2031	320,000	3.80%	53,985	373,985	362,415,565	\$1.03	\$154.79
2032	335,000	3.90%	41,825	376,825	366,039,721	\$1.03	\$154.42
2033	350,000	4.00%	28,760	378,760	369,700,118	\$1.02	\$153.68
2034	360,000	4.10%	14,760	374,760	373,397,120	\$1.00	\$150.55
TOTAL	5,500,000		2,023,978	7,523,978			\$3,327.75

*Rates based on "A+" Sale of 8/12/2014

** Cost for a home valued at \$150,000 if no other revenue is available to pay debt service.



The Secrets of Successful Communities

by [Edward T. McMahon](#)

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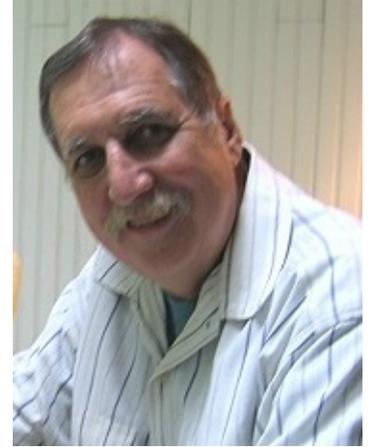
1. Have a vision for the future
2. Inventory community assets
3. Use education and incentives, not just regulation
4. Pick and choose among development projects
5. Cooperate with neighbors for mutual benefit
6. Pay attention to community aesthetics
7. Have strong leaders and committed citizens

Other articles by Edward McMahon published in the [Planning Commissioners Journal](#) and available on [PlannersWeb.com](#)

[The End of the Strip?](#)

[Billboards: The Case for Control](#)

Editor's Note: Ed McMahon is one of the country's most incisive analysts of planning and land use issues and trends. He holds the Charles Fraser Chair on Sustainable Development and is a [Senior Resident Fellow at the Urban Land Institute](#) in Washington, DC. McMahon is a frequent speaker at conferences on planning and land development. Over the past 21 years, we've been pleased to have published [more than two dozen articles by McMahon](#) in the [Planning Commissioners Journal](#), and now on [PlannersWeb.com](#).



There are over 25,000 incorporated communities in America. How many of these are truly successful?

How is it that some small towns and rust belt cities are prospering, while many others are suffering disinvestment, loss of identity, and even abandonment?

Why are some communities able to maintain their historic character and quality of life in the face of a rapidly changing world, while others have lost the very features that once gave them distinction and appeal?

How can communities, both big and small, grow without losing their heart and soul?

From coast to coast, communities are struggling to answer these questions. After working in hundreds of communities in all regions of the country, I have come to some conclusions about why some communities succeed and others fail. There are many communities that have found ways to retain their small town values, historic character, scenic beauty and sense of community, yet sustain a prosperous economy. And they've done it without accepting the kind of cookie-cutter development that has turned many communities into faceless places that young people flee, tourists avoid and which no longer instill a sense of pride in residents.

Every "successful" community has its own strengths and weaknesses, but they all share some common characteristics. It's clear for instance that successful communities involve a broad cross-section of residents in determining and

The Place Making
Dividend

Density Without High-
Rises?

What's So Bad About
Zoning?

Building Codes Get
Smarter

Barriers to Better
Development

Public Buildings Should
Set the Standard

Road Design: A Turn
Ahead

School Sprawl

Green Infrastructure

Making a "Visible"
Difference

Why is Everybody So
Mad About
Development?

Gateway Communities

Smart Growth Trends

All Development Is Not
Created Equal

Bicyclists and
Pedestrians Belong!

Tourism and the
Environment: What's the
Connection?

Stopping Sprawl by
Growing Smarter

On-Premise Sign
Regulation

Environmentally
Sensitive Development

planning the future. They also capitalize on their distinctive assets — their architecture, history, natural surroundings, and home grown businesses — rather than trying to adopt a new and different identity.



Sometimes a community's assets are obvious, like in Annapolis, Maryland (above). Sometimes they are not obvious. In the 1970's Lowell, Massachusetts was dying industrial city. It had an unemployment rate of 25%. It thought it had no assets. But it had abandoned textile mills. Today almost all of these mills — such as the one shown below — have been restored and repurposed. (Note: all photos in article by Ed McMahon unless otherwise noted)



Historic Districts and
Property Values

Green Enhances Growth

Fast-Food Restaurant
Design

Most successful communities also utilize a variety of private-sector and market incentives to influence their development, instead of relying solely on government regulations.

Not every, successful community displays all of the following characteristics, but most have made use of at least three or four:

1. Have a vision for the future
 2. Inventory community assets
 3. Use education and incentives, not just regulation
 4. Pick and choose among development projects
 5. Cooperate with neighbors for mutual benefit
 6. Pay attention to community aesthetics
 7. Have strong leaders and committed citizens
-

1. Have a Vision for the Future

Successful communities always have a plan for the future. Unfortunately, “planning” is a dirty word in some communities, especially in small towns and rural areas. In some places, this is the result of today’s highly polarized political culture. In other places, it results from a misunderstanding of planning and its value.

The truth is, failing to plan, simply means planning to fail. It is difficult to name any successful individual, organization, corporation or community that doesn’t plan for the future.

Try to imagine a company that didn’t have a business plan. It would have a very hard time attracting investors or staying competitive in the marketplace. The same is true of communities. A community plan is simply a blueprint for the future. People may differ on how to achieve the community’s vision, but without a blueprint, a community will flounder.

Understandably, people in small towns don’t like change. But change is inevitable.

Technology, the economy, demographics, population growth, market trends and consumer attitudes are always changing and they will affect a community whether people like



it or not. There are really only two kinds of change in the world today: planned change and unplanned change.

A community without a plan for the future is simply planning to fail.

Communities can grow by choice or chance. Abraham Lincoln used to say that “the best way to predict the future is to create it yourself.” Communities with a vision for the future will always be more successful than communities that just accept whatever comes along.

2. Inventory Community Assets

Creating a vision for the future begins by inventorying a community’s assets: natural, architectural, human, educational, economic, and so on.

Twenty-first century economic development focuses on what a community has, rather than what it doesn’t have. Too many cities and towns spend all their time and money on business recruitment. They build an industrial park out by the airport and then they try like crazy to attract a plant, factory or distribution center to move there. The few communities that are “successful” at this strategy usually accomplish it by giving away the store.

The old economic development paradigm was about cheap land, cheap gas and cheap labor. It was about shotgun recruitment and low cost positioning. In the old economy, the most important infrastructure investment was roads. Today, successful economic development is about laser recruitment and high value positioning. Today highly trained talent is more important than cheap labor and investing in education is far more valuable than widening the highway.

American communities are littered with projects that were sold as a “silver bullet” solution to a city’s economic woes: the New Jersey State Aquarium in Camden, New Jersey; Vision Land Amusement Park in Birmingham, Alabama; the Galleria Mall in Worcester, Massachusetts; the Winter Garden in Niagara Falls, New York — to name just a few.

Too many communities think that economic revival is about the one big thing. Whether it is a convention center, a casino, a festival marketplace, a sports arena, or an aquarium, city after city has followed the copycat logic of competition. If your city has a big convention center, my city needs an even bigger one. Festival marketplaces worked fine in cities like Boston and Baltimore, but similar projects went bankrupt in Toledo, Richmond, and a dozen other communities.

Successful economic development is rarely about the one big thing. More likely, it is about lots of little things working synergistically together in a plan that makes sense. In her award winning book –*The Living City* – author, Roberta Brandes Gratz says that “successful cities think small in a big way.”

Two examples of this are Silver Spring, Maryland and Cleveland, Ohio. Cleveland had an aging, undersized convention center. Civic boosters argued for a huge new convention center that could compete with much bigger cities like Chicago, Atlanta, or Minneapolis. But small cities like Cleveland will never win in an arms race to build the biggest convention center. Instead Cleveland took a look at its assets, one of which is the Cleveland Clinic — a world renowned medical center located a short distance from downtown. Instead of trying to compete with every other convention city, Cleveland decided to build a smaller, less expensive meeting facility — the Cleveland Medical Mart and Global Center for Health Innovation – focused on medical conventions and which would have an attached medical mart, affiliated with the Cleveland Clinic.



Cleveland’s Global Center for Health Innovation — the white building with the black striping — is located in the heart of downtown, next to the city’s War Memorial Fountain.
Photo by Erik Drost; Flickr Creative Commons License.

Another example of asset based economic development is Silver Spring, Maryland. For many years, Silver Spring was among the largest suburban commercial centers in the Mid-Atlantic region. But, by the early 1990’s Silver Spring had fallen on hard times. In 1996, a story in the *Economist* said “You can see America wilting in downtown Silver Spring. Old office blocks stand empty. A grand art deco theater is frequented only by ghosts. Glitzy department stores have decamped to out-of-town shopping malls. Tattoo parlors, pawnbrokers and discounters remain.”

To combat this decline, local officials and an out of town developer proposed to build a second Mall of America (like the one in Bloomington, Minnesota). The proposed mega-mall would have 800 stores and it would cover 27 acres. The projected cost was \$800 million and it would require a \$200 million public subsidy. It would also mean the demolition of most of downtown Silver Spring's existing buildings.

So what happened? The county rejected the massive American Dream Mall and set their sights on a succession of more modest developments. First, they realized that despite its decline, Silver Spring had some important assets that were probably more valuable than a giant mega-mall. First, Silver Spring was adjacent to Washington, DC, the nation's capital. Second it was served by transit (i.e. the Washington Metro system), and third it was surrounded by stable middle-class neighborhoods.

Rather than spending \$200 million subsidizing a giant mall, county and state officials collaborated to find a site for the new headquarters for the Discovery Communications Corp, which was then housed in several different locations around the Washington area.



Shark Week. A massive inflatable Great White Shark in 5 pieces adorns the Discovery Channel HQ building in Silver Spring, Maryland. Photo by Glyn Lowe Photoworks; Flickr Creative Commons license.

The site where Discovery Communications decided to build their new headquarters was adjacent to the Silver Spring Metro Station. Bringing 1500 employees to downtown Silver Spring was a huge boost to the community, but what really synergized the renewal was Discovery Corp's agreement not to build a cafeteria in their new headquarters building. This meant employees would have to patronize local restaurants.

3. Use Education and Incentives, Not Just Regulation

Successful communities use education, incentives, partnerships, and voluntary initiatives not just regulation. To be sure, land use regulations and ordinances are essential to protecting public health and to setting minimum standards of conduct in a community.

Regulations prevent the worst in development, but they rarely bring out the best. Regulations are also subject to shifting political winds. Often one county commission or town council will enact tough regulations only to see them repealed or weakened by a future town council or commission with a different ideology or viewpoint.

If regulations aren't the entire answer, how can a community encourage new development that is in harmony with local aspirations and values?

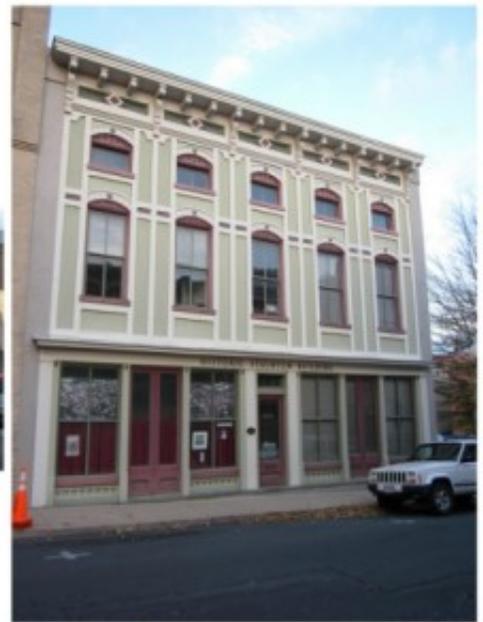
Communities need to use carrots, not just sticks. They also need to use education, partnerships, and voluntary initiatives. Successful communities have identified a variety of creative ways to influence the development process outside of the regulatory process. Some of the incentives they use include: conservation easements; purchase of development rights; expedited permit review; tax abatements that promote the rehabilitation of historic buildings; award and recognition programs; density bonuses for saving open space; and other techniques.

In Staunton, Virginia the Historic Staunton Foundation offered free design assistance to any downtown business owner who would restore the façade of their building. They did this after the city council had rejected a measure to create an historic district in downtown Staunton. At first, only one business owner took advantage of the incentive, but then a second business owner restored his building facade, and then a third, and then many more. Today, there are five historic districts in Staunton including the entire downtown, but it all began with an incentive.



Staunton, Virginia

photos by Doug Kerr.
Flickr creative commons license.



Editor's note: Ed McMahon also mentions the Historic Staunton Foundation (HSF). According to a [quite interesting article](#) by Logan Ward in Preservation magazine (January/February 2012):

Year after year [since its formation in 1971 following the demolition of dozens of historic buildings], HSF documented the amount of money invested in preservation and its positive economic effects. City council members and city managers eventually got on board. "Before that, you had nobody doing anything for 10 years except talking about demolition," says [Bill] Frazier [who became executive director of HSF in 1976]. "It was a big shift in the city's consciousness. ... Staunton has completely turned itself around. Restaurants, shops, and live music venues line the small grid of downtown streets. ... In the city's five distinct historic districts, property values have climbed by 279 percent on average since 1983. Since 2000 alone, more than \$50 million in private investment on historic tax-credit projects — from single-family homes to mixed-use commercial projects — has poured into the city.

Successful communities also use education to encourage voluntary action by citizens. **Why do cities and towns need to use education?** Because, education reduces the need for regulation. Also, because people and businesses will not embrace what they don't understand. Finally, community education is important because, citizens have a right to choose the future, but they need to know what the choices are.

4. Pick and Choose Among Development Projects

All development is not created equal. Some development projects will make a community a better place to live, work, and visit. Other development projects will not.

The biggest impediment to better development in many communities is a fear of saying "no" to anything. In my experience, communities that will not say no to anything will get the worst of everything.

The proof is everywhere, communities that set low standards or no standards will compete to the bottom. On the other hand, communities that set high standards will compete to the top. This is because they know that if they say no to bad development they will always get better development in its place.

Too many elected officials have an "it'll do" attitude toward new development. Worse yet, they'll accept anything that comes down the pike, even if the proposed project is completely at odds with the community's well thought out vision for the future. They are simply afraid to place any demands on a developer for fear that the developer will walk away if the community asks for too much. This is especially true when dealing with out of town developers or with national chain stores and franchises.

The bottom line for most developers, especially chain stores and franchises, is securing access to profitable trade areas. They evaluate locations based on their economic potential. If they are asked to address local design, historic preservation, site planning or architectural concerns they will usually do so. Bob Gibbs, one of America's leading development consultants says that "when a chain store developer comes to town they generally have three designs (A, B, or C) ranging from Anywhere USA to Unique (sensitive to local character).



The McDonald's design we're all familiar with. Most would agree that Asheville, North Carolina, did better with its McDonald's, seen below.



Which one gets built depends heavily upon how much push back the company gets from local residents and officials about design and its importance.”

One community that has asked chain stores and franchises to fit-in is Davidson, North Carolina. Chain drugstores, like CVS, Rite Aid, and Walgreens are proliferating across the country. They like to build featureless, single-story buildings on downtown corners, usually surrounded by parking — often after one or more historic buildings have been demolished. This is what CVS proposed in Davidson.

The town could have easily accepted the cookie cutter design (Plan A), but instead it insisted on a two story brick building, pulled to the corner with parking in the rear. CVS protested, but at the end of the day they built what the town wanted

because they recognized the economic value of being in a profitable location.



Davidson, North Carolina, did not settle for CVS' "Plan A" design.

The lesson learned is that successful communities have high expectations. They know that community identity is more important than corporate design policy.

5. Cooperate With Neighbors for Mutual Benefit

Historically, elected officials have tended to view neighboring communities, the county government, and even the managers of adjacent national parks or other public lands as adversaries rather than allies. Some community leaders see economic development as a "zero-sum" game: if you win, I lose.

Successful communities know that today's world requires cooperation for mutual benefit. They know that the real competition today is between regions. They also understand that very few small towns have the resources, by themselves, to attract tourists or to compete with larger communities.

Regional cooperation does not mean giving up your autonomy. It simply recognizes that problems like air pollution, water pollution, traffic congestion and loss of green space do not respect jurisdictional boundaries. Regional problems require regional solutions.

There are numerous examples of communities working together for mutual benefit. In the Denver region, 41 communities cooperated to support funding for a regional transit system (i.e. FasTracks). Cleveland area communities cooperated to

build a Metro parks system. Metro Minneapolis and St. Paul collaborate on tax base sharing.



Even small rural communities can cooperate for mutual benefit. Small towns in Mississippi have worked together to organize and promote U.S. Route 61 as “the Blues Highway.” Similarly, five rural counties on Maryland’s Eastern Shore collaborated with the Eastern Shore Land Conservancy to create a regional agreement to preserve

farmland and open space.

6. Pay Attention to Community Aesthetics

During the development boom of the 1980’s, Time Magazine had a cover story article about what they called “America’s growing slow-growth movement.” The article began with a quote from a civic activist in Southern California, who said “we were in favor of progress, until we saw what it looked like.” Looks count! Aesthetics matter!

Mark Twain put it this way, “We take stock of a city like we take stock of a man. The clothes or appearance are the externals by which we judge.”

Over 80 percent of everything ever built in America has been built since about 1950 and a lot of what we have built is just plain ugly. There are still many beautiful places in America, but to get to these places we must often drive through mile after mile of billboards, strip malls, junk yards, used car lots, fry pits, and endless clutter that has been termed “the geography of nowhere.”



The problem is not development, per se; rather the problem is the patterns of development. Successful communities pay attention to where they put development, how it is arranged, and what it looks like.

The image of a community is fundamentally important to its economic well-being. Every single day in America people make decisions about where to live, where to invest, where to vacation and where to retire based on what communities look like. Consider tourism, for example. The more any community in America comes to look just like every other community the less reason there is to visit. On the other hand, the more a community does to protect and enhance its uniqueness whether natural or architectural, the more people will want to visit. Tourism is about visiting places that are different, unusual, and unique. If everyplace was just like everyplace else, there would be no reason to go anywhere.

Successful communities pay attention to aesthetics. Typically they control signs, they plant street trees, they protect scenic views and historic buildings, and they encourage new construction that fits in with the existing community.

Editor's note: Whether you're in a big city or small town, dignified, well-designed public buildings can also make a huge difference. They also set an example for developers showing that the community truly believes in a high quality built environment.



Two public buildings in the small city of Port Royal, South Carolina (population, 11,000) set the standard. Port Royal's city hall is above left; the fire station is above right (and, yes, even buildings like fire and police stations can and should be well-designed).

Take a look at Ed McMahon's earlier article, [Public Buildings Should Set the Standard](#), for more on the key role public buildings play.

7. Have Strong Leaders and Committed Citizens

Successful communities have strong leaders and committed citizens. A small number of committed people can make a big difference in a community. Sometime these people are longtime residents upset with how unmanaged growth has changed what they love about their hometown. Others times, the leaders might be newcomers who want to make sure that their adopted hometown doesn't develop the same ugliness or congestion as the one they left. More often than not, they're simply citizens who care a great deal about their community.

An example of a citizen who made a big difference is [Jerry Adelman](#). Jerry grew up in the small town of Lockport, Illinois. Almost single-handedly Jerry created the [Illinois and Michigan Canal National Heritage Corridor](#) which helped restore an abandoned canal linking Lockport with Chicago. Adelman's success at building local support for the canal convinced Congress to add the canal corridor to the national park system.

What about the Naysayers?

Every community has naysayers. Whatever the civic or community leaders propose to do, some people will always say things like: “you can’t do it,” “it won’t work,” “it costs too much,” “we tried that already.” And, “no,” is a very powerful word in a small community, but leaders of successful communities know that “yes” is a more powerful word. Yes, we can make this town a better place to live in, to look at, to work in, to visit.

A pessimist sees difficulty in every opportunity. An optimist sees opportunity in every difficulty.



Summing Up:

We live in a rapidly changing world. In his new book, The Great Reset, author Richard Florida says that “the post-recession economy is reshaping the way we live, work, shop and move around.” He goes on to predict that “communities that embrace the future will prosper. Those that do not will decline.”

One big change is that people and businesses can now choose where to live or operate a business. In today’s world, **communities that cannot differentiate themselves will have no competitive advantage**. This means that quality of life is more important than ever.

Successful communities know that sameness is not a plus. It is minus. Successful communities set themselves apart. They know that communities that choose their future are always more successful than those that leave their future to chance.

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Getting the Density You Want

by Elizabeth Humstone

Across the United States over the past 50 years, development has increasingly spread out and average densities declined. On a forty-acre parcel, where once you could find over 1,500,000 square feet of mixed uses, today you are more likely to find one 150,000 square-foot big box store.¹

House sizes and yards are about double today what they were in the 1950s. Nevertheless, there is evidence that these patterns are beginning to shift. As communities struggle with issues of climate change, energy consumption, transportation, and affordable housing, many are looking for opportunities to encourage more concentrated development.

Higher densities of housing and commercial development have been linked to healthier lifestyles, lower auto use, and reduced energy consumption.² Low and moderate income housing is more finan-

cially viable at higher densities. In spite of the benefits, perhaps nothing gets a community more riled up than a discussion of density. Some fear that density – if too high – will create congestion, deplete open space, and block light and air. Others fear that density – if too low – will eat up valuable natural resources, tax community services, and fail to meet housing needs.

Often, discussions of density occur without any reference to how it can be applied in the community. The job of a planning commissioner is to bring helpful information about density to these discussions, including a definition of density, why it is important, and how it can best be applied taking into account the community's unique character and vision.

WHAT DOES DENSITY LOOK LIKE?

When residents hear the term *high density*, they often picture high-rise housing towers that lack privacy and open space, surrounded by surface parking. And when the term *low density* is used, large-lot rural subdivisions may come to mind. Neither may be the case.

As has been aptly illustrated in Julie Campoli and Alex MacLean's book, *Visualizing Density*, even the same densities take many different forms and have different impacts on the viewer. Take a look, for example, at the paired photos on the bottom of this page and the next.

Our perceptions of density are usually governed by the design of projects – how high they are, how they are sited, how close they are to the street, how much landscaping there is, and how doors, windows, porches, and roofs are articulated. Visual preference surveys have shown that people may dismiss one project as too dense while approving of another project that has the same density.³ One of the challenges for planners and planning commissioners is to determine the qualities that will make desirable densities acceptable in their communities.

¹ Julie Campoli, Elizabeth Humstone, and Alex MacLean, *Above and Beyond: Visualizing Change in Small Towns and Rural Areas* (American Planning Association, 2003), pp. 100-101.

² For a good summary, see the Urban Land Institute's *Higher-Density Development: Myth and Fact* (2005).

³ Editor's note: for more on the use of visual preference surveys, see Anton Nelesen & James Constantine, "Understanding & Making Use of People's Visual Preferences, (PCJ #9); available at: www.plannersweb.com/visualpreferences.html.

The development in Orlando, Florida (left) and in Longmont, Colorado (right) are built at the same density: 5.3 units/acre. The aerial photos are by Alex MacLean from his book *Visualizing Density* (co-authored by Julie Campoli).



PLANNING FOR DENSITY

1. The Municipal Plan

The starting point for deciding on density is the municipal plan. The plan sets forth the overall vision for the community and establishes the land use pattern, the transportation system, plans for public facilities and services, and natural resource policies. How do you determine how much density is enough or how much is too much? Each community will have to make this decision given its own situation and vision for the future.

2. Growth Estimates

One of the functions of a municipal plan is to determine how the community will meet current and future needs based on trends in population, housing, jobs and services, and existing conditions. How fast the community is growing, and what the characteristics of the new residents are likely to be, will help determine what densities need to be considered for the future. For example, if a new employer with low-wage jobs announces plans to move to the community, higher density rental housing may be needed. For those areas with a concentration of seasonal homes, low densities to protect lakeshores or steep slopes may be appropriate.

4 PAS QuickNotes No. 12, Density.

5 See *America's Families & Living Arrangements: 2003* (U.S. Census Bureau, Nov. 2004), p. 4.

Two more very differently designed developments, but again at comparable densities: 13.5 units/acre in Castro Valley, California (left) and 13.2 units/acre in Chicago, Illinois (right).



Defining & Measuring Density

According to the American Planning Association, density is “the amount of development in a given area.”⁴

Planners measure density in several different ways. To understand regional patterns of growth, density is often measured in terms of people per square mile. According to the U.S. Census, the average population density of the United States in 2000 was about 80 people per square mile, and for urbanized areas 2,670 people per square mile.

Communities that are job and service centers for surrounding towns may define population more broadly to include employees and daily visitors, as well as residents. When these figures are added to base population numbers, they are often referred to as population intensity or service population. Intensity can be a measure of both population and development density.

For housing and zoning standards, density is typically measured in terms of *units per acre* or *minimum square feet of*

land area per unit. Even these terms may be modified by communities who use the term net density, which means the amount of development permitted for a given area once land not used for residential purposes (streets, sidewalks, parking, recreation land, utility easements, etc.) is subtracted.

Some communities take the net density definition a bit further by not allowing certain natural features, such as water bodies, wetlands, steep slopes, and rock outcroppings, to be counted as “developable.”

For commercial and industrial uses, density (in some places referred to as intensity) is either measured by the number of square feet per acre or by floor area ratio. Floor area ratio is the measure of the total amount of square footage of the building divided by the total square footage of the parcel on which it is built. For example, a 10,000 square foot commercial lot with a floor area ratio of .5 could have 5,000 square feet of commercial space built on it. This space could be configured in one, two, or three or more stories, depending on the zoning regulations for height and lot coverage.

Many communities are now realizing that only a small share of their population (under 25 percent nationally⁵) consists of two parents with children. Their plans must also provide for single parents, the elderly, empty nesters, and

young adults. These households have a variety of housing needs; many desire smaller units that are easily accessible to transportation, retail, and jobs and services.

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Getting the Density You Want...

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3. Inventory of Current Conditions

Every plan should set forth the current conditions in the community, including the intensity of land use. An assessment of existing densities and their distribution around the community is an important first step in determining future densities. To measure densities, first delineate the boundaries of the areas to be analyzed and then determine how the data will be collected.

U.S. Census data can be used to measure density. Julie Campoli and Alex MacLean, the co-authors of *Visualizing Density*, have prepared a step-by-step guide to how this can be done.⁶ Other sources include town property records and ortho-photo maps. Property records provide the size of lots and buildings. Using ortho-photo maps, measurements can be made of the number of units or building footprints within a given area from which the density can be calculated. These densities should be compared to natural, cultural, and physical conditions of the land, community facilities and services, and transportation in order to decide if they should be maintained or altered.

4. Connecting with Community Goals

Density should be closely correlated with community goals for health, environmental protection, energy conservation, alternative transportation, and neighborhood character. Many communities are now reexamining their assumptions that low densities protect neighborhood character and are better for the environment and public health.⁷ They are responding to a growing body of evidence that compact, walkable communities promote healthier lifestyles. As a result, they are looking for locations where densities can be increased.

Any consideration of an alteration in density must include an assessment of the character of a neighborhood and how its existing densities are working today.

For example:

- are moderately high densities promoting walking, but lacking in amenities?
- are densities too low to encourage walkable neighborhoods?
- are there historic areas where increasing density will require special considerations?
- are there opportunities for modest infill development, such as accessory apartments or duplexes, that will retain the neighborhood character?

5. Links to Transportation

In general, communities will want to encourage higher densities in village and town centers and where transportation options, such as walking, bicycling, bus, and rail service, are readily available or could be added.

How much density is enough to support a bus route or transit? Hannah Twaddell covered this in her article, "The ABC's of TOD: Transit-Oriented Development," published in the last issue of the *Planning Commissioners Journal* (PCJ #73, Winter 2009). She reported that densities ranging from about 7 to 20 units per acre are typically required to generate enough riders for 15 to 20 minute frequencies on local bus routes. Twaddell notes that light rail service requires higher densities, typically between 9 to 35 or more units per acre.⁸ Other sources suggest that employment densities of 50 jobs per acre or more best support high frequency, high volume light rail.⁹

6. Links to Community Services

Many residents worry that more density will place excess demands on public facilities including water, sewer, roads, schools, and emergency services. This concern should be addressed by deter-



Some FAQs on Density:

1. Q. Will higher density housing cause my taxes to rise because of excessive demands on public facilities, including water, sewer, roads, and schools?

A. Not necessarily. Some higher density housing has lower school costs due to fewer children per unit and lower bus transportation costs. All residents must pay for their own electrical, gas, trash, water, and sewer usage. Other costs are lower due to the shorter utility lines and roads in compact developments.

2. Q. Don't higher density developments increase traffic and cause congestion?

A. Actually, there are fewer auto trips per household in apartments and high rises than in single family homes if, as is often

the case, essential retail and services are nearby.

3. Q. Won't higher density housing create more adverse environmental impacts such as increased stormwater runoff?

A. There are more opportunities to manage stormwater runoff with higher density development due to less impervious surface than with low density, spread out development. In addition, water consumption tends to be lower and there is less open space used per unit.

4. Q. Doesn't higher density threaten historic buildings & neighborhoods?

A. Many community groups become concerned that historic values will be compromised when densities are increased. It is important to identify the historic features within a neighborhood before proposing any changes. Any recommended changes

should show how these values will be retained. For example, does the historic significance of the area rest in the architectural style of the buildings? If so, can that be reflected in newer buildings or additions? Is the density of development – heights, setbacks, lot sizes – varied or consistent? Is there a way to increase density without visual disturbance, such as by allowing large older homes to be divided into two, three, or four units?

5. Q. Does higher density mean we'll have less green space in our community?

A. Not necessarily. With careful planning, increasing densities may save more green space for your community. By accommodating housing and commerce in a smaller area, more land is available for recreation, farming, forestry and protection of scenic views.

mining the capacity of public facilities where more residents and jobs are planned.

Keep in mind also that the impact on facilities and services will vary by the type of housing and intensity of employment to be provided. Higher density development can save on costs for public facilities. Multi-family housing and townhomes often have fewer occupants than single-family homes. Some types of commerce, such as small-scale retail and services, have a higher concentration of jobs than warehouses and big box stores.

7. Environmental and Natural Resource Protection

When planning for environmental or natural resource protection, communities should consider the density of development they allow in these critical areas. Zoning farmland for a density of one unit per acre is not going to ensure that farming will continue. Allowing dense development on steep slopes is likely to bring the community problems with erosion, road wash-outs, and sewage disposal. Communities that have undertaken an assessment of critical environmental and natural resources often use this information to lower the density of development in sensitive areas.

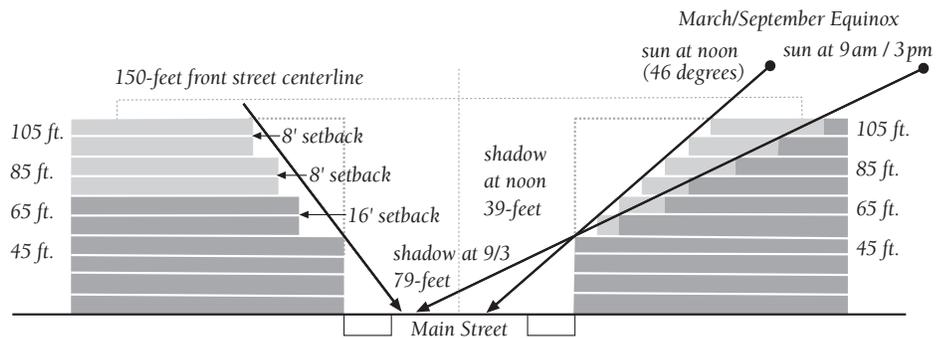
6 "Steps for Using the Census 2000 to Measure Density (units per acre)," available at: www.lincolnst.edu/subcenters/visualizing-density/census.pdf

7 See, e.g., "Measuring the Health Effects of Sprawl," by Barbara A. McCann & Reid Ewing (Smart Growth America, Sept. 2003).

8 Some call for even higher housing densities. The Washington State legislature has been debating a bill that, as originally proposed, would have required Seattle and other cities to authorize development at 50 units per acre within a one-half mile radius of each light rail or rapid bus transit station in their community. As of March 17, 2009, the bill had been amended to call for local plans and regulations to "encourage development along transit lines and at major transit stations at levels that support transit-oriented communities."

9 See, e.g., Lawrence D. Frank and Gary Pivo, "Impacts of Mixed Use and Density on Utilization of Three Modes of Travel: Single-Occupant Vehicle, Transit, and Walking," *Transportation Research Record No. 1466* (1994).

10 See Hans Blumenfeld, *The Modern Metropolis: Its Origins, Growth, Characteristics and Planning* (MIT Press, Cambridge, MA, 1967), p. 175.



In Burlington, Vermont, zoning changes to allow increased height and density in the downtown core are being considered along with upper story building setbacks. This diagram illustrates how setbacks would allow for more sunlight to reach Main Street (which runs east-west through downtown) at various times of day during the March/September equinox, mitigating the impacts of the increased height.

Communities need to consider both density and lot size when planning for these resources. There is a difference between density and lot size, however. Lower densities will limit the total number of units on a parcel of land or in an area. Large lots will spread these units out over a larger area than small lots clustered in a portion of the parcel.

The Bottom Line

Having considered the above, some communities may decide to increase existing densities in order to address growth trends and the community's vision and goals as set out in their plan. In other places, a decision may be reached that existing densities are essential to neighborhood character and should be maintained. Still other municipalities may find that densities are too high and need to be lowered, for example, to protect an important natural resource such as farmland.

The bottom line is that it is up to each town and city to make an informed decision that best fits the community's needs. The next section describes ways communities can implement densities to work better for them.

FACTORS IN MAKING DENSITY WORK FOR YOU

To make density work, whether it is high, moderate, or low density, specific standards need to be developed in your municipal zoning regulations.

One of the challenges for planners is to determine the qualities that will make desirable densities acceptable in their

communities. Some factors that can be important to determining what density will look like include:

1. Height

In general, lower heights are compatible with lower densities, and higher heights with greater densities. Figuring out appropriate heights depends on many factors, including the character of the area, desired uses and activities, walkability, view enhancement, and light and air.

Communities are rightly concerned that higher densities may not fit with the character of the area. To minimize negative impacts and accommodate increased density, some communities have implemented requirements that new buildings may be higher than existing ones only if they are stepped back from the street on the upper floors. Such guidelines can protect light and air on the street, while also maintaining compatibility with historic streetscapes.

Municipalities are also often frustrated when developers do not build to the heights allowed in the zoning code. The concern is that valuable urban land is being inefficiently used. These communities should consider implementing *minimum* height standards, such as requiring at least three or four stories in new buildings in downtown or core areas. This concept is not a new one. Hundreds of years ago, builders were required to build to certain heights in order to use land efficiently and create order in the built environment.¹⁰

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"New urbanist" developments, as in Abacoa, Florida, often provide smaller setbacks than traditional subdivisions, allowing for increased density and a more compact development pattern. This can be done without sacrificing attractively designed housing. In fact, this denser pattern is more in keeping with older, early 20th century suburban neighborhoods such as Chicago's "bungalow" district (on right).



Getting the Density You Want...

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2. Setbacks

Citizens often fear that increases in density will bring overcrowding and block light and air. Setbacks can help to minimize these impacts by requiring minimum distances between buildings and the street. However, if setbacks are too large, then allowed densities may not be achieved.

A good rule of thumb is to look at existing buildings first before formulating new setbacks. Evaluate the setback pattern and how important it is to maintaining the neighborhood's character. If reducing setbacks between buildings and the street would not harm the streetscape, then consider doing this as it would enable more density on the site. If the neighborhood has little or no separation between buildings, consider repeating this pattern for new construction.



Structured parking can reduce the amount of surface parking lots needed, increasing the overall density that can be achieved in a downtown area. Garages can be designed to blend in unobtrusively, as here in Burlington, Vermont.

3. Lot Coverage

The amount of land that a building footprint consumes can affect the density of building construction. Coverage needs to be considered in conjunction with setbacks and height requirements. If, for example, your community mandates a low lot coverage percentage and allows eight story buildings, you are likely to have towers surrounded by extensive open space and/or parking areas. Higher lot coverage factors, such as 80 to 100 percent, will encourage use of the entire parcel for buildings. This is most appropriate in high density areas, such as downtowns where setbacks are low.

4. Planned Unit & Planned Residential Developments

Many communities have been experimenting with variable densities for decades by enabling planned unit developments and/or planned residential developments. These projects allow

higher densities in one portion of a parcel, provided they are offset by protection of open space and natural resources on the remainder of the parcel.

5. Bonuses

Some cities and towns enable developers to apply for density bonuses that allow more units per acre or a higher floor area ratio than would otherwise be permitted in the zoning district. In return, developers' need to commit to meet special standards set out in the ordinance, such as LEED energy standards, a minimum percentage of affordable housing, or some other special amenity.

Prior to considering such bonuses, communities need to be sure that areas where bonuses can be used are appropriate for the additional density. It also makes sense to first determine if such requirements (e.g., affordable housing) should be standard for all projects or something that should be encouraged through optional density bonuses.

6. Parking

Parking can be a major factor in limiting densities in downtowns and urban neighborhoods. Often zoning requirements for size of spaces and number of spaces per unit (or square feet) result in parking dominating the site.

Communities desiring higher densities will need to consider a variety of approaches to addressing parking needs while preventing the voids created by large areas of surface parking. This can include alternatives such as structured or underground parking, increased on-street parking, and even lower minimum parking requirements for commercial and residential development. While reducing parking requirements can be controversial, people in high density areas often have alternatives to using cars, such as bus transit or walking, which lowers their need for multiple parking spaces.

7. Landscaping

No matter what the density, landscaping can and should be provided. In high density areas, landscaping, such as trees or greenbelts along sidewalks and streets,



Landscaping, such as street trees (seen here along 16th Street in Denver, Colorado), can reduce the perceived density of buildings in downtowns and other areas.

can soften building façades and provide a human scale to taller buildings. In medium density areas, landscaping of front, side, and rear yards, and courtyards will create a more pleasing environment, while also adding privacy.

8. Driveways and Garages

Placement of driveways and garages can be critical to achieving desired densities. Individual driveways serving garages lining the frontage of the street can destroy the pedestrian scale of moderate and high density communities and take up valuable space. Shared driveways at the backs of buildings can minimize impacts and enable the use of frontage for housing, commerce, pedestrian access, and landscaping.

9. Accessory Apartments & Duplexes

Small communities without the high densities found in downtowns and urban neighborhoods often look for more subtle ways to increase densities. One method that has been found to have minimal impact on the character of a neighborhood is the addition of accessory



Accessory units in Davis, California's Aggie Village are unobtrusive and fit well into the neighborhood. Photos shows an accessory unit (above left) and the principal structure (above right).

units or apartments (also called “granny flats”) and duplexes. Some states even require that accessory units be permitted in zoning districts where single family housing is located.

These additional units can be added within a home, as an extension on the building, or as an addition or alteration to a garage or outbuilding. By law, they are usually smaller than the principal use of the property – the single-family home.

Duplexes are usually permitted on the same size lot as a single-family dwelling unit, provided wastewater and water supply can be accommodated. It is not uncommon to find historic neighborhoods where single-family homes, duplexes, and apartments share the same block – without compromise to the quality of the area.

10. Tear Downs

Tear-downs occur when a house is demolished and replaced with a larger or more intensive one. This “McMansionization” process is becoming an increasing problem in many neighborhoods. Often the replacement buildings don't increase density, but they do increase the intensity and scale of buildings and lead to an impression of increased density without offering the benefits.

SUMMING UP:

Addressing the knotty issue of density can be one of the most frustrating, yet creative, activities a planning commissioner can undertake. Given the controversial nature of the issue of density, it is important that planning commissions engage citizens, elected officials, property owners, businesses, and non-profit



Duplexes and apartments in Portland, Maine, provide for increased density without changing the residential character of the neighborhood.

organizations in the review of existing conditions. The goal is to gain consensus on what densities and development standards are most appropriate for neighborhood, downtown, suburban, or rural areas. ♦

Over the past 35 years, Elizabeth Humstone has worked as a planning consultant on a wide range of projects in rural communities and small towns. Humstone is an advisor to the National Trust for Historic Preservation and former Executive Director of the Vermont Forum on Sprawl (now Smart Growth Vermont); past member of the Burlington (VT) Planning Commission; and former Chair of Vermont's Housing & Conservation Trust Fund Board.





Density Resources:
Additional online resources to help you better understand and deal with density issues are available on our PlannersWeb site. Just go to our main page & look for the links to our Resource Pages.

Density Without High-Rises?

by Edward T. McMahon

When it comes to land development, Americans seem to dislike two things: too much sprawl and too much density. Over the last 50 years, the pendulum has clearly swung in the direction of spread-out single use, drive everywhere, low density development.

Now the pendulum is swinging back. Today, high energy prices, smart growth, new urbanism, infill development, transit-oriented development, and sustainability concerns are all coalescing to foster more compact, mixed-use, walkable, higher density development.

The swing toward greater density is necessary and long overdue. The problem is many developers and urban planners have decided that density requires high-rises, the taller the better. To oppose a high-rise building is to run the risk of being labeled a NIMBY, a dumb growth advocate, an antediluvian, or worse.

Buildings 20, 40, 50, 60 even 100 stories tall are being proposed in low- and mid-rise neighborhoods and cities all over the world. All these projects are justified with the explanation that if density is good, than even more density is better, despite the overwhelmingly negative impact on community character and identity.

I'll acknowledge that the "Buck Rogers"-like skylines of cities like Shanghai and Dubai are thrilling – at a distance – but at street level they are often dreadful. The glass and steel towers may be functional, but they seldom move the soul or the traffic as well as more human scale, fine grained neighborhoods.

Yes, we need more compact, walkable, high density communities, but no, we do not need to build thousands of look-alike glass and steel skyscrapers to accomplish the goals of smart growth or sustainable development.

In truth many of America's finest and most valuable neighborhoods achieve density without high-rises. Georgetown in Washington, D.C., Park Slope in Brooklyn, the Fan in Richmond, and the French Quarter in New Orleans are all compact, walkable, charming – and low rise. Yet they're also dense: the French Quarter, for example, has a net density of 38 units per acre. Georgetown, 22 units per acre.

WE DO NOT NEED TO BUILD THOUSANDS OF LOOK-A-LIKE GLASS AND STEEL SKYSCRAPERS TO ACCOMPLISH THE GOALS OF SMART GROWTH.

Julie Campoli and Alex MacLean's new book *Visualizing Density*, vividly illustrates that we can achieve tremendous density without high-rises. They point out that before elevators were developed, two to four story "walk-ups" were common in cities and towns throughout America. Constructing a block of these types of buildings today could achieve a density of anywhere from 20 to 80 units an acre.

Mid-rise buildings ranging from 5 to 12 stories can create surprisingly high density neighborhoods in urban settings where buildings cover most of the block. Campoli and MacLean point to Seattle where mid-rise buildings achieve densities ranging from 50 to 100 units per acre, extraordinarily high by U.S. standards.

St. Petersburg, Russia; Basel, Switzerland; Edinburgh, Scotland; Bethesda, Maryland; and Washington, D.C. are just a few of the hundreds of cities around the world where developers have proposed

giant out-of-scale skyscrapers in formerly low- or mid-rise settings.

This issue of tall buildings in historic settings is not a small one. City after city has seen fights between those who want to preserve neighborhood integrity and those who want Trump Towers and "star-chitect" skyscrapers. Prince Charles, for example recently criticized the "high-rise free for all" in London which, he said, has left the city with a "pockmarked skyline and a degraded public realm."

Whatever you think about Prince Charles, he has clearly raised some important issues about the future of the built environment. These include:

1. Does density always require high-rises?
2. Are historic areas adequately protected from incompatible new construction?
3. What's more important, the ability of tall buildings to make an architectural statement or the need for buildings to fit into a walkable mixed-use neighborhood?

I love the skylines of New York, Chicago, and many other high-rise cities but I also love the skylines of Charleston, Savannah, Prague, Edinburgh, Rome, Washington, and other historic mid-rise cities. It would be a tragedy to turn all these remarkable places into tower cities.

Density does not demand high-rises. Skyscrapers are a dime a dozen in today's world. Once a low- or mid-rise city or town succumbs to high-rise mania, many more towers will follow, until the city becomes a carbon-copy of every other city in a "geography of nowhere." ♦

Edward T. McMahon is the Senior Resident Fellow for Sustainable Development at the Urban Land Institute in Washington, D.C.

