

Chapter 6 Transportation



COMPREHENSIVE PLAN CITY OF MASON



Chapter 6: Transportation

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Section 6.1. Purpose

The Transportation Element classifies and analyzes performance of existing automobile, bicycle, pedestrian and mass transit infrastructure and provides direction for future improvements. Analysis and recommendations reflect coordination with the Land Use Element and Development Plans.

The main components of this element include:

1. Classification and analysis of existing roadways and traffic patterns.
2. Identification and analysis of bicycle, pedestrian and mass transit infrastructure.
3. Recommendations to maintain and improve roadway level of service as growth occurs, including new roadways, expansion of existing roadways, and access management.
4. Recommendations for creating a balanced multi-modal transportation system, including new pedestrian pathways, mass transit improvements, and traffic calming strategies.
5. Recommendations to enhance the appearance of the City's main thoroughfares and gateways.

Chapter Cover Photo

Mason has taken extensive steps to improve the transportation system by separating local and through traffic and offering bicycle paths and sidewalks as a means of being a multi-modal and family-friendly.

Vision Statement

Mason will provide a balanced and integrated multi-modal transportation system that is interconnected with the regional transportation system. Mason's streets will be designed to provide an acceptable level of service for local traffic and commerce while providing a comfortable environment for pedestrians, bicycles and transit. Greenways will provide off-street pedestrian connections to local and regional destinations in addition to providing recreational amenities. This multi-modal approach will meet vehicular transportation needs while complementing other goals of this Comprehensive Plan.

Section 6.2. Transportation Snapshot

This section contains a summary of existing transportation conditions, issues and opportunities. Detailed information can be found in the Existing Conditions Report.

Transportation Network

Roadway System

- Overall, rapid growth and proximity to both I-71 and I-75 have placed significant pressure on Mason's roadways, leading to increased traffic congestion.
- Mason has made substantial improvements to its roadways, but there remains a lack of continuous north-south arterials in central and northern Mason.

Highlights

- Rapid growth combined with a lack of north-south circulation has created several traffic chokepoints, including intersections along Mason-Montgomery Road, Tylersville Road and Western Row Road at Kings Island Drive. Planned roadway improvements will help to address this issue.
- Expanded interchanges on I-75 and I-71 will improve regional access but may also generate more traffic on local roadways.
- Event traffic contributes significantly to local traffic congestion in the eastern portion of Mason.
- Developments still remain that were constructed prior to strict access management regulations.
- Through the implementation of the 2001 Bicycle and Pedestrian Way Master Plan, numerous biking facilities have been created. These facilities need to be more interconnected through future projects
- Sidewalks are planned in several older neighborhoods built prior to sidewalk requirements, with the exception of the Trailside Acres subdivision east of SR 741.
- Planned arterial widening projects that include sidewalks and bike paths will improve connections between neighborhoods.
- Although Mason has done an exceptional job of planning for pedestrian facilities, the community's low-density, segregated land use pattern necessitates the use of the automobile for most practical trips.

Accident Locations

- According to the City of Mason, the total number of traffic accidents in the City has declined substantially since 2006: approximately 854 traffic accidents were recorded in 2006, 575 in 2007 and 601 in 2008.
- The highest concentrations of accidents occur at intersections along Tylersville/Western Row Road, a heavily travelled artery and the only continuous link between I-75 and I-71.

Past Thoroughfare Plan Recommendations

- Mason's Thoroughfare Plan was originally adopted in 1969 with the most recent update in 2005.
- The 2005 Thoroughfare Plan (Map 6.3B) recommends future roadway improvements and classifies roadways according to their desired functional objective, such as local access or regional mobility. Table 6.2A describes the function and characteristics of Mason's roadway classifications.
- Surrounding counties and the Ohio-Kentucky-Indiana Regional Council of Governments (OKI) all play a role in planning future roadway improvements in surrounding areas.
- In addition to Mason's Thoroughfare Plan, Map 6.3B incorporates recommendations from the Thoroughfare Plans of Butler and Warren Counties, OKI's Regional Transportation Plan, and the Southwest Warren

County Transportation Study that was completed in 2005.

- The planned roadway improvements generally accomplish the following objectives:
 - Increase access to development opportunities.
 - Improve east-west movement at the north end of the City.
 - Improve access to I-75 and I-71.
 - Improve/extend roadways parallel to I-71.
 - Relieve pressure on congested arterials by constructing alternative, parallel collectors.
 - Re-align intersections to improve efficiency.
 - Improve safety and efficiency of existing intersections.
- The Southwest Warren County Transportation Study's prioritized recommendations included several transportation improvement projects that are within Mason or within potential future growth areas:

High Priority

- Widen and connect Bethany Road and Mason-Morrow-Millgrove Road between Butler-Warren Road and SR 48.
- Construct full interchange at I-71 and Western Row Road.
- Improve the I-71/Kings Mills Road interchange.

- Widen SR 741 between US 42 and Kings Mills Road.

Medium Priority

- Widen Butler-Warren Road between Western Row Road and Bethany Road.
- Widen Columbia Road between Kings Mills Road and Mason-Morrow-Millgrove Road.
- Widen Mason-Montgomery Road between Fields-Ertel Road and Western Row Road.
- Construct bike paths on SR 741 from Bunnel Road to Hamilton Road, and on Socialville Fosters Road from Columbia Road to the Little Miami River, continuing to SR 48 via Foster-Maineville Road.

Low Priority

- Widen Snider Road from Fields-Ertel Road to Tylersville Road.
- Widen SR 741 from US 42 to SR 63.
- Extend Bunnel Road to Columbia Road via McKinley Road.
- Bus circulator system linking Kings Island, downtown Mason, and several business parks along the I-71 corridor from Fields-Ertel Road to Kings Mills Road.

Table 6.2A: Function, Characteristics and Estimated Traffic Volume Ranges of Functional Classifications

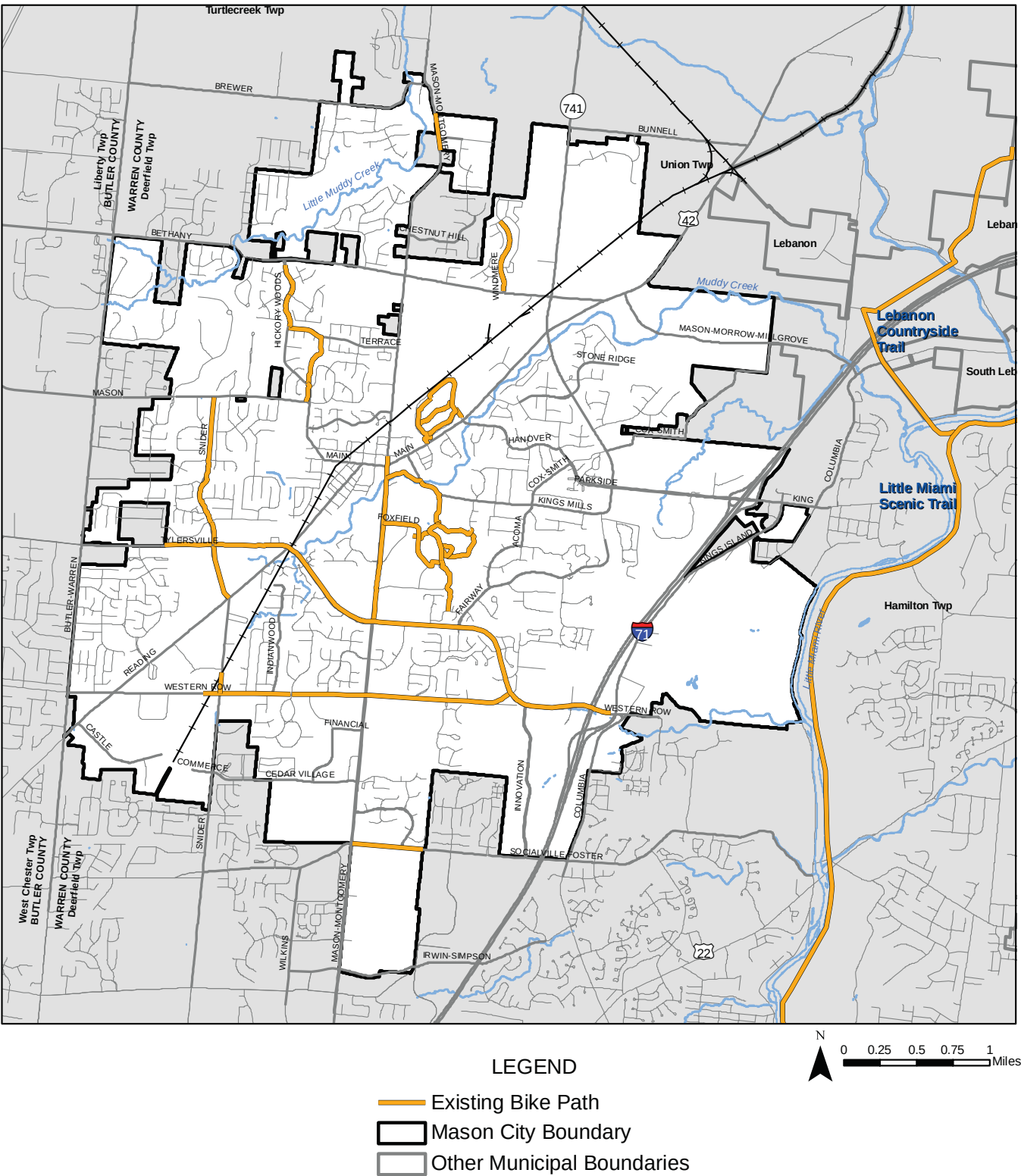
Roadway Type	Function and Characteristics	Existing ADT*	Proportion of Service
Freeway	• Carry high volumes of traffic at high speeds over long distances. • Serves interstate/intrastate/interregional/intracity travel. • No direct property access. • Median/grade separation of opposing traffic movements.	Over 20,000	
Major Arterial	• Provides mobility at moderate to high speeds/volumes/distances. • Serves interregional, intercity, and intracity travel. • Direct property access is not permitted or restricted.	9,000 - 20,000	
Minor Arterial	• Provides access and mobility at low to moderate speeds/volumes. • Serves intercity, intracity and intracommunity travel. • Direct property access is restricted.	4,000 - 12,000	
Primary Collector	• Provides access and mobility at lower speeds, with equal priority assigned to access and mobility. • Connects local or secondary collector streets to arterials. • Residential driveways not permitted; commercial driveways restricted by number/spacing/site distance.	3,000 - 6,000	
Secondary Collector	• Connects primary collectors to local streets. • Limited residential or commercial driveways based on volume/speed/sight distance/spacing.	1,000 - 4,000	
Local Street	• Provides local land access. • Carries traffic to and from local land developments and collectors. • Direct property access is permitted.	Less than 1,000	

Source: FHWA
Functional
Classification
Guidelines

*Based on City of Mason Subdivision Regulations

**Estimates based on City of Mason 2008 Traffic Counts

Map 6.2A: Existing Bike Paths



Section 6.3. Goals and Strategies

Goal TR-1.

Encourage alternative methods of transportation.

The City's past efforts to develop non-automobile forms of transportation have boosted Mason's quality of life and regional image as a place to live and work. Further improvements to bicycle, pedestrian and transit infrastructure will extend these benefits to all areas of Mason, while encouraging physical activity, community interaction and reduced automobile traffic and pollution.

Strategy TR-1.1.

Expand the City's bike path and sidewalk system in order to continue the City's progress toward creating a connected bike path and sidewalk system (see Map 6.3A) (coordinate efforts with Chapter 1, HN-1.5).

Action TR-1.1.1. Require bike paths or fees-in-lieu of as part of future project approvals and as part roadway improvement projects along routes identified on Map 6.3A.

Action TR-1.1.2. Require sidewalks with all new development and new or widened roadways.

Action TR-1.1.3. Construct sidewalks where they do not exist on developed residential streets. Prioritize projects based on Thoroughfare Plan classification

(i.e. Collectors have a higher priority than local streets).

Action TR-1.1.4. Encourage pedestrian access easements between dead-end streets and other nearby streets.

Action TR-1.1.5. Establish a non-motorized pathway gap development fund that is funded by grants, donations, and/or payments in lieu of requirements.

Action TR-1.1.6. Evaluate and update the Bicycle and Pedestrian Way Master Plan as needed to address potential changes in priorities and resources since 2001. Incorporate Comprehensive Plan goals and strategies such as the proposed Muddy Creek Greenway.

Action TR-1.1.7. Encourage the provision of bike racks in multi-family and commercial developments.

Action TR-1.1.8. Build community support for pedestrian facilities by promoting an active lifestyle through recreational events and programs. Examples include community walks or running or biking races.

Action TR-1.1.9. Construct a pedestrian bridge across I-71, connecting the Lindner Family Tennis Center with Kings Island.

Strategy TR-1.2.

Use green infrastructure such as stream corridors as pedestrian routes.



The Lebanon Countryside Bike Path, a nearby connection to the Little Miami Scenic River Trail, is easily accessible from Mason as shown on Map 6.3A on page 6.9.

Action TR-1.2.1. Complete the Muddy Creek Greenway as shown on Map 6.3A as greenway land is acquired or dedicated. Require trail segment construction or fees-in-lieu with new development on properties that include portions of the greenway, while using capital improvement funds or grants for remaining portions.

Action TR-1.2.2. Construct a bike path and greenway along the stream extending from the Lindner Tennis Center and Kings Mills Sub-Area to the Muddy Creek bike path, using the same implementation strategy as Action TR-1.2.1.

Action TR-1.2.3. Connect downtown to neighborhoods, parks, community center, planned Activity Nodes and the Little Miami Scenic Trail via the Muddy Creek Greenway.

Strategy TR-1.3.

Consider the development of a trolley loop that connects the Community Core Sub-Area to the Kings Mills Sub-Area and Kings Island. (see ED-5.2.5)

Action TR-1.3.1. Explore feasibility, funding options and potential partners such as the Southwestern Ohio Transit Authority, Warren County Transit Services and Kings Island.

Strategy TR-1.4.

Politically support rail connectivity from Mason to downtown Cincinnati.

Action 1.4.1. Work with OKI and other jurisdictions along I-71 to re-establish the I-71 light rail corridor as a priority in OKI's Long Range Regional Transportation Plan.

Action 1.4.2. Work with OKI and other jurisdictions to establish a commuter line with a station in Downtown Mason on the I&O Railroad. There is a 3 mile gap of track that needs restored starting at Mason's southern border.

Action 1.4.3. Work with SORTA and Warren County to establish transit connections with 3C Passenger Rail Station in Sharonville.

Goal TR-2.

Strive for pedestrian friendly, "Complete Streets".

A Complete Street (as defined by the National Complete Streets Coalition) is a road that is designed to be safe for drivers, bicyclists, transit vehicles and users, and pedestrians of all ages and abilities (see Figure 6.3A for more information). Complete Streets help to create a balanced and sustainable transportation system and vibrant, desirable neighborhoods. Completing Mason's streets will require new design standards for future streets as well as retrofits to existing streets.

Strategy TR-2.1.

Amend subdivision regulations to promote Complete Streets concepts.

Action TR-2.1.1. Consider reducing minimum local residential street widths and curb return radii.

Action TR-2.1.2. Develop maximum-block-length requirements for residential neighborhoods, with block ends defined by intersections, alleys or mid-block pedestrian paths.



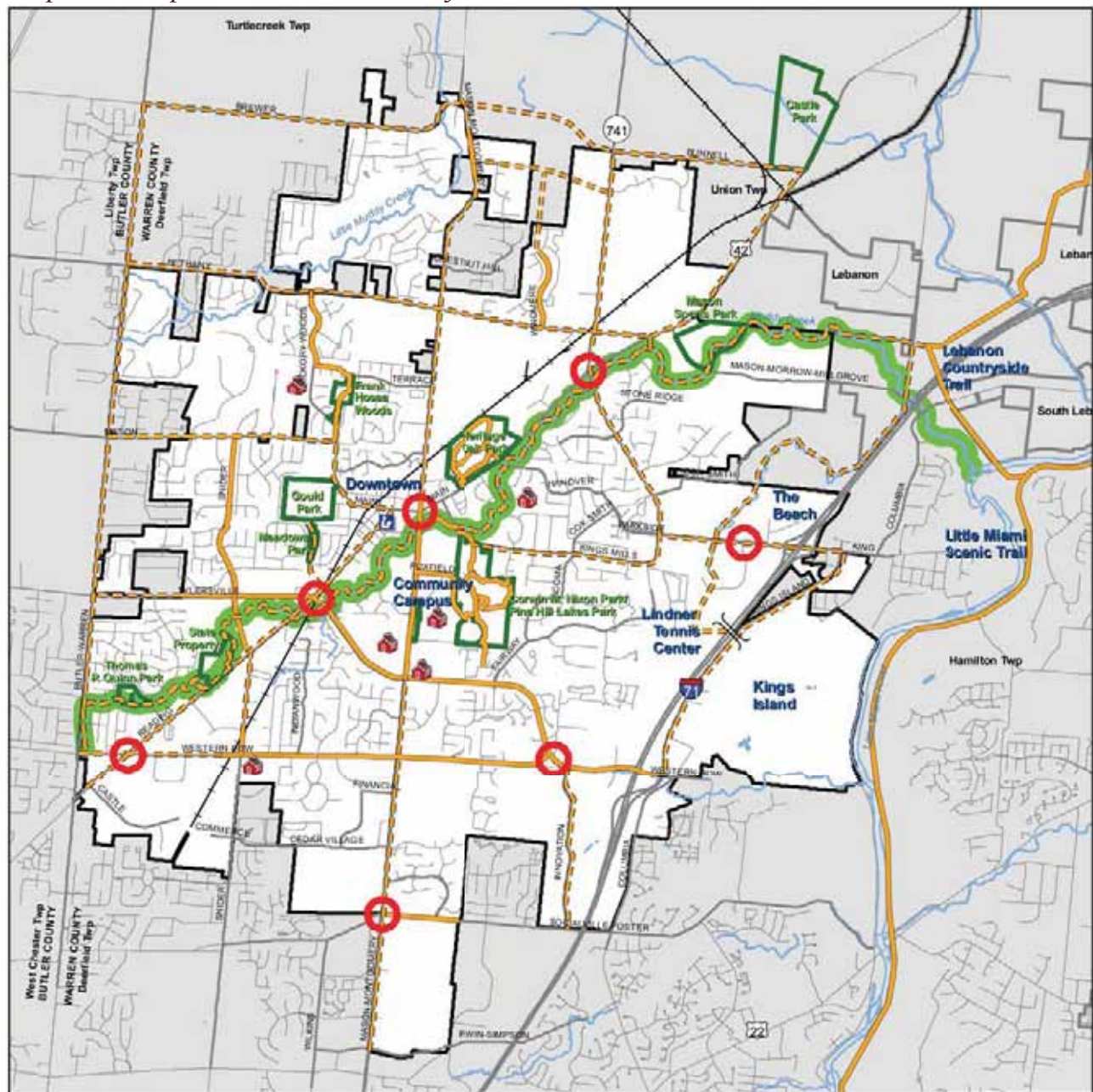
Strategy TR-2.2.

Implement traffic calming measures in residential areas where appropriate.

Action TR-2.2.1. Develop a traffic calming program for local streets (see case study in Figure 6.3B) where speeding, accidents and non-local traffic are concerns. See Figure 6.3A for examples of traffic calming measures.

Action TR-2.2.2. Encourage incorporation of traffic calming measures with new developments where appropriate.

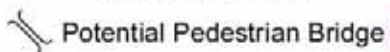
Map 6.3A: Proposed Pedestrian and Bicycle Plan



LEGEND

Pedestrian/Bike Infrastructure

- Existing Bike Path
- - - Proposed Bike Path



Potential Pedestrian Bridge

Pedestrian Attractions

- Library
- Public School
- Planned Activity Node
- Existing and Planned Parks

Muddy Creek Greenway

Mason City Boundary

Other Municipal Boundaries



0 0.25 0.5 0.75 1 Miles

Action TR-2.2.3. Establish safe routes to school by identifying key walking routes as priorities for traffic calming and other pedestrian safety measures.

Goal TR-3.

Reduce vehicle miles traveled in Mason.

Reducing vehicle usage leads to less roadway congestion and pollution. Furthermore, reducing the need for automobiles by encouraging non-automobile transportation leads to increased physical activity, social interaction and convenience. Reducing automobile necessity requires a focus on pedestrian-friendly mixed land use patterns, in addition to the non-automobile infrastructure strategies discussed under Goals TR-1 and TR-2.

Strategy TR-3.1.

Promote mixed use development at Activity Nodes (see Chapter 7, LU-19) to provide daily necessities at convenient locations.

Action TR-3.1.1. Amend the zoning map and create new districts or overlay districts to promote mixed-use development in Activity Nodes as identified on the Future Land Use Map (Map 7.4A).

Action TR-3.1.2. Provide live/work opportunities at appropriate locations throughout the City, as described under Goal HN-1 in Chapter 1 and Chapter 7 Land Use.

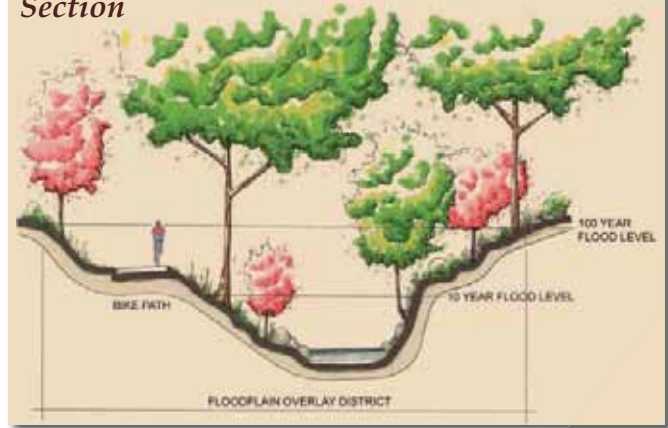
Action TR-3.1.3. Integrate young professional housing in new mixed-use and residential developments to increase the possibility of both living and working in Mason. Implement actions recommended under Goal HN-4 in Chapter 1.

Goal TR-4.

Provide a safe and efficient roadway system.

Although a multi-modal approach (see Goals TR-1 through TR-3) will help to reduce automobile usage and improve circulation, some new roadways and improvements to existing roadways will be needed as well as shown on Map 6.3C Proposed Thoroughfare Plan. The City has a history of effective access management and planning for future roadway improvements to

Proposed Muddy Creek Greenway Cross-Section



Source: 2004 Mason Parks and Recreation Master Plan

accommodate growth. The following strategies continue this legacy and address lingering problems associated with Mason's roadway network.

Strategy TR-4.1.

Upgrade existing roads that are performing poorly to meet Level of Service requirements. The following improvements increase roadway, intersection and interchange capacity by adding lanes and constructing alternative, parallel routes.

Action TR-4.1.1. Support the widening of Butler-Warren Road between US 42 and Bethany Road.

Action TR-4.1.2. Construct a full interchange at I-71 and Western Row Road.

Action TR-4.1.3. Improve the I-71/Kings Mills Road interchange.

Action TR-4.1.4. Support the widening of Mason-Montgomery Road between the Fields-Ertel Road and Socialville-Fosters Road.

Action TR-4.1.5. Widen SR 741 between US 42 and Kings Mills Road.

Action TR-4.1.6. Extend Financial Way east of Mason-Montgomery Road to Western Row Road.

Action TR-4.1.7. Extend White Blossom Boulevard west to an extended Wilkins Boulevard.

Figure 6.3A: Complete Streets Design Concepts

Below are several examples of Complete Streets design concepts, based on information provided by the National Complete Streets Coalition. Additional information can be found at www.completestreets.org.

1. Reduced Street Width



Conventional Local Street (29')

This typical 29-foot residential street in Mason provides more than enough space for two travel lanes and one lane of on-street parking, despite the presence of private off-street parking.



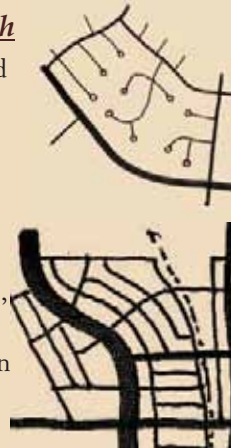
Reduced-Width Street (18')

Streets as narrow as 18 feet provide ample two-way driving space for low-volume streets, while forcing traffic to slow down, reducing pedestrian crossing time and leaving more room for open space¹.

2. Connectivity and Block Length

This street system is poorly connected and includes lengthy blocks, encouraging speeding funneling traffic onto arterials.

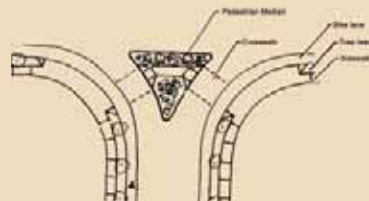
A well-connected street grid with shorter blocks helps to discourage speeding, disperse cut-through traffic, reduce arterial congestion, and improve pedestrian connectivity between neighborhoods and land uses.



5. Medians/Pedestrian Refuge Islands

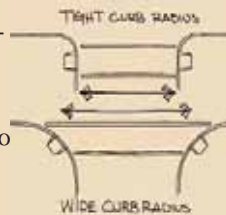


Landscaped medians and Pedestrian refuge islands help to visually narrow the roadway, provide a pedestrian crossing refuge, and improve access management.



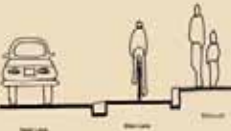
3. Reduced Curb Radii

Tightened curb radii slow vehicle turning movements and reduce pedestrian crossing times. New Urbanism principles suggest a curb return radius of no greater than 15 feet¹.



4. Bike Lanes

Bike lanes provide bicycle mobility and a buffer between vehicular lanes and sidewalks. Furthermore, painting bike lanes on excessively wide roadways reduces their perceived width, providing an inexpensive form of traffic calming.



6. On-Street Parking/Curb Extensions



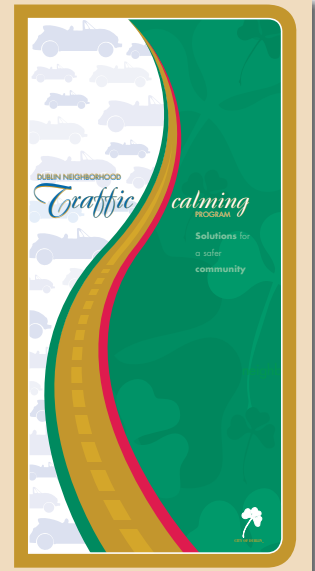
On-street parking provides access to businesses while narrowing the travelled way and calming traffic. Often seen in combination with on-street parking, curb extensions narrow the roadway, shorten pedestrian crossings and improve vehicle sight lines.

¹ Steuteville et al, *New Urbanism: Comprehensive Report and Best Practices Guide* (New York: New Urban Publications, 2003) 8-21, 8-24.

Figure 6.3B: Case Study: City of Dublin, Ohio Neighborhood Traffic Calming Program (see TR-2.2)

The City of Dublin Engineering Department administers a proactive, community-based program for calming traffic on local streets.

1. Residents petition the Police Department for pre-traffic-calming solutions such as speed monitoring trailers and targeted enforcement.
2. If the above step is ineffective, residents are invited to petition the Engineering Department for the Traffic Calming Program.
3. If the petition is approved, the Engineering Department conducts a comprehensive traffic study to determine whether traffic calming is recommended.
4. If traffic calming is recommended, the Engineering Department works with neighborhood residents to select and design the appropriate calming measure.



Action TR-4.1.8. Extend Wilkins Boulevard north to Financial Way and extend Financial Way northwest to Western Row Road.

Action TR-4.1.9. Widen US-42 from Butler Warren Road to Tylersville Road.

Action TR-4.1.10. Widen Kings Mills Road from US-42 to SR-741.

Action TR-4.1.11. Extend Cox-Smith Road from SR-741 to Parkside Drive.

Action TR-4.1.12. Implement intersection upgrades indicated on Map 6.3B in coordination with roadway widening projects.

Action TR-4.1.13. Explore *roundabouts* as a potential upgrade for intersections (see Figure 6.3C for a description).

Action TR-4.1.14. Uphold access management policies to preserve roadway capacity, safety and efficiency.

Action TR-4.1.15. Update the Thoroughfare Plan to reflect the changes indicated in Table 6.3.A.

Figure 6.3C: Roundabouts (see TR-4.1.13)

A roundabout is a circular intersection in which incoming traffic yields to circulating traffic. Roundabouts have fewer automobile/automobile and automobile/pedestrian conflicts than a conventional stop-sign or signalized intersection (for example, left turns). As a result, roundabouts can potentially improve the safety and operation of an intersection.

Roundabouts also provide opportunities for community enhancement, as the center of a roundabout can be a focal point for landscaping, gateway signage or public art.



Sources: Federal Highway Administration, Ohio Department of Transportation
Photo: Roundabout in Golden, Colorado, courtesy of the Applied Technology and Traffic Analysis Program (partnership between University of Maryland - College Park and Maryland State Highway Administration)

Non- Motorized Circulation

- The City has adopted the principles of the *Ohio Physical Activity Plan*, a statewide initiative that focuses on programs, policies, and environmental changes to encourage Ohioans to be more physically active. Many components of the plan's vision encourage a pedestrian-oriented transportation system.
- Mason is primarily an automobile-oriented community, although the City has made considerable efforts to accommodate pedestrians. Pedestrian connections have improved substantially since the 2001 Comprehensive Plan.
- The City now has a growing bike path system (see Map 6.2B), and new neighborhoods have expanded the network of streets with sidewalks and improved connectivity.
- Remaining areas of need include older neighborhoods built prior to sidewalk requirements, connections between newer neighborhoods along thoroughfares, and connections to regional trail networks such as the Little Miami River bike path.
- The City completed a Bicycle and Pedestrian Way Master Plan in 2001 that recommended phased construction of bike paths, bike lanes and bike routes throughout the City, mainly on the City's thoroughfares. The plan also recommended sidewalks along arterials and key local streets in older portions of the City and along thoroughfares that connect newer neighborhoods.
- The City has completed several paths in Corwin M. Nixon Park, Pine Hill Lakes Park and Hosea Woods, as well as extensions of paths along Tylersville Road, Snider Road and Western Row (see Map 6.2B). A current widening project is adding a bike path segment on Mason Road.
- Future thoroughfare widening projects such as US 42 and Bethany Road will include bike path segments and sidewalks. The City also plans to construct sidewalks in the Manhasset Village and Mason Heights subdivisions.

Rail

- A single railroad line, the Indiana-Ohio, provides freight service to several local industries in Mason.
- Ohio's 3C Passenger Rail System is in the planning

Ohio Physical Activity Plan Vision Components

- Incorporation of Complete Streets concepts into roadway construction, maintenance, and resurfacing.
- Development of state enabling legislation for enlightened regional and local zoning and transportation policies, such as impact mitigation requirements and encouragement of non-motorized transportation opportunities.
- Regional cooperation on transportation and land use planning and zoning and development of inter- and intra-regional mass transit and non-motorized transportation.
- Reduce vehicle miles traveled and the number of vehicular trips.
- Designing all new developments to accommodate pedestrians and bicycles.
- Incentives by health insurance organizations and employers for healthy lifestyles, including exercise and active commuting.
- Active environments and programs that make schools centers of community physical activity.
- Comprehensive effort to develop a statewide trail and bikeway, greenway, and open space network.
- Engagement of a variety of partners in implementing the Plan, particularly health professionals.
- Institutionalization of all components of the Plan.

stages with a proposed opening date set for 2012. The closest station is planned in Sharonville, Ohio.

Transit

- Although the City of Mason provides no mass transit service, the Southwest Ohio Transit Authority (SORTA) provides service between Mason and downtown Cincinnati via Routes 71X and 72.
- Warren County Transit Services provides transit to any location within Warren County using a demand response system.

Strategy TR-4.2.

Develop new roads or road connections and improve existing roads to support future growth and improve east/west and north/south connectivity.

Action TR-4.2.1. Widen Mason Road from downtown to Butler-Warren Road.

Action TR-4.2.2. Widen and connect Bethany Road and Mason-Morrow-Millgrove Road between Butler-Warren Road and SR-48.

Action TR-4.2.3. Construct a new roadway parallel to I-71 from Kings Island Drive near Western Row Road to Mason-Morrow-Millgrove Road, with a connection to Fairway Drive.

Action TR-4.2.4. Extend Kings Island Drive north to Columbia Road.

Action TR-4.2.5. Construct a new Primary Collector from Western Row Road to Innovation Way.

Action TR-4.2.6. Widen Mason-Montgomery Road from downtown to the northern boundary of Mason. Straighten the curve south of Brewer Road to improve safety and traffic movement.

Action TR-4.2.7. Widen SR-741 from US-42 to the northern boundary of Mason.

Action TR-4.2.8. Widen Kings Mills Road from I-71 to Parkside Drive.

Action TR-4.2.9. Widen Columbia Road between Kings Mills Road and Mason-Morrow-Millgrove Road.

Action TR-4.2.10. Widen US-42 north of downtown to the Mason Sports Park.

Action TR-4.2.11. Extend Stone Ridge Drive east to Mason-Morrow-Millgrove Road and west to US-42.

Action TR-4.2.12. Connect Bunnel Road and Brewer Road.

Action TR-4.2.13. Connect Avalon Trail, Windemere Way and Batsche Trails Boulevard to the Bunnel-Brewer Connector with new roadway extensions.

Action TR-4.2.14. Construct a new Primary Collector parallel to Butler-Warren Road north of Bethany Road.

Strategy TR-4.3.

Improve access and circulation in the Community Core.

Action TR-4.3.1. Extend Foxfield Drive northeast to Kings Mills Road.

Action TR-4.3.2. Extend Foxfield Drive south to Tylersville Road. Consider a design treatment that mitigates cut through traffic. Some options include changing street names, restricting turning movements onto Kenwood Drive from Mason-Montgomery Road, and/or installing a cul-de-sac or creating a one-way street south of Tylersville Road.

Strategy TR-4.4

Prioritize transportation projects in-line with City land use and development goals.

Coordinated land use and infrastructure projects can synergistically further multiple goals at the same time.



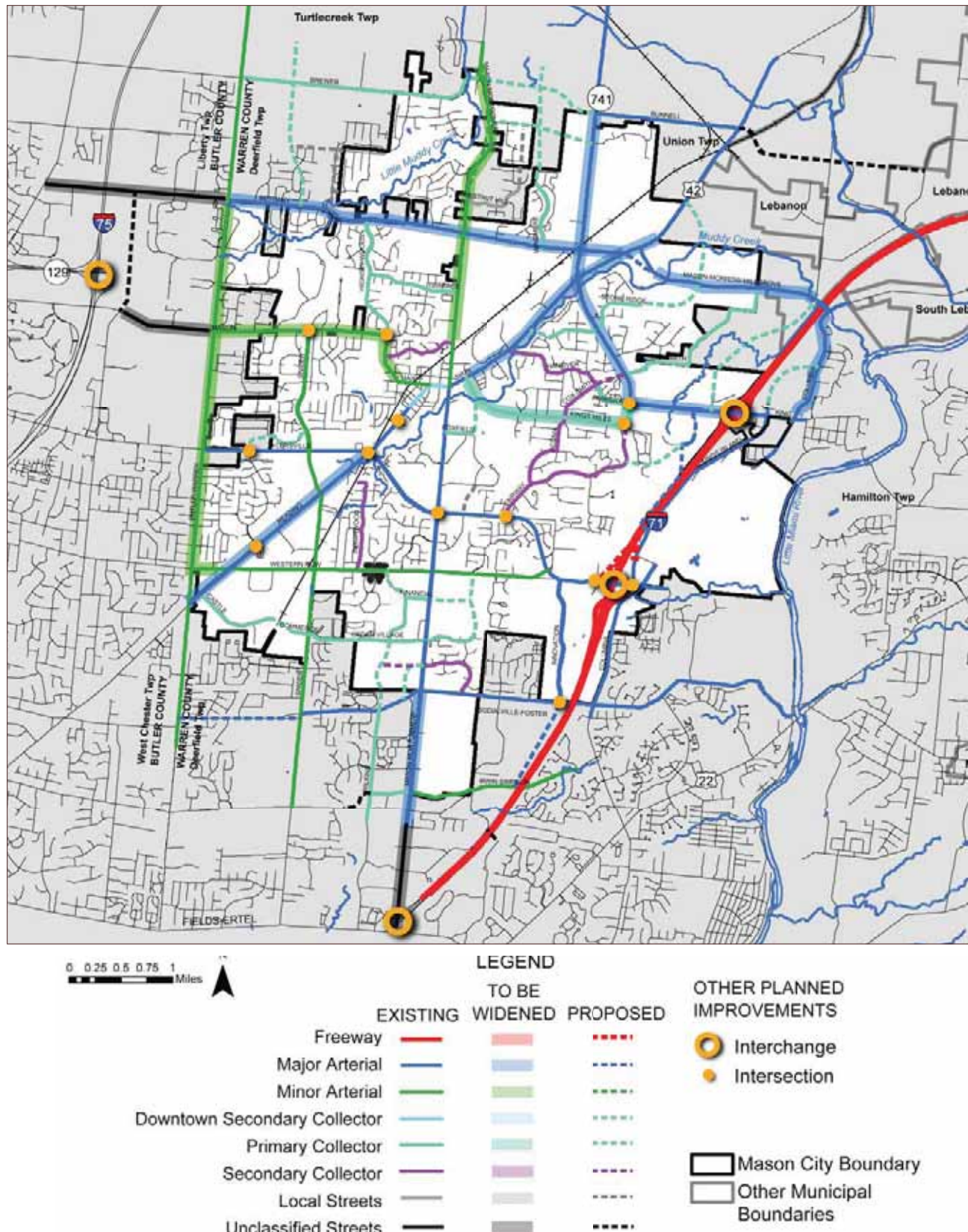
SR-741 north of Bethany Road

Table 6.3A: Proposed Changes to Functional Classifications

Roadway Segment	Existing Classification	Proposed Classification	Justification*
Brewer Road, Proposed Brewer-Bunnel Connector	Primary Collector	Minor Arterial	- Projected 2030 ADT (6,700) exceeds existing range for Primary Collectors. - Proposed connections to Bunnel Road and Columbia/Kings-view will increase through-traffic demands, including employee and truck traffic for proposed Light Industrial uses.
Bunnel Road	Major Arterial	Minor Arterial	Serves similar function to Brewer Road.
Butler-Warren Road (Reading Road to Mason Road)	Minor Arterial	Major Arterial	- Projected 2030 ADT (14,400 - 15,000) exceeds existing range for Minor Arterials. - Continuous north-south route through the City.
Cox-Smith Road	Primary Collector	Secondary Collector	- Projected 2030 ADT (2,300) is less than existing range for Primary Collectors. - Proposed Beach Boulevard extension will provide a parallel alternative for through traffic. - Will help to preserve Low-Intensity Residential character and uses.
Kings Mills Road	Primary Collector	Minor Arterial	- Projected 2030 ADT (12,500) exceeds existing range for Primary Collectors. - Supports through traffic travelling east-west through Mason and to the Kings Mills/I-71 interchange.

*Based on an analysis of functional objectives, comparison of projected 2030 ADT to existing ADT ranges, and Land Use chapter recommendations. 2030 ADT projections were obtained from the Southwest Warren County Transportation Study, completed in 2005.

Map 6.3B: Existing Thoroughfare Plan and Planned Roadway Improvements



Map 6.3C: Proposed Thoroughfare Plan

