

# Transportation

## Summary

The transportation system in Wayne County plays a crucial role in serving development and business needs, as well as transporting goods and people through the County. The system is principally comprised of the road network, with a hierarchy of federal, state, county and local roads. The County has significant responsibilities given its large road network. Horse and buggy traffic is a unique issue from a safety standpoint. The Element recommends a Thoroughfare Plan and identifies road improvements to guide Wayne County over the coming years.

## Planning Issues

*The following is an overview of transportation-related planning issues. For a detailed discussion, please refer to the report **Planning Issues**.*

Long-term transportation needs must be effectively addressed especially as the County continues to grow. Wayne County already has a significant infrastructure burden related to the transportation system (road surfaces, bridges, culverts, etc.). Local funding concerns are an ongoing topic and the County Engineer's Office is financially limited in its ability to meet maintenance and replacement needs.

Scattered residential development places an unbalanced burden on infrastructure, as does large-scale rural businesses that don't contribute to infrastructure improvements. The state is getting closer to reconstructing US 30 east of Wooster following a new alignment. Safety concerns regarding horse and buggies has also been noted. Specific subdivision-related issues have been raised, concerning engineering design standards and internal neighborhood access. Truck traffic in specific communities is another local concern.

The Transportation Element of the **Comprehensive Plan** has two major components:

- A Thoroughfare Plan including the functional classification of roadways and desirable right-of-way widths.
- Future roadway improvements consistent with recommendations of the **Comprehensive Plan**.

## Existing Conditions and Trends

*The following is an overview of existing conditions and trends. For a detailed discussion, please refer to the report **Existing Conditions and Trends**.*

The transportation network is based on the movement of goods and people through the County. The existing roadway inventory/functional classification, its capacity, deficiencies and accident locations are key indicators of how the movement of goods and people actually occurs. The information collected to establish the baseline for the highway system in Wayne County included: existing functional classification of roadways, inventory of roads and bridges including a condition report of all bridges maintained by Wayne County, traffic volumes (expressed as average daily traffic [ADT]) from 1992 for state highways and 1993 and 1996 for County and township roads, accident data for intersections and roadway segments (nonintersections), information from the Ohio Department of Transportation's (ODOT's) statewide study *Access Ohio*, which evaluated existing conditions and future demands on the state's transportation system and interviews with the County Engineer's office regarding finances, priorities, available funding and other issues.

## State Roadway System

The State Transportation Improvement Plan and *Access Ohio* together detail potential system upgrades. Eight roadway improvement projects were recommended for Wayne County, each classified as a roadway reconstruction project. *Access Ohio* identified the following three major transportation facilities in Wayne County as macro corridors: I-71, US 30 and US 250. Collectively the routes provide major north-south and east-west movements through the County.

- I-71 serves as a direct link between the Ohio cities of Cleveland and Cincinnati and continues through to southern states.
- US 30 crosses the United States from Portland, Oregon to Atlantic City, New Jersey, passing through Wayne County.
- US 250 links Sandusky, Ohio to I-77 just north of New Philadelphia, Ohio (I-77 provides a direct route between Cleveland and Charlotte, South Carolina).

## Functional Classification

Roadway inventory/functional classification is important to the overall efficiency of the roadway network. The functional classification for township and County roads was derived from ODOT's Road Inventory. The U.S. routes and state routes were considered Principle Arterials for the following reasons: the routes provide an integrated roadway network throughout Wayne County and Ohio, serve urban areas in Wayne County and link major cities throughout Ohio and beyond and serve corridor movements having statewide or interstate travel.

## Level of Service and Average Daily Traffic

The capacity of a transportation facility determines how freely traffic moves on the roadway. The flow of traffic on the facility - whether motorists can maneuver freely or traffic congestion results in delays - is directly related to the Level of Service (LOS) of the roadway. Capacity and LOS define how the road operates under the Average Daily Traffic (ADT) load and its physical conditions. LOS is ranked from A (best) to F (worst). The segments with the lowest ratings in Wayne County were:

- Portions of SR 585 between Wooster and Doylestown are rated as LOS F.
- Portions of US 250, SR 83, SR 585 and SR 57 are rated as LOS E.

## Deficient Bridges and Lane Widths

Portions of deficient infrastructure have been identified by the Wayne County Engineer's Office. A total of 94 bridges are noted as deficient and warrant replacement, and about 475 miles of pavement is classified as having deficient lane widths. The Wayne County Engineer Office's Index of Bridges was used to identify bridge deficiencies on County and township routes. The bridge deficiencies located on state routes were identified using a list prepared by ODOT for *Access Ohio*. Segments of state routes with deficient lane widths were identified by using a map prepared by ODOT for *Access Ohio*. The standard lane width for a state route is 12 feet. A lane of deficient width is less than 12 feet but not likely less than 10 feet in width. The ***Existing Conditions and Trends Report*** identifies these locations.

## Top Accident Locations

The top intersection and non-intersection accident locations between 1992 and 1994 were identified by the Wayne County Engineer's Office. Fatal accidents on state routes were

identified by ODOT for *Access Ohio*. A total of 18 locations have been identified. The ***Existing Conditions and Trends Report*** identifies these locations.

**Programmed Projects - State Transportation Improvement Plan**

As shown on the Programmed Projects-State Transportation Improvement Plan map (***Existing Conditions and Trends Report***), several improvements to Wayne County's transportation system over the next few years have been programmed by ODOT. Various types of projects are to be completed including bridge replacements and rehabilitation, pavement repairs and intersection upgrades, signal improvements and preliminary development phase projects. Table 9.1 lists programmed projects for the County through the year 1999.

**Table 9.1  
ODOT Transportation Improvement Program (1996-1999)**

Route	(Miles)	Length Description	Fiscal Year			
			1996	1997	1998	1999
Oakhill Road	1.56	Wooster; widen to 3 lanes, including sidewalks, drainage and curb and gutter		X		
Signal Pre-Empt*	0.00	Intersections in Wooster: purchase equipment for emergency pre-empt system	X			
C-1 Rehab	0.12 X	Bridge Replacement		X		
Reconstruction 70	0.32	Bridge Replacement 4-Lane Rehabilitation and Additional Lanes	X		S.R. 21 C-54	0.2 0.0
109 Replacement	0.14	Bridge Replacement			XS.R.302	0.0
		Bridge Replacement				

Source: Ohio Department of Transportation, 1995.

Note: \*Completed

Projects preceded with "C" are funded in part with significant local money and staff time for

administrative

**Assessment**

Major *Access Ohio* recommendations for Wayne County are graphically portrayed in the ***Existing Conditions and Trends Report***. Several improvements are recommended to federal and state routes in the County, specifically on US 30, 250 and SR 83, 3, 585, 226 and 57. Most of these improvements are upgrades of two-lane roads to meet ODOT standards for pavement and roadway widths and minor corrections of geometrics (e.g., sight distance improvements). Also, most of the improvements are not likely to occur until 2005 and beyond.

The one exception to this is the **U.S. 30 upgrade/bypass** from Wooster to Kansas Road (Township Road 179). This project is nearing completion of its environmental studies, which precede final design and construction. Construction was tentatively scheduled to occur in 1998, but in late January, 1997, ODOT released a project list which deleted this

project from funding. The bypass is currently planned as a limited-access, four-lane freeway with up to three interchanges.

A portion of ODOT's evaluation of future conditions entailed the forecasting of future traffic volumes and then comparing this number with the highway's ability to accommodate this demand. This type of capacity analysis was also conducted for the Comprehensive Plan on select County and township roads (typically those with higher existing traffic volumes). This analysis based upon standard traffic engineering practices, indicated that the County and township roadway system would not need major upgrades (i.e., widening two-lane roads to four-lane roads, however many geometric deficiencies were noted). This is not to say, however, that needs may not change due to unanticipated development. This situation will be monitored continuously by the County Engineer's Office through their planned program of conducting traffic counts on all County and township roads on a periodic basis (every three to five years).

There are some roads, however, which are currently experiencing rather substantial increases in traffic over the past three to four years (for example, CR 23 or Back Orrville Road). These roads were then evaluated for their pavement and roadway widths due to concerns for safety of motorists. As these roads are evaluated further, one major element needs to be incorporated into the decisionmaking process—right-of-way widths. The available right-of-way and whether it is an easement or wholly "owned" by the County can have substantial impact on the cost of the needed improvement.

Because all highway improvement plans need to match available and foreseeable financial resources, a review of the County's highway and bridge funding programs was conducted. The highlights of the review are as follows:

- Of the \$5.3 million budgeted for the County's highway and bridge programs, \$2.3 million was allocated for capital improvements and maintenance.
- The utilization of 44 percent of available resources for capital improvements is quite substantial considering that Wayne County is in the top two or three counties in terms of miles of highway and number of bridges to maintain and repair.
- The County has identified approximately 200 bridges which need to be rehabilitated or replaced at an estimated cost of \$25 million.
- The County has been very successful in utilizing all monies available for road and bridge improvements and maintenance, including dedicated user fees/taxes (gasoline tax, state license tag fees and all allowable permissive license tag fees), federal funds (bridge and safety programs) and monies from the Ohio Public Works Commission (Issue 2 and Local Transportation Improvement Program).

## Goals, Objectives and Strategies

Policies are the basis of the **Comprehensive Plan** and this sections presents the Transportation Goal, three objectives and related strategies. Together these policies are the driving force behind the Transportation Element. The Implementation section presents actions for each objective. The Transportation Goal is:

**Transportation system to be improved to address existing and future traffic challenges.**

The objectives and their respective strategies are:

**Objective 1 - Highway System - Maintain and preserve investments made in the existing County highway system, by:**

- 1.1 Continuing to rehabilitate, repair and replace County's bridges as deficiencies are identified.
- 1.2 Continuing to monitor and correct unsafe intersections, roadway segments and railroad grade crossings.
- 1.3 Continuing routine maintenance of pavements and culverts and, if funding allows, expanding resurfacing programs.
- 1.4 Encouraging the implementation of beautification and conservation projects on or along highway corridors.

**Objective 2 - Highway Infrastructure - Improve highway infrastructure to meet increasing demand and development, by:**

- 2.1 Pursuing the thoroughfare plan and implementing where feasible.
- 2.2 Pursuing additional sources of funding.
- 2.3 Encouraging cooperative ventures among the various jurisdictions where new projects are identified.
- 2.4 Continuing working with ODOT to improve Access Ohio recommendations. Where feasible, to help meet Amish travel requirements, pursue upgrading state routes to a "Super 2" (i.e., wider berms).

**Objective 3 - Land Use and Transportation Linkages - Provide a strong link between land use objectives and transportation, to manage demands to preserve the integrity and/or prevent degradation of the system, by:**

- 3.1 Exploring access management strategies with the state on designated state and/or federal routes.
- 3.2 Coordinating access management and thoroughfare plan issues when amending or revising subdivision regulations.

## Transportation Plan

### Thoroughfare Plan

The existing functional classification is based upon the ODOT Roadway Inventory which is a compilation of information (e.g., roadway and pavement widths, surface type, etc.) assembled by ODOT and the County Engineers Office. It is updated on a periodic basis; however, this may change in the future.

For this Plan, all federal and state routes were classified as arterials in recognition of the vital role they play in moving the majority of traffic within and through Wayne County. County roads were then classified as major collector, minor collector or local roads dependent upon their traffic volumes and general utility to the whole roadway system. Township roads with noted exceptions were classified as local roads.

Generally, the right-of-way associated with the functional classifications should be of sufficient width so that when it is necessary to improve and/or widen the road to accommodate traffic demand, it can be done without additional significant, permanent acquisition from adjacent property owners. Right-of-way acquisition increases the cost and time requirements of a project. Therefore, whenever possible the County should ensure that sufficient right-of-way is dedicated as new developments on existing highways

are brought forward for approval. The following are recommended minimums for rights-of-way:

- **Arterials:** 100 feet
- **Major collectors:** 80 feet
- **Minor collectors and local roads:** 60 feet

This hierarchy of roads reflects, in general the differentiation of accessibility and mobility functions of the various streets and highways. For example, an interstate highway (a principal arterial) has greater capacity, higher speeds and minimum points of access, whereas a subdivision street (typically considered a local classification) has lower speeds, less capacity and a large number of driveways or access points. For the most part, County roads in the collector classification are those which could be considered to have equal balance between mobility (speed and capacity) and accessibility (number and spacing of access points).

The recommended functional classifications for Wayne County share the following characteristics:

- Building upon the existing functional classification by closing gaps and making connections that were viewed as “completing” the system.
- Taking into account the Land Use Element of the **Comprehensive Plan**.
- Reflecting the most recent (1996) traffic count information from the County Engineer’s Office and evident trends suggested by comparison to 1993 data.
- Keeping the existing orientation focused on supporting the comprehensive state highway system in Wayne County (i.e., no new “superhighways” recommended).

A quick review of the Thoroughfare Plan map shows the major focal points of the higher class (major collector) County routes:

- East/west from the Ashland County line through Wooster and the Smithville/Orrville/Stark County line corridor.
- The southeastern quadrant of the County focuses on connecting Apple Creek, Fredericksburg, and Mount Eaton to U.S. 30 and U.S. 250.
- The northern “cross county” (County Roads 70 and 150) which connects the five cities and/or villages near the Medina and Summit County lines.

### **Recommended Improvements**

As previously mentioned, ODOT’s *Access Ohio* identified several state highways for upgrading. Since these routes are part of Wayne County’s arterial system, the County should consider their importance to the overall **Comprehensive Plan**. It may be beneficial to explore with ODOT the need and/or desire of upgrading these roadways to a “Super 2” facility. “Super 2” improvement consists of improving a two-lane facility to a very good horizontal and vertical geometry, adding shoulders (and often times increasing the paved berm to eight to ten feet in width), adding left turn lanes as needed and controlling private access. The County could also discuss factoring into consideration the special requirements of nonmotorized vehicles (horse and buggy) which are prevalent in certain sections of the County.

For those roads identified in Table 9.2 for upgrading the following standards are viewed as desirable:

- **Major Collectors:** Pavement width of 24 feet (minimum) and berms of four feet (minimum) to six feet (maximum).
- **Minor Collectors and Local Roads:** 20 feet (minimum) to 24 feet (maximum) of pavement width and two feet (minimum) to four feet (maximum) of berm widths.

These recommendations are based upon the foundation of highway safety, recognizing that as a general rule as traffic volumes increase the chance of accidents increases. Analyses performed by The Road Information Program (TRIP) using 1994 data published by the National Highway Traffic Safety Administration found:

- About 77 percent of all fatal accidents occur on two-lane roads.
- Widening a traffic lane by one foot on a substandard road reduces accidents by 12 percent.
- A two-foot widening reduces accidents by 23 percent.
- Providing a 14-foot obstruction-free shoulder reduces accidents by 25 percent.

It should also be recognized that motor vehicle accidents involve three primary elements: the driver, the vehicle and the roadway condition at the time of the accident. Therefore, any recommended solution first needs to be based on detailed studies taking the above factors into account in addition to other site-specific information (e.g., topography, speed limits/actual speeds, engineering judgement, etc.).

An issue for future consideration by the County Engineer is the classification of **Old US 30** once the new alignment east of Wooster comes on line. The functional classification should be studied at that time.

### **Funding Issues**

Wayne County has well utilized its available funding from various sources to tackle its extensive needs in repairing/replacing deficient bridges. However, needs in the future are of such magnitude that County leadership has little choice but to focus its efforts in that direction. This leaves minimal amounts of money to meet highway resurfacing needs, let alone larger amounts of money for roadway widening.

A review of what has been done by other counties in Ohio to secure additional revenues for their road and bridge needs has revealed three primary sources. These are as follows:

- **Sales Tax** - Increasing local sales tax has been done in six or seven counties with varying success. Since by law the revenues cannot be dedicated solely to a single purpose, as time passes pressure from other needed services increases, often times diminishing the monies available for roads and bridges.
- **Property Tax** - A levy on property taxes, however, can be earmarked for roads and bridges. Since property taxes support a number of community needs and services such as schools, the community must decide if its transportation system is of comparable importance. Where this method has been used, it appears that people have been in support of its renewal.
- **General Fund** - Some counties have allocated monies to roads from their general fund budgets. Again, this means that transportation competes with other needs on a yearly basis.

- **Bed Tax** - Erie County is utilizing part of the countywide bed tax (paid by visitors at lodging) to fund a highway improvement locally justified based on tourism traffic.
- **Transportation Improvement District** - A district can be formed as a funding mechanism to assess the cost of transportation improvements to all properties benefiting within the district.

As of this writing, discussion of Ohio's and the nation's transportation needs is increasing. At the federal level, the reauthorization of the Intermodal Surface Transportation Efficiency Act (ISTEA) needs to occur by September 30, 1997. At the state level, ODOT is advising that money available for new construction is diminishing and that many of its roads and bridges are nearing the end of their design life. A theme common to both levels of government is that if a local entity wants a particular transportation project, it will have to provide a larger share of local matching funds than has been the practice in the past.

The following alternative funding sources should also be considered by the County in the long-term:

- **Impact Fees** - A potential source of funding are impact fees, but state legislation is required to permit counties to undertake a road impact fee. Charter municipalities can move forward without state legislative changes, although a challenge to the first municipal exaction in Beavercreek is still in the courts. An impact fee permits a jurisdiction to exact a fee on a development at the building permit stage to fund directly-related public improvements, such as road widening and intersection reconstruction.
- **Tax Increment Financing** - Another current issue before the legislature is loosening requirements of tax increment financing (TIF) that would permit a community to expend TIF-raised revenues for a public improvement unrelated to the subject project. Under TIFs a community can capture a portion of the increased property taxes that result from the development and use those funds to fund related public improvements, such as road projects. TIF agreements are subject to approval of the respective Board of Education of the district in which the project is located.

### **Aesthetic Considerations**

The visual impact of all future road improvements should be addressed at the design stage and where feasible taken into account to ensure that such improvements have a positive visual impact on the landscape. ISTEA enhancement funds should be used to upgrade projects through additional landscaping. Wildflower plantings should be continued and expanded where possible.

### **Building Neighborhood Road Networks**

Neighborhood road networks are important because they interconnect growing neighborhoods, and distribute traffic throughout a larger area and not directly onto local roads. Within Growth and Transitional Areas subdivisions should be designed with stub streets to provide connections with future subdivisions, as per the Subdivision Regulations. Within Conservation Areas, subdivisions may be developed without stub streets depending on their size and whether they abut an adjacent, existing subdivision with stub streets. In those cases connections should be made. As the Subdivision Regulations are updated in 1997, this issue should be addressed and standards developed.

## **Access Management**

As part of the County's planned update to the Subdivision Regulations, attention should be focused on access management and a set of standards proposed to limit the number of curb cuts currently permitted on local roads, and limiting lot splits. At a larger level access management involves managing the location, design and operation of driveways, median openings and street connections to a roadway. The purpose is to preserve traffic flow in terms of safety, capacity and speed. Proper access management improves subdivision layouts, discourages poor development patterns, improves on-site circulation systems, reduces accidents and improves a community's ability to manage the overall transportation system.

## **Rail**

Efforts should continually be made by the County and Wayne Development Council to support the continuation of rail service in Wayne County. Where necessary such service should be expanded to accommodate new industrial facilities and the two industrial parks proposed in the **Strategic Economic Development Plan**.

## **Rail-to-Trail Conversion**

The County Commissioners and Wayne County Park District should support proposals for rail-to-trail conversions. At a minimum efforts should be undertaken to preserve abandoned railroad right-of-way for future uses, whether reuse as rail or for recreational needs. Where recreation is pursued, connection with adjacent county systems should be encouraged.

## **Implementation**

The County Engineer's Office currently implements an effective program of managing the road network within funding constraints. ODOT is currently completing studies to undertake the US 30 realignment east of Wooster - although state funding is currently questionable. The systems in place at the County and State level should continue to manage the road network, providing improvements where necessary and conducting ongoing maintenance programs. The Engineer's capital improvement plan will provide a good tool to anticipate future improvements and allocate funds accordingly.

## **Subdivision Process**

A number of steps must be undertaken to implement the Transportation Element relative to the County subdivision process:

- **Right-of-Way** - Implementing the Thoroughfare Plan will require right-of-way dedications in all subdivision approvals to ensure the County is able to gain sufficient right-of-way to undertake road improvements benefiting the subject property.
- **Road Alignments** - Subdivision proposals should be responsive to the Thoroughfare Plan relative to their intersection with the roadway network, ensuring that proper alignments are proposed and intersections sufficiently spaced to ensure safety and traffic flow.
- **Stub Streets** - Major subdivisions except those located in Conservation Areas (see below) should provide a sufficient number of stub streets at property lines to ensure that integrated neighborhood road networks will be developed in the future, reducing traffic impacts on existing rural roads. Within Conservation Areas, subdivisions may be developed without stub streets depending on their size and whether they abut an

adjacent, existing subdivision with stub streets. In those cases connections should be made. As the Subdivision Regulations are updated in 1997, this issue should be addressed and standards developed.

- **Access Management** - As the subdivision update process occurs in 1997, access management must be a major focus. The long-term benefit will be lengthening the effectiveness of the existing roadway network without requiring expensive improvements, by managing traffic flow and safety through access controls.

### **Funding**

The County Engineer and County Commissioners should consider appointing a special committee to research funding options and propose a recommendation to the Commissioners for consideration. Clearly current funding sources are used to the extent possible, yet the County's transportation demands cannot be sufficiently addressed. Several options are available for study, as noted in the Plan.

### **Actions**

A detailed set of recommended actions follows which provide direction relative to the strategies presented earlier in this chapter. Actions are intended to be very defined steps that are necessary to implement individual strategies. Parties are identified that are responsible for implementing individual actions. Recommended timeframes are also provided as a measure of success. A summary of all actions presented in the **Comprehensive Plan** is provided in the Implementation Element