5 Transportation

5.1 Introduction


Fig. 5.1: SR 44 / SR 2 Interchange

With the exception local streets in the new residential developments, the transportation network in Painesville Township has been relatively unchanged since the 1996 Comprehensive Plan.

At casual glance, it appears that transportation is not a critical issue in Painesville Township, but a thorough analysis of current developments and large scale projects in the planning stages reveal a myriad of challenges throughout the township. Through traffic on collector roads, at-grade railroad crossings, increased traffic on US 20, SR2, SR44 and SR84, access management and the lack of bicycle and pedestrian accommodation can diminish the quality of life in the township.

Future transportation plans must consider a diverse range of users, including residents of all ages and abilities, business commuters, visitors, commercial traffic, and those traveling by foot or bicycle.

An effective transportation plan should not be measured in how it would potentially decrease travel times or increase traffic speed, but rather how it will shape future development, improve the quality of life for residents, and preserve rural character. Of course, Painesville Township is not an island, and transportation planning must consider how roads and trails in the community function as part of a regional transportation network, and how traffic from the community affects other cities and townships. The Transportation element will evaluate existing conditions; identify challenges, and present goals and policies that address current and future mobility issues in the township.

5.2 Roads

As of January 2006, there are over 109 miles of roads in the transportation network: 50 mi. Township / 37 mi. State / 22 mi. County. With the exception local streets in the new residential developments and resurfacing programs, the transportation network in Painesville Township has been relatively unchanged. However, increased vehicle ownership, an influx of new residents who commute to jobs outside the community, non-residents commuting daily through the township and changing lifestyles have all impacted township roads.

Table 5.1
Traffic count – 1972 and 2005*
Painesville Township *County Roads*

Road	*Segment*	*Direction*	*Traffic volume 1972*	*Traffic volume 2005**	*△% 1972-current*
Bacon Road	1) US 20 to Blasé-Nemeth Road	n/s	1,950	4,620	136
Bacon Road	2) Blasé-Nemeth Road to Lake Road	n/s	2,161	4,330 (04)	100
Blackbrook Road	1) City of Mentor line to Newell Street	e/w	644	2,700 (04)	319
Blase-Nemeth Road	1) SR 535 to Bacon Road	e/w	710	3820	438
Blase-Nemeth Road	2) Bacon Road to US 20	e/w	444	900 (01)	102
Bowhall Road	1) Madison Avenue to N&W Railroad	n/s	1,743	3,990	129
Bowhall Road	2) Conrail Railroad to US 20	n/s	1,589	3,400 (01)	113
Casement Avenue	1) US 20 to Painesville City line	n/s	2,474	2,700 (01)	9
Fairgrounds Road	1) South of US 20	n/s	3,877	5,500	41
Freedom Road	1) West of Newell Street to dead end	e/w	2,135	1,900 (01)	-11
Hale Road	1) US 20 to Park Road	e/w	4,245	5,350 (02)	26
Hale Road	2) Park Road to Lane Road (Perry Township)	e/w	2,451	3,570	45
Hardy Road	1) SR 535 to Lake Road	n/s	1,746	4,200	140
Headlands Road	1) City of Mentor line to Grand River Village line	both	1,800	2,440 (95)	35
Jackson Street	1) City of Mentor line to Painesville City line	e/w	3,730	7,250 (04)	94
Liberty Street	1) SR 84 to Painesville City line	n/s	4,435	6,650 (95)	49
Madison Avenue	1) West of Welch Road	e/w	3,721	7,300 (01)	96
Madison Avenue	2) Riverside Drive to Bowhall Road	e/w	4,660	7,250 (01)	55
Mantle Road	1) South of SR 535	n/s	4,664	1,725 (02)	-63
Newell Street	1) SR 2 to SR 283	n/s	969	2,935	202
Nye Road	1) Jackson Street to US 20	n/s	2,230	2,650 (01)	18
Palmer Avenue	1) US 20 to Jackson Street	n/s	4,330	2,700	37
Ravenna Road	1) SR 84 to Auburn Road	n/s	2,673	5,625 (04)	110
Riverside Drive	1) Overlook Road to Madison Avenue	n/s	1,705	2,000 (04)	17
Welch Road	1) Madison Avenue to Park Road	n/s	441	1,030	133
Woodworth Avenue	1) Madison Avenue to Casement Avenue	n/s	1,856	1,900	2

* 2005 data is used where available (most recent used when 2005 not available)
Township population – 10,870 in 1970, 15037 in 2000; increase of 38%
(Lake County Engineer, Ohio Department of Transportation)

Roads per resident

There are 104 mi. or 546,960 linear feet of road surface, or about 36.37 feet of road for each of the 15,037 township residents. By comparison, in neighboring Concord Township, 105.68 miles serves a population of 15,282 residents, with 557,990 linear feet or 36.5 feet of road per person.

In Leroy, this figure increases to 92.3 feet of road per 3,122 residents indicating a scattered, low density population base.

While large commercial/industrial areas do exist in the township, it is important to increase the non-residential tax base to help offset the cost of road maintenance to local homeowners.

Traffic Counts

As expected, the traffic volume on nearly all roads has increased since the 1996 plan (Table 5.1). With the exception of two corridors, the average daily traffic volume on all county roads has increased. Increases range from 2 percent on Woodworth Avenue to over 400 percent on Blasé-Nemeth Road since 1972.

Other than a growing population, several factors contribute to the increase of traffic in the township. Changing lifestyles through the years have resulted in increased vehicle traffic, among them two-income families, children who can afford cars of their own, and increased recreational activities (sports leagues, extracurricular activities) for children.

These trends also affect adjacent communities, increasing through traffic in Painesville Township. (Likewise, residents in Painesville Township affect traffic in other communities.) As eastern Lake County continues to grow, so will traffic in Painesville Township and surrounding communities. Large scale development plans for eastern and northern Painesville Township will dramatically increase the traffic load on the following roads: Madison Avenue, Bowhall Rd., Park Rd., Bacon Rd., Lake Road and Fairport Nursery Rd. Along with maintenance, it is possible that township residents will begin to discuss pedestrian friendly corridors. Future road construction or reconstruction should examine wider pavement widths to accommodate pedestrians and bicycle traffic.

Transportation-related comments from resident surveys

Negative changes you have witnessed

- The appearance of the Route 20 corridor from Painesville City to Perry. I feel that it looks very trashy and could be improved.
- Underpass for Route 20 railroad crossing.
- We should have a street light at the Fairport-Nursery exit off Route 2. It's an accident waiting to happen.
- Route 20 needs more lanes.
- I'm concerned about my family's safety on Bowhall Rd. Cars speed and drive recklessly. We run across the street for our mail at the risk of our lives.
- We can't walk down the road since we don't have sidewalks.
- More sidewalks would be great and would promote friendlier neighbors.
- There are a lot of dangerous intersections in the area, particularly on Route 20.
- I would like to see bike or walking paths on Madison Avenue and Park Rd. to connect. This would service new home developments in the area.
- Sidewalk or bike path down Bacon Rd.

Positive changes you have witnessed

- Curbs on Madison Avenue and sewers.
- Road improvements.
- Better roads.
- Street repairs and more visible sheriffs patrolling.
- Good roads, snow removal and very good emergency services.
- Upgrading of roads, property improvement, both public and privately owned.
- Road and Building Department efforts.
- Excellent snow removal.
  The red light at the end of Fairgrounds.
- Snow plowing and taking care of our roads.
  Improved roads.
- Madison Ave. getting repaved.
- Repaving streets in the Pines development and Route 20.
- Snow removal and road repair has improved.
- Snow removal improved.
- Streetlights, better roads, crime protection, better schools.
- Road resurfacing and great snow removal.
- Road paving.
- Good zoning laws and enforcement. Roads well maintained. I feel trustees take their jobs very seriously.
- Maintenance of road.
- Some roads re-paved.
- Paved streets.
- Roads are better. School system improved.
- Better snow removal.
- Improvement in services such as road/fire/etc.
- Road Department.
- Better Road Dept. and school leadership.

Discounting a long-term national crisis that would dramatically impact the supply and price of gasoline, little can be done to reduce traffic in the township, or slow its rate of increase.

Route 20 (west)

The Mentor Avenue corridor (US 20) is the major east-west thoroughfare in Painesville Township moving traffic from Mentor to Painesville City. According to a 2002 NOACA traffic volume map, approximately 15,850 vehicles travel the corridor daily. Currently, it is a two lane road with a center turn lane. This has proven inadequate to serve the largest commercial corridor in the township. During the peak commuting time and often non-peak hours, traffic crawls through this section of road.

Currently, the Ohio Department of Transportation is in the process of widening the right-of-way and the road, creating a fourth lane to allow two lanes of traffic in both directions. Right-of-way acquisition is complete and utilities construction is underway. Road construction should start spring 2006 and completed by late 2007-early 2008.

Access management and ease of access to the many businesses along Mentor Avenue has always been an issue. It has been standard practice for each business to create individual parking lots for their customers. These multiple ingress/egress points along Mentor Avenue slow traffic and create safety issues for pedestrians and drivers as people try to turn in and out of the businesses.

The Route 20 corridor also has a grade level railroad crossing (with gate) utilized by Norfolk and Southern.

Calamity Curve

In 1916, the Board of Lake County Commissioners authorized the relocation of US Route 20 from crossing the railroad tracks at grade to an underpass that would line up with Casement Road. They created the now famous "S" curve that has become known as Calamity Curve. In 1934, the road was moved again to create a curve that was easier to take at high speeds. In 1985, the Route 20 bridge over the Grand River was moved south and another gentle curve was created. At this time, Casement Road and Erie Street Ext were moved to create a better intersection. The cross intersection of Erie Street, Erie Street Ext, Casement and North Ridge was eliminated. Calamity Curve has evolved into a semi-safe curve.

Route 20 (east)

Similar to the western corridor, the eastern portion of US 20 (aka North Ridge Road) is the major east-west corridor through the township to points east. Access management is a major issue for the approximately 16,000 vehicles that travel this route on a daily basis (NOACA, 2002).

Much needed intersection improvements and road widening projects have occurred at US 20 and Bacon Rd. and US 20 and Park Rd. This will ease the traffic pressure for vehicles accessing the quickly developing Bacon Road corridor in the extreme northeast quadrant of the township.

This stretch of US 20 is marked with unique and often hazardous intersection. These include Mantle Rd., Fairport Nursery Rd., and State Route 2. Future corridors studies and intersection upgrades may be needed as the population in the Township and eastern Lake County continues to increase.

Route 2 & US 20 Merge

State Route 2 was constructed in the 1960's with the goal of completely traversing Lake County east to west. Ultimately, the constructed of SR 2 ended near the Painesville Twp./Perry Twp. line resulting in a poorly designed merging point (Fig. 2). Increased traffic volumes on both US 20 and SR 2 have magnified the problem.

Fig. 5.2.: US 20 / SR 2 Interchange

Near the merge point, two additional access management concerns are noticeable; the intersection of US 20 and Blase-Nemeth and the continuous curb cut of an existing business on the south side of the road.

Presently, SR 2 has plans to be widened throughout Lake County, but extension to the County's eastern border is not a option at this time. As continued developed of Painesville Twp. and points east continue, the traffic volume on US 20 and SR 2 will continue to increase, thus increasing potential conflicts at this merge point. A multi-jurisdictional intersection study should be considered for alternative design scenarios. NOACA's Transportation for Livable Communities Initiative is a potential funding source for these types of studies.

The Northeast Quadrant

Development pressures, erosion and east-west road connectivity are concerns in northeastern Painesville Township. All three are related. In 1964, Lake Road ran from Bacon Road to Hardy Today, erosion has short-ended this connection to Bacon Rd. to Ardoyle Ave. Severe bluff erosion continues near the Lake Rd. terminus and it is only matter of time before the connection to Ardoyle Ave. is lost. The loss of this connection has severely limited the east-west transportation capabilities in the township's most rapidly growing area.

Conservative estimates show approximately 3,500 new units of residential development in this area. These units will substantially increase the traffic load and demand easier means to traverse through the township. At least one connection between Hardy Rd. and Bacon Rd. is highly recommended. This will also aid with emergency response times and predicted traffic congestion. Post Rd. may be a solution to providing this connection. Currently, the Fire Department is proposing to build a third station at the corner of Fairport Nursery Road and Hardy Rd.

Impact of the Vrooman Road Bridge

The Vrooman Road crossing over the Grand River is technically in Perry and Leroy, yet it may have a great effect on Painesville Township. It provides interstate access to the southeastern potion of the township. Bridge improvements would provide much safer and quicker access to the township and potentially make the southeastern quadrant more attractive to homebuyers and businesses who were historically turned off due to lack of access.

South from State Route 84 (Riverside Drive/South Ridge Road) in Perry Township, Vrooman Road descends down the side of a ravine into the Grand River valley. A very tight turn takes the road over a deteriorating two-lane bridge that is often closed. The road makes another sharp, almost 90-degree turn to the left before rising out of the valley. The Vrooman Road crossing over the Grand River is closed to truck traffic; there is little room to accelerate before ascents, and the elderly bridge cannot handle heavy loads.

The 1960 Lake County Comprehensive Plan proposed realigning Vrooman Road, following Lane Road south from Perry Township across a new high-level bridge spanning the Grand River valley, connecting to Vrooman Road. The concept of a high-level bridge was reintroduced in the 1984 township plan, although a proposed route was not mentioned.

In 2004, the Lake County Engineering Department again began to investigate replacement of the Vrooman Road crossing. Homeland Security issues related to the presence of the Perry Nuclear Power Plant – the need for better access to the Perry and Painesville areas from I-90, and another possible evacuation route in the event of an emergency, is driving efforts to improve the Vrooman Road crossing over the Grand River. The two favored routes both involve high level bridges; one crossing the river and intersecting with State Route 84 at Madison Avenue, where Vrooman Road now ends – essentially straightening the current crossing – and the other extending Vrooman Road north to connect with Lane Road, similar to what was proposed in 1960. At the time this plan was written, there was no preferred option; however, the County Engineer anticipates a possible planned completion by 2010. With either option, though, a truck-accessible, all-season bridge across the Grand River will cause through traffic to increase along Madison Ave. and SR 84 in the township.

The Ohio Department of Transportation and the Lake County Engineer do not have any immediate plans to improve the Vrooman Road/I-90 interchange.

5.3 Access Management

Access management is the planning, design and implementation of land use and transportation strategies that control the flow of traffic between the road and surrounding land; control of driveways and access points between streets and private property


Fig. 5.3: Access Management Opportunity

When access management is poor, there are increased conflict points – areas where vehicle travel routes cross paths. A large

amount of conflict points results in an unpredictable traffic pattern, lower traffic speeds, and an increased potential for accidents. The investment the public has made in roadways, and their careful design, is degraded.

Conflict points should be minimized and spaced as far apart as possible. Drivers can only mentally process one conflict point at a time. Separation of conflict points provides more time and space for drivers to react to unexpected events. Conflict points and other poor access features also increase speed differential – the speed of the fastest traffic on a road versus the speed of the slowest traffic entering a road -- between through traffic and turning traffic.

Greater speed differential results in more rear end collisions. According to the Ohio-Kentucky-Indiana Regional Council of Governments, 50% to 60% of all vehicle accidents are access-related.

Painesville Township has no access management policy or requirements (Fig 3). In many communities, access management is a problem because there are individual driveways for each business, with many having multiple driveways. Along US 20 in eastern Painesville Township, the problem is worse; most businesses do not even have defined driveways or curb cuts. There is no separation of the street and private property; business parking lots touch the street along the entire property frontage (Fig. 5.2).

The continuous curb cuts, as such access is called by traffic engineers, result in an infinite amount of vehicle conflict points. Continuous curb cuts create a very unsafe pedestrian environment, because vehicles can cross a pedestrian path anywhere. Continuous curb cuts make it difficult for a driver to spot the correct entrance to a business. They also increase stormwater runoff, eliminate any visual buffer between the street and a building, and present an unkempt and makeshift appearance of a commercial district.

Painesville Township can adopt commercial access management requirements by an amendment to its zoning regulation, working in cooperation with the Lake County Planning Commission and Lake County Engineer. A barrier to implementation, though, may be resistance from businesses who feel controlled access creates a perception of more difficult access among their customers – they have to pull into a driveway from the road, instead of just veering off the road in front of the business – so vehicle access is no longer "easy." Studies performed by many state transportation departments have concluded strong access management policies do not hurt local businesses.

Common Driveways

Access management is also a concern in residential areas. Houses on lots fronting on long collector roads usually have their own driveways. Encouraging common driveways for residential uses can reduce the number of access points on collector roads and arterials. It can also protect the rural character of developing areas by making development further from a main road possible, thus reducing visual impact on the roadscape. This also has the effect of making building sites more private.

A common drive can either be permanent access easements or tracts dedicated for use as private roads (Fig. 5.4). Ohio law gives developers the right to build private streets. State law does not prohibit access easements. Covenants address maintenance of shared driveways; grading, plowing, patching and so on, along with fees.

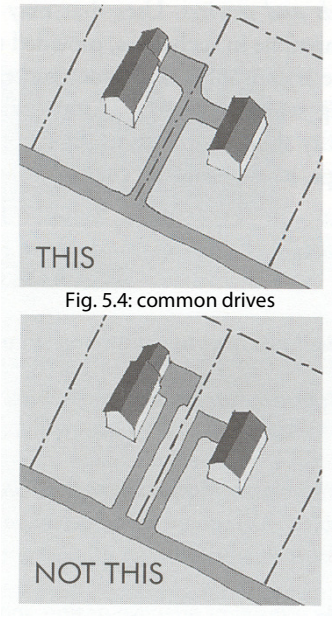


Fig. 5.4: common drives

Common driveways can also be used with commercial and industrial uses, to reduce the number of access points along a road and lower pavement maintenance and plowing costs.

5.4 Railroads

There are two major national east-west rail corridors bisecting the Township. CSX operates the northern set of tracks that run from Indianapolis to Buffalo. Norfolk and Southern (N&S) operates the southern tracks that run from Cleveland to Buffalo. The N&S also owns the remaining tracks of the B&O and old Fairport, Painesville and Eastern Railroad (FP&E). The B&O tracks primarily serve the Morton Salt and Lime Plant in northwestern Painesville Township while the FP&E services PET Processors and Equistar with approximately 2 trains per week.

According to a 1998 NOACA report, the 56 trains per day operate on the CSX tracks and 38 trains per day operate on the N&S. Twenty-one rail/roadway intersections exist (Table 5.2).

The increasing development patterns in eastern and northeastern Painesville Township may warrant a railroad overpass along Park Road in the future. Fire and EMS runs from Station #2 must deal with numerous grade level crossings when responding to calls in the northern portion of the township.

Table 5.2
Railroad crossings
Painesville Township

Railroad	*Road intersection*	*Crossing type*
CSX	SR 44	Overpass
CSX	Newll Street	Gate
CSX	US 20 (North Ridge Road)	Underpass
CSX	Bowhall Road	Gate
CSX	Park Road	Gate
N&S	Jackson Street	Gate
N&S	US 20 (Mentor Avenue)	Gate
N&S	Walnut Street	Underpass
N&S	Madison Avenue	Gate
N&S	Park Road	Warning light
N&S (FP&E)	US 20 (North Ridge Road)	Overpass
N&S (FP&E)	Fairport-Nursery Road	Lights
N&S (FP&E	Hardy Road	Lights
N&S (FP&E)	Fairport-Nursery Road	Lights
N&S (FP&E)	SR 2	Overpass
N&S (FP&E)	Bacon Road and Lake Road	Signs
N&S (B&O)	Richmond Road	Signs
N&S (B&O)	Williams Road	Signs
N&S (B&O)	Headlands Road	Signs

Lake County Planning Commission maps

5.5 Pedestrian and bicycle accommodation

With the exception of local streets in the new residential developments, the transportation network in Painesville Township has been relatively unchanged since the 1996 Comprehensive Plan and previous plans. This includes the lack of local provisions for pedestrian or bicycles.

Rural Roads

Pedestrians walking on rural roads without sidewalks may occasionally have to step off the paved surface to let traffic pass. With higher vehicle volumes, a pedestrian could spend more time off the road than on pavement. Since drainage ditches and soft shoulders are unsuitable for safe, comfortable walking, pedestrian travel is discouraged and endangered by traffic on rural roads.

A road profile designed with some pedestrian accommodation, with a wider shoulder and bicycle markings, should be considered when a rural road is reconstructed. A wider shoulder would maintain the rural ambience of the roadscape, while still providing a maintained, paved area for pedestrians and bicycles.

Sidewalks

Most County and older township roads in Painesville Township have no sidewalks. Sidewalk construction and maintenance is expensive, and even more so when long stretches are spread along roads fronted by few homes.

Sidewalks should be considered for new development in commercial and industrial areas, and retrofitted in existing commercial areas when roads are reconstructed. Sidewalks should be buffered from roads by a landscaped tree lawn. Where driveways cross them, sidewalks could remain visually prominent, with a distinctive pavement color and texture.

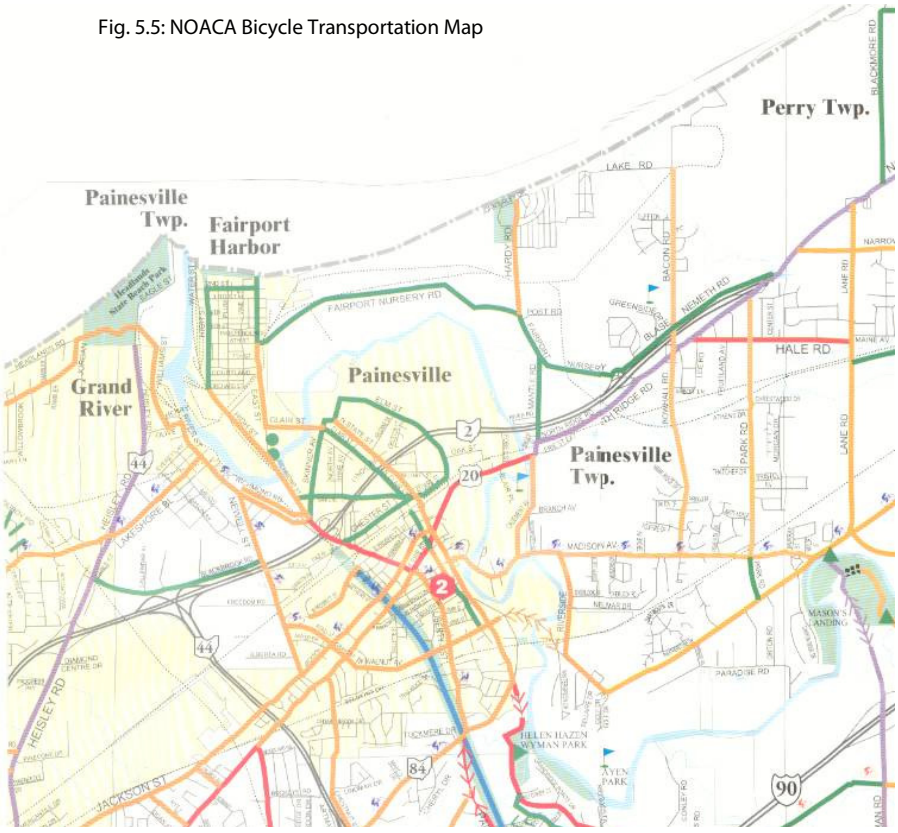
Sidewalks are usually part of a town center, suburban and urban landscape, where population density is much higher than rural areas. Detached sidewalks would be inappropriate along rural roads outside of commercial areas, where their appearance would detract from the desired rural character of streetscapes. The cost of building and maintaining sidewalks along rural, light-traffic roads with only a few residents would also be very difficult to justify.

Bicycle Trails

With the exception of the , Lake Metroparks Greenway Corridor (see inset), the bicycle network is comprised of the existing road network.

In 2003, NOACA published the Bicycle Transportation Map, Lake County, Ohio to provide guidance to bicyclists who want to travel by bicycle using the existing road network (fig. 5.5). The color coded trails (roads) are based on the recommended skill level, terrain and traffic levels of network.

Fig. 5.5: NOACA Bicycle Transportation Map



While bicycle accommodations are desirable amenities in all communities, proper bicycle planning should be county and regionally based. The Lake Metroparks is a natural asset for this type of planning. Large-scale projects similar to Casement and Lakeview Bluffs provide a great opportunity to provide potential corridor linkages between major corridors; for example, a bike trail between Casement, Bowhall and potentially Park Rds.

Long term planning should consider a road profile to accommodate pedestrians, yet make it wide enough to accommodate the increasing bicycle traffic as well.

On a National level, the Adventure Cycling Association has two routes through Painesville Township. The northern route enters the township from Mentor along Lakeshore Blvd. The southern route enters the township along SR 84 following the Greenway Corridor north to Painesville City.

Lake Metroparks Greenway Corridor

The Baltimore and Ohio Railroad, founded in 1827, owns a prominent place in the cultural and economic history of the United States and that of our own Lake County. Countless memorable events mark the progress and succession of the railroad during its 160-year span of operation. Original tracks linking the nation's rail system to Lake Erie were laid in Lake County in 1870 and acquired by the Baltimore and Ohio Railroad in the 1890's. The railroad provided freight service in and out of Painesville, moving some five million tons of coal and iron ore annually.

Today, Lake Metroparks, utilizing the same route that our forefathers founded so many years ago, is proud to officially open The Greenway Trail Corridor. Sounds of bicycle wheels and happy walkers will replace train whistles and the clattering of tracks as one travels on the 4.4 mile paved trail. This corridor links the municipalities of Painesville, Painesville Township and Concord Township allowing visitors to enjoy the natural beauty of these communities in a safe environment. Travelers will cross two newly constructed bridges and experience varied levels of terrain ranging from a 660 ft. elevation in Painesville to an elevation of 895 ft. in Concord Township **(Lakemetroparks.com)**.

5.6 Public transportation

Laketran, the public transit agency serving Lake County has been in operation since 1986. Route 1 travels from downtown Painesville to Mentor and Great Lakes Mall via Mentor Ave. and to Lakeland Community College**.** The Painesville Township stop on this route is located at the Painesville Shopping Center on Mentor Ave. The moderate-to-low population density and scattered development makes large-scale fixed route public transit service impractical and very costly.

Laketran also operates a Dial-a-Ride service. The service offers door-to-door, assisted transportation for all Lake County residents, including those in Painesville Township. Dial-a-Ride picks up users at their homes, and drops them off at work, medical appointments, or any other destination in Lake County. It also provides transportation to medical appointments at Euclid Meridia/Mednet, Euclid Medical Park, Richmond Mt. Sinai East, University Hospitals and Cleveland Clinic in Cuyahoga County. Dial-a-Ride is not intended for regular commuters, but rather for senior citizens and those who are physically challenged. It can be used as temporary transportation for those whose vehicles have broken down.

5.6 Goals and objectives

Each primary paragraph (in **bold type**) is a statement of a goal. The subparagraphs are objectives for implementing the goal.

TR-1 **Transportation networks will accommodate pedestrian and non-pedestrian transportation.**

TR-1-01 Encourage pedestrian and bicycle corridors during site plan and subdivision review of large-scale projects.

TR-1-02 Build wider, pave clearly marked shoulders on and collector and arterial roads that are reconstructed.

TR-1-03 Consider sidewalks in new developments.

TR-2 **A access management policy will be implemented.**

TR-2-01 Work with the Planning Commission and Lake County Engineer in creating and implementing access management.

TR-2-02 Where appropriate, encourage common (shared driveways) to reduce the amount of conflict points along major roadways.

TR-2-01 Conduct a SR2/US 20 interchange study for future modifications.

TR-3 **The transportation network will keep in line with future growth patterns and pressures.**

TR-3-01 Provide a new east-west connection between Hardy Rd. and Bacon Rd.

TR-3-02 Provide a new east-west connection between Casement Rd., Bacon Rd. and Park Rd.

TR-3-03 Continue the US 20 improvement program in place.