TRANSPORTATION

INTRODUCTION

The Transportation System in Boone County is important because it allows for the movement of people and goods. This Element consists of the <u>Boone County Transportation Plan</u>, the CVG Airport Master Plan, Railroad and River Transport activities, and information about the Land Use/Transportation connection.

BOONE COUNTY TRANSPORTATION PLAN

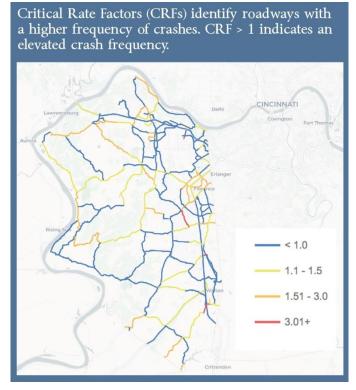
The Boone County Transportation Plan was first adopted in 1996 and later updated in 2006. The most recent update of the Transportation Plan occurred in 2017. This Plan views Boone County as an integral part of the eight county Cincinnati region, while also recognizing it as a dynamic community in its own right. Boone County is well positioned in Northern Kentucky and in the Cincinnati region with three interstates and the Cincinnati/Northern Kentucky International Airport (CVG), two rail lines, and 42 miles of the Ohio River frontage. Boone County is well connected to Midwest, national, and international markets. The Transportation Plan is not an amendment to the Comprehensive Plan. Rather, it is intended to be one of many planning tools utilized during the review of applications submitted for development in the County. The Transportation Plan informs residents, business owners, employees, etc. of the anticipated road, transit, bike, and pedestrian improvements that will be necessary to accommodate the growth expected by the year 2040. The Boone County Transportation Plan includes an existing and future conditions report (crash, signal and traffic count data), an environmental constraints report, a series of maps showing current transportation conditions, a public outreach report, a final set of recommendations, and an executive summary. The overall mission statement of the 2017 Transportation Plan is to deliver a modern, reliable, and sustainable multi-modal, surface transportation system that uses advanced technology and innovative design solutions to improve the mobility of people and goods through the development of a publicly supported plan. The 2017 Boone County Transportation Plan has eight goals.

Goal #1: Improve safety and security for all travelers. This can be accomplished by achieving the following objectives:

- Work to eliminate fatalities and injuries on public roads.
- Reduce the total number of crashes for all modes of transportation, including walking and bicycling.
- Protect critical transportation infrastructure from natural and human disasters.

Goal #2: Enrich our community quality of life. This can be accomplished by achieving the following objectives:

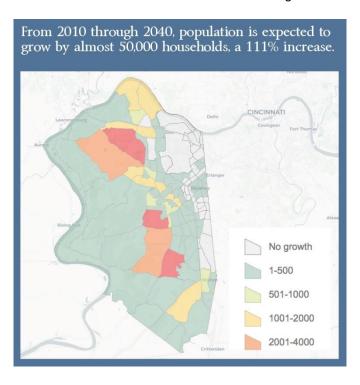
- Incorporate community design when developing transportation improvements.
- Improve community health by encouraging walking and bicycling.
- Provide mobility options for all populations to accommodate social, physical, and economic needs.

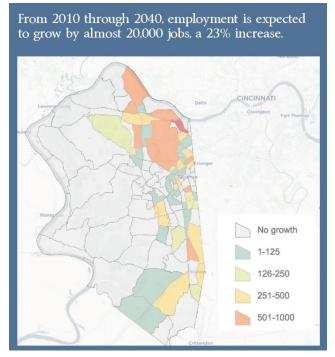


These objectives can be achieved providing safe bicycle and pedestrian facilities throughout the County and efficient TANK bus service options.

Goal #3: Provide sufficient future capacity and mobility. This can be accomplished by achieving the following objectives:

- Address existing and projected capacity needs based on anticipated volumes through 2040.
- Improve travel time reliability.
- Provide a Minimum Level of Service (LOS) "C" on public roads.
- Employ the use of transit, sidewalks/multi-use paths, and bike lanes as capacity solution options.
- Utilize advanced technologies to maximize the performance of the future road network.





Goal #4: Preserve and optimize the existing infrastructure. This can be accomplished by achieving the following objectives:

- Maintain the existing transportation system in good repair.
- Utilize operating improvements to manage traffic effectively and improve the reliability of the transportation system within the existing right-of-way.
- Expand the performance of the existing network by supporting reliable transit service.
- Provide pedestrian and bicycle facilities to optimize the transportation network and ensure connectivity between activity modes.
- Maximize the use of the existing right and facilities to manage traffic effectively through innovative design solutions and advanced technologies to manage traffic effectively.

Goal #5: Facilitate freight logistics. This can be accomplished by achieving the following objectives:

- Accommodate the growing volume of truck traffic to ensure safe and efficient goods movement.
- Enhance multi-modal accessibility to freight-related jobs and mobility of employees especially transit dependent populations.
- · Address truck parking issues.
- Improve interconnectivity and accessibility to local, regional, and global freight modes.
- Utilize advanced technologies to address freight demands.

Goal #6: Support economic vitality. This can be accomplished by achieving the following objectives:

- Enhance multi-modal accessibility, connectivity and mobility between centers of employment, consumer activity and residential development.
- Demonstrate compatibility with the <u>Boone County Comprehensive Plan</u> linking the transportation system with existing zoning and future land uses.
- Retain, expand, and attract private investment in Boone County by implementing advanced technology for transportation.

Goal #7: Maintain Environmental Sustainability. This can be accomplished by achieving the following objectives:

- Preserve the natural and historic context of Boone County.
- Minimize impacts to air quality.
- Ensure compatibility with other Boone County plans.

Goal #8: Utilize advance technologies and innovative designs. This can be accomplished by achieving the following objectives:

- Consider innovative design solutions to address transportation issues.
- Take a proactive planning approach in order to take full advantage of technological opportunities.
- Develop public policies and practices that facilitate the implementation of new technologies.

The 2017 <u>Boone County Transportation Plan</u> included a recommendation of 84 projects. This included 57 road projects, 4 bridge projects, 10 bike/pedestrian projects, 4 transit projects, and 9 future studies for miscellaneous projects. Below is a list of the projects. For further information about these individual projects and the 2017 <u>Boone County Transportation Plan</u>, visit **www.booneky.oki.org**.

Road Projects (57):

Bullittsville Road, Phase 1
 Bullittsville Road, Phase 2
 Bullittsville Road, Phase 3
 Camp Ernst Road, Phase 1
 Camp Ernst Road, Phase 2

6. Central Parkway Scoping Study

7. Coral Drive Extension

8. I-275/Graves Road Interchange

9. Hicks Pike, Phase 110. Hicks Pike, Phase 211. Holbrook Lane12. I-71/75 Auxiliary Lanes

12. I-7 1/75 Auxilially Lailes

13. I-71/75 Turfway Road Interchange from I-275

14. KY 14/I-75 Interchange, Phase 1 15. KY 14/I-75 Interchange, Phase 2 16. KY 14/Verona Mudlick Road 17. KY 18/I-75 Interchange

18. KY 18/West of Jefferson Street

19. KY 18/Aero Parkway

20. KY 20 (Petersburg Rd Curve)21. KY 20 (Conner Rd to KY 237)22. KY 20/I-275 (Petersburg)

23. KY 20/I-275 (Graves Rd to KY 237)

24. KY 20/Aviation Boulevard 25. KY 212/I-275 Interchange

26. KY 236 Widening (Donaldson Rd)

27. KY 237 (Gunpowder Rd) 28. KY 237 (North Bend Rd) 29. KY 237 (Conrad Ln) 30. KY 3060 (Frogtown Rd)

31. KY 3076 (Mineola Pike), Phase 1 32. KY 3076 (Mineola Pike), Phase 2

33. KY 3076 (Mineola Pike), I-275 Interchange

34. KY 3076 (Mineola Pike)35. KY 338/I-75 Interchange36. KY 338 Widening

37. KY 3608 (Idlewild Bypass) Interchange

38. KY 536 Interchange

39. KY 536 (Rabbit Hash Rd) Safety Imp.

40. KY 842 (Richardson Rd)41. Litton Lane Extension42. Litton Lane/KY 237 Intersection

43. Longbranch Road Widening
44. Mall Road Connector, Phase 1
45. Mall Road Connector, Phase 2

46. Rice Pike 47. Rogers Lane

48. Toebben Drive Extension

49. Toebben Drive/KY 536 Intersection

50. U.S. 25 Widening, Phase 1 51. U.S. 25 Widening, Phase 2 52. U.S. 25/KY 536 Intersection 53. U.S. 25/Empire Drive Intersection

54. U.S. 42 Widening55. U.S. 42/I-75 Interchange56. U.S. 42 Curve Reconstruction57. Youell Road Connector

Bridge Projects (4):

- 1. Bender Road
- 2. Beaver Road

Bike/Pedestrian Projects (10):

- 1. Bike Sharing Program
- 2. Bike Safety Program
- 3. Connor Road, Multi-Use Path
- 4. CVG Loop Trail
- 5. Kentaboo Sidewalk

Transit Projects (4):

- 1. Dixie Highway Enhancement Transit Corridor
- 2. TANK CVG Transit Station

Future Studies (9):

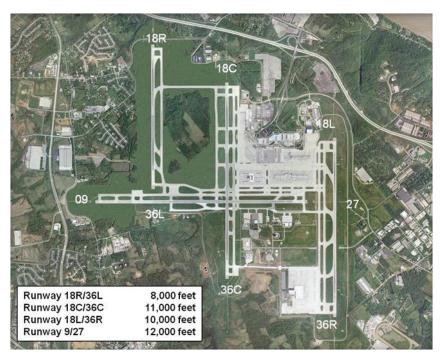
- 1. Roadway Network Connectivity
- 2. Freight Truck Parking
- 3. Traffic Control Center & Corridor Project
- 4. Street Lighting Policy
- 5. Truck Parking Policy

- 3. KY 842 (Richardson Road)
- 4. Longbranch Road
- 6. KY 3503 (Empire Drive Sidewalk)
- 7. Old Union Road Sidewalk, Phase 1
- 8. Old Union Road Sidewalk, Phase 2
- 9. Pedestrian Facility Program
- 10. New Buffington Multi-Use Path
- 3. TANK Pilot Service
- 4. Two System Transfer Policy Program
- 6. First/Last Mile Innovative Tech. Pilot Project
- 7. I-71/75 Truck Parking
- 8. I-71/75 Active Traffic Demand/Management Study
- 9. U.S. 42 Adaptive Signal Control

The end result is the creation of 84 recommendations divided into Tier 1 (highest priority), Tier 2 (medium priority), and unscheduled needs (low priority) categories. The above recommended projects will be considered for inclusion in the fiscally constrained Ohio-Kentucky-Indiana (OKI) Regional Transportation Plan. Recently, it was announced that Kentucky was awarded an Infrastructure for Rebuilding America (INFRA) Grant in the amount of \$67,445,000 to expedite the reconstruction to the I-75/I-71 Mt. Zion Road and the I-75/I-71 Richwood Interchanges.

CINCINNATI/NORTHERN KENTUCKY INTERNATIONAL AIRPORT (CVG)

Cincinnati/Northern The Kentucky International Airport (CVG) is located in Boone County but is managed by the Kenton County Airport Board. history is documented in earlier <u>Boone</u> versions of the County Comprehensive Plan. Since 1956. CVG has completed seven master plan updates and three FAA Part 150 Noise Studies. Previous master plans and noise studies have resulted in runway expansions, land acquisition programs for noise migration purposes, residential and public facility soundproofing programs, and terminal area development. Previous master plans have also addressed flight approaches and take-off procedures to minimize overnight noise relating to (primarily) cargo flights. A preferential corridor to the west has been developed for night-time aviation traffic.



The CVG Airport owns or controls 7,210 acres of land. It is the largest landowner in Boone County. Currently, the Airport has three north-south runways and one east-west runway. Over the years, the CVG's Airport Layout

Plan (ALP) has changed to reflect current and forecasted aviation traffic levels for passenger and cargo flights. CVG has transitioned from a hub and spoke airport with one dominant air passenger carrier to multiple passenger air carriers and cargo carriers. CVG Airport had 32% originating passengers in 2006. In 2017, this percentage increased to 93%. Since 2013, CVG had a total of 1,480,900 passengers originating from Cincinnati.

In terms of cargo trends, there has been an annual average growth of 14% of cargo activity since 2010. In 2017 alone, over 1,000,000 tons of cargo was brought to CVG. In 2018, CVG had 63 non-stop passenger destinations. In 2017, there were 150,463 total aircraft operations versus 328,056 in 2007. Today, the aircraft fleet holds more passengers and the regional aircraft activity has been reduced at CVG. The future of passenger air traffic is based upon legacy network carriers, low-cost carriers, ultra-low-cost carriers, and international carriers. Currently, there are approximately four million enplaned passengers. By the year 2050, CVG Airport projects this figure to be 9.6 million enplaned passengers. The forecast for cargo activity is significant. In 2017, there were about 1.1 million tons of cargo activity at CVG Airport. By the year 2050, this figure is expected to increase to 6.7 million tons largely due to the presence of DHL and Amazon. Finally, total cargo and passenger aircraft operations at CVG were 150,463 in 2017. By the year 2050, this figure is expected to increase to 446,220 annually.

RAILROADS

Rail service in Boone County is provided by two rail lines, the Norfolk and Southern Railroad and the CSX Railroad. Thirty-two Norfolk Southern Railroad trains pass through Boone County each day. In addition, twenty-three CSX trains pass through Boone County each day. Only the eastern portion of the county, specifically the area east of I-75/71, has rail service. The tracks located in the county do provide service to all points in the United States. In addition to individual companies, freight rail service is provided to three industrial parks in Boone County: Northern Kentucky, Richwood, and Walton. The railroad companies can provide design services to individual users needing rail service.

At present, the railroads do not expect to expand the railroad network to other parts of Boone County. The topography and expense involved make such an undertaking very unlikely. However, it is expected that new users will be adequately served by the existing tracks. The presence of three interstate highways and two rail lines in the same corridor create a unique and favorable situation for future industrial areas along the eastern edge of Boone County.

RIVER TRANSPORT

The Ohio River comprises approximately one half of Boone County's border. As one of the major rivers in the United States, the Ohio River is part of a vast river transportation network. The 42 mile river shoreline of Boone County has historically been underutilized by river traffic for barge docking or storage. In May 2018, 329 tug boats with 3,023 barges and 1,648,000 tons of freight passed through Boone County. This activity is expected to increase based upon the completion of the Panama Canal expansion project. The third set of locks project is expected to double the capacity of the Panama Canal by allowing more large ships carrying cargo to pass through. At one time there were three ferry crossings in Boone County. The Anderson Ferry in the Constance area and the Rabbit Hash Ferry north of Rabbit Hash are the only vehicular ferries operating in the county.

The Boone County river shoreline presently lacks the appropriate infrastructure of roadways and rail service needed to accommodate a large river port facility. However, Boone County's Ohio River shoreline is viewed as an undeveloped resource for the county. Therefore, a future land use study of this shoreline is needed to ascertain its potential for various land uses such as business, residential, recreational, resort, and port operations, and to determine the needed surface transportation connections to such uses.

TRANSIT AUTHORITY OF NORTHERN KENTUCKY (TANK)

In 2013, TANK developed a <u>Transit Network Study</u>. The objective of the Study was to evaluate the existing transit network and identify service improvements based on existing and future travel patterns, population density, and employment center locations. Recommendations included an hourly cross-county service from NKU to the

Florence Mall/Hub, increase bus service in the Hebron employment center area, enhanced service along the Dixie Highway bus corridor, bus shoulder pilot program, and new park and rides. Currently, TANK operates two local routes and nine express routes. Boone County and TANK are constantly evaluating bus routes to support service demands based on population and employment growth. Routes are currently funded by the Boone County Fiscal Court and other private companies to support public transport to employment centers.

KENTUCKY TRANSPORTATION CABINET SIX-YEAR HIGHWAY PLAN (2018-2024)

The Six-Year Kentucky Transportation Cabinet Highway Plan is a bill enacted by the Kentucky Legislature to program funding for specific roadway improvements throughout the State. The Plan schedules design, right-of-way acquisition, and construction funding in phases for each roadway project. It is updated and readopted every six years by the Kentucky Transportation Cabinet. It was last updated in 2018. The Plan is dependent upon the financial condition of the State of Kentucky and priorities throughout the State. The most current Six-Year Plan is available by visiting the Kentucky Transportation Cabinet's website. A two year Biennial Budget has been approved by the Kentucky Legislature. It includes road construction, studies, and sidewalk projects. The 2018-2020 Budget recommends \$300 million worth of transportation projects in Northern Kentucky, of which Boone County will receive \$150 million over the next two years.

TRAFFIC SAFETY COMMITTEE

This Committee meets regularly in order to share information between agencies about traffic safety problems, primarily on county roads. It is chaired by the County Engineer and also includes representatives from the Boone County Sheriff Department's Traffic Division, the Boone County Planning Commission, and the Public Works' Engineering and Sign Divisions. The majority of the Committee's work involves identifying and responding to localized issues including speeding, signage and signalization, parking, sight distances, crosswalks, and maintenance issues. Solutions range from conducting speed studies, increasing enforcement, or adjusting speed limits to adding signage/signals, installing speed humps or turn lanes. Cases involving roads outside county jurisdiction are forwarded to the proper governing authority with the committee's recommendation.

STREET CONNECTIONS

The <u>Boone County Subdivision Regulations</u> contain specific criteria for evaluating potential street connections between developments and adjoining property. The Boone County Planning Commission maintains conceptual maps and a GIS layer of possible future street connections for public review as well as to assist the Planning Commission in the development plan review process. These are working maps that change as communities develop.

In addition to already planned improvements, certain geographic areas must develop both an interconnected collector and local street system as well as improved routes or connections to the interstate system. Some of these connections will be developer-built. The recommended connections listed in the <u>Boone County Transportation Plan</u> are in addition to the existing GIS street connection layer information being used on a daily basis. Individual building lot access to these connector routes should not occur and the connectors should be designed to serve side streets. Existing examples include Oakbrook Drive, Wetherington Boulevard, Fox Run Drive, Triple Crown Boulevard, Hanover Boulevard, Thornwilde Drive, and Grand National Boulevard. Some connections may need to be three lanes in order to adequately serve turning movements. These planned connections are based on future land use planning and are important for the 2040 Future Land Use Plan to develop property. Details regarding the recommended connections can be found in the 2017 <u>Boone County Transportation Plan</u>.

PEDESTRIAN/BIKE PATH PLANS

The <u>2002 Florence Pedestrian and Bike Plan</u> concentrates mainly on the City of Florence, but it also addressed some extensions of the network into the County in the West Florence area. It was conducted under the guidance of a joint City/County committee. The Plan recommended that the sidewalk system in the City of Florence be

completed where voids exist, that a network of designated bike lanes and routes be established in the City, and that several bike paths and lanes extend into the county. The 2002 Florence Pedestrian and Bike Plan is planned to be updated in 2018. The 2019 Florence Bike/Ped Plan Update analyzed current facilities to identify gaps in the system. The plan primarily recommends that the City (1) focus on connecting existing multi-use paths to build a regional network running from Kenton County through Florence to Union, Burlington, and Hebron and (2) continue building sidewalks with the goal maximizing connectivity by tying into the path system. The 2017 Boone County Transportation Plan recommends a series of bike/pedestrian projects. As each project is completed, there will be a need to update the list of projects for the Boone County Fiscal Court and the Cities of Florence, Union and Walton. Some of the legislative units have allocated funds each year to improve pedestrian/bike access along existing roads.

FREIGHT

According to the OKI Regional Freight Plan (2011), over 323 million tons of freight flow through the region annually. Approximately one-third of this total is inbound to major businesses such as General Electric and AK Steel. More than 80% of the region's freight moves by truck and I-75 is one of the country's heaviest truck corridors. Global carriers FedEx and DHL located in Boone County are the key players in freight at CVG, which itself is a significant factor in the movement of freight in the County and across the region. Freight also moves through the region via rail and the Ohio River. Improvements in rail capacity by CSX and Norfolk Southern and the 2014 Panama Canal expansion contributed to an increase of freight movement in the region to 487 tons/year by 2040. The region (as well as Boone County) is well served by having four available transportation modes for freight travel: road, rail, river, and air. However, OKI suggests that challenges relating especially to rail congestion and highway freight capacity should be addressed in order for the region to fully realize its potential in coming years.

In order for Boone County to capitalize on the forecasted increase in regional freight, the <u>OKI Regional Freight Plan</u> recommended a number of improvements. Chief among these is the CVG Air Cargo Park (est. \$50 million), which is identified as an immediate need. Regarding road improvements, the Plan recommended improving the I-75 interchanges at Richwood Road and Mt. Zion Road as well as modifications of the I-75/I-275 interchange, the I-275/Mineola Pike interchange, and construction of the new I-275/Graves Road interchange.

FUNDING TRANSPORTATION IMPROVEMENTS IN BOONE COUNTY

Public transportation projects in Boone County are primarily paid for through Federal, State, and/or Local funding sources. Federal funding amounts are based on estimates of the region's share of funds from programs authorized and appropriated by Congress. The current Fixing America's Surface Transportation Act (Fast Act) programs provide funding for the region's transportation system as noted below:

- Interstate Maintenance (IM)
- National Highway System (NH)
- Federal Safety Funds (SAF)
- Federal Emergency Relief Fund

There are Federal funds used for transportation improvements that are appropriated to both the State of Kentucky and OKI. These programs consist of the following:

- Surface Transportation Block Program (STBG)
- Transportation Alternatives Program (TA)
- Congestion Mitigation Air Quality (CMAQ)
- Federal Transit Administration Funding (FTA)

In addition, there are competitive federally funding opportunities to local, regional and State sponsors. These include the following programs:

- Nationally, Significant Freight and Highway Projects (NSFHP)
 - Infrastructure for Rebuilding America (INFRA) Grants
 - Better Utilizing Investments to Leverage Development (BUILD)
- Advanced Transportation and Congestion Management Technologies Deployment Initiative

Kentucky State and Local Funding Services

The Kentucky Road Fund is primarily derived from vehicle fuel tax and registration fees. These funds can be used as sole source of transportation project funding or as matching funds for federal programs. Typically, these funds are used for projects on the state-maintained roadway system which includes roadways with a Kentucky (KY) or Interstate (I) designation and all bridges on public roadways. Roadway projects on county or local roadways are typically funded with local funds or other innovative finance measures.

State Funds Available For Transportation Projects

- Kentucky Road Fund (SPP)
- State Bond Projects (SPB, SB2)
- Volkswagen Settlement Fund
- Surface Transportation Program for NKY (SNK)

Local Funding

In addition to State and Federal funding, Boone County has contributed local money to transportation projects. Local transportation funds can be a match to a federal program, a sole funding source, or a contribution to an important local project to expedite the implementation timeframe. For example, Boone County recognized the importance of alleviating congestion in Hebron and contributed approximately \$375,000 to the 2017 <u>Graves Road/I-275 Interchange Justification Study</u>, which amounted to approximately half of the total cost of the Study. By contributing County funds, fewer state funds were needed and the timeline to initiate and implement the study was significantly streamlined.

Innovative Financing Tools

Innovative finance refers to a series of administrative and legislative initiatives undertaken in recent years which have removed barriers and added flexibility to federal participation in transportation finance. Policy makers recognized they could accelerate surface transportation project development and expand the base of available resources by removing barriers to private investment. Innovative finance is broadly defined as a combination of special funding initiatives. In the transportation industry, the term innovative finance has become synonymous with techniques that are specifically designed to supplement the traditional methods used to finance highways. The United States Department of Transportation's (USDOT) innovative finance initiatives are intended to augment rather than replace traditional financing techniques. Available Innovative Finance Tools are listed below:

- Credit Assistance
 - Transportation Infrastructure and Finance Innovation Act (TIFIA)
 - State Infrastructure Banks
- Tax Increment Financing
- Debt Financing and Cash Flow Management Tools
 - Garvee Bonds
 - Advance Construction
- Public Private Partnerships
 - Availability Payment
 - Private Activity Bonds

Local Funding Options

Often, local agencies such as Boone County receive funding for projects that are not implemented through the Kentucky Transportation Cabinet. These projects are known as Local Public Agency (LPA) projects and often include sidewalks and projects on local roadways. These programs are administered by KYTC's Office of Local Programs with the oversight of the local District Office. However, these two entities are not within the same department. The Office of Local Programs is within the Department of Rural and Municipal Aid, while the District Office is within the Department of Highways.

Other options include funding transportation improvements by creating a Tax Increment Financing (TIF) District and to possible change the State law that would allow the formation of a Transportation Improvement District (TID). A TID is defined as a body both corporate and political that can finance, construct, maintain and repair transportation projects.

CONCLUSIONS AND RECOMMENDATIONS

One of the goals of the Transportation Element is to demonstrate the interdependence between transportation systems and land use patterns in order to assure that future development and redevelopment is planned with multi-modal transportation facilities. The future Transportation System in Boone County will significantly be improved if the recommendations of the <u>Boone County Transportation Plan</u> are implemented to address existing problems and allow for opportunities for new development. An updated and improved transportation system will accommodate new growth with mixed land uses and densities. It will encourage a more efficient land use pattern.

A different type of planned development, one that will facilitate the evolution to a more "transportation-sensitive" land-use development pattern, is advocated in this Transportation Element. Unlike the usual form of suburban development of the last 50 years that adhered to the separation of uses, this type of planned development would incorporate a mixture of uses including residential, retail, office, light-industrial, public parks, and other public uses in a tastefully-designed, compact development. The City of Florence is pursuing this style of development for the Mall Road area with the goal of restoring that area as the most vibrant commercial district in Northern Kentucky. The other defining element of this new type of planned development is that it will be served by an interconnected, multi-modal transportation system.

This system would include appropriately located transit stations or transit stops within walking distance (a quarter mile) of all residential areas. There would be well-designed pedestrian and bicycle facilities that would connect to the transit stations or stops. The bicycle facilities could include bike lanes or routes on roadways and bike lockers at the transit stations. Pedestrian facilities should be built along streets where possible and should provide an attractive, safe, and direct route to the transit stops. As the Union Town Center develops as a center of relatively dense development, transit service may need to be expanded based on demand.

Boone County has outgrown the current road system due to population and business growth and because of the lack of timely funding over the past two decades. Transportation improvements are finally beginning to catch up with development with the infusion of Federal, State, and Local funding sources. The next five years will be critical as the major transportation improvements will be needed to accommodate existing and future logistic traffic in and around Florence and the Airport areas. Strategic improvements can achieve significant increases in level of service if designed correctly. The Kentucky Transportation Cabinet is often intent on building major roads or reconstructing existing roads into major multi-lane facilities to answer the community's needs. The planning horizon for such improvements is the year 2040 for current design efforts. This correlates with the planning horizon for the <u>Boone County Comprehensive Plan</u> and reflects the close relationship that is needed between land use and transportation planning.