Mobility

The Kenton County Comprehensive Plan is comprised of nine elements. Recommendations and associated tasks for implementation have been developed for each element to implement the Goals and Objectives that serve as the foundation for the plan. The recommendations were derived after extensive public discussions, discourse and dialogue and are based on research which includes local data as well as national trends. They explore different facets of the county's physical development as well as its economic and social well-being and provide a roadmap for implementation. The Mobility element addresses policies related to efficient movement through Kenton County.

Mobility is a broad term that refers to how people and goods move around an area through a variety of different transportation choices like cars and trucks, transit, biking, and walking. Planning for and maintaining an efficient multimodal transportation network is important to give people and businesses choices for how they want to move from place to place, rather than having to rely on a single modal option. This section provides recommendations for a wide variety of transportation options in Kenton County. Explore the main headings below to learn more about the recommendations for mobility.

●1. Recommendation:

Enhance connectivity and public transit within and between communities to provide increased mobility options for all users.

Associated Goals & Objectives:

Goal 4 - Objective C

Goal 6 – Objective A Goal 6 – Objective E



- 1. Identify areas where there are high concentrations of mobility deficient demographics and provide a targeted approach to increasing modal choices, public transit and access to the network.
- 2. Incorporate complete street components to encourage intra-community connectivity where appropriate.
- Parallel secondary access roads should be considered along new or realigned collector or arterial roadways to minimize curb cuts and improve traffic movement.
- 4. The impact of transportation improvements on land use and the environment should be considered.
- 5. Assist in identifying locations and resources to retrofit existing residential communities with internal and external connections.
- 6. Establish a connectivity measurement tool to evaluate residential communities.
- 7. Focus connectivity improvements in strategic locations such as schools, parks, libraries and commercial areas or districts.
- 8. Increase access to public transit within all communities, including traditional bus route services and new innovative approaches such as microtransit.

Kenton County has multiple forms of development and connectivity across its four unique sub areas. Communities that developed earlier in Kenton County's history have increased connectivity between and within uses due to the pattern of development. Topographic and density related issues make it challenging to provide the same level of connectivity within newer subdivisions. However, increasing route options for drivers helps alleviate undue strain on the transportation network, especially at peak hours or in the event of a natural or man-made disaster that prevents usage (temporarily or permanently) of a part of the transportation network. Public comments received from all areas of the county indicate that the current public transit system is not adequate to meet the day-to-day needs or residents.

■2. Recommendation:

Utilize access management practices along all arterial and collector roadways.

Associated Goal & Objective:

.

Goal 6 – Objective A

"An effective access management

- **program** can reduce crashes as much as 50
- percent, increase roadway capacity by 23 to
- 45 percent, and reduce travel time and delay
- as much as 40 to 60 percent."
 - Access Management, Location and Design" 2000

Tasks:

- 1. Develop additional access management practices and congestion mitigation measures for areas with increasing traffic volumes, high volume to capacity ratios, and high travel delay.
- 2. Access management techniques such as secondary access roadways, limiting conflict points, and signal optimization should be employed to improve safety and enhance traffic circulation.

Basis:

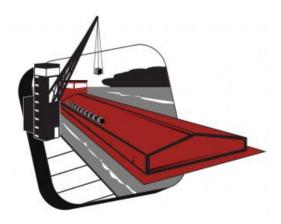
Access management systems have been proven to increase roadway safety while providing access to adjoining land uses. Additionally, the use of secondary access roadways increases connectivity and reduces congestion. These methods have been planned for and implemented through studies like The Dixie Fix and should be considered as part of the county's overall transportation plan.

3. Recommendation:

Improve opportunities for multimodal freight facilities within Kenton County. Utilize the detailed research, findings, and recommendations from the OKI Freight Plan.

Associated Goal & Objective:

Goal 6 - Objective B



Tasks:

- 1. Study feasibility of creating river/rail/truck facility within Kenton County for a potential multi-modal freight hub.
- 2. Implement transportation improvements needed to serve industrial areas in portions of western Kenton County near I-71/75.
- 3. Identify locations and promote siting of new companies that have multimodal freight facility needs near existing rail, interstate, river, or air operations.
- 4. Minimize at-grade railroad crossings.
- 5. Refer to the list of recommendations within the OKI Freight Plan to address current and future freight issues that have, or may have, an adverse impact on the region.
- 6. Research supplemental smaller-scale freight needs in conjunction with the sub area planning process.

Basis:

Research indicates that removing freight operations is not an ideal solution to congestion issues along roadways as it increases operating costs, vehicle emissions, and is difficult to enforce. Infrastructure improvement and multimodal facilities should be pursued in an effort to increase safety and efficiency rather than restricting freight movements.

4. Recommendation:

Develop county-wide consensus on the appropriate balance between maintaining infrastructure and new construction.



Associated Goal & Objective:

Goal 1 – Objective E

Tasks:

- Identify areas that are likely to experience increased development and improve transportation infrastructure within these areas to provide increased mobility options.
- 2. Elevate infrastructure maintenance, redevelopment, repair projects, and addition of technology to existing facilities to the same level of importance and funding status as new infrastructure.

Basis:

There is a desire for existing roadways to be maintained and improved. Improving this aging infrastructure could benefit people in existing population centers and help maintain their economic competitiveness over the long term. At the same time, opportunities for new infrastructure should be pursued with a comprehensive approach to their effect on surrounding areas.

□5. Recommendation:

Improve east/west connectivity that links Boone, Campbell, and Kenton counties.



Associated Goal & Objective:

Goal 6

Tasks:

- 1. Identify prime east/west corridors, such as I-275 and KY 536, and prioritize based on needs and funding.
- 2. Establish multimodal freight facilities strategically along major north/south, east/west corridors to allow for more efficient movement of goods.
- 3. Explore the feasibility of adding public transit routes to east/west corridors. Establish an east/west public transit route if it feasible.
- 4. Coordinate with neighboring jurisdictions to promote regional bicycle and pedestrian facility continuity. Utilize the Tri-State Trails Regional Trails Plan to assist in identifying appropriate connections to the larger region.

Basis:

Kenton County has a transportation network that is primarily oriented in a north to south alignment as described in the Research Report. As such, movement from rural areas in the south to more urban areas in the north is well facilitated along major roadways such as Madison Pike, Decoursey Pike, and even Dixie Highway. This orientation has well-served the historical model of a hub and spoke transportation network that took people and goods to downtown Cincinnati and Covington. However, research shows that as jobs and population centers are moving farther from the urban core, more connections are needed to connect suburban areas. The Public Comments Report also describes a need for enhanced east/west mobility, including public transit options. KYTC's Statewide Corridor Plan (2021), they identifies I-275 and KY 536 as corridors with statewide significance.

●6. Recommendation:

Support the implementation of the <u>projects</u>, detailed research, findings, and recommendations from the 2014 Kenton County Transportation Plan (KCTP), <u>and the Kenton County projects included in the OKI</u> 2050 Metropolitan Transportation Plan Update, and Transportation Improvement Plan (TIP). The <u>goals-projects identified byof</u> these plans are consistent with the goals and objectives of the Kenton County Comprehensive Plan, and <u>their purpose and goals</u> are as follows:

2014 KCTP

The Kenton County Transportation Plan is a comprehensive, multi-modal strategy for improving transportation in Kenton County. It includes a demonstration element for linking transportation improvements with the county's future land use. The plan accounts for the importance of transportation in sustaining economic growth and enhancing the quality of life.

OKI 2050 Metropolitan Transportation Plan Update

The 2050 Metropolitan Transportation Plan Update is a comprehensive blueprint projecting the transportation needs of the OKI region area for the next 25 years.

- Safety: The transportation system should work to reduce the risk of crashes that cause death or injuries. The plan will consider recommendations to address problem crash locations for all travel modes, with the goal of reducing vehicle accidents.
- Infrastructure Condition: This plan's foundation is preserving and optimizing the region's existing transportation system and infrastructure. In addition to improvement projects to meet this goal, the 2050 Plan includes a roadway maintenance and transit operation budget of more than \$8.8 billion.
- Mobility and Congestion: This goal can also be referred to as System
 Performance or how well people and commodities can move with greater speed
 and less congestion to improve efficiency.
- Environmental Sustainability: Strategies that promote the effective and efficient use of natural resources would reduce mobile source emissions, and they would benefit other environmental issues and quality of life. Transportation recommendations that increase green infrastructure and promote multimodal travel alternatives while reducing vehicle trips can help address this goal.
- Economic Vitality: In addition to the four performance goals presented in MAP-21 and continued in both the FAST Act and the Bipartisan Infrastructure Law (BIL), OKI has added a fifth goal of Economic Vitality. The transportation network can support the economic vitality of the region by enabling global competitiveness, productivity and efficiency.

TIP

The TIP is a listing of all federally funded and other regionally significant transportation projects in the MPO planning area. Inclusion in the TIP is a requirement for receiving federal transportation funds. The TIP includes a list of multi-modal transportation projects, such as:

Improving highways that have recommendations for improving bus service

- Advanced technologies to move traffic more efficiently
- Projects that reduce drive-alone commuting, including ridesharing
- Bicycle and pedestrian projects
- Upgrading highway operating efficiency and projects that improve freight operations

Associated Goals & Objectives:

Goal 6

Tasks:

- 1. Support the implementation of the mobility recommendations within the Kenton County 2014 Transportation Plan Recommendations, OKI 2050 Metropolitan Plan Update, and Transportation Improvement Plan.
- 2. Consult small area studies for more detailed recommendations that apply to local-level projects.
- 3. Research supplemental smaller-scale needs in conjunction with the sub area planning process.

Basis:



This plan recognizes and endorses the recommendations of the OKI 2050 Metropolitan Transportation Plan Update and Transportation Improvement Plan (TIP). The KCTP

project was conducted in 2013 and 2014 by the Ohio-Kentucky-Indiana Regional Council of Governments (OKI), with technical expertise and local information provided by PDS. An advisory team comprised of county and city elected representatives, transportation professionals, and citizens guided the plan and worked to rank recommendations based on their level of importance and implementation timeframe.

To help set priorities and ensure the highest amount of return possible for transportation expenditures, mobility recommendations were limited only to roadways functionally classified as collector, arterial, or interstate routes by the Kentucky Transportation Cabinet (KYTC). These routes experience the highest amounts of traffic and subsequently are subjected to increased problems such as congestion, delay, and safety. A thorough technical analysis including crash data, narrow roadways, and intersection alignment issues was conducted to determine the county's most problematic mobility areas and routes. This analysis was then supplemented with over 500 survey responses submitted by the public during the research phase of the project. The resulting plan includes 65 recommendations for mobility improvements throughout Kenton County.

It should be noted that while the 2014 KCTP serves as the basis for mobility recommendations there are other important transportation related projects, on nonfunctionally classified roadways that were not explicitly included in the county-wide plan document. Projects such as local-level recommendations that were part of small area studies did not get mentioned by name in the KCTP but are still considered valid projects that should warrant future consideration should the need for further study or implementation arise. Also, projects that were identified throughout the KCTP study that did not move forward to the recommendation stage should be considered valid as well.

■7. Recommendation:

Prepare for new mobility technologies such as Intelligent Transportation Systems, Connected / Autonomous Vehicles, electric vehicles, and ridesharing.

Associated Goals & Objectives:

Goal 6

- 1. Conduct a detailed study of new mobility technology for Kenton County that specifically addresses impacts and provides recommendations for Sub Areas.
- 2. Enact flexible zoning regulations that allow for changes in requirements such as parking, access, and patron loading / unloading areas as technology adoption levels are achieved.
- 3. Work to educate officials, stakeholders, and the public on the potential impacts of new mobility technologies and assist in the transition to new standards.

- 4. Collaborate with regional and state transportation agencies as vehicular spacing standards change to identify areas with opportunities to accommodate new active transportation facilities.
- Implement Intelligent Transportation Systems and roadway infrastructure that operates on the same standard as regional systems to ensure broad compatibility across Greater Cincinnati.

Since the adoption of the Direction 2030 comprehensive plan in September 2014, new mobility technologies have been developed at an unprecedented rate. Some vehicles on the roadway as of 2019 employ technology to assist drivers in steering, braking, and acceleration, and a small portion of the vehicular fleet on Greater Cincinnati roadways can even drive themselves. Technology that seemed only science fiction or a distant reality is now at the threshold and promising to make significant changes in the daily lives of Kenton Countians.

As with the observed advent of such technologies and introduction into the marketplace between 2014 and 2019, these systems advance at a pace not frequently encountered by government. Planners, engineers, officials, stakeholders, the public, and especially policies must remain flexible in their approach to incorporating new mobility technology. The eventual transition to a fully autonomous fleet will have wide-ranging implications and impacts upon how people and goods move in and around the region. This technology will likely make significant changes to the constructed environment and alter land use patterns on a scale not seen since introduction of the interstate highway system and suburbanization that took place beginning in Post WWII America.

Bicycle and Pedestrian

■8. Recommendation:

Increase density within walkable distances of transit stops to improve efficiency.

Associated Goal & Objective:

Goal 4 – Objective C

Goal 5 – Objective A

Goal 6 - Objective C

Goal 6 - Objective D

Tasks:

1. Identify areas that could support increased development patterns in collaboration with appropriate agencies.

- 2. Improve transit facilities and provide bus traffic priorities along corridors that can support high transit ridership (urban, mixed-use, dense), in order to encourage multi-modal balanced transportation, and mitigate congestion and air quality.
- 3. Improve coordination with local transit authorities to ensure planning goals are aligned.
- 4. Encourage multimodal connections by strategically adding or improving sidewalks, bicycle facilities, and park and ride lots.
- 5. Encourage new development and redevelopment of higher density in close proximity to transit routes.

Numerous comments were received throughout the public involvement segment of the plan regarding transit options in Kenton County. Respondents requested additional transit options, a more comprehensive system, routes that had increased service, and operations later into the night. Unfortunately, TANK's options for growing are limited by funding constraints and increasing service in one area would require cuts to another. This recommendation recognizes that in order for transit to become more efficient, enhanced development options within a short distance of a transit stop are necessary.

9. Recommendation:

Increase and improve operational safety of bicycling and walking as modes of transportation.

- 1. Through incorporation of crash data research, work with local jurisdictions to increase enforcement efforts to correct unsafe traffic operation.
- 2. Strategically target specific bicycle and pedestrian crash problem areas through detailed site-specific analysis and potential facility improvements. Ensure equitable consideration of crash data and facility improvements are applied to all communities.
- 3. Improve intersection safety at signalized intersections in appropriate areas. Explore solutions including, but not limited to, blank-out signs, crosswalk signal timing and leading pedestrian intervals, pavement striping, signage, street lighting improvements, and other strategies proven to reduce crashes.
- 4. Improve problematic bicycle and pedestrian crash areas that happen outside of intersection areas. Explore solutions including, but not limited to, signage, pavement striping, pavement surface treatments, protected bike lanes, localized enforcement, and other strategies proven to reduce crashes.
- 5. Encourage and support local governments to adopt and enforce bicycle helmet laws
- 6. Encourage and support bicycle and pedestrian safety be taught in elementary schools, driver's education classes and to those preparing to take their driver's test.

The lack of safe bicycle and pedestrian infrastructure and the perception of a lack of safety was identified as an important component to improving active transportation. Research has shown that minor improvements at intersections and problem crash areas can help reduce the number of incidents. It is also important to understand that safe transportation for all involves participation and vigilance from all users: bicyclists, pedestrians, and drivers. Results from the survey conducted during the 2018 Kenton Connects plan indicate that the lack of safety when bicycling or walking was one of the biggest barriers to using these modes of transportation. To better understand and improve bicycle and pedestrian safety benchmarks have been established. These benchmarks provide a goal to strive for and are intended to help provide the basis for the recommendation and associated tasks. These metrics should be reviewed in the future to determine their effectiveness and revisited periodically.

- Reduce the number of total bicycle and pedestrian crashes by 10 percent in the next 5 years.
- Reduce the number of bicycle and pedestrian crashes in priority corridors and intersections by 10 percent in the next 5 years.
- In the next 10 years, reduce the number of people who do not wear a helmet to be consistent with that national average.

□10. Recommendation:

Support and encourage programs and opportunities for bicycle and pedestrian education and awareness.

- 1. Assess the number of existing schools that offer bicycle and pedestrian education through the school and after school activities.
- Encourage organizations and groups to apply for Transportation Alternatives Program (TAP) funding for Safe Routes to School related programs and Kentucky's Paula Nye Grant to promote bicycle and safety education and awareness.
- 3. Assist communities in becoming recognized by the League of American Bicyclists as a Bicycle Friendly Community. Encourage communities and businesses to apply for this designation if appropriate.
- 4. Submit recommendations to the Kentucky State Police to strengthen the bicycle and pedestrian components of the Kentucky Driver Manual and exam. Partner with organizations such as Kentucky Bicycle and Bikeway Commission to collaborate on this effort.
- 5. Support an annual education workshop for police officers, city employees, and elected officials to provide an opportunity to learn updates to bicycle and pedestrian laws, refresher on existing laws, and to create awareness of bicycle and pedestrian issues.

- 6. Encourage public and private organizations to promote and demonstrate bicycle and pedestrian education and awareness.
- 7. Institute an educational outreach program to drivers, pedestrians, and cyclists to ensure an understanding of the rules of the road and equity for all users of the network.
- 8. Establish a bicycle and pedestrian advisory committee to promote the active transportation recommendations within the comprehensive plan.

Education is a key component of creating a culture that supports bicycling and walking as practical modes of transportation in Kenton County. Educating citizens, employees, and students about bicycle and pedestrian related issues reinforces the idea that these are practical modes of transportation. Teaching bicycle and pedestrian education and awareness in school activities, driver's education classes, and to safety professionals will continue to improve issues related to these modes of transportation. To better understand and improve bicycle and pedestrian education benchmarks have been established. These benchmarks provide a goal to strive for and are intended to help provide the basis for the recommendation and associated tasks. These metrics should be reviewed in the future to determine their effectiveness and revisited periodically.

- Increase the number of students who are receiving bicycle and pedestrian education in school activities.
- Increase the number of schools that incorporate bicycle and pedestrian education in activities.
- Encourage yearly applications for grants to promote bicycle and pedestrian education and safety.
- Increase the number of schools that participate in Safe Routes to Schools, Walking School Bus, and other bicycle and pedestrian education programs.

=11. Recommendation:

Create an atmosphere and culture that promotes bicycling and walking in Kenton County and increases the number of users.

- 1. Enhance and expand biannual bicycle and pedestrian counts.
- 2. Work with Tri-State Trails, OKI, or other organizations to add full-time bicycle and pedestrian counters at specified locations around the county.
- 3. Utilize ongoing bicycle and pedestrian counts to identify effects of development patterns on bicycling and walking.
- 4. Coordinate with Red Bike to expand and improve the accessibility and the number of stations in Kenton County.
- 5. Support alternative parking options such as bicycle parking in lieu of vehicular parking through strategic revisions to zoning ordinances.

- 6. Encourage bicycle parking, to be included where appropriate, within multi-family and commercial developments through strategic revisions to zoning ordinances.
- 7. Support bicycle and pedestrian infrastructure funding opportunities by coordinating workshops to present the technical details of grants when funding is available.
- 8. Support development of bicycle and pedestrian infrastructure in an equitable manner that maximizes its availability for users and access to communities given the limited resources available.

Comments received from the 2018 Kenton Connects survey, along with direction from the advisory committee specified a desire to increase usage of the bicycle and pedestrian system in Kenton County. Respondents indicated inadequate access to bicycle and pedestrian infrastructure as well as facilities that do not connect to destinations as reasons why they do not bike or walk more frequently. The lack of access to adequate bicycle and pedestrian infrastructure relates to number of users who bicycle and walk in Kenton County. To better understand and increase bicycle and pedestrian usership benchmarks have been established. These benchmarks provide a goal to strive for and are intended to help provide the basis for the recommendation and associated tasks. These metrics should be reviewed in the future to determine their effectiveness and revisited periodically.

- Increase the number of bicyclists and pedestrians on key paths and routes by 10% in the next 5 years.
- Increase the number of count locations in the county by at least 2 locations in the next two years.
- Increase the frequency of bicycle and pedestrian counts to include a second twoweek period at the same locations during the year.
- Add a full-time bicycle and pedestrian counter within 2 years.

=12. Recommendation:

Increase and improve bicycle and pedestrian connectivity, infrastructure, and facilities to increase mobility opportunities for all users.

- Facilitate continued maintenance and strategically enhance the existing bicycle and sidewalk network by focusing on filling in network deficiencies and gaps.
 Prioritize bicycle and pedestrian improvements that connect existing infrastructure and focus on reducing network gaps and deficiencies.
- Prioritize installing and increasing new bicycle and pedestrian facilities along vehicular corridors as they are improved or reconstructed while maintaining existing facilities. Encourage facilities that physically separate bicycles and pedestrians from motorized traffic.

- 3. Add sidewalks retroactively in areas where they were not originally constructed as opportunities for redevelopment arise.
- 4. Encourage bicycle and pedestrian infrastructure connections along vehicular corridors as they are improved or reconstructed.
- 5. Support bicycle and pedestrian infrastructure that connect the suburban and rural subareas to the urban core.
- 6. Enhance walkability by encouraging sidewalks during new construction on both sides of the street to achieve a long-term vision for improved sidewalk connectivity.
- 7. Encourage the expansion of sidewalk and bicycle facility regulations as required in the Kenton County Subdivision Regulations.
- 8. Prioritize the Licking River Greenway, Riverfront Commons, New Buffington Multi-modal Path, and KY-536 corridor as outlined in the 2014 Kenton County Transportation Plan.
- Prioritize bicycle and pedestrian connectivity, facilities, and infrastructure improvements toward communities with high rates of zero car households, meeting ADA requirements, and those who use active transportation as a means of commuting.
- 10. Meet ADA standards when bicycle or pedestrian facilities are reconstructed or new amenities are added.

Analysis provided in the Research Report indicates that bicycle and pedestrian infrastructure has developed in a fragmented pattern, which currently exists in disjointed sections. As development requirements evolved through the years, the requirements for sidewalks and bicycle infrastructure fluctuated creating varying connectivity and facility availability throughout the 4 sub areas. Improving and increasing bicycling and walking as mobility options provides another mode of transportation and can help alleviate traffic issues, provide health benefits, and create thriving communities. To better understand and improve bicycle and pedestrian connectivity and infrastructure, benchmarks have been established. These benchmarks provide a goal to strive for and are intended to help provide the basis for the recommendation and associated tasks. These metrics should be reviewed in the future to determine their effectiveness and revisited periodically.

- Increase the number of sidewalk miles by 20 miles in five years, by 40 miles in 10 years, and 80 miles in 20 years.
- Reduce the number of identified sidewalk gaps by 5 over the next 10 years.
- Increase the number of multi-use shared paths to 15.4 miles after 5 years, 16.8 miles after 10 years, and 19.6 miles after 20 years.
- Increase the number of miles of on-street bicycle facilities to 14.6 miles after 5 years, 15.8 miles after 10 years, and 18.4 miles after 20 years.