



Chapter 2: Existing Conditions

OVERVIEW

Dixie Highway is a major transportation life-line for the Northern Kentucky counties of Boone and Kenton. During the 1990s, the population of these two counties grew by more than double the rate (19.0%) of the entire Commonwealth of Kentucky (9.7%). Since 2000, the population of Boone and Kenton counties has grown by 3.9%, compared to -4.4 for Hamilton County, Ohio. It is estimated that over 485,000 people now reside in these two counties (Source: U.S. Census Bureau). In addition, almost 32,500 new employees were added to the Boone and Kenton County economies between 1990 and 2000 (Source: Labor Force and Employed from Ohio Bureau of Employment Services).

Along with growth comes increased traffic. As noted in the 2005 *Dixie Highway Corridor Study*, Dixie Highway is a major transportation artery for local and regional traffic with more than 32,000 vehicles per day on its most heavily traveled segment. However, it is generally inefficient and traffic is slowed by congestion and when incidents occur on I71/I75. On a daily basis, the worst traffic conditions involve southbound traffic during the PM peak, with an average travel time of 22 minutes that includes 10 minutes of delay (Source: *Dixie Highway Corridor Study*, June 2005).

Physical conditions of the built environment are a major cause of transportation problems on Dixie Highway. Moreover, existing development reduces options for expanding rights-of-way and applying access management techniques. Typically, land is not available for widening lanes or intersections or for the addition of turn lanes. In areas with commercial development, the number, location, and design of curb-cuts contributes to congestion and crashes,

especially where driveways are located close to intersections or to other driveways.

INTERSECTIONS

Another aspect of development that contributes to problem conditions is the number and design of intersections. Traffic entering and exiting Dixie Highway from intersecting streets contributes to congestion as additional vehicles are accommodated into vehicular flow. Appendix 2-1 is included as a reference for existing intersection levels of service (LOS) and delay times.

LOS for roadways is a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, traffic interruptions, freedom to maneuver, comfort and convenience. LOS is generally measured on a six point scale from A to F with A representing the best operating conditions (free flow) and F the worst where the flow rate of vehicles exceeds the capacity of the roadway segment. A detailed description of roadway segments is as follows:

- LOS A – Complete free-flow conditions usually about 90% of the free-flow speed for the given street class. Vehicles are completely unimpeded in their ability to maneuver within traffic. Control delay at signalized intersections is minimal.
- LOS B – Indicates reasonably unimpeded operations at average travel speeds, usually about 70% of the free-flow speed for the street class. The ability to maneuver within the traffic stream is only slightly restricted, and control delays at a signalized intersection are not significant.
- LOS C – Describes stable operations, however the ability to maneuver and change lanes in mid-block locations may be more restricted than LOS B and longer queues, adverse signal coordination, or both may contribute to lower than average travel speeds of about 50% of the free-flow speed for the street class.

- LOS D – Borders on a range in which small increases in flow may cause substantial increases in delay and decreases in travel speed. LOS D may be due to adverse signal progression, inappropriate signal timing, high traffic volumes or a combination of these factors. Average travel speeds are about 40% less of the free-flow speed for the street class.
- LOS E – Is characterized by significant delays and average travel speeds of 33% or less of the free-flow speed for the street class. Such operations are caused by a combination of adverse progression, high signal density, high traffic volumes, extensive delays at critical intersections, and inappropriate signal timing.
- LOS F – Is characterized by urban street flow at extremely low speeds, typically one-third to one-fourth of the free-flow speed for the street class. Intersection congestion is likely at critical signalized intersections with high delays, high volumes and extensive queuing.

(Source: *Highway Capacity Manual, 2000*; *Transportation Research Board National Research Council*).

Offset intersections, where streets do not intersect at right angles to form a four-legged intersection and centerlines on opposite streets do not align, further contribute to delay and the potential for crashes. Due to these skewed roadways, traffic signals operate on each side street approach as a separate phase, creating a large amount of lost time for the main roadway. The impact of offset intersections on signal placement and timing impedes efficient traffic progression and contributes to driver confusion and the potential for accidents. Dixie Highway has numerous offset intersections, including McAlpin and Garvey, Bartlett and May, and Eastern and Kentaboo.

In conjunction with the intersections, Dixie Highway has 44 traffic signals in the study area. The spacing between the signals is extremely varied, and often signals are in close proximity as a result of the offset intersections and large number of driveways throughout the project corridor. This close proximity and high number of signalized intersections creates overlapping traffic back-ups. Kentucky

Transportation Cabinet’s minimum spacing standards for most of Dixie Highway is one signal every 2,400 ft., but the spacing between traffic signals on Dixie Highway varies between 100 feet to more than a mile (5,280 ft.). The proximity of some signals to each other, combined with the spacing, makes it difficult to coordinate the signals to favor progression in both directions and move traffic efficiently.

CORRIDOR SEGMENTS

As one travels south to north along Dixie Highway, distinctive differences in development styles and land uses appear. Each brings their own character and transportation challenges to the corridor. By defining separate segments, we can identify shared traffic and safety concerns which will lead us to conceptual recommendations presented later within this document. [Appendix 2-2](#) are included as references for existing northbound and southbound segment levels of service (LOS) and travel speeds.

Segment 1: Turfway Road to Hallam Avenue (Cities of Florence, Erlanger and Elsmere)

This is a four-lane segment that includes a railroad underpass in Erlanger with narrow (10ft.) lanes. Land use includes commercial facilities mixed with some residential and community uses. For the most part, businesses are accessed directly from the street by their own curb-cuts. Some businesses have multiple driveways. In this segment are three of the eight blocks in the corridor with the highest accident rates (between Turfway and Bustetter, Commonwealth and Graves, and Commonwealth and Erlanger) and five of the eleven intersections on Dixie Highway with accident rates above the state average (0.57 accidents per million entering vehicles) for this type of facility (intersections at Sunset/Main, McAlpin/Garvey, Commonwealth, Cave Run, and Kentaboo/Eastern).

Segment 2: Hallam Avenue to I-275 (Cities of Erlanger, Edgewood and Crestview Hills)

This is a five-lane section where most signalized intersections have turn lanes. It includes the I-275 interchange, from which traffic

entering onto Dixie Highway during incidents on I-275 or I-71/I-75 add to Dixie Highway's traffic volumes and problem conditions. Commercial development in this segment includes strip shopping centers with parking lots, several sites with multiple driveways, and the Crestview Hills Town Center which has undergone a major redevelopment, including the addition of 200,000 square feet of new retail space, increasing traffic levels significantly from previous land uses. There is also some residential development. This segment includes four of the eight blocks with the highest accident rates (the highest for the entire corridor between Kenton Lands and Edgewood Roads, in addition to blocks between Montgomery and Silver Lakes, Silver Lakes and Clover, and Edgewood and Dudley Roads) and four of the eleven intersections with above-average accident levels (Kenton Lands, Montgomery, and Dudley/Summit, and Winding Way).

Segment 3: I-275 to Buttermilk/Orphanage (City of Lakeside Park and the city edges of Crestview Hills and Fort Mitchell)

This is a five-lane section that is almost exclusively large-lot single-family homes, but there are also some community and commercial facilities in the vicinity of Buttermilk and Orphanage Roads. In this segment, Buttermilk Pike and Orphanage Roads (KY 371) provide east-west connection across the corridor. Unfortunately, these two roads are not aligned and while the offset is long enough to provide for complete turn movements and stacking between signal changes, complications still occur here during peak flows. A shared left turn lane permits vehicles to exit through lanes and wait for safe turns onto side streets that are not signalized. This is not a high traffic volume segment of Dixie. However, with fewer signals and the fifth lane, in peak hours and interstate incidents, this segment is better able to handle heavier traffic volumes.

Segment 4: Buttermilk/Orphanage to I-71/I-75 (Fort Mitchell)

This is a four-lane segment except for the bridge over I-71/I-75, which is five lanes. It is almost exclusively large-lot single-family homes, but there are also some community and commercial facilities just south of the interstate, Blessed Sacrement Church and School near

the midpoint, and immediately north of Orphanage Road. There are 5 to 10 on-street parking spaces just north of Orphanage Road on both sides of Dixie Highway. These spaces serve adjacent commercial retail establishments. This is one of only two segments containing any on-street parking. Additionally, one of the eleven high-level accident intersections (Beechwood Road) is contained within this segment.

Segment 5: I-71/I-75 to St. Joseph Lane (Cities of Fort Mitchell, Fort Wright and Park Hills)

This four-lane segment contains commercial facilities that benefit from interstate access (motels, restaurants, retail, service, professional office) as well as a shopping center and other commercial, community, and residential uses. This segment has been subject to streetscape improvements including tree planting. One block is identified as having high-level accidents (between Kyles Lane and Sleepy Hollow Road) and one of the eleven high-level accident intersections on Dixie Highway (Kyles Lane).

Segment 6: St. Joseph Lane to Main Street in Covington (Cities of Park Hills and Covington)

As this four-lane segment nears Covington, one experiences a sharp curve and steep grades due to the hilly topography. At its intersection with Montague, Dixie Highway's name changes to Pike Street. Land use along this segment is a mixture of residential and commercial with some office, schools, and new development under construction. Some businesses have angle or perpendicular parking that requires vehicles to back out of spaces toward or onto Dixie Highway; there are also large areas with on-street parking in Covington. At Montague, the highway cuts through a National Register Historic District in which all buildings, including a few residential structures, are immediately adjacent to the highway.

CRASH RATES

Crash rate data from the 2005 *Dixie Highway Corridor Study* continued as a reference and evaluation measure for *The Dixie Fix Plan*. Crash rates along Dixie Highway exceed the state average for

similar locations at 11 intersections and 8 mid-block locations, with the highest rate between Kenton Lands and Edgewood Roads. This one block segment just so happens to also have 18 full access driveways. Traffic conditions are projected to get worse if improvements are not made. The following two tables outline the locations with the highest crash rates on Dixie Highway.

Rank	Intersection	Crash Frequency	Crash Rate*	EPDO Rate**
1	Kyles Lane	71	2.38	3.57
2	Sunset/Main	40	1.62	2.63
3	McAlpin/Garvey	39	1.7	2.46
4	Commonwealth/Stevenson	33	0.98	1.35
5	Winding Way	27	1.03	3.06
6	Kenton Lands	23	0.63	0.76
7	Dudley/Summit	23	0.61	1.01
8	Beechwood	20	0.85	1.81
9	Cave Run	20	0.83	1.04
10	Kentaboo/Eastern	20	0.83	1.35
11	Montgomery	20	0.62	0.93

*The average intersection crash rate for the Commonwealth of Kentucky is 0.57 accidents per million entering vehicles.

**The Equivalent Property Damage Only (EPDO) rate weights crashes by property damage only, injury, and fatality.

INTERSECTION CRASH DATA

Rank	Mid-Block	Crash Frequency	Crash Rate*	EPDO Rate**
1	Edgewood & Kenton Lands	126	19.11	22.52
2	Bustetter/Goodridge & Turfway	63	16.47	25.61
3	Summit/Dudley & Edgewood	27	5.46	7.48
4	Kyles & Sleepy Hollow	25	8.1	8.91
5	Commonwealth & Graves	20	10.51	15.76
6	Montgomery & Erlanger TC	19	8.58	11.96
7	Erlanger TC & Clover	19	7.86	10.97
8	Erlanger Rd. & Commonwealth	18	8.57	9.76
9	Cave Run & Dry Creek	15	4.64	8.5
10	St. Joseph's to St. James	13	3.56	5.34
11	Kenton Lands & Montgomery	13	3.1	5.49

*The average mid-block crash rate for the Commonwealth of Kentucky is 4.84 accidents per million vehicle miles.

**The Equivalent Property Damage Only (EPDO) rate weights crashes by property damage only, injury, and fatality.

MID-BLOCK CRASH DATA

OTHER EXISTING CONDITIONS

Freeway Incidents

Added congestion in response to freeway incidents is of particular concern. Since Dixie Highway parallels Interstate 71/75 in Northern Kentucky, drivers often divert onto Dixie Highway from interchanges at Buttermilk Pike, Kyles Lane, and Twelfth Street. These influxes can increase the traffic on Dixie Highway by as much as 30% and overwhelm the signal system, causing traffic backups. The 2005 *Corridor Study* predicted that over the next ten years, freeway incidents are projected to increase travel times on Dixie Highway by more than 40% when they occur during peak hours.

Turn Lanes

Another problem is the general lack of turn lanes, especially left turn lanes. Intersections with heavy turn volumes create significant delay along the corridor. Left-turning vehicles block the left through lane and cause a backup until the turn is completed.

Parking

In areas with on-street parking, Dixie Highway is reduced to one lane in each direction. In addition, traffic slows down in response to parking maneuvers. Two areas, as previously noted, contain on-street parking. In Covington, this parking is restricted to non-rush hour times reducing the highway to only two lanes of traffic. On the other hand, the on-street parking in Fort Mitchell is designed so that four lanes of traffic are maintained.

Schools

There are 18 schools in the Dixie Highway Corridor. During the beginning and end of schools' daily operation, especially during the AM peak, traffic volumes increase significantly in these areas in response to the influx of personal vehicles and school buses. Children exiting and entering vehicles pose an additional safety concern.

Bus

The Transit Authority of Northern Kentucky (TANK) provides over 100 public bus stops in the corridor. Every time the bus stops, it decreases the capacity on Dixie Highway as the rightmost through lane is blocked. Transit issues and recommendations will be discussed in more detail in Chapter 5.

Pedestrian and Bicycle Accommodations

The lack of sidewalk connectivity along Dixie Highway raises safety and access concerns. There are areas along Dixie where sidewalks exist only on one side of the roadway and others where none exist at all. Pedestrian accommodations extend beyond sidewalks. Marked crosswalks do not exist consistently throughout the corridor. For bicycles, the lack of space for sharing the road safely with motor vehicles is an important issue. Pedestrian and Bicycle issues and recommendations will be discussed in more detail in Chapter 6.

FUTURE CONDITIONS

The Ohio-Kentucky-Indiana Regional Council of Governments regional traffic models for 2010 and 2030 were utilized for the 2005 *Dixie Highway Corridor Study* to project how traffic in the corridor



A careful watch on the progress of the Brent Spence should be maintained as Dixie Highway recommendations are implemented to insure compatibility and connectivity.

would look in the future if no improvements were made. The results of the traffic model show that the corridor will continue to get worse if measures are not taken.

Appendix 2-3 lists existing, projected Years 2010 and 2030 Average Daily Traffic (ADT) counts for the entire corridor as presented in the 2005 Corridor Study. The anticipated growth percentages are clearly exhibited.

Appendix 2-4 present the future level of service, northbound/southbound peak travel speeds, and intersection delay expected for Dixie Highway in the year 2015.

RELATED PRESENT AND PAST PLANNING EFFORTS

The following plans and studies directly impact Dixie Highway and were utilized in the drafting of *The Dixie Fix Plan*. Other general sources not directly tied to Dixie Highway were also used. These sources will be referenced as appropriately in this document.

Kentucky's Proposed Access Management Program Executive Summary

The Kentucky Transportation Cabinet has developed proposed access management standards. The spacing standards included in the document have been recommended by the Cabinet's Access Management Implementation Task Force, but they have not yet been formally adopted by the Cabinet. A copy of the Executive Summary is included as Appendix 2-5 and inclusion of standards is included in Chapter 3's Access Management discussion.

Dixie Highway Corridor Study (June 2005)

The Dixie Highway Corridor Study was conducted by OKI in response to a request from the Kenton County Fiscal Court. The study analyzes traffic and transportation issues on Dixie Highway within the limits of Kenton County. The study presents recommendations for improving safety, traffic flow and reducing delay along this heavily congested corridor. This study focused on increasing traffic throughput without adding lanes. Therefore, recommendations address improving traffic

operations by using a combination of new technologies and traditional methods.

Status of Short Term Recommendations

The short term recommendations were focused on optimizing the operation of the existing signal system. Specifically, they called for correcting a number of traffic signal operational problems that contribute to traffic delay and for instituting a new timing plan, designed to move traffic more efficiently.

KYTC reports that 100% of the short term recommendations that came from the study, including correcting problems related to signal maintenance and installing the signal timing plan, have been implemented.

As a result of the improvements implemented in response to the *Corridor Study's* short-term recommendations, significant reductions in travel time were achieved in a number of locations. At the time of the Study's conclusion, PM Peak Hour travel times for southbound traffic were reduced most significantly between Rosemont Drive and Dudley Road (58%) and between Beechwood Road and Expressway Plaza (51%). During the PM Peak Hour for northbound traffic, travel reductions greater than 50% were measured for segments from approximately Parkside Drive to Turfway Road (61%), Montgomery Drive to Kenton Lands Road, (71%), and Arcadia Avenue to Buttermilk Pike (58%). Similar travel time reductions are also expected for some segments during the AM Peak Hour. Based on such data, it is expected that the implementation of the *Corridor Study's* short term recommendations has had an overall effect of decreasing travel time approximately 10% for the length of the corridor.

Status of Mid- and Long-Term Recommendations

Mid- and long-term recommendations from the *Dixie Highway Corridor Study* focus primarily on changes to the traffic signal system and on further studies to identify solutions for specific problems. The chart that follows lists all the mid- and long-term recommendations and their status as of June 2006.

One of the mid-term recommendations of the *Corridor Study* was that an access management plan be undertaken. An access management plan was viewed as providing the opportunity to expedite efforts to manage access and insure a coordinated approach to access management along the corridor. The study included design scenarios for improving access at approximately 100 locations in the corridor. This recommendation was taken as *The Dixie Fix's* call to action and formed the foundation upon which work began. The complete 2005 Dixie Highway Corridor Study can be accessed at www.oki.org.
North South Initiative (February 2004)

OKI and the Miami Valley Regional Planning Commission (MVRPC) conducted a major planning study on Interstate 75, known as the *North*

KYTC reports that 100% of the short term recommendations that came from the study. . . have been implemented.



MID-TERM RECOMMENDATIONS

RECOMMENDATION	DISCUSSION	BENEFITS	COST*	STATUS
CLOSED LOOP SIGNAL SYSTEM	Signal system will react to daily fluctuations in traffic, allow remote operation of the system, and notify operators of maintenance issues; need to review signal system division & traffic signal warrants.	Signal timing that suits traffic best can offer a 10%-30% decrease in travel times+	\$100,000	No action
TRAFFIC CAMERA SYSTEM	In order to adequately implement remote timing plans, it is necessary to see the traffic conditions.	Camera systems would allow operators to see the real time traffic conditions. Improve the efficiency of the Closed Loop System.	\$2,500/ camera, plus broadcasting-corridor will need to be evaluated to determine # of cameras & best broadcasting options.	No action
ARTIMIS INTERCONNECTION	Would allow traffic signal timing to be remotely changed to accommodate additional freeway traffic diverted due to freeway incident. Would require signal timing plans to be developed.	Based on Synchro traffic models, travel time would decrease by 10%-20% (during overflow events) with the implementation of improved timing+	\$80,000	No action
SIGNAL PREEMPTION FOR EMERGENCY VEHICLES	System to allow the signals to immediately give a green light to approaching emergency vehicles.	Will improve response time by emergency vehicles; does not detrimentally impact progression on main street. Study on Colerain Avenue resulted in a 22% decrease in EMS travel time+	\$500,000	Interest and support received from several local communities

*Costs represent estimates for construction only

+Traffic signal improvement listed is for this improvement only. Improvement percentages are not cumulative, but a combination of recommendations will result in improved conditions.

MID-TERM RECOMMENDATIONS - continued

RECOMMENDATION	DISCUSSION	BENEFITS	COST*	STATUS
SIGNAL HARDWARE IMPROVEMENTS				
• Fortside & Dixie	A pressure sensor has been found at the intersection of Fortside & Dixie; the westbound traffic signal is aimed at the building, not at the driveway	Pressure sensor removal will remove any possible confusion between this detector and the actual loop detector; moving WB signal head will provide better visibility	\$15,000	Funding application submitted; no funding yet received
• St. John's & Dixie	EB loop detectors are set too far forward; vehicles will eventually run the light	Vehicles could potentially stop behind the loops, never requesting the signal; will improve the operation of the traffic signal	\$6,000	Funding application submitted; no funding yet received
• Beechwood & Dixie	No detection provided for the private driveway opposite Beechwood Drive; vehicle must run the red light to enter traffic stream	Will allow vehicles in this private drive to place a call for the signal; will improve the operation of the traffic signal	\$2,000	Funding application submitted; no funding yet received
• Winding Way	WB loop detectors are set too far forward; vehicles will eventually run the light	Vehicles could potentially stop behind the loops, never requesting the signal; will improve the operation of the traffic signal	\$6,000	Funding application submitted; no funding yet received
• SB I-75 Ramp & Dixie	Detectors on the SB I-71/75 ramp set too far back; vehicles will eventually run the light	Vehicles could potentially stop in front of the loops, never requesting the signal	\$6,000	Funding application submitted; no funding yet received
ACCESS MANAGEMENT PLAN	Complete a study to provide a development plan on Dixie Highway and establish standards and regulations for managing access.	Reduction in number of driveways will reduce the frequency of accidents. Study will provide plan to facilitate access management.	\$125,000	Completed by <i>The Dixie Fix Plan</i>

*Costs represent estimates for construction only

MID-TERM RECOMMENDATIONS - continued

RECOMMENDATION	DISCUSSION	BENEFITS	COST*	STATUS
STUDY OF ON-STREET PARKING	Complete a study of access options for eliminating on-street parking	On-street parking reduces capacity on Dixie, reduction or removal could greatly improve capacity. Near the Montague/Western intersection, removal of parking could improve the capacity of the segment by up to 60%+	\$100,000	No action
PEDESTRIAN IMPROVEMENTS				
• Crosswalk Markings	Pedestrian crosswalks not adequately delineated in all locations; some crosswalks not optimally placed to minimize pedestrian exposure	Improves pedestrian safety	--	No action
• Pedestrian Pushbuttons & Signal Heads	Pedestrian signal heads do not rest in "WALK", therefore pushbuttons should be provided for all signal heads associated with the main street	Allows the Dixie Highway pedestrians to request the "WALK" signal; promotes continuity throughout corridor	\$150,000	Interest expressed by several local communities
• "Countdown" Pedestrian Heads	KYTC has been installing "countdown" pedestrian signal heads throughout Northern Kentucky	Promotes continuity throughout Northern Kentucky	\$300,000	Interest expressed by several local communities
MANAGEMENT ISSUES FOR CONSIDERATION				
• Staggering of School Hours	Starting and ending times for schools along Dixie Highway need to be reviewed. Several schools have similar starting and ending times.	Will reduce the number of vehicles on Dixie during the AM Peak Hour, stagger vehicles throughout Peak		No action

*Costs represent estimates for construction only

MID-TERM RECOMMENDATIONS - continued

RECOMMENDATION	DISCUSSION	BENEFITS	COST*	STATUS
<ul style="list-style-type: none"> Review of Bus Stops 	Review the number and location of bus stops along the corridor. Several have been added over the years, appears none have been consolidated/removed. Consider use of bus pullouts.	Bus pullouts will remove buses out of roadway while stopped, decreasing bottlenecks. Removing/consolidating bus stops will reduce the number of times buses stop		2006 Transit Network Study completed by TANK; recommendation for elimination or consolidation of 12 bus stops. No new bus pullouts recommendations forwarded.
<ul style="list-style-type: none"> Clearance Intervals 	KYTC should review the yellow and all-red times for each intersection. Several intersections have shorter clearance intervals than necessary.	Will increase the safety of each intersection. Yellow and all-red time allows vehicles to safely enter and clear the intersection		No action

LONG-TERM RECOMMENDATIONS

REALIGNMENT OF OFFSET INTERSECTIONS

<ul style="list-style-type: none"> McAlpin/Garvey & Dixie 	Realign existing intersection to form a normal four approach intersection	Decrease in lost time at the intersection because east and west approaches can run together, decrease in accidents at intersection	\$450,000	Funding application submitted, no funding yet received
<ul style="list-style-type: none"> Goodridge/Bustetter & Dixie 	Realign existing intersection to form a normal four approach intersection	Decrease in lost time at the intersection because east and west approaches can run together, decrease in accidents at intersection	\$325,000	Funding application submitted, no funding yet received
<ul style="list-style-type: none"> Eastern/Kentaboo & Dixie 	Realign existing intersection to form a normal four approach intersection	Decrease in lost time at the intersection because east and west approaches can run together, decrease in accidents at intersection	\$600,000	Funding application submitted, no funding yet received

*Costs represent estimates for construction only

LONG-TERM RECOMMENDATIONS – continued

RECOMMENDATION	DISCUSSION	BENEFITS	COST*	STATUS
• Sunnymede/Requardt & Dixie	Realign existing intersection to form a normal four approach intersection	Decrease in accidents at intersection	\$400,000	Funding application submitted, no funding yet received
• Virginia/Superior & Dixie	Realign existing intersection to form a normal four approach intersection	Decrease in accidents at intersection	\$600,000	Funding application submitted, no funding yet received
• Pleasant Ridge/ Church Driveway & Dixie	Realign existing intersection to form a normal four approach intersection	Decrease in lost time at the intersection because east and west approaches can run together, decrease in accidents at intersection	\$120,000	Funding application submitted, no funding yet received
• Kyles/George Huser & Dixie	Realign existing intersection to form a normal four approach intersection	Decrease in lost time at the intersection because east and west approaches can run together, decrease in accidents at intersection	\$1,450,000	Funding application submitted, no funding yet received
ADDITION OF TURN LANES				
• Dudley/Summit & Dixie	Provide a NB right turn lane. Large backups in the NB rightmost lane as several vehicles attempt to turn right onto Dudley Road. Right-of-way for the additional lane is available in this location	Decrease in right turning vehicles blocking the right through lane. Could decrease delay at intersection by up to 50%+	\$275,000	Funding application submitted, no funding yet received
• Beechwood Road	Provide a NB left turn lane. Large backups in the NB leftmost lane as several vehicles attempt to turn left onto Beechwood Road. Right-of-way for the additional lane is available in this location	Decrease in left turning vehicles blocking the left through lane. Could decrease delay at intersection by up to 50%+	\$200,000	No local support

*Costs represent estimates for construction only

LONG-TERM RECOMMENDATIONS – continued

RECOMMENDATION	DISCUSSION	BENEFITS	COST*	STATUS
<ul style="list-style-type: none"> • Highland Avenue 	Provide a SB left turn lane. Large backups in the SB leftmost lane as several vehicles attempt to turn left onto Highland Avenue. Right-of-way for the additional lane is available in this location	Decrease in left turning vehicles blocking the left through lane. Could decrease delay at intersection by up to 50%+	\$200,000	No local support
RECONSTRUCTION OF RAILROAD OVERPASS	Replace the existing railroad bridge located to the north of Commonwealth & Dixie with a single span. Review the vertical alignment of Dixie in this area	Increased sight distance for SB & NB traffic. Reduction in accidents at intersections of Dixie with Commonwealth, Erlanger, Alice & Hallam	\$5,000,000	No action
ACCESS MANAGEMENT IMPROVEMENTS				
<ul style="list-style-type: none"> • Kenton Lands Road to Edgewood Road 	Control access conditions to improve safety and traffic flow. Elimination of one driveway, installation of five right-in/right-out islands, and implementation of a cross easement in one location	Reduction in the frequency of angle-type accidents from the current 19.11 per million vehicle miles	\$100,000	Recommendations included in <i>The Dixie Fix Plan</i>
<ul style="list-style-type: none"> • Turfway Road to Bustetter Dr./ Gooddridge Dr. 	Control access conditions to improve safety and traffic flow. Elimination of two driveways and installation of one right-in/right-out island, and reconfiguration of one piece of property to become an access roadway	Reduction in the frequency of angle-type accidents from the current 16.47 per million vehicle miles	\$20,000	Recommendations included in <i>The Dixie Fix Plan</i>

*Costs represent estimates for construction only

LONG-TERM RECOMMENDATIONS – continued

RECOMMENDATION	DISCUSSION	BENEFITS	COST*	STATUS
<ul style="list-style-type: none"> Kyles Lane to Sleepy Hollow Drive 	Control access conditions to improve safety and traffic flow. Closure of three driveways, installation of one right-in/right-out island, and reconfiguration of one piece of property to become an access roadway	Reduction in the frequency of angle-type accidents from the current 8.10 per million vehicle miles	\$300,000	Recommendations included in <i>The Dixie Fix Plan</i>
STUDY OF ARTIMIS EXTENSION	Study to review possibility of extending the ARTIMIS system onto Dixie Highway. Review of hardware necessary to extend system	ARTIMIS system has greatly reduced fuel consumption, number of fatalities, and emergency response time on Cincinnati area freeways	\$250,000	No action

*Costs represent estimates for construction only

South Transportation Initiative. The major focus of the *Initiative* was to improve the safety, efficiency, and reliability of Interstate 75. The report was reviewed in regard to the segment in Northern Kentucky extending the entire length of *The Dixie Fix* study area. The recommendations in the *North South Initiative* that relate to the Dixie Highway are included as Appendix 2-6. The *North South Initiative* report can be viewed at www.oki.org.

Brent Spence Bridge Replacement/Rehabilitation Project (ongoing)

The *Brent Spence Bridge Replacement/Rehabilitation Project* was initiated in late 2005. This project is being overseen by the Kentucky Transportation Cabinet and Ohio Department of Transportation. The study area is generally defined as including the I-71/75 corridor from the Kyles Lane Interchange in Kentucky to the Western Hills Viaduct in Ohio. In addition, some areas east and west of the I-71/75 corridor are included within the study area. A careful watch on the progress of the Brent Spence should be maintained as Dixie Highway recommendations are implemented to insure compatibility and connectivity. More information on the Brent Spence project can be obtained by visiting www.brentspencebridgecorridor.com.

Dixie Highway Corridor Study (1984)

In 1984, the Northern Kentucky Area Planning Commission prepared a study entitled the *Dixie Highway Corridor Study*. It reviewed the area between the I-75 interchange on Dixie Highway and Turfway Road. This study was reviewed as part of the 2005 *Dixie Highway Corridor Study* to see which recommendations were implemented. The study made several general recommendations concerning Dixie's intersecting side streets. Many of these recommendations were implemented as a result of the report. Several other recommendations are summarized in Appendix 2-7. These past recommendations were considered and incorporated into *The Dixie Fix Plan*.

Kenton County Bicycle Plan (June 1999)

The *Kenton County Bicycle Plan* was adopted in June 1999 as the framework for more detailed bikeway planning in the county. This

plan identified roads as bikeways that were deemed necessary to create an effective bikeway system. Routes were classified in four categories: primary (most important); secondary (substitute routes but less direct to major destinations than primary); touring (rural routes); and local (routes along local streets that could be used to reach various destinations). One component of the plan was to educate local officials to the needs and basic principles of planning and implementing bikeways. A copy of the Plan can be seen on the NKAPC website at www.nkapc.org.

Kenton County Pedestrian Plan (June 2001)

The *Kenton County Pedestrian Plan* was adopted in June 2001 and like the earlier Bicycle Plan was intended as a framework plan to present a strategy for detailed pedestrian planning and implementation. One of the most notable features of this plan was the use of GIS technology to evaluate the walkability to a destination using "Ped Sheds." Once the "Ped Shed" was identified evaluations could be made as to the availability of sidewalks necessary to reach a destination. Like the Bike Plan, the Pedestrian Plan contained information to educate local officials on the basic principles of planning for pedestrian access. A copy of the Plan can be seen on the NKAPC website at www.nkapc.org.

TANK Transit Network Study (2006)

The Dixie Fix had the advantage of incorporating recommendations from the recently completed Transit Authority of Northern Kentucky (TANK) Transit Network Study. TANK initiated the Transit Network Study to analyze the trends, challenges and opportunities facing Northern Kentucky and to create a long-range plan for public transportation. The plan will serve as TANK's guideline for future operation and investment to the year 2030. While this plan is a long-term vision, it is designed so that it can be implemented over time in small or large pieces, depending on available funding and opportunities. The Study's Dixie Highway recommendations are presented in Chapter 5. More information on the Transit Network Study can be found on the TANK website, www.tankbus.com, or by

contacting the TANK Planning Department at (859) 814-2143.

Vision 2015

Vision 2015 began on March 4, 2005. This 10-year strategic blueprint builds upon the original 1995 *Quest: A Vision for Northern Kentucky* and is being used to define and transform the future of Northern Kentucky. With a common purpose to ensure Northern Kentucky is capable of competing in a global economy, with our citizens benefiting from the prosperity and opportunity this creates, six strategies were established:

- **Competitive Economy:** The Northern Kentucky region will reinvent its economy and create new jobs that ensure continued growth and prosperity.
- **Educational Excellence:** Our educational system will promote talent and innovation and prepare children and adults to successfully compete in the global knowledge-based economy.
- **Livable Communities:** All Northern Kentucky residents will have the opportunity to access and fully participate in the civic, cultural and social life of the community.
- **Urban Renaissance:** The urban center of the region will leverage its unique assets to add economic and social value to the community and to make the region more competitive in the global economy.
- **Effective Governance:** Local government will enhance the economic competitiveness of the region by ensuring that high-quality public services are efficiently provided.
- **Regional Stewardship:** Our community's leaders and citizens are collaborating and working together to achieve a shared vision of our future.

The Dixie Fix Plan works to support and enhance each of the objectives above, with the exception of Educational Excellence.

