Chapter 3: Access Management

OVERVIEW
Access management is the systematic control of the location, spacing, design, and operation of driveways, median openings, interchanges, and street connections to a roadway. The primary objective is to provide vehicular access to land development in a manner that preserves the safety and efficiency of the transportation system. Over 21 states have implemented access management programs to improve the safety and efficiency of roadway systems. Access management plans examine vehicular, pedestrian, and multi-modal access to businesses, residences, and institutional establishments along primary transportation corridors. Studies have found that effective access management programs may reduce crashes as much as 50%. In addition, roadway capacity has been shown to increase nearly 45% and travel time has been improved as much as 60%. (Source: http://www.ctre.iastate.edu/PUBS/8.5x11BROCHURE.pdf)

Act, Don’t React!
As a roadway corridor reaches development capacity, necessary measures need to address the location and spacing of driveways and traffic signals. The challenge presented with Dixie Highway is its status as an urban, fully-developed corridor. Access management becomes a retrofitting project that is very difficult due to physical constraints and existing public expectations based on long-standing travel patterns. Hence, the need to develop an access management strategy and plan that is ready for implementation as redevelopment of the corridor occurs. The ultimate position is then created for local communities to ACT instead of REACT to ensure safety, mobility, access, etc. are improved. Access management retrofitting becomes a long-term, parcel-by-parcel process. There is no “quick fix” possible to a problem that was decades in the making.

Applying access management requires assessing properties at locations that may extend beyond the immediate vicinity of the site where the actual improvement is occurring. It is also necessary to consider conditions beyond the time of the development review in order to identify supporting road systems that may need to be addressed. The long-term implications and cumulative impacts of access-related decisions must be identified. When approaching access management, a couple of questions should be posed:

- Is there a better way to provide access to this property?
- What considerations should be taken when applying access management to this property(ies)?
- How will access management application here impact the corridor in regards to safety and traffic flow?

Design techniques including the implementation of roundabouts, medians, turn lanes, shared access drives/inter-parcel connections, right in/right out islands, and frontage/backage roads help address these issues and achieve the goals of access management.
ACCESS MANAGEMENT TECHNIQUES

Access management considerations for application in developed corridors may include the following:

- Spacing of signals
- Spacing of driveways
- Implementing shared access drives and inter-parcel connections
- Frontage/backage roads
- Decreasing the number of driveways
- Aligning roadways and avoid odd angle intersections
- Designating exclusive turn lanes
- Adding nontraversable medians to restrict direct left turns
- Adding two-way left turn lanes
- Facilitating U-turn movements
- Raising right in/out only curbs
- Constructing roundabouts

A study conducted by the National Cooperative Highway Research Program (NCHRP) found that roadway speeds were reduced an average of 2.5 miles per hour for every 10 access points per mile, up to a maximum of 10 miles per hour reduction (at 40 access points per mile)”. Dixie Highway has an average 54.75 driveways per mile over an eight mile stretch.

Signal Spacing

U.S. Department of Transportation and Federal Highway Administration studies indicate a clear correlation between the number of traffic signals and the frequency of traffic accidents, increased travel time, and reduced environmental quality. Under the right design, placement and operating circumstances, traffic signals can reduce the number and severity of crashes as well as assist in optimal traffic flow. According to 2002 data compiled by the National Highway Traffic Safety Administration, 21% of crashes and 24% of all fatalities and injuries related to motor vehicles occurred at signalized intersections. In addition, anything greater than two signals per mile has a significant impact on congestion and safety. The Dixie Highway corridor from Covington to Florence currently has an average of 5.5 traffic signals per mile.

Driveway Spacing

Driveway spacing presents another major access issue. Large numbers of driveways increase the potential conflicts on the road. Fewer driveways spaced further apart allow for more orderly merging of traffic and present fewer challenges to drivers. A study conducted by the National Cooperative Highway Research Program (NCHRP) found that roadway speeds were reduced an average of 2.5 miles per hour for every 10 access points per mile, up to a maximum of 10 miles per hour reduction (at 40 access points per mile). Dixie Highway has an average 54.75 driveways per mile over an eight mile stretch.

The following steps can be taken to increase spacing between driveways:

1) Consolidation/reduction of driveways serving a single parcel.
2) Use of shared driveways to serve adjacent parcels.
3) Relocation of driveways away from cross street intersections, especially when the driveway faces a left turn or right turn lane.

Kentaboo and Dixie – open driveways enable traffic to enter roadway at any number of locations adjacent to the intersection.
4) Installation of curb and gutter along full frontage parking areas, to concentrate and direct access movements to specific drive locations.

**Aligning roadways and avoiding odd angle intersections**

Aligning opposing driveways or roadways helps to avoid or eliminate offsets. Avoiding odd angle intersections decreases the number of conflict points and increases visibility for both drivers and pedestrians.

LIMIT CONFLICT POINTS

---

**Shared Access Drives and Inter-Parcel Connections**

Shared access drives and inter-parcel connections combine entry points and eliminate unnecessary driveways along primary roadways using the following steps:

1) Relocation of access from the main road to a secondary road where possible.
2) Interconnection of adjacent parking lots, to allow inter-parcel vehicular circulation without accessing the main road.
3) Development of service roads, either in front of or behind existing buildings, to allow inter-parcel vehicular circulation without accessing the main road.

SHARED ACCESS
**Turn Lanes**

Designated turn lanes allow drivers to remove themselves from the roadway without disrupting the flow of traffic.

**Medians**

Constructing medians can enhance the aesthetic appeal, but more importantly installation of median barriers can be used to prohibit left turns at problematic locations by directing left turn movements to fewer and more central locations. Medians also work to separate different directional flows of traffic, thereby limiting the number of conflict points and improving safety.

**Right in/out only curbs**

Replacement of full service drives by constructing right in/right out only raised curbing allows business owners to guide circulation patterns through parking lots. It also encourages patrons to enter and exit establishments more safely. Full turn movements are directed to major signalized intersections, rather than every access drive off of the major thoroughfare. This is extremely advantageous as an option for drives closest to intersections or turn lanes.

**Roundabouts**

Although not appropriate for all situations, roundabouts represent a solution for intersections with many conflict points. They also improve visibility and safety at odd angle and offset intersections while maintaining the flow of traffic.

**ACCESS MANAGEMENT RECOMMENDATIONS**

Accompanying this written plan is a CD on which aerial maps for the ten Dixie Fix communities are included as electronic files. Each
The Dixie Fix’s access management recommendations are placed into two categories. A green text box identifies improvements that can be applied to existing developments in their current state within the immediate future. A blue text box indicates proposed changes that should only be applied if and when the parcel is redeveloped.

Besides the aerial maps, the 168 individual recommendations are also listed within a table and identified by community and location (Appendix 3-1). Proposals range from relatively minor changes, such as the implementation of right in/right out only curbs, to the creation of landscaped medians and extended access drives. The digital maps show existing TANK bus stop locations and identify those to be eliminated. This element will be discussed further in Chapter 5: Public Transit.

Kentucky’s Proposed Access Management Program
For further consideration and inclusion in future Dixie Highway access management improvements, The Dixie Fix had the benefit of Kentucky Transportation Cabinet (KYTC) staff’s involvement on the Oversight Team. Staff shared a document, Kentucky’s Proposed Access Management Program Executive Summary, that has been developed by the Kentucky Transportation Cabinet and proposes 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 complete copy of this document is included as Appendix 2-5.

Based on the Proposed Access Management Program criteria, Dixie Highway, for the section covered by The Dixie Fix, would have the following access management classification under this new program:

- From Turfway Road to Sleepy Hollow Road: Urban I
- From Sleepy Hollow Road to the I-75 underpass in Covington: Urban II
- From the I-75 underpass to Main Street in Covington: Urban III

Subsequently, Signalized Intersection Spacing Standards recommended by the Proposed Access Management Program are:

<table>
<thead>
<tr>
<th>Access Classification</th>
<th>Signalized Intersection Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban I</td>
<td>2,400 ft.</td>
</tr>
<tr>
<td>Urban II</td>
<td>2,400 ft.</td>
</tr>
<tr>
<td>Urban III</td>
<td>1,200 ft.</td>
</tr>
</tbody>
</table>

Signal spacing of approximately ½ mile on all Class I and II roads is to ensure adequate bi-directional signal progression.

Unsignalized Intersection Spacing Standards recommended by the Proposed Access Management Program are:

<table>
<thead>
<tr>
<th>Access Classification</th>
<th>Type A Access*</th>
<th>Type B Access**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban I</td>
<td>1,200 / 600 ft.***</td>
<td>300 ft.</td>
</tr>
<tr>
<td>Urban II</td>
<td>600 ft.</td>
<td>150 ft.</td>
</tr>
<tr>
<td>Urban III</td>
<td>300 ft.</td>
<td>150 ft.</td>
</tr>
</tbody>
</table>

* Type A Access - All commercial, industrial, and recreational uses; residential subdivision entrances; public roadways; and, all other access not specified as Type B Access.
** Type B Access - Single family residences; multiple-family residences (3 units or less); and, farm/field entrances.
*** For roadways with an 85th percentile speed greater than 45mph use larger values. For roadways with an 85th percentile speed less than or equal to 45 mph, the larger values should be utilized where feasible but the lower values may be applied, where necessary.
Restrictions and Notes Applicable to Type B Access:

1. All other standards will apply according to the roadway classification.
2. Type B access spacing may be utilized only if alternative reasonable access meeting Type A standards is not feasible.
3. Change of land use from that previously permitted under Type B access to that classified as Type A requires a new permit and application of Type A standards.
4. Only one access allowed per parcel or for contiguous parcels under one ownership. Additional access points may be allowed only if they meet Type A standards and are deemed necessary for the convenience or welfare of the traveling public.
5. Type B access should not be allowed within the functional area of another intersection. No entrance shall be permitted within the limits of a turning lane.
6. Type B access shall not be permitted on routes designated as having “Partial Control” access.
7. When a median is present, Type B access will be limited to right turns only.
8. Unified access using cross access, combined entrances, backage roads and frontage roads is strongly encouraged.

**Preferred Median Type Standards** recommended by the Proposed Access Management Program are:

- Urban I: Nontraversable
- Urban II: Nontraversable (multilane facility)
  Two-Way Left Turn Lane (TWLTL) (2-Lane facility)
- Urban III: TWLTL (typical)
  Nontraversable (high control situations)

Non-traversable medians preferred for:

- All new multilane arterials
- Existing roadways where ADT, access density, and/or turning volumes exceed thresholds established above for TWLTLs
- Existing rural multilane arterials
- Crossroads in the vicinity of interchanges
- Multilane roadways with high pedestrian activity

**Median Type Guidelines:**

Individual left-turn lanes recommended for:

- Locations where left-turn volume exceeds warrant (to be determined), and
- Access point density $\leq 10$ ap/mi

**TWLTL generally appropriate for:**

- Urban/suburban 3-lane roadways with:
  - $o$ projected ADT $<17,000$
  - $o$ access point density $> 10$ ap/mi and $< 85$ ap/mi
  - $o$ left-turn volume $< 150$ vph
- Urban/suburban multi-lane roadways with:
  - $o$ projected ADT $<24,000$
  - $o$ access point density $> 10$ ap/mi and $< 85$ ap/mi
  - $o$ left-turn volume $< 100$ vph

Traversable raised medians are not recommended since they neither facilitate left turns nor do they provide positive control over left turn movements. If a project design team determines that a different median type is needed for safety or traffic operational reasons, a variance may be requested.

**Median Opening Spacing Standards** recommended by the Proposed Access Management Program are:

<table>
<thead>
<tr>
<th>Access Classification</th>
<th>Median Opening FULL</th>
<th>Median Opening DIRECTIONAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban I</td>
<td>2,400 ft.</td>
<td>1,200 ft.</td>
</tr>
<tr>
<td>Urban II</td>
<td>2,400 / 1,200 ft.*</td>
<td>1,200 / 600 ft.*</td>
</tr>
<tr>
<td>Urban III</td>
<td>600 ft.</td>
<td>300 ft.</td>
</tr>
</tbody>
</table>

*For roadways with an 85th percentile speed greater than or equal to 45mph, use larger values. For roadways with an 85th percentile speed less than or equal to 45mph, the larger values should be utilized where feasible, but the lower values may be applied, where necessary. Use of the lower values does not alter the 2,400 ft. minimum traffic signal spacing standard.

Mid-block median openings (used for U-turns only) may be located 300 ft. from an intersection at which left-turns are restricted, if the following conditions are met:

1. Adequate sight distance;
2. Adequate space for accommodating the U-turn design vehicle;
3. Adequate space for incorporation of a “left-turn” auxiliary lane (including taper and storage); and,
4. There is no potential for use by drivers desiring to turn left from nearby driveways.

For all three classes, full median opening standards are developed to align with the signal spacing standards with the exception noted above for Class II roadways.

**Corner Clearance Standards** recommended by the Proposed Access Management Program are:

<table>
<thead>
<tr>
<th>Access Classification</th>
<th>Type A Access*</th>
<th>Type B Access**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban I</td>
<td>1,200 / 600 ft.***</td>
<td>300 ft.</td>
</tr>
<tr>
<td>Urban II</td>
<td>600 ft.</td>
<td>150 ft.</td>
</tr>
<tr>
<td>Urban III</td>
<td>300 ft.</td>
<td>150 ft.</td>
</tr>
</tbody>
</table>

* Type A Access - All commercial, industrial, and recreational uses; residential subdivision entrances; public roadways; and, all other access not specified as Type B Access.

** Type B Access - Single family residences; multiple-family residences (3 units or less); and, farm/field entrances.

*** For roadways with an 85th percentile speed greater than 45mph, use 1,200 ft. upstream of intersection.

In addition to the spacing standard for the appropriate roadway classification, requirements for adequate corner clearance include:

• Driveways should not be permitted within the limits of turning or other auxiliary lanes in cases where the length of the auxiliary lane, including taper, is greater than the applicable spacing standard.
• Driveways should not be permitted within the limits of regularly forming queues.

For corner properties, Type B corner clearance may only be applied along the roadway with lower access function, based on the access classifications of the intersecting routes. In cases where the access classifications are the same a determination of relative access function will be made by the Cabinet. For intersections of a local road or street with a state-maintained route, it is presumed that the local facility will have the lower access function.

Requirements for corner clearance are necessary to insure that the functional area of the intersection is not impacted. Requests for access near important or congested intersections may require a detailed traffic engineering analysis to determine the intersection’s functional area.

**Interchange Area Spacing Standards** recommended by the Proposed Access Management Program are:

<table>
<thead>
<tr>
<th>Access Classification</th>
<th>Full Access Intersection*</th>
<th>Limited Access Connection**</th>
<th>Right-In / Right-Out Access Only***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban I</td>
<td>1,200 / 600 ft.</td>
<td>300 ft.</td>
<td>300 ft.</td>
</tr>
<tr>
<td>Urban II</td>
<td>600 ft.</td>
<td>150 ft.</td>
<td>150 ft.</td>
</tr>
<tr>
<td>Urban III</td>
<td>300 ft.</td>
<td>150 ft.</td>
<td>150 ft.</td>
</tr>
</tbody>
</table>

* Distance to first four-way intersection. Beyond this point spacing standards based on crossroad access class apply.

** Distance to first access connection limited to Right-In/Right-Out and Left-In movements. Applicable where left-turn movements restricted by median barrier with directional median opening.

*** Applicable where left-turn movements restricted by median barrier.

Additional comments:

• Spacing measured from ramp end of taper (end of radius if no taper) to access connection closest edge of pavement.
• Spacing distances for Limited Access Connections apply only where adequate left-turn lanes can be physically accommodated.
• Spacing distances for Limited Access Connections may be applied to unsignalized full movement connections if there is no possibility for access on opposite side.
• Access connections shall not permitted within limits of ramp taper.
• Access connections should not permitted within limits of auxiliary lane for downstream intersection.
• Type B access spacing not permitted with between ramp and first Limited Access Connection.

It should be noted that corridor agreements for access management retrofit projects (such as those recommended by The Dixie Fix Plan) may result in different negotiated access spacing. Such agreements, signed by KYTC and appropriate local government(s), would take precedence over the standards presented here.
The Dixie Fix access management recommendations were studied to determine their projected impact on improving crash rates and travel speeds/timing. The goal was to see how well the recommendations were projected to address The Dixie Fix’s goals of improving safety and mobility/traffic movement.

Safety

A methodology found in the 1999 National Cooperative Highway Research Program report number 420 was used to estimate the crash rates. Figure 3.1 shows representative crash rates by signalized and unsignalized access density for urban and suburban areas. These rates contain adjustments to account for apparent inconsistencies. Each unsignalized driveway may add about 0.02 to the accident rate at low signal densities and from 0.06 to 0.11 at higher signal densities. The rates have been used to estimate the changes associated with increasing unsignalized access density at a given signal density. Put quite simply, the greater the number of driveways, the greater the chance of a crash occurring.

The Dixie corridor was divided into eight sections matching the sections defined in OKI’s Congestion Management System. Crash rates within those sections were derived from calendar years 2002-03 Commonwealth of Kentucky highway crash numbers and traffic volume information from OKI’s traffic count database. The number of signalized intersections and unsignalized access points were enumerated for all sections from aerial photos. Future access points were determined from preliminary recommendations of the Dixie Fix Oversight Team. The number of existing and future access points was divided by section length to determine existing and future access points per mile. The projected crash rate was determined by the formula (existing accident rate* (R2/R1) where R1 and R2 are the estimated existing and future rates from Figure 3.1. The results can be found in Appendix 3-2 and are summarized in Figure 3.2. Analysis of The Dixie Fix’s access management recommendations shows a reduction in projected accident rates for all 10 communities. The greatest reduction is projected for the segment between the West ramps of I-71/75 to Main/Pike St. (a -27.04% drop in accidents).
Mobility and Traffic Movement
OKI’s Congestion Management System provided existing travel speeds for each section by direction during three time periods (AM peak, Mid-day and PM peak). Referring again to the methodology found in the 1999 National Cooperative Highway Research Program report number 420, Projected travel speeds are estimated to be increased 0.25 mph for every eliminated access point. Projected travel speeds and travel times were calculated for each of the eight sections, direction and time periods by the formula (projected speed = observed speed + (0.25mph * (existing access pts. - future access pts.))). Figure 3.3 below provides a summary of this data and Appendix 3-3 contains all data related to this computation.

Analysis of The Dixie Fix’s access management recommendations show reductions in projected travel time for all 10 communities. The greatest reduction is projected for the segment between Turfway and Commonwealth.

Economic Stability and Growth
Evaluation of current property values, retail sales, or other economic data was beyond the scope of this study. It is recommended that such information be collected and compared to similar data once a number of access management recommendations from The Dixie Fix are implemented or every five years.

Economic Impact Studies
As examples of the benefit of access management, other studies were examined. Studies in Iowa and Texas have indicated that access management improvements create few or no adverse effects to most businesses.

Iowa Impact Study
- Corridors with completed access management projects performed better in terms of retail sales than the surrounding communities. Business failure rates along access managed corridors were at or below the statewide average for Iowa. Although this suggests that access management projects generally did not have an adverse effect on the majority of businesses, some businesses may have been negatively affected.

- Eighty percent of businesses surveyed in Iowa along access-managed corridors reported sales at least as high after the project was in place. Relatively few businesses reported sales declines associated with the access management project, although these business owners clearly believed that they were hurt by the project. The firms perceiving negative impacts were a mixture of business types.

- Similarly, about 80 percent of businesses reported no customer complaints about access to their businesses after project completion. Businesses that tended to report most complaints were highly oriented toward automobile traffic.

<table>
<thead>
<tr>
<th>Facility</th>
<th>Section Name</th>
<th>2-way daily vehicle hours saved (hours : minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>US42/127</td>
<td>Turfway to Commonwealth</td>
<td>227:49</td>
</tr>
<tr>
<td>US42/127</td>
<td>Commonwealth to I-275</td>
<td>79:46</td>
</tr>
<tr>
<td>US42/127</td>
<td>I-275 to Turkeyfoot</td>
<td>2:57</td>
</tr>
<tr>
<td>US42/127</td>
<td>Turkeyfoot to Buttermilk</td>
<td>2:40</td>
</tr>
<tr>
<td>US42/127</td>
<td>Buttermilk to I-71/75</td>
<td>21:53</td>
</tr>
<tr>
<td>US42/127</td>
<td>I-71/75 to Kyles</td>
<td>10:49</td>
</tr>
<tr>
<td>US42/127</td>
<td>Kyles to west ramps of I-71/75</td>
<td>126:23</td>
</tr>
<tr>
<td>US42/127</td>
<td>West ramps to I-71/75 to Main/Pike St.</td>
<td>0:41</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>473:02</td>
</tr>
</tbody>
</table>
• In all cases, 90% to 100% of motorists surveyed had a favorable opinion of improvements made to roadways that involved access management. The vast majority of motorists thought that the improved roadways were safer and that traffic flow had improved.

(Source: Iowa State University, Iowa Access Management Research and Awareness Project: Executive Summary, 1997).

Texas Impact Study
A study of the economic impacts of left-turn restrictions was conducted for the Texas Department of Transportation in the mid 1990s. Due to the sensitivity of information on business activity, researchers did not ask for sales details, but for general perceptions as to whether business activity had changed over time using ranges (e.g. better/worse/same). Information on historical property values was obtained through the use of appraisal district computers or by purchasing CDs from private companies with this information. Key findings included the following:

• Perceptions of business owners before a median was installed were more pessimistic than what usually happened.

• Business owners reported no change in pass-by traffic after median installations.

• Most business types (including specialty retail, fast-food restaurants and sitdown restaurants) reported increases in numbers of customers per day and gross sales, except for gasoline stations and automotive repair shops, which reported decreases in the numbers of customers per day and gross sales.

• Most adverse economic impacts were realized during the construction phase of the median installations.

• Employment within the corridors experienced upward trends overall, with some exceptions during construction phases.

• When asked what factors were important to attracting customers, business owners generally ranked “accessibility to store” lower than customer service, product quality and product price, and ahead of store hours and distance to travel.

• About 94% of business owners reported that their regular customers were at least as likely or more likely to continue patronizing their business after the median installation.

• Along corridors where property values were studied, the vast majority of land values stayed the same or increased, with very few exceptions


PRIORITIZATION OF ACCESS MANAGEMENT RECOMMENDATIONS
In an attempt to prioritize access management implementation, a process was developed for inclusion in the final plan. The Dixie Fix stakeholders agreed that there was a need for flexibility in the prioritization process. It was determined that recommendations would be separated into two categories: corridor-wide priorities and local community priorities. The priority rankings that follow are not intended to limit or package projects, but rather to show the level of support and need for implementation urgency. If necessary funding is identified and timing becomes ripe for action, implementation should be pursued regardless of whether or not a higher ranked recommendation has been completed. Redevelopment opportunities may also influence the timing of implementation. Some recommendations may also be chosen to be grouped together due to their proximity, funding flexibility and the desire to achieve as much as possible.
From the 168 individual access management recommendations, Oversight Team members were asked to submit their top 5 project priorities. A combined 36 priorities were submitted from the following members; Florence, Erlanger, Elsmere, Edgewood, Crestview Hills, Lakeside Park, Fort Wright, Covington, KYTC and TANK (Appendices 3-4). Note: Some priorities were duplicated by more than one Oversight Team member. These priorities were then evaluated based on criteria reviewed and approved by the Oversight Team members. Weight was also assigned to each criteria category by the Oversight Team. Refer to Appendix 3-5 for the completed matrices for each priority recommendation.

The final chart ranking the 36 priority access management recommendations follows. This chart separates corridor-wide priorities from local community priorities. Corridor-wide priorities are projects much larger in nature which will involve large amounts of funding and involve multiple governmental agencies to implement. Local community priorities are relatively smaller scaled projects that, for the most part, will involve only the local community and individual property owner(s). The chart shows how each recommendation was ranked by its community, as well as how it compared with the other 35 priority recommendations. Level of desire for implementation, cost ranges, and designated lead agencies are also included in the chart. It should be noted that a column entitled “Progress Report” is included in the priority matrix. Oversight Team members want to continue meeting and tracking accomplishments as they are reached. As priorities are implemented and removed from the priority list, remaining recommendations can be evaluated and added. These measures are included to allow the spreadsheet to be an effective tool and help keep the study “alive.”

It is strongly suggested that after a critical number of recommendations are implemented, a re-evaluation of travel time, crash rates and economic data be made and compared to 2004/05 existing data to pinpoint the value added to the Dixie Highway through access management. This Dixie Highway-specific evidence could prove immensely enlightening to existing property owners, future developers, or other individuals who may question the benefits of access management.
### Access Management Recommendation

<table>
<thead>
<tr>
<th>Access Management Recommendation</th>
<th>A. Regional Priority</th>
<th>B. Local Priority</th>
<th>Desire for Implementation</th>
<th>Cost</th>
<th>Lead Agency(ies)</th>
<th>Progress Report (Date: 06/30/06)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edgewood: Dudley Rd. Intersection</td>
<td>1</td>
<td>1</td>
<td>High</td>
<td>Moderate</td>
<td>KYTC, Edgewood</td>
<td>KYTC seeking $$</td>
</tr>
<tr>
<td>Erlanger/Elsmere: Garvey/McAlpin Intersection Realignment</td>
<td>3</td>
<td>1</td>
<td>High</td>
<td>High</td>
<td>KYTC, Erlanger/Elsmere</td>
<td>KYTC seeking $$</td>
</tr>
<tr>
<td>Park Hills: 4 to 2 lanes with landscaped median and sidewalk connectivity</td>
<td>5</td>
<td>1</td>
<td>Medium</td>
<td>High</td>
<td>KYTC, Park Hills</td>
<td>Ph's receiving $250k for sidewalk component</td>
</tr>
<tr>
<td>Park Hills: St. Josephs Ln. Intersection Realignment</td>
<td>7</td>
<td>2</td>
<td>Medium</td>
<td>Moderately High</td>
<td>KYTC, Park Hills</td>
<td></td>
</tr>
<tr>
<td>Ft. Wright: Kyles Lane Intersection Realignment</td>
<td>10</td>
<td>1</td>
<td>High</td>
<td>High</td>
<td>KYTC, Ft. Wright</td>
<td></td>
</tr>
<tr>
<td>Erlanger: Kentaboo/Eastern Intersection Realignment</td>
<td>11</td>
<td>4</td>
<td>Low</td>
<td>Moderately High</td>
<td>KYTC, Erlanger</td>
<td></td>
</tr>
<tr>
<td>Park Hills: Roadway Realignment/Driveway Closures @ Ft. Mitchell Garage</td>
<td>13</td>
<td>3</td>
<td>Medium</td>
<td>High</td>
<td>KYTC, Park Hills</td>
<td></td>
</tr>
<tr>
<td>Covington: Main St. Intersection Reconfiguration</td>
<td>14</td>
<td>1</td>
<td>High</td>
<td>Moderately High</td>
<td>Covington, KYTC</td>
<td></td>
</tr>
<tr>
<td>Park Hills: Roundabout &quot;realigning&quot; Arlington Rd.</td>
<td>20</td>
<td>4</td>
<td>Low</td>
<td>Moderately High</td>
<td>KYTC, Park Hills</td>
<td></td>
</tr>
<tr>
<td>Ft. Wright: St. John/Thriftway Ctr Left Turn Lane &amp; Sidewalk Improvements</td>
<td>23</td>
<td>2</td>
<td>High</td>
<td>Moderately High</td>
<td>KYTC, Ft. Wright</td>
<td></td>
</tr>
<tr>
<td>Covington: SB I-75 Exit Ramp Dedicated Right Turn Lane</td>
<td>32</td>
<td>3</td>
<td>Medium</td>
<td>Low</td>
<td>KYTC, Covington</td>
<td></td>
</tr>
<tr>
<td>TANK: Consolidation and/or Removal of bus stops</td>
<td>n/a</td>
<td>n/a</td>
<td>High</td>
<td>Low</td>
<td>TANK</td>
<td>underway</td>
</tr>
</tbody>
</table>

### Terminology

**A. Regional Priority:** Each of the 36 local priorities were ranked using 8 weighted criteria factors. A copy of each recommendation's matrix is included in Appendix 3-5. These regional priorities were then numbered 1 (highest priority) to 36 (lowest priority).

**B. Local Priority:** Each of the 10 Dixie community Oversight Team representatives was asked to choose and rank their community's top 5 access management recommendations. 35 were received.

**Desire for Implementation:** The Oversight Team further classified the "Top 36" by level of desire for implementation timing. HIGH projects are desired for immediate implementation; MEDIUM - 2nd round of implementation; LOW - 3rd round of implementation. All implementation priority and timing is based on funding availability. Lack of funding for more highly desired projects should not prevent the implementation of lower ranked projects should funding for them become available.

**Cost:** Low, Moderate, Moderate-to-High, High

The estimated level of cost is for the commonly expected application of the conceptual planning strategy (basic construction). It does not include cost estimates for additional right-of-way acquisitions, relocation of utilities, or engineering.
### Access Management Recommendation

<table>
<thead>
<tr>
<th>Access Management Recommendation</th>
<th>A. Regional Priority</th>
<th>B. Local Priority</th>
<th>Desire for Implementation</th>
<th>Cost</th>
<th>Lead Agency(ies)</th>
<th>Progress Report (Date: 06/29/06)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covington: Jillians Way to Main St. Removal of On-Street Parking</td>
<td>21</td>
<td>2</td>
<td>High</td>
<td>Low</td>
<td>Covington</td>
<td></td>
</tr>
<tr>
<td>Covington: Montague-Bullock Remove On-/Create Off-Street Parking</td>
<td>15</td>
<td>4</td>
<td>Medium</td>
<td>Moderate</td>
<td>Covington</td>
<td></td>
</tr>
<tr>
<td>Covington: &quot;The Curve&quot;-Montague Remove On-/Create Off-Street Parking</td>
<td>2</td>
<td>5</td>
<td>Medium</td>
<td>Moderate</td>
<td>Covington</td>
<td></td>
</tr>
<tr>
<td>Park Hills: Closure of residential drives/new access off side or rear rds.</td>
<td>27</td>
<td>5</td>
<td>Low</td>
<td>Low</td>
<td>Park Hills</td>
<td></td>
</tr>
<tr>
<td>Ft. Wright: Fortside Driveway Closures, Align new entry w/ signal</td>
<td>18</td>
<td>3</td>
<td>Medium</td>
<td>Moderate to High</td>
<td>Ft. Wright</td>
<td></td>
</tr>
<tr>
<td>Ft. Wright: Acquire I-75 ROW</td>
<td>34</td>
<td>4</td>
<td>Low</td>
<td>n/a</td>
<td>Ft. Wright</td>
<td></td>
</tr>
<tr>
<td>Ft. Wright: Rivard Adjacent Commercial Properties Shared Access</td>
<td>35</td>
<td>5</td>
<td>Low</td>
<td>Moderately High</td>
<td>Ft. Wright</td>
<td></td>
</tr>
<tr>
<td>Crestview Hills: Fill-in Sidewalks Whitehouse to Dudley</td>
<td>4</td>
<td>1</td>
<td>High</td>
<td>Low</td>
<td>Crestview Hills</td>
<td></td>
</tr>
<tr>
<td>Edgewood: Summit Right Turn Lane</td>
<td>6</td>
<td>2</td>
<td>Medium</td>
<td>Low</td>
<td>Edgewood</td>
<td></td>
</tr>
<tr>
<td>Edgewood: 5th/3rd Bank &amp; Subway Right-in-outs</td>
<td>12</td>
<td>3</td>
<td>Medium</td>
<td>Low</td>
<td>Edgewood</td>
<td></td>
</tr>
<tr>
<td>Edgewood: Thornton Driveway Closure</td>
<td>9</td>
<td>4</td>
<td>Low</td>
<td>Low</td>
<td>Edgewood</td>
<td></td>
</tr>
<tr>
<td>Edgewood: Edgewood Rd.</td>
<td>8</td>
<td>5</td>
<td>Low</td>
<td>Moderate</td>
<td>Edgewood</td>
<td></td>
</tr>
<tr>
<td>Erlanger: Montgomery Cyclery</td>
<td>16</td>
<td>2</td>
<td>High</td>
<td>Moderate</td>
<td>Erlanger</td>
<td></td>
</tr>
<tr>
<td>Erlanger: Sunset (Mexican Rest.) Close Entries/Create Shared Access Dr.</td>
<td>31</td>
<td>3</td>
<td>Medium</td>
<td>Moderate</td>
<td>Erlanger</td>
<td></td>
</tr>
<tr>
<td>Erlanger: Colonial Cottage</td>
<td>26</td>
<td>5</td>
<td>Low</td>
<td>Low</td>
<td>Erlanger</td>
<td></td>
</tr>
<tr>
<td>Elsmere: Eastern &amp; Park Aves. Driveway Closure</td>
<td>28</td>
<td>2</td>
<td>Medium</td>
<td>Low</td>
<td>Elsmere</td>
<td></td>
</tr>
<tr>
<td>Elsmere: Paul Wright TV Driveway Closure</td>
<td>30</td>
<td>3</td>
<td>Medium</td>
<td>Low</td>
<td>Elsmere</td>
<td></td>
</tr>
<tr>
<td>Elsmere: Pasquales Driveway Closure</td>
<td>25</td>
<td>4</td>
<td>Low</td>
<td>Low</td>
<td>Elsmere</td>
<td></td>
</tr>
<tr>
<td>Elsmere: Vine Street Closure</td>
<td>22</td>
<td>5</td>
<td>Low</td>
<td>Moderate</td>
<td>Elsmere, KYTC</td>
<td></td>
</tr>
<tr>
<td>Florence: Marshall Dodge Driveway Consolidations/Shared Access @ signal</td>
<td>19</td>
<td>1</td>
<td>High</td>
<td>Moderate</td>
<td>Florence</td>
<td></td>
</tr>
<tr>
<td>Florence: Taco Bell / Turfway Commercial Center Entrance</td>
<td>17</td>
<td>2</td>
<td>High</td>
<td>Moderate</td>
<td>Florence</td>
<td></td>
</tr>
<tr>
<td>Florence: McDonald's</td>
<td>24</td>
<td>3</td>
<td>Medium</td>
<td>Low</td>
<td>Florence</td>
<td></td>
</tr>
<tr>
<td>Florence: Consolidation of Driveways between Nicholas and Bustetter</td>
<td>33</td>
<td>4</td>
<td>Medium</td>
<td>Moderate</td>
<td>Florence</td>
<td></td>
</tr>
<tr>
<td>Florence: Chinese Restaurant Driveway Closure</td>
<td>29</td>
<td>5</td>
<td>Low</td>
<td>Low</td>
<td>Florence</td>
<td></td>
</tr>
</tbody>
</table>

#### Terminology

**A. Regional Priority:** Each of the 36 local priorities were ranked using 8 weighted criteria factors. A copy of each recommendation's matrix is included in Appendix 3-5. These regional priorities were then numbered 1 (highest priority) to 36 (lowest priority).

**B. Local Priority:** Each of the 10 Dixie community Oversight Team representatives was asked to choose and rank their community's top 5 access management recommendations. 35 were received.

**DESIRE FOR IMPLEMENTATION:** The Oversight Team further classified the "Top 36" by level of desire for implementation timing. HIGH projects are desired for immediate implementation; MEDIUM - 2nd round of implementation; LOW - 3rd round of implementation. All implementation priority and timing is based on funding availability. Lack of funding for more highly desired projects should not prevent the implementation of lower ranked projects should funding for them become available.

**COST:** Low, Moderate, Moderate-to-High

The estimated level of cost is for the commonly expected application of the conceptual planning strategy (basic construction). It does not include cost estimates for additional right-of-way acquisitions, relocation of utilities, or engineering.