Local Access Management

Brent Sweger, P.E.
Division of Planning
Kentucky Transportation Cabinet
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Topics

- Need for State Policy
- Model Ordinance
- Permit Review Agreement
- Corridor Plan MOU
Land Use Cycle

- Land Use
- Land Value
- Accessibility
- Trans. Facilities
- Trans. Needs
- Trips

Land Use Cycle
Hitting the Access Management Bull's-eye

- Local Government’s Requirements
- State’s Minimum Requirements
- Unrestricted Access
Kentucky’s Model Ordinance

- For use by Cities and Counties
- Can be modified to fit local needs
- Available on KYTC Division of Planning website
Access Classification System

- Include all important roadways.
- Divide into logical segments (from A to B)
- Group them by:
  - Major Arterials
  - Minor Arterials
  - Collectors
- Include areas that are growing.
- Decide on 1 or 2 groups of standards—urban/suburban & rural.
Road Classifications

Street Hierarchy

- Arterial
- Collector
- Subcollector
- Residential Access
- Residential
- Minor Arterial

North 31W

Freeway
Local Ordinance

Classification Example

- **Class 1 - Major Arterial**
  - US 31W (Ring Road to 31W Business)

- **Class 2 - Minor Arterial**
  - KY 1600 (KY 220 to KY 2802)

- **Class 3 - Collector**
  - KY 86 (County Line to US 62)
Local Ordinance

Access Classification System

• After defining the classes, defines standards for each class:
  • median type
  • median opening spacing
  • driveway/connection spacing
  • signal spacing
## Local Ordinance

### Example Classification System

<table>
<thead>
<tr>
<th>Access Class</th>
<th>Functional Class</th>
<th>Median Type</th>
<th>Median Opening Spacing - Full</th>
<th>Median Opening Spacing - Directional</th>
<th>Connection Spacing</th>
<th>Signal Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Major Arterial</td>
<td>Non-traversable</td>
<td>2400</td>
<td>1200</td>
<td>600</td>
<td>2400</td>
</tr>
<tr>
<td>2</td>
<td>Minor Arterial</td>
<td>Non-traversable</td>
<td>1200</td>
<td>600</td>
<td>450</td>
<td>2400</td>
</tr>
<tr>
<td>3</td>
<td>Collector</td>
<td>2-Lanes w/ Median</td>
<td>1200</td>
<td>300</td>
<td>300</td>
<td>1200</td>
</tr>
<tr>
<td>4</td>
<td>Collector</td>
<td>3-Lanes (TWLTL)</td>
<td>NA</td>
<td>NA</td>
<td>300</td>
<td>NA</td>
</tr>
<tr>
<td>4</td>
<td>Collector</td>
<td>2-Lanes w/o Median</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>NA</td>
</tr>
<tr>
<td>4</td>
<td>Local</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Local Ordinance

Access Design Standards

• Local ordinances should also define:
  – Corner clearance
  – Joint & cross access
  – Interchange areas
  – Driveway design
  – Outparcels/Phased Development Plans
  – Emergency & Transit access
  – Transformation of Non-conforming access
Local Ordinance

Joint and Cross Access
Local Ordinance

**Design Standards (2)**

- Reverse frontages (Backage Roads)
- Flag lots (alternatives to)
- Lot width-to depth ratios
- Shared access
- Connectivity (possible connectivity index)
- Minor subdivisions & private roads
Local Ordinance

Backage (not frontage) Roads
Local Ordinance

Avoid Flag Lots
Local Ordinance Implementation

- Stand-alone ordinance
  - E.g. Lincoln County & Bowling Green
- Comprehensive Plan
  - Setting Goals & Objectives
  - Transportation Element/Plan
    - Connectivity of road system
    - Designating (new or extended) cross access corridors
  - Land Use Element/Plan
    - Land use along roadways
      - i.e., mixed use instead of commercial strips
Local Ordinance Implementation

• Subdivision Regulations
  – Review Procedures
  – Driveway Design & Throat Length
  – Cross connections/joint access requirements
  – Lot(s) layout and frontage
Local Ordinance Implementation

- **Zoning ordinance (3 options)**
  1. Standards within each zone definition
  2. Separate section that covers all zones
  3. Corridor Overlay Zones
     - Access management standards
     - Landscape and streetscape
     - Set backs, architectural, other standards

- **Basic Elements**
  - Spacing standards
  - Number of entrances per development
  - Cross connections/joint access requirements
  - Roadway connectivity requirements
  - Parking and Internal Traffic Circulation Requirements
Local Ordinance Implementation

• Where does flexibility fit in?
  – Waiver process to Subdivision Regulations
    • Granted by Planning Commission
  – Variance to zoning
    • Granted by Planning Commission or BZA
  – Should list specific conditions to be met
    • Special conditions exist that present hardship to applicant
    • Change to standard should be the least non-conforming
    • Traffic study shows negligible impacts to safety or traffic flow
    • Access to another roadway is not feasible
  – Mitigation measures
    • Median, Right-in/Right/out, turning lanes, etc. should be specified to minimize impacts
Local Ordinance Implementation

• Knowledgeable Staff or Traffic Consultant
  – Need proper training
  – Can make competent recommendations
    • Approval/denial
    • Suggestions on waivers/variances
  – Need to coordinate internally and with KYTC
Example – Lincoln County

<table>
<thead>
<tr>
<th>Road</th>
<th>Segment</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. 27</td>
<td>Garrard Co. Line to Stanford City Limits; Stanford City Limits to Pulaski Co. Line</td>
<td>1</td>
</tr>
<tr>
<td>U.S. 127</td>
<td>Boyle Co. Line to Hustonville City Limits; Hustonville City Limits to Casey Co. Line</td>
<td>1</td>
</tr>
<tr>
<td>U.S. 150</td>
<td>Boyle Co. Line to Stanford City Limits; Stanford City Limits to Crab Orchard City Limits; Crab Orchard City Limits to Rochester County Line</td>
<td>1</td>
</tr>
<tr>
<td>KY 39</td>
<td>Garrard Co. Line to Crab Orchard City Limits; Crab Orchard City Limits to Pulaski Co. Line</td>
<td>2</td>
</tr>
<tr>
<td>KY 78</td>
<td>Casey Co. Line to Hustonville City Limits; Hustonville City Limits to Stanford City Limits; Stanford City Limits to U.S. 150</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 1: Access Classification of State, County and City Roadways

1. All connections on facility segments that have been assigned an access classification shall meet or exceed the minimum connection spacing requirements of that access classification as specified in Table 2.

<table>
<thead>
<tr>
<th>Access Class</th>
<th>Minimum Adjacent Spacing for 45 mph and slower (ft)</th>
<th>Minimum Adjacent Spacing for over 45 mph (ft)</th>
<th>Signal Spacing (ft)</th>
<th>Median Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>600</td>
<td>1200</td>
<td>2400</td>
<td>Restrictive</td>
</tr>
<tr>
<td>2</td>
<td>450</td>
<td>600</td>
<td>2400</td>
<td>Restrictive</td>
</tr>
<tr>
<td>3</td>
<td>300</td>
<td>450</td>
<td>1200</td>
<td>Preferred</td>
</tr>
<tr>
<td>4</td>
<td>150</td>
<td>150</td>
<td>N/A</td>
<td>Non-restrictive</td>
</tr>
</tbody>
</table>

Table 2: Minimum Driveway and Signal Spacing
Example – Bowling Green Traffic Management Manual
Example – Bowling Green

21-7 ACCESS CONTROL PLAN.

21-7.01 Purpose.

In order to promote the safety of the motorist and pedestrian, to minimize traffic congestion by limiting points of conflict and to promote the general welfare by preserving the traffic-carrying capacity of public streets, it is necessary to set forth an Access Control Plan and provisions which shall include the designation of the location of required frontage roads and circulation drives, in addition to access and circulation regulations.

(Ord. BG80-63, S25-91, 7/15/80; Ord. BG2002-41, 8/20/2002)

21-7.02 Developer's Requirements; Alternatives.

All applicable State requirements must be met by the developer when seeking access approval to a State or Federal highway. Additionally, any access to state roads within city limits shall be reviewed and approved by the City and City-County Planning Commission.

(Ord. BG80-63, S25-92, 7/15/80; Ord. BG2002-41, 8/20/2002)

21-7.03 General Requirements for Access Control.

Requirements for access are located in the Access Management section of the City of Bowling Green Traffic Management Manual.

(Ord. BG80-63, S25-93, 7/15/80; Ord. BG84-17, 5/1/84; Ord. BG2002-41, 8/20/2002)

21-8 TRAFFIC IMPACT STUDY.

21-8.01 Purpose.

In order to completely evaluate the impacts of proposed land developments on the existing transportation network, it is necessary to set forth Traffic Impact Study Guidelines. The studies conducted are designed to assist the Public Works Department and private planners in making decisions regarding the allowance of major land use changes or new developments. Traffic impact studies should protect future transportation needs, assess impact of changes in land use and suggest ways for mitigating the adverse effects of land use changes.
### Example – Bowling Green

#### EXHIBIT 5-1 STREET DESIGN STANDARDS

<table>
<thead>
<tr>
<th></th>
<th>COLLECTORS</th>
<th>RESIDENTIAL</th>
<th>COMMERCIAL</th>
<th>INDUSTRIAL</th>
<th>FRONTAGE</th>
<th>ALLEY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ARTERIAL</strong></td>
<td>Major</td>
<td>Minor</td>
<td>Through</td>
<td>Through</td>
<td>Through</td>
<td>Cul-de-Sac</td>
</tr>
<tr>
<td>Volume Range</td>
<td>&gt;10,000</td>
<td>4,500 TO 10,000</td>
<td>&lt;1,000</td>
<td>&lt;1,000</td>
<td>&lt;1,000</td>
<td>&lt;1,000</td>
</tr>
<tr>
<td>Right-Of-Way</td>
<td>100</td>
<td>80</td>
<td>60</td>
<td>50</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Length (Minimum)</td>
<td>6</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Superelevation (Max. Percent)</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Grade (Max. Percent)</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Radius of Vertical Curves</td>
<td>400</td>
<td>300</td>
<td>300</td>
<td>250</td>
<td>250</td>
<td>250</td>
</tr>
<tr>
<td>Shoulder Width (Min. Feet)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Sidewalks (Notes)</td>
<td>4 feet wide</td>
<td>4 feet wide</td>
<td>4 feet wide</td>
<td>4 feet wide</td>
<td>Not Required</td>
<td></td>
</tr>
<tr>
<td>Intersection Spacing (Min. Feet)</td>
<td>600</td>
<td>500</td>
<td>500</td>
<td>150</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>Intersection Spacing (Max. Feet)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>140</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Intersection Spacing Tangent (Min Feet)</td>
<td>300</td>
<td>200</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Length of Tangent between Reverse Curves (Min Feet)</td>
<td>260</td>
<td>175</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
</tr>
</tbody>
</table>

**Notes:**
- For Bowling Green, as necessary to provide connectivity in Warren County.
- For Bowling Green, as necessary to provide connectivity in Warren County.
- For Bowling Green, as necessary to provide connectivity in Warren County.
- For Bowling Green, as necessary to provide connectivity in Warren County.
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- For Bowling Green, as necessary to provide connectivity in Warren County.
- For Bowling Green, as necessary to provide connectivity in Warren County.
Example - Bowling Green

Access Plan Review Process

1. Access Plan Development
2. Submittal
3. KDOH Review
4. P&Z Review
5. City Review
6. Approval
7. Construction
8. Inspection

Denied
## Comprehensive Plan Goals & Objectives

### 5 TRANSPORTATION (500)

#### 5.1 GENERAL

<table>
<thead>
<tr>
<th>5.1.1 Provide for the movement of people and goods from one place to another in a safe and efficient manner.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1.1.1 Reduce travel time and costs by integrating or interconnecting the various modes of transportation where possible.</td>
</tr>
<tr>
<td>5.1.1.2 Share transportation rights-of-way with other community facilities such as waterlines, sewers, utility lines, etc., where possible.</td>
</tr>
<tr>
<td>5.1.1.3 Encourage the logical extension, expansion, and maintenance of our present transportation systems.</td>
</tr>
<tr>
<td>5.1.1.4 Ensure that adequate and appropriate safety measures are provided when upgrading or expanding our various transportation systems.</td>
</tr>
<tr>
<td>5.1.1.5 Coordinate our local transportation systems with regional, state, and national systems.</td>
</tr>
</tbody>
</table>

#### 5.2 HIGHWAYS, STREETS & ROADS (510)

<table>
<thead>
<tr>
<th>5.2.1 Provide for the movement of people and goods from one place to another in a safe, efficient, and cost-effective manner, via autos, taxis, trucks, and buses -- giving proper recognition to the needs of pedestrians and bicyclists.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.2.1.1 Ensure that our highways are adequate by supporting an ongoing transportation planning program.</td>
</tr>
<tr>
<td>5.2.1.2 Classify our system of streets by traffic function and apply appropriate standards of design and land access based on that functional classification, to minimize traffic congestion on major streets.</td>
</tr>
<tr>
<td>5.2.1.3 Maximize the existing highway network through traffic operations, safety programs, and safety improvements.</td>
</tr>
<tr>
<td>5.2.1.4 Plan highways to offer maximum support of, and integration with, all other movement elements.</td>
</tr>
<tr>
<td>5.2.1.5 Design major streets adjoining residential areas for safety, noise control, and reduction of visual pollution.</td>
</tr>
</tbody>
</table>
Example - Owensboro
Example - Owensboro

Subdivision Regs

5.373 Vehicular Access Requirements. The following sections establish minimum requirements concerning the provision of vehicular access to lots from traffic thoroughfares of various classes. Whenever these sections below are in conflict, the most restrictive requirements should govern and should be enforced by appropriate local agencies.

5.3731 Discretion. The OMPC may require particular measures to reduce conflicts between traffic and land use, as per Section 5.224 herein.

5.3732 Zoning Ordinance. The Zoning Ordinance limits the location of, and distance between, access points for planned business centers in the B-1 and B-3 Zones; it also limits the width of driveways and the percentage of lot frontage that driveways may cover for all lots in any zone.

5.3733 Manual on Access Control. The Manual on Access Control and Minimum Design Standards, a policy manual adopted by the Owensboro Urbanized Area Transportation Policy Committee and the Technical Advisory Committee on Transportation, limits the location of, and distance between, access points for all properties abutting arterial and major collector streets.
13.23 Maximum Driveway Widths. The width of each driveway along any street, as measured at the property line, shall not exceed the maximum dimensions in the following exhibit.

### 13.231 Maximum Driveway Widths

<table>
<thead>
<tr>
<th>Type</th>
<th>Width (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>30</td>
</tr>
<tr>
<td>Commercial, single lot</td>
<td>40</td>
</tr>
<tr>
<td>Large planned development</td>
<td>60</td>
</tr>
<tr>
<td>Industrial, single lot</td>
<td>50</td>
</tr>
<tr>
<td>Large planned development</td>
<td>60</td>
</tr>
<tr>
<td>One-way Driveway Residential</td>
<td>16</td>
</tr>
<tr>
<td>One-way Driveway Residential</td>
<td>26</td>
</tr>
</tbody>
</table>

15.31. A Neighborhood Business Center is established by locating a planned business center in a new area of B-1 zoning which should be located no closer than three-quarters (3/4) of a mile to any other area of B-1 zoning. The minimum area for this business center is five (5) acres and may provide for the partial subdivision of the center. Access points should connect the initial center primarily with a street or streets of collector status; each use in the initial center must be afforded access to at least one of these access points. Initial design and subsequent expansion of a Neighborhood Business Center should comply with established highway and street access standards. (see table below)

#### B-1 Zone: Highway and Street Access Standards

<table>
<thead>
<tr>
<th>Type</th>
<th>Access Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>STREET TYPE</td>
<td>ANY USE IN B-1 ZONE</td>
</tr>
<tr>
<td>ARTERIAL</td>
<td>LIMITED ACCESS</td>
</tr>
<tr>
<td>COLLECTOR</td>
<td>Primary access at points no closer than 250’ to each other</td>
</tr>
<tr>
<td>CONTINUING LOCAL</td>
<td>Secondary access at points no closer than 250’ to each other</td>
</tr>
<tr>
<td>INTERNAL LOCAL</td>
<td>Access as necessary (all subdivided lots shall have access to dedicated public</td>
</tr>
<tr>
<td></td>
<td>rights-of-way)</td>
</tr>
</tbody>
</table>
Permit Review Agreement

- Agreement between local government and KYTC
- Establishes coordination procedures for access permits on state routes
- Establishes AM regulation hierarchy
- Independent of personalities
Corridor Plan

- Plan for designated (future) access points
  - Cross roads
  - Entrances
- Fix deficient driveways
  - Redundant driveways
  - Full frontage driveways
  - Small radii
- Plan location & type of intersection controls
  - Signals
  - Roundabouts
  - Directional median openings
- Plan for other modes
  - Transit, pedestrians and bicycles
Corridor Plan

• Develop Formal Agreement (MOU) to adopt the Corridor Plan
  – County Governments
  – City Governments
  – KYTC
  – MPO?

• MOU should specify no modifications are allowed unless all parties agree.
Conclusions

• KYTC encourages planning commissions and local governments to become leaders in managing access on the roadways in their jurisdiction.
• Consider adopting local AM rules
• Consider developing Permit Review Agreement with KYTC
• Develop and adopt detailed corridor plans
Access Management

Brent A. Sweger, P.E.
Kentucky Transportation Cabinet
502.564.7183
brent.sweger@ky.gov