IDOT's Perspective on Bicycle Accommodation
September 19, 2016
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Why Accommodate Bicyclists?

- Illinois Highway Code: “Give Full Consideration”
- FHWA: Advocates a “Flexible Approach”
- 2014 Illinois Bike Transportation Plan
- Safety Concerns (SHSP Focus)

AASHTO Guidance

A “multi-modal perspective” leads to safer bicyclist and pedestrian accommodation

Advantages of cycling:
- lower cost, better health, reduced impacts

Assume that roads will be used by bicyclists.

Existing streets can be retrofitted to improve accommodations

Bicyclists, like motorists, seek direct routes and direct access

High traffic volumes and speeds do not justify not accommodating

Bicycle Use?

Figure 3  Mode Share By Country (Bischoff, et al. 2011)

Active travel varies significantly between wealthy countries.

Source:
Evaluating Active Transport Benefits and Costs.

Bicycle Safety: a Major Concern

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Fatalities</th>
<th>Pedestrian Fatalities</th>
<th>Percentage of Total Fatalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>23,919</td>
<td>796</td>
<td>3.3%</td>
</tr>
<tr>
<td>2006</td>
<td>42,788</td>
<td>772</td>
<td>1.8%</td>
</tr>
<tr>
<td>2007</td>
<td>41,239</td>
<td>751</td>
<td>1.7%</td>
</tr>
<tr>
<td>2008</td>
<td>57,823</td>
<td>718</td>
<td>1.3%</td>
</tr>
<tr>
<td>2009</td>
<td>32,083</td>
<td>528</td>
<td>1.6%</td>
</tr>
<tr>
<td>2010</td>
<td>32,059</td>
<td>525</td>
<td>1.6%</td>
</tr>
<tr>
<td>2011</td>
<td>32,679</td>
<td>603</td>
<td>1.8%</td>
</tr>
<tr>
<td>2012</td>
<td>32,792</td>
<td>704</td>
<td>2.2%</td>
</tr>
<tr>
<td>2013</td>
<td>32,844</td>
<td>749</td>
<td>2.3%</td>
</tr>
<tr>
<td>2014</td>
<td>32,875</td>
<td>726</td>
<td>2.2%</td>
</tr>
</tbody>
</table>


IDOT Bicycle Coordinators

Maria Kindred – R1D1
Dan Long – R2D2
Scott Ferguson – R2D3
Chris Maushard – R3D4
Robert M. Nelson – R3D5
Andrew Werner – R4D6
Eugene Becceu – R4D7
Kevin Jimerson – R5D8
Julie A. Klamm – R5D9

Jon McCormick  OPD/BDE
BDE Manual Chapter 17 (Bike/Ped)
- Basis of Complete Streets (605 ILCS 5/4-220)
- Needs Assessment
- Design Criteria
- Bike Operating Characteristics
- Pedestrian Accommodations

“The Department shall establish design and construction standards for bicycle and pedestrian ways.”

Needs Assessment
IDOT shall consider/establish Bike Accommodations if:
- The route is designated as a bikeway, or provides “primary” or “unique” access
- The project would otherwise have “negative effects” on a bikeway
- The route will handle at least 25 bikes/day

Design Policies and Criteria
- Policies must be consistent with AASHTO and FHWA Guidance
- Design Elements are consistent with (allowed by) the MUTCD

On-Road vs. Side Paths (per AASHTO)
- Limit shared-use side path applications
- Side paths can be undesirable for safety reasons,
  - Crashes with motor vehicles.
  - Concerns with walkers/joggers/etc. conflicts

BICYCLE FACILITY SELECTION TABLE (Chapter 17)
Rumble Strips (Compatible w/Bikes?)

Bicycle Service Quality

- To evaluate on-road bicyclist perceived safety and comfort in mixing with motor vehicle traffic
- Consider lane/shoulder widths, traffic volumes, heavy vehicles, posted speed, pavement condition
- Rate on a Scale - For BLOS, “A” (best) to “F” (worst)
- A measure of Service Quality will be assessed as part of engineering studies

Green Pavement/Paint

- Highlights the presence of bike lanes
- Interim FHWA Approval
- Can be installed in portions of a bike lane

BICYCLE FACILITY SELECTION TABLE (Chapter 17)

<table>
<thead>
<tr>
<th>Roadway Characteristics</th>
<th>Bicycle Access</th>
<th>Bicycle Lanes</th>
<th>Side Path Bidirectional</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

Bicycle Lanes

- Dedicated width for bicyclist use
- Buffered bike lanes are an option for improving the service quality
- Buffer width 18” minimum

Green Pavement/Paint

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Bike Lanes at Intersections

- Watch free-flow turns by motor vehicles
- Make bike movements direct, logical
Road Diets

FHWA: “Proven Safety Countermeasure”, promoted as safety-focused alternative
Volumes up to 15K ADT allow for “4 lanes to 3 lanes”.
Operational analysis is required.

IDOT BDE Policy Focus:

- Safer Travel for bicyclists (and pedestrians)
- Facility Selection Criteria adjustments (BLOS?)
- Design Flexibility using AASHTO Guidance and publications by FHWA, NACTO and ITE
- Training to implement Best Practices
- Open, Effective communication with those who share interest in bikes

Questions?
Thank You!