Town of Dayton

ADA Pedestrian Mobility Plan
Area Plan Commission of Tippecanoe County
Purpose and Demographics

- Equal access is a federal requirement. The Lafayette MPO has taken responsibility for ensuring that the requirements are met by the small towns under our jurisdiction (Battle Ground, Clarks Hill and Dayton).
- Work done for the Town of Dayton represents a first effort at this sort of project.
- Initial methods were based on Frankton’s Mobility Plan and adapted for local needs.

Dayton, Indiana
- Population approximately 1,100 (2010 U.S. Census)
- 9% over 65 and 21% under 14
- Less than 50 employees
- Sidewalks only way to reach some destinations in town
Field Work and Equipment

Measurements (2011 PROWAG proposed guidelines):
Sidewalks:
  - Width
  - Cross slope
Curb ramps:
  - Ramp cross slope
  - Running slope
  - Length
  - Width
  - Depth
  - Flare and landing

Visual inspection for obstructions

Equipment:

Sears Craftsman digital torpedo level
Keson surveyor’s measuring wheel
Panasonic 28mm digital camera
**Scoring**

**FOR SIDEWALKS** On a scale of 0-7* (all standards from 2011 PROWAG proposed guidelines):
- Sidewalk width:
  - Less than 4’ = 1
  - 4’ or greater = 0
- Sidewalk cross-slope:
  - 2% or less = 0
  - Greater than 2% = 1
- Minimum sidewalk depth:
  - Less than 4” = 0
  - 4” or greater = 1

Sidewalk Obstructions (visual inspection):

<table>
<thead>
<tr>
<th>Obstruction</th>
<th>All existing sidewalks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manhole Coverings, sewer plates</td>
<td>0 or 1</td>
</tr>
<tr>
<td>Trees, grass, bushes</td>
<td>0 or 1</td>
</tr>
<tr>
<td>Surface irregularities (heaving, wear, etc.)</td>
<td>0 or 1</td>
</tr>
<tr>
<td>Gaps in sidewalk (no wider than 1 lot width)</td>
<td>0 or 1</td>
</tr>
<tr>
<td>Absence of sidewalk (wider than 1 lot width)</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

*Sidewalks with higher scores are a higher priority.
Scoring

FOR CURB RAMPS On a scale of 0-8*

Ramps -
Minimum width: 4’
  Less than 4’ = 1
  4’ or greater = 0
Maximum run slope: .021 (1:48)
  .021 or less = 0
  Greater than .021 = 1
Maximum cross-slope: .083 (1:12)
  .083 or less = 0
  Greater than .083 = 1

Flares -
Minimum width: 2’
  Less than 2’ = 1
  2’ or greater = 0
Maximum cross-slope: .1 (1:10)
  .1 or less = 0
  Greater than .1 = 1

Landings -
Minimum depth: 2’
  Less than 2’ = 1
  2’ or greater = 0
Minimum width: 5’
  Less than 5’ = 1
  5’ or greater = 0
Maximum slope: .021
  .021 or less = 0
  Greater than .021 = 1

*Curb ramps with higher scores are a higher priority.
Dayton Core

- Area Plan staff outlined a central “core” area. The distinction was necessary as sidewalks and ramps with equal scores also have an apparently equal priority. Pedestrian facilities within or adjacent to the core have a higher priority than other facilities.

- The core extends north to the elementary school, south to South Street, west to Dayton Road and east to Conjunction Street.
Dayton Core
Sidewalk Priorities

- Score determined by meeting design standards and visual inspection for obstructions:
  - The final highest sidewalk score was 4 (out of possible 7)
  - The most important high priority sidewalks (scored 3 or 4) are located along Dayton Road and Main Street, in the core area
  - The western residential area has the highest concentration of medium priority sidewalks (scored 1 or 2), but facilities in similar condition are spread fairly evenly through the town
  - Low priority sidewalks (scored 0) are split between the western residential area and the core
Sidewalk Priorities

Sidewalk Condition
- Red: Highest Priority
- Yellow: Moderate Priority
- Green: Lowest Priority
- Pink: In Compliance
- Dayton Core
Curb Ramp Priorities

- Scored only by PROWAG design standards:
  - Final highest ramp score was 5 (out of possible 8)
  - The only highest priority curb ramps (scored 4 or 5) are in the NW corner of the western residential area
  - Medium priority curb ramps (scored 2 or 3) are largely located in the western residential area
  - Lowest priority curb ramps (scored 1) are mostly in the western residential area or adjacent to the Dayton core area
  - Most of the curb ramps in the core area are currently compliant
Curb Ramp Priorities

Curb Ramp Condition
- Highest Priority
- Moderate Priority
- Lowest Priority
- In Compliance
- Dayton Core
Good Examples in Dayton

Sidewalk

Curb Ramp
Not So Good Examples

Sidewalk Obstruction

Crosswalk
Lessons Learned

- We were limited by technology and time
  - Initially tried to record field measurements using a laptop, switched to printed spreadsheet because of battery life and weight issues
  - Fieldwork took longer than initially thought for a 2-person crew so later outings were somewhat rushed
- Fieldwork is not a 1 person job, but simple tools can be very effective
  - Surveyor’s measuring wheel, inexpensive level and digital camera
- Don’t try to reinvent the wheel
  - Plenty of good resources are available and readily adaptable
  - For us, the Frankton Mobility Plan was a great jumping-off point