Turbo Lanes

• Signalized T-Intersection
• Special Traffic Lanes Configuration
• Special Signal Operation
• One (or More) Lanes on Main Street Flow Continuously
• Actuated Pedestrian Signals When Needed
Suitability Factors

- Nearby Driveways/Streets
- Proximity of Other Signals
- Dual Left Turns
- Number of Lanes on Main Street
- Median
Concept Design Parameters
Location Screening

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
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<tbody>
<tr>
<td>DPA ID:</td>
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<tr>
<td>MD ID:</td>
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<tr>
<td>Location:</td>
<td>NW 22 Ave @ NW 139 St</td>
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<tr>
<td>Turbo Lane Direction:</td>
<td>SB</td>
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<tr>
<td>Recommendation:</td>
<td>MD turbo lane type A</td>
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<tr>
<td>Conflict:</td>
<td>NA</td>
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<tr>
<td>Minor Conflict:</td>
<td>1. Parking lanes</td>
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<tr>
<td>Existing Ped. Crossing</td>
<td>Yes</td>
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<tr>
<td>Proposed Ped. Phase</td>
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<tr>
<td>Special Features:</td>
<td>NA</td>
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<td>Comments:</td>
<td>NA</td>
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Study Coordination

- MD Public Works Department
  - Meeting: August 26, 2009
  - Prelim. Recommendations Report (8/09)
  - Draft Final Report Review (3/10)
- Transp. Planning Tech. Advisory Committee (4/7/10)
- Citizens Transportation Advisory Committee (4/28/10)
Recommended Turbo Lanes
25 Locations
Map
Location Information/Specifications

Location No. 2
NW 22 Ave @ NW 139 St

The main street at this location, NW 22 Ave, is a four lane road with a raised median that runs in the north-south direction. NW 139 St is a minor street intersecting the main street from the east. The area has both commercial industrial and residential developments. A canal, vacant property and a few low scale businesses are located along the west side of NW 22 Ave. Little friction and weaving is expected from the nearby driveways. The outside southbound lane is extra wide and allows for on-street parking. Parking activity, however, was not observed. Therefore, the extra wide lane is available to reconfigure the southbound approach and introduce the required geometry for the proposed turbo lane. A rendering of the recommended improvements at this intersection is included in section 6 of the report.
Schematic Plan
Location 2 - Perspective
Location 18 - Perspective
Benefits

Increase in intersection approach capacity

ranging from 7 to 173%

at 25 intersections
# Lane Type Cost Matrix

## Exhibit 7
**Preliminary Cost Estimates by Turbo Lane Type**

<table>
<thead>
<tr>
<th>Turbo Lane Type</th>
<th>Low</th>
<th>Mid</th>
<th>High</th>
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<tbody>
<tr>
<td>Type A or B</td>
<td>$215,000</td>
<td>$270,000</td>
<td>$325,000</td>
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<td>Type C</td>
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<td>$170,000</td>
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<td>Type D</td>
<td>$95,000</td>
<td>$120,000</td>
<td>$145,000</td>
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Source: David Plummer and Associates
Priority Evaluation

- Capacity Improvement
- Cost
- Implementation Issues
Implementation

• Short Term: 6 – 12 Months
• Mid Term: 1 – 2 Years
• Long Term: 3 Years +
Questions?