N. Monroe Project Advisory Board

Position 1
N. Monroe Business Owner
Legacy
Ed Ardiss

Position 2
N. Monroe Business Owner
New/Emerging
Brianna Musser

Position 3
N. Monroe Property Owner
Dale Westhaver

Position 4
Emerson/Garfield
Neighborhood
E.J. Ianelli

Position 5
Neighborhood Resident
Megan Kennedy

Position 6
North Hill Neighborhood
Michael Trautman

Position 7
At Large
Chris Bornhoft

Position 8
West Central Rep
Mike Wallace

Position 9
Business Owner From
Riverside
Jill Leonetti

City Council District 3
Council Member
Karen Stratton

City Council District 3
Council Member
Candace Mumm
Surviving Construction Meetings
Focus Area 1: York to Cleveland or Fairview
Focus Area 2: Indiana to Montgomery
Overview

1. Traffic Volume Reduction / Shift
2. Level of Service Comparison
3. Queuing at Indiana
4. Travel Time
5. Pedestrian Data
6. Emergency Vehicles
7. Deliveries and Garbage Pick-up
8. Snow Storage
Traffic Analysis Process and Assumptions

- 2011 Traffic Data Used in Analysis
- Analysis Focused on PM Peak Hour Analysis
- Peak Hour Typically from 5-6 PM
- Northbound is Critical Movement
TRAFFIC VOLUME REDUCTION AND SHIFT

235 CARS

15% reduction in volume during PM Peak Hour

ESTIMATED DIVERSION DISTRIBUTION

DIVISION

MAPLE/ASH 55 CARS 25%

POST ST. 55 CARS 25%

LOCAL ROUTES 30 CARS 10%

95 CARS 40%
# Levels of Service for Intersections with Traffic Signals

<table>
<thead>
<tr>
<th>Level of Service</th>
<th>Delay per Vehicle (seconds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>( \leq 10 )</td>
</tr>
<tr>
<td>B</td>
<td>11-20</td>
</tr>
<tr>
<td>C</td>
<td>21-35</td>
</tr>
<tr>
<td>D</td>
<td>36-55</td>
</tr>
<tr>
<td>E</td>
<td>56-80</td>
</tr>
<tr>
<td>F</td>
<td>&gt;80</td>
</tr>
</tbody>
</table>

## Factors Affecting LOS of Signalized Intersections

### Traffic Signal Conditions:
- Signal Coordination
- Cycle Length
- Protected left turn
- Timing
- Pre-timed or traffic activated signal
- Etc.

### Geometric Conditions:
- Left- and right-turn lanes
- Number of lanes
- Etc.

### Traffic Conditions:
- Percent of truck traffic
- Number of pedestrians
- Etc.

Source: 2000 HCM, Exhibit 16-2, Level of Service Criteria for Signalized Intersections
## Level of Service Comparison

<table>
<thead>
<tr>
<th>Corridor</th>
<th>Existing Conditions - 2011 PM Peak</th>
<th>3-Lane Monroe - 2011 PM Peak</th>
<th>Corridor</th>
<th>Existing Conditions - 2011 PM Peak</th>
<th>3-Lane Monroe - 2011 PM Peak</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>LOS</td>
<td>LOS</td>
<td></td>
<td>LOS</td>
<td>LOS</td>
</tr>
<tr>
<td>Maple-Ash Corridor</td>
<td></td>
<td></td>
<td>Division Corridor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ash / Garland</td>
<td>B</td>
<td>B</td>
<td>Division / Garland</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Maple / Garland</td>
<td>C</td>
<td>C</td>
<td>Division / Montgomery</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Ash / NW Blvd</td>
<td>B</td>
<td>B</td>
<td>Ruby / Montgomery</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Maple / NW Blvd</td>
<td>C</td>
<td>D</td>
<td>Division / Indiana</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Ash / Indiana</td>
<td>A</td>
<td>A</td>
<td>Ruby / Indiana</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Maple / Indiana</td>
<td>A</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wall-Post Corridor</td>
<td></td>
<td></td>
<td>Monroe Corridor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post / Garland</td>
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<td>B</td>
<td>Monroe/Indiana</td>
<td>C</td>
<td>C</td>
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<tr>
<td>Wall / Garland</td>
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<tr>
<td>Post / Buckeye</td>
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<td>C</td>
<td>Monroe/Garland</td>
<td>C</td>
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</tr>
<tr>
<td>Post / Indiana</td>
<td>B</td>
<td>B</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Northbound Queuing at Indiana during PM Peak Hour

<table>
<thead>
<tr>
<th></th>
<th>5 LANES</th>
<th>3 LANES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northbound</td>
<td>370 ft</td>
<td>600 ft</td>
</tr>
<tr>
<td>Time to Clear Queue</td>
<td>36 secs</td>
<td>58 secs</td>
</tr>
</tbody>
</table>
Travel Time

5 LANE
Northbound North of Indiana to Garland 3.33 MIN 200 SEC
Northbound South of Indiana to Garland 4.5 MIN 270 SEC

3 LANE
Northbound North of Indiana to Garland 3.33 MIN 200 SEC
Northbound South of Indiana to Garland 4.6 MIN 280 SEC
Date: Wed, Apr 13, 2016
Count Period: 3:00 PM to 7:30 PM
Peak Hour: 4:30 PM to 5:30 PM

On Monroe
Max | Min | Ave.
98 | 21 | 53

On Carlisle
Max | Min | Ave.
11 | 2 | 7

On Dalton
Max | Min | Ave.
21 | 7 | 14

On Monroe
Max | Min | Ave.
69 | 36 | 49

Monroe ST
W DALTON AVE
W DALTON AVE
1,984
TEV:
0.87
PHF: 5
607
14
626
1,334
0
18
2
6
26
20
6
1,308
5
1,319
618
0
5
0
8
13
12
0
Emergency Vehicle Response

Police

- Response Time
- Lane Width Improvement
- Emergency Evacuation
Deliveries and Garbage Pick-up

**Deliveries**
Center lane, drop-off zones, etc.

**Garbage**
Alley, Parking lot, and Side Street pickup.
Snow Removal

Plowing
Present condition is to plow to the curb. Future condition will remain plowing to the curb.
• Wider sidewalk provide better storage space.
QUESTIONS?