Agenda

- Downtown Circulation History
- Study Overview
- Existing Conditions
- Short-Term Improvements
- Downtown Circulation Improvements
- Next Steps
- Questions
Downtown Circulation History

Current roadway circulation pattern (“Scheme J”) developed in 1971
Minor improvements since
Current economic development opportunities have spurred the need to revisit circulation
Study Overview

- Evaluate existing downtown traffic flow and circulation
- Develop short-term, low-cost improvements
- Evaluate impacts of converting select one-way streets to two-way operation
Existing Conditions
Lynn Circulation Study

Total Entering Intersection Volume
- **Low** - Below 1,000 vehicles
- **Moderate** - 1,000 to 1,500 vehicles
- **High** - Over 1,500 vehicles

<table>
<thead>
<tr>
<th>Weekday AM Peak Hour</th>
<th>Weekday PM Peak Hour</th>
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Study Area

VHB
Car Following Survey

- Over 300 observations
- 20% of trips end in downtown
- Remaining 80% have destinations outside downtown ("just passing through")
  - 50% of external trips use perimeter roads
  - 50% of external trips drive through downtown
Lack of wayfinding/ regulatory signage
Abundance of on-street parking
Select street widths could allow for two-way traffic
Signal inventory notes:
  – Signal equipment generally in fair to poor condition
  – Faulty detection
  – Retiming/time of day program potential
  – MUTCD and/or ADA non-compliance issues

Oxford Street
Available parking (picture taken midday)
Street width +/- 33 feet
Short Term Improvements
Andrew Street Parking Lot

- Improve wayfinding signage:
  - Market Street
  - Central Avenue
- Consider re-opening the Andrews Street driveway
  - May require another pay kiosk
  - Discourage cut-through traffic from Liberty Street to Andrew Street
# Liberty Street

<table>
<thead>
<tr>
<th>Issues</th>
<th>Potential Improvement</th>
<th>Benefits/Impacts/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Unnecessary “all red” clearance phase</td>
<td>Modify signal timings</td>
<td>Improves operations from LOS E to LOS D</td>
</tr>
<tr>
<td>2. Liberty Street northbound lane usage</td>
<td>Consider striping Liberty St north of Washington St as 2-lanes</td>
<td>Potential on-street parking impacts and/or bus stop impacts</td>
</tr>
<tr>
<td>unbalanced</td>
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<tr>
<td>3. Liberty Street northbound congestion</td>
<td>Implement improvements (1) and (2), and consider circulation scenario(s)</td>
<td>Divert traffic off of Liberty St with circulation scenario</td>
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<tr>
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<td>--------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>1</strong> Parking interferes with traffic</td>
<td>Eliminate parking spaces west of Oxford St</td>
<td>Improves safety and traffic flow</td>
</tr>
<tr>
<td><strong>1</strong> Signage does not prohibit parking</td>
<td>Add “No Parking Anytime” signs</td>
<td>Low-cost, implement immediately</td>
</tr>
<tr>
<td><strong>2</strong> Sight distance issues compounded by</td>
<td>Eliminate westbound parking (1)</td>
<td>Address intersection control as part of circulation scenario</td>
</tr>
<tr>
<td><strong>2</strong> parking issues</td>
<td>Consider circulation scenario(s)</td>
<td></td>
</tr>
<tr>
<td><strong>3</strong> Intersection control causes confusion</td>
<td>Add STOP sign for Washington St and</td>
<td>Improves safety, reduces driver confusion</td>
</tr>
<tr>
<td><strong>3</strong> and safety issues</td>
<td>Central Ave approaches</td>
<td>All movements LOS D or better</td>
</tr>
<tr>
<td><strong>3</strong></td>
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</tbody>
</table>
## Central Square

<table>
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<th>Issues</th>
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<th>Benefits/Impacts/Notes</th>
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</thead>
<tbody>
<tr>
<td><strong>Limited sight distance on Munroe Street</strong></td>
<td>Consider STOP control for Central Square Left-turn only from Munroe St (with circulation scenario(s))</td>
<td>Improved safety All movements LOS D or better Full multi-way stop warrant analysis recommended</td>
</tr>
<tr>
<td><strong>Safety issues crossing Central Square</strong></td>
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</tr>
<tr>
<td><strong>Illegal/wrong-way movements from Munroe Street to Blake Street</strong></td>
<td>Add left-turn only signage; extend island and improve striping Left-turn only from Munroe St (with circulation scenario(s))</td>
<td>Low-cost, implement immediately Left-turn only from Munroe St with circulation scenario(s)</td>
</tr>
</tbody>
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Candidate One-Way Streets
Candidate One-Way Streets

• Selected based on data collection and discussions with City officials:
  – Central Avenue
  – Liberty Street
  – Andrew Street
  – Oxford Street
  – Willow Street
Central Avenue: Washington Street to Market Street

Benefits
- Improves east-west flow
- Results in 70-115 peak hour trips through downtown
- Trips divert from Washington Street/Essex Street and Market Street/Broad Street

Impacts
- 9 on-street parking spaces
- 1 unsignalized intersection
- 1 signalized intersection
- Signage/pavement markings
Liberty Street: Market Street to High Street

Benefits

• Supports redevelopment
• Enhances access to Andrew Street parking lot
• Improves north-south flow:
  • Results in 125-160 peak hour trips diverted from Oxford Street and Essex Street

Impacts

• 13 on-street parking spaces
• 2 unsignalized intersections
• 2 signalized intersections
• Signage/pavement markings
Andrew Street:
Washington Street to Market Street

Benefits
• Supports redevelopment
• Enhances access to Andrew Street parking lot
• Minimally improves north-south flow:
  • Results in 15-25 peak hour trips diverted from Liberty Street

Impacts
• 14 on-street parking spaces
• 2 unsignalized intersections
• 1 signalized intersection
• Signage/pavement markings

Candidate Street

S  Impacted Signalized Intersection
U  Impacted Unsignalized Intersection
**Oxford Street:**
**Market Street to Buffum Street**

**Benefits**
- Supports redevelopment
- Improves north-south flow:
  - Results in 175-285 peak hour trips diverted from Liberty Street and Munroe Street
  - Relieves Liberty Street congestion
- Mitigates safety issues at Munroe Street/Blake Street/Central Avenue

**Impacts**
- 22 on-street parking spaces
- 3 unsignalized intersections
- 2 signalized intersections
- Signage/pavement markings

<table>
<thead>
<tr>
<th>Candidate Street</th>
<th>S</th>
<th>Impacted Signalized Intersection</th>
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<tr>
<td>U</td>
<td></td>
<td>Impacted Unsignalized Intersection</td>
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</table>
### Willow Street: Oxford Street to Liberty Street

#### Benefits
- Enhances access to post office
- Only localized impact to traffic patterns anticipated

#### Impacts
- 11 on-street parking spaces
- 1 unsignalized intersection
- 1 signalized intersection
- Signage/pavement markings
- Curb extension removal

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**Diagram Legend:**
- Candidate Street
- Impacted Signalized Intersection
- Impacted Unsignalized Intersection
Circulation Scenarios
**Circulation Scenarios**

Candidate streets combined into two circulation scenarios:

**Scenario 1:** Liberty Street & Oxford Street

**Scenario 2:** Central Avenue, Liberty Street, Andrew Street, Oxford Street, & Willow Street
Scenario 1
Liberty Street & Oxford Street

Figure 10
Scenario 1 Summary of Impacts
Downtown Circulation Study
Lynn, Massachusetts
Scenario 2
Central Avenue, Liberty Street, Andrew Street, Oxford Street, & Willow Street
Summary/Next Steps

- VHB to finalize report

- Short-Term Improvements: Evaluate options in light of City priorities and funding availability

- Circulation Scenarios
  - Evaluate which scenario best addresses the City’s priorities
  - Consider impacts to signalized intersections
  - Consider on-street parking impacts
  - Consider if funding for any future improvements could be sought from MassDOT (bicycle, pedestrian accommodations)
Questions?

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