

Woburn Center Study

Woburn Redevelopment Authority
February 28, 2018



Outline

- Methodology
- Constraints
- Woburn Center Goals
- Design Concept Update
- Summary

Methodology

- Existing Data
- City's Traffic Study and Concept Plan
 - Origin-Destination Study
- Identify Opportunities/Constraints

Constraints

- Existing ROW
- Minimize Impacts to Common
- Keep Common Street for One-Way Traffic
- Maintain Access and Turning Movements
- Expand On-Street Parking

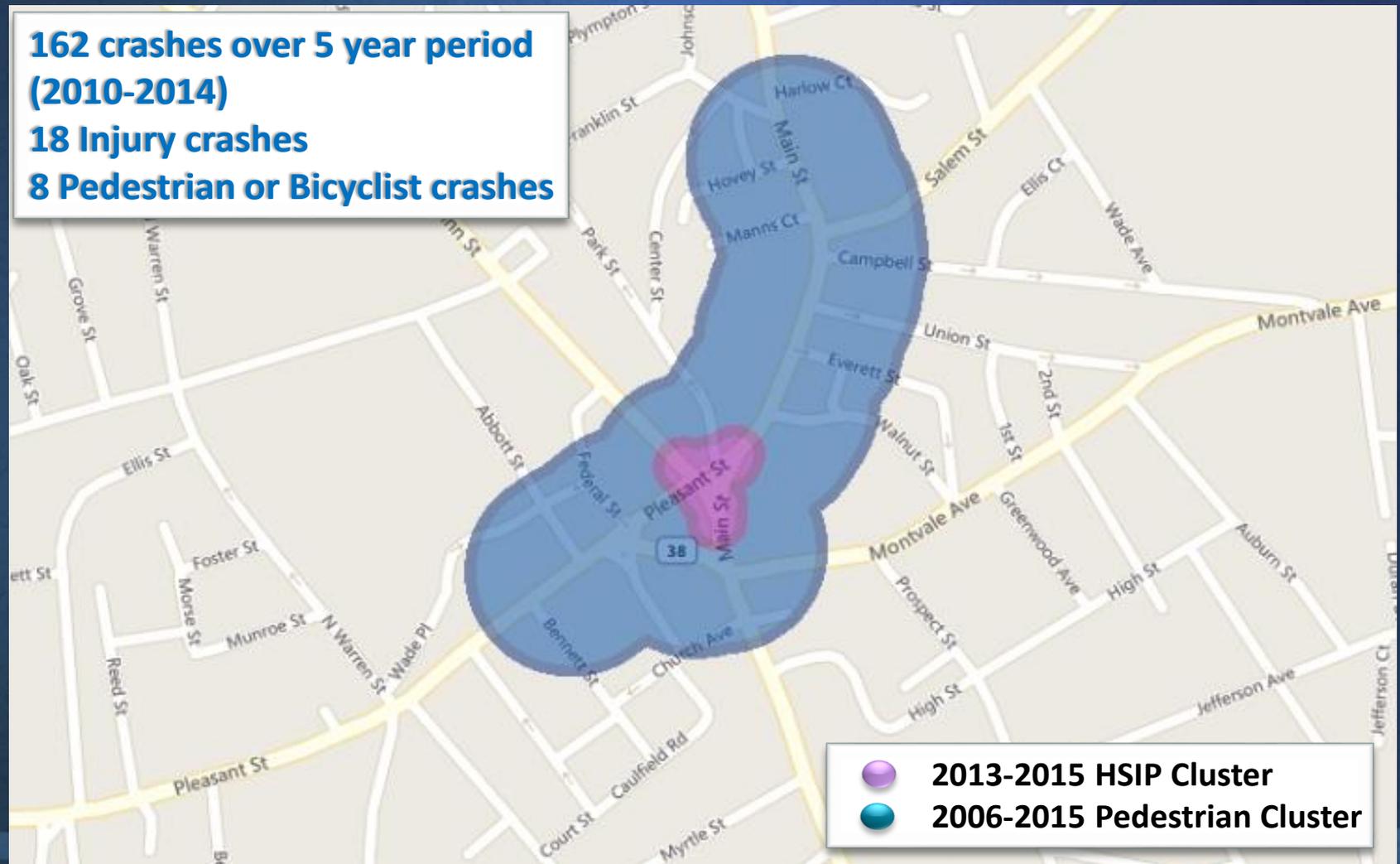
Woburn Center Goals

- Increase Safety (HSIP location)
- Improve Traffic Circulation/Congestion
- Add Parking
- Transform into Pedestrian-Oriented CBD
- Maintain Common Area

Woburn Center Goals

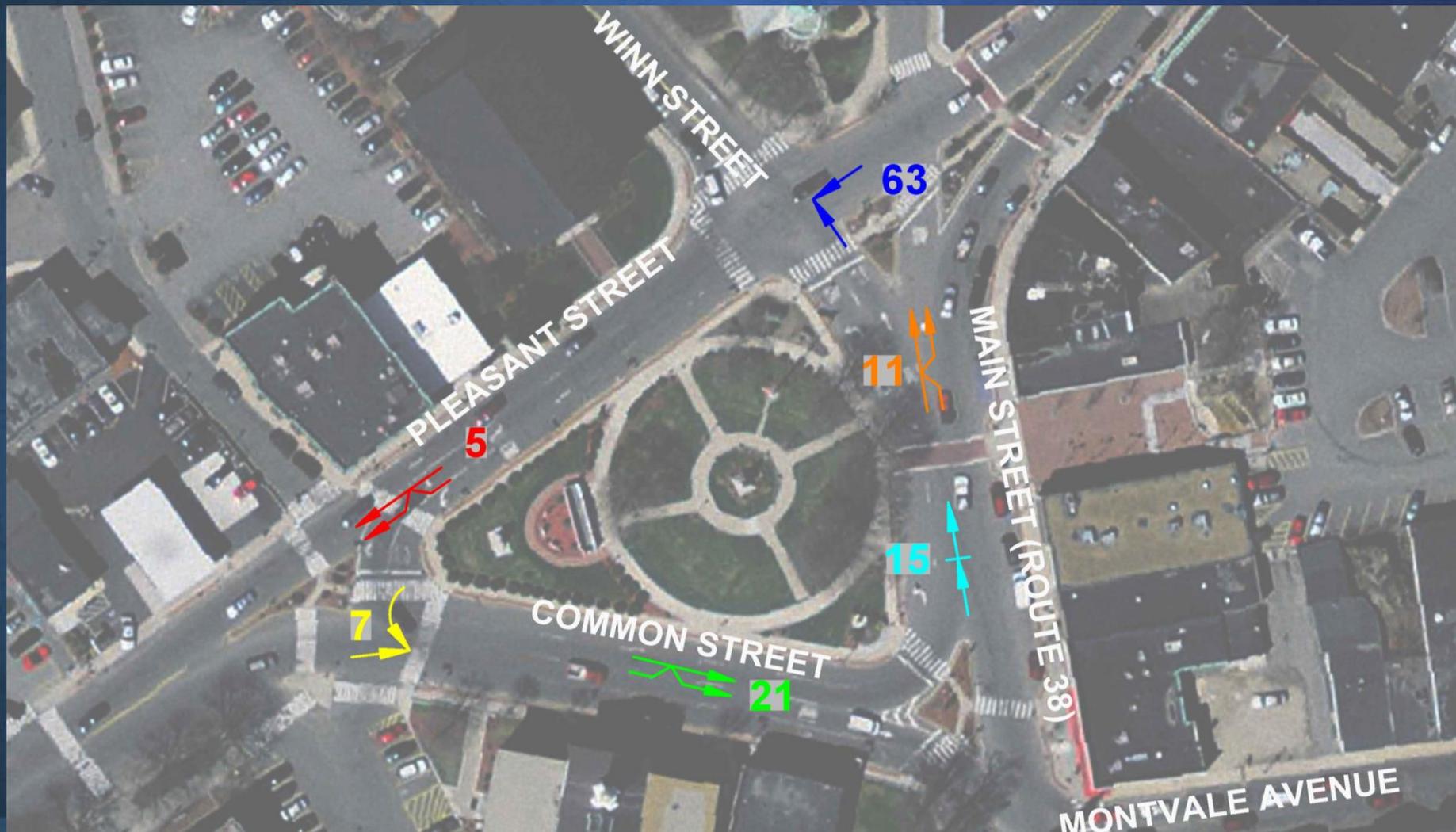
Safety – MassDOT Top Crash Location

**162 crashes over 5 year period
(2010-2014)**
18 Injury crashes
8 Pedestrian or Bicyclist crashes



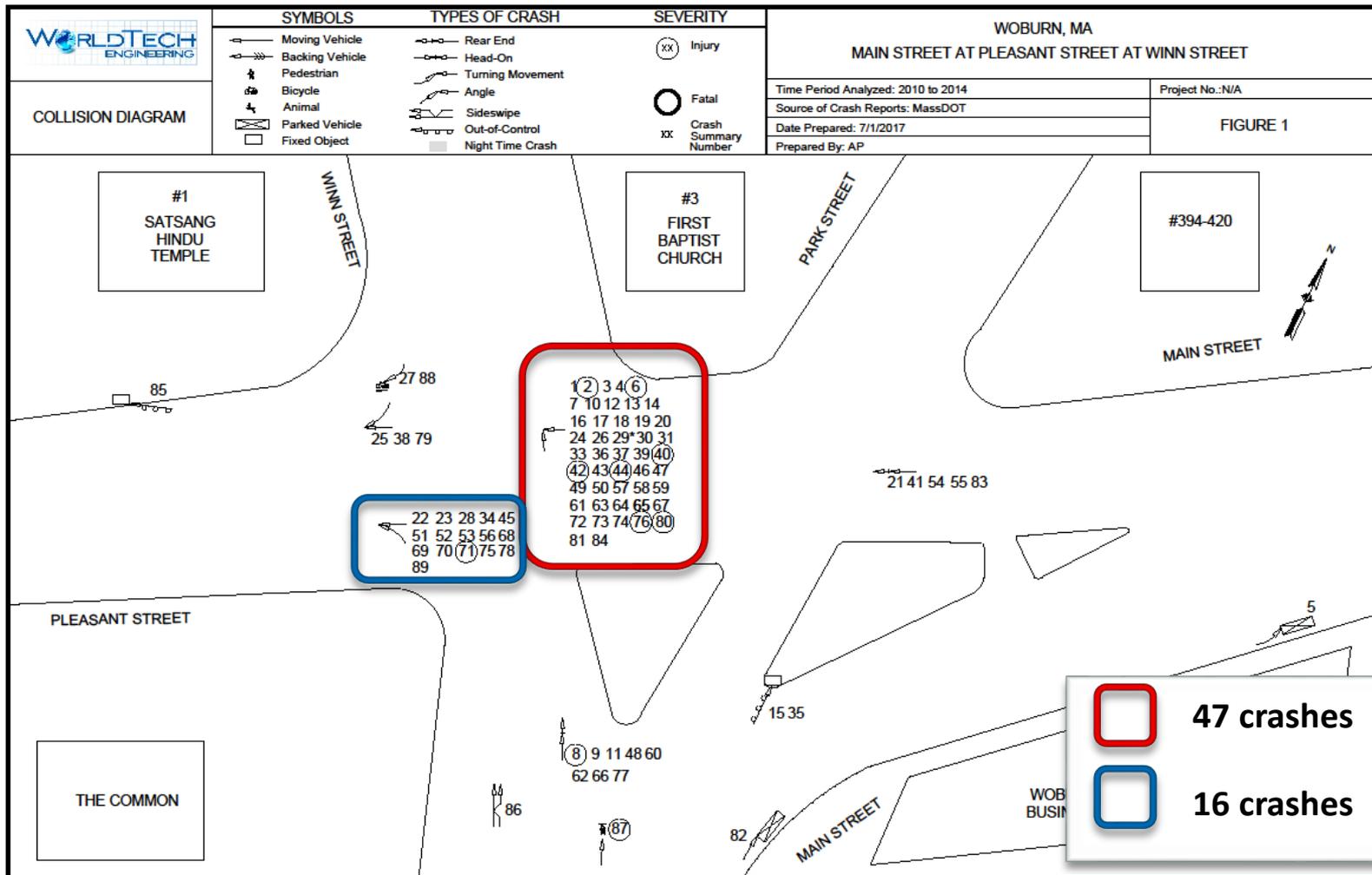
Woburn Center Goals

Safety



Woburn Center Goals

Safety



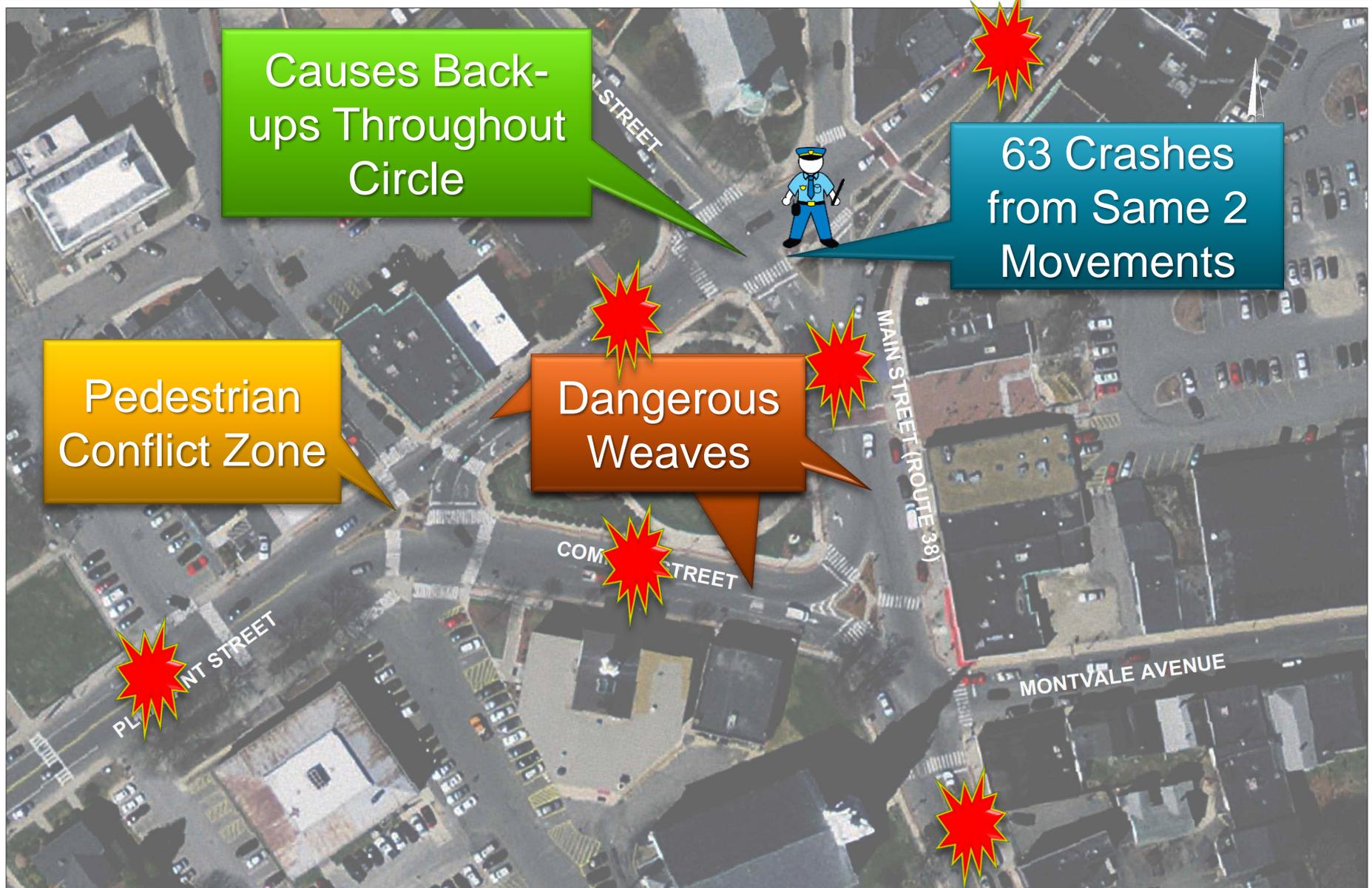
Existing

Causes Back-ups Throughout Circle

63 Crashes from Same 2 Movements

Pedestrian Conflict Zone

Dangerous Weaves



Origin-Destination Data

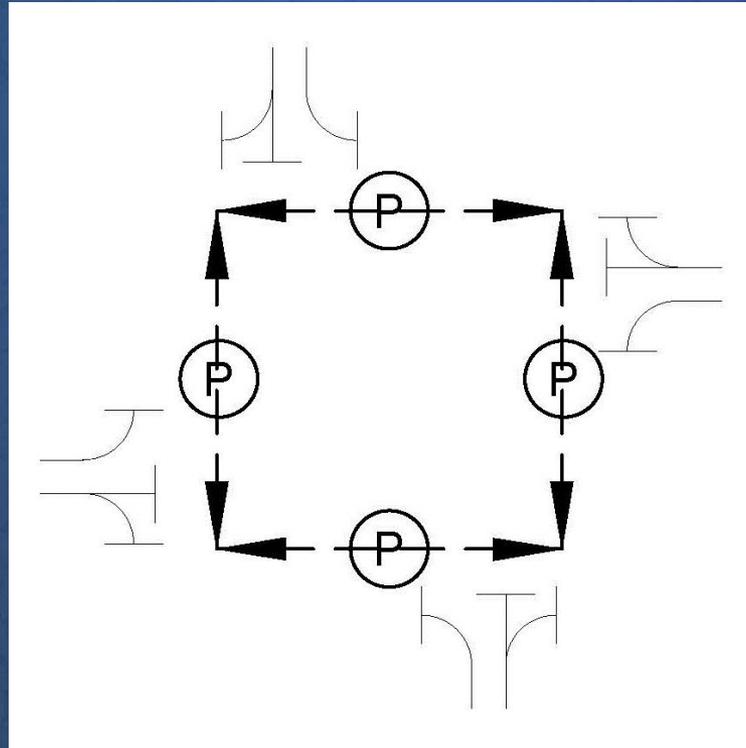


Traffic Operations Analysis

- Treatment of Eastbound Pleasant Street Traffic (> 500 veh/hr)
 - Circulation Patterns
 - Pedestrian Phasing Alternatives (Exclusive/Concurrent/Leading Pedestrian Interval)

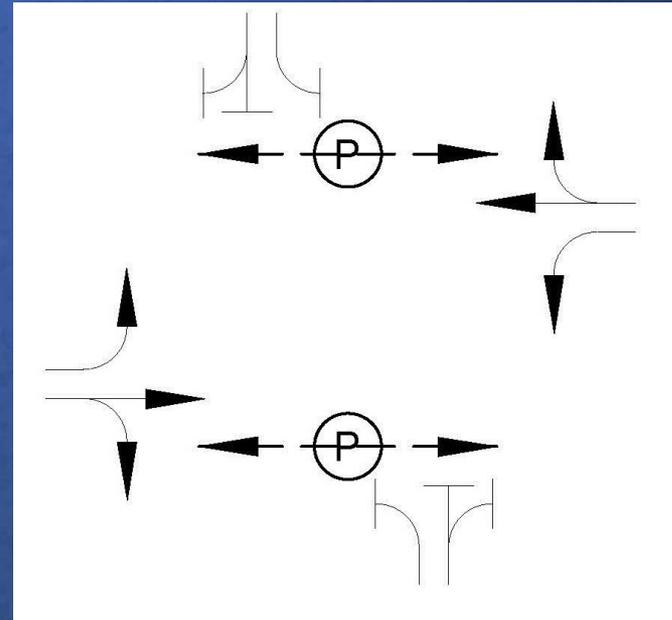
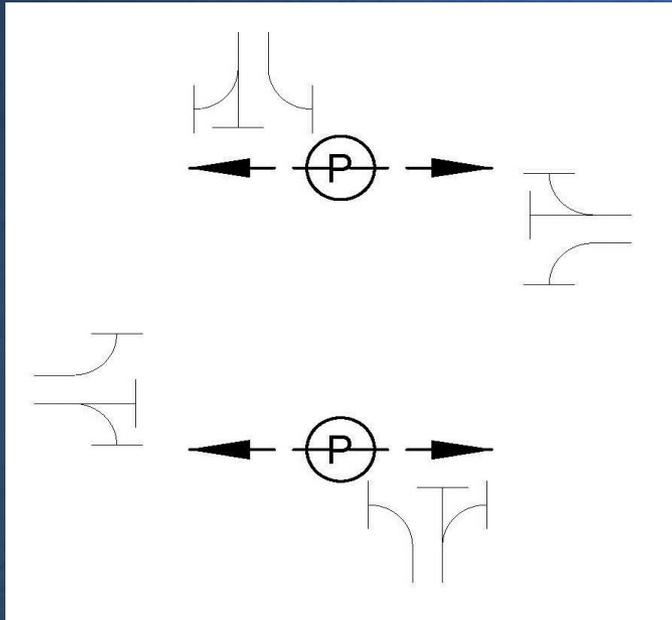
Pedestrian Phasing Alternatives

Exclusive Phase



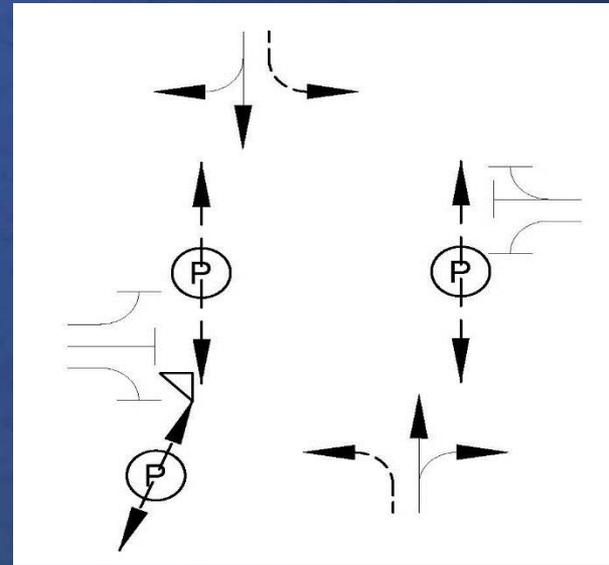
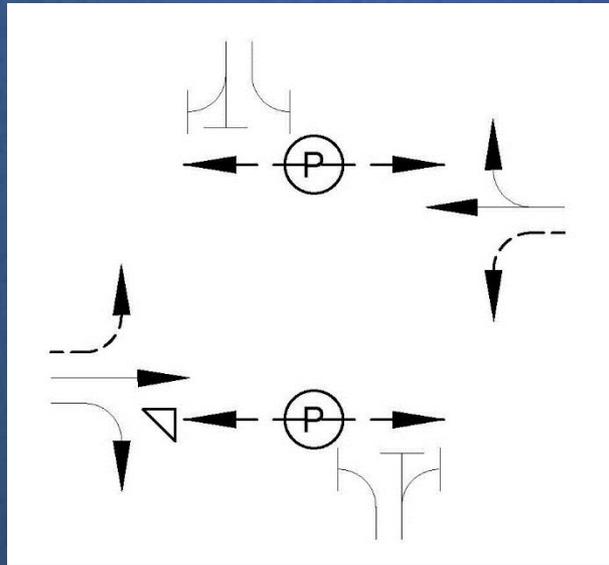
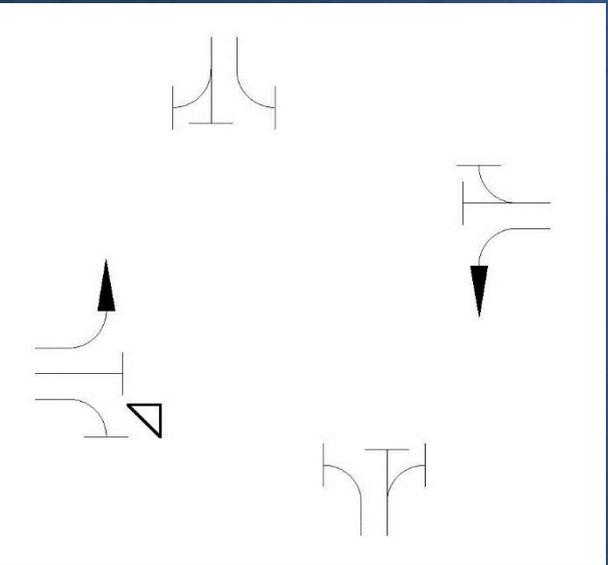
Pedestrian Phasing Alternatives

Leading Pedestrian Interval



Pedestrian Phasing Alternatives

Concurrent Phasing



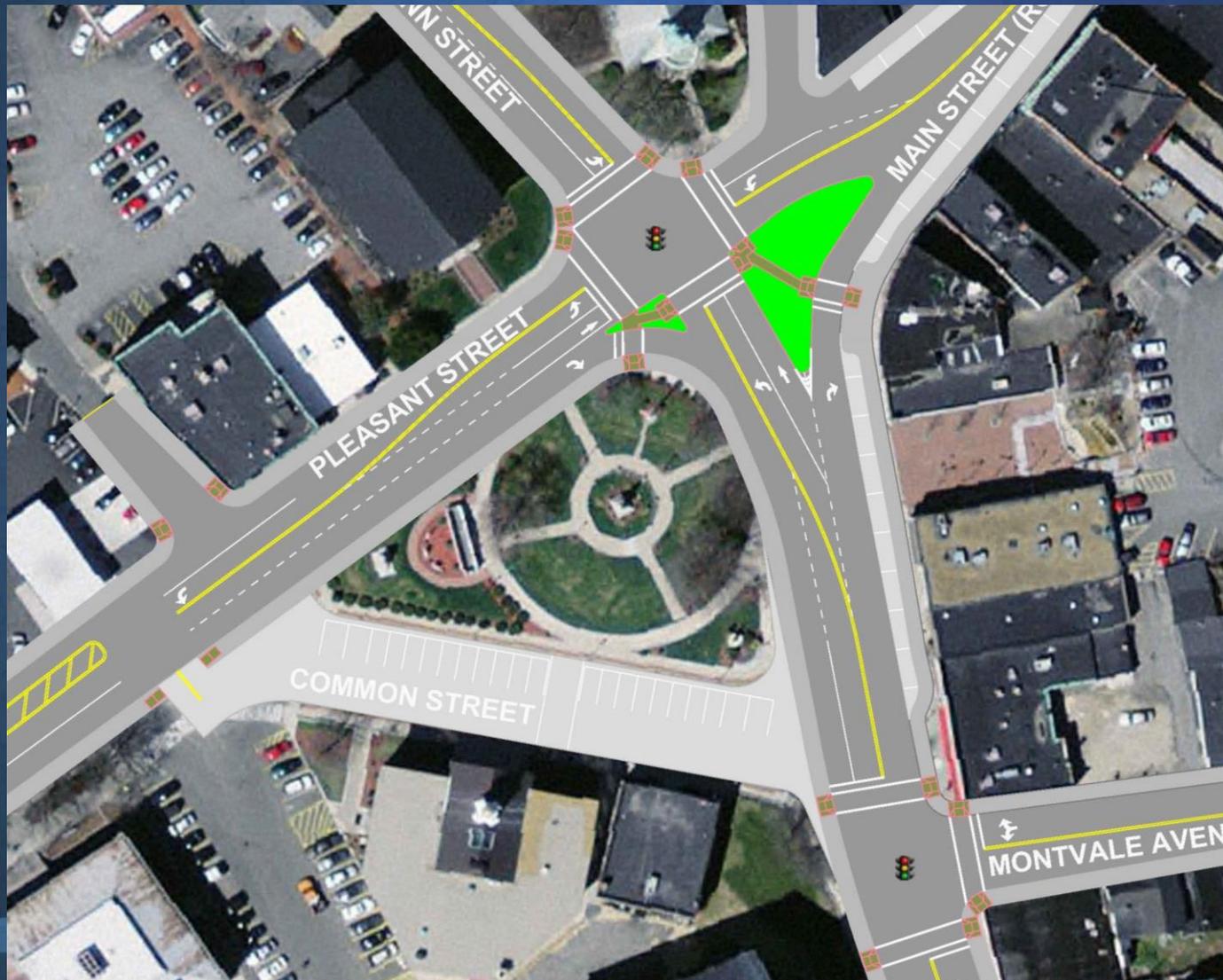
Alternative 1 (City's Scheme)

Summary

- Signalize 4 approach intersection
 - All approaches bi-directional
- LOS F for Multiple Approaches
 - EB Pleasant Street Right-Turn is Critical Movement
- Large Increase in Parking
- Minimal Impacts to Common Area

Alternative 2

Channelized Right-Turn for Eastbound Pleasant Street



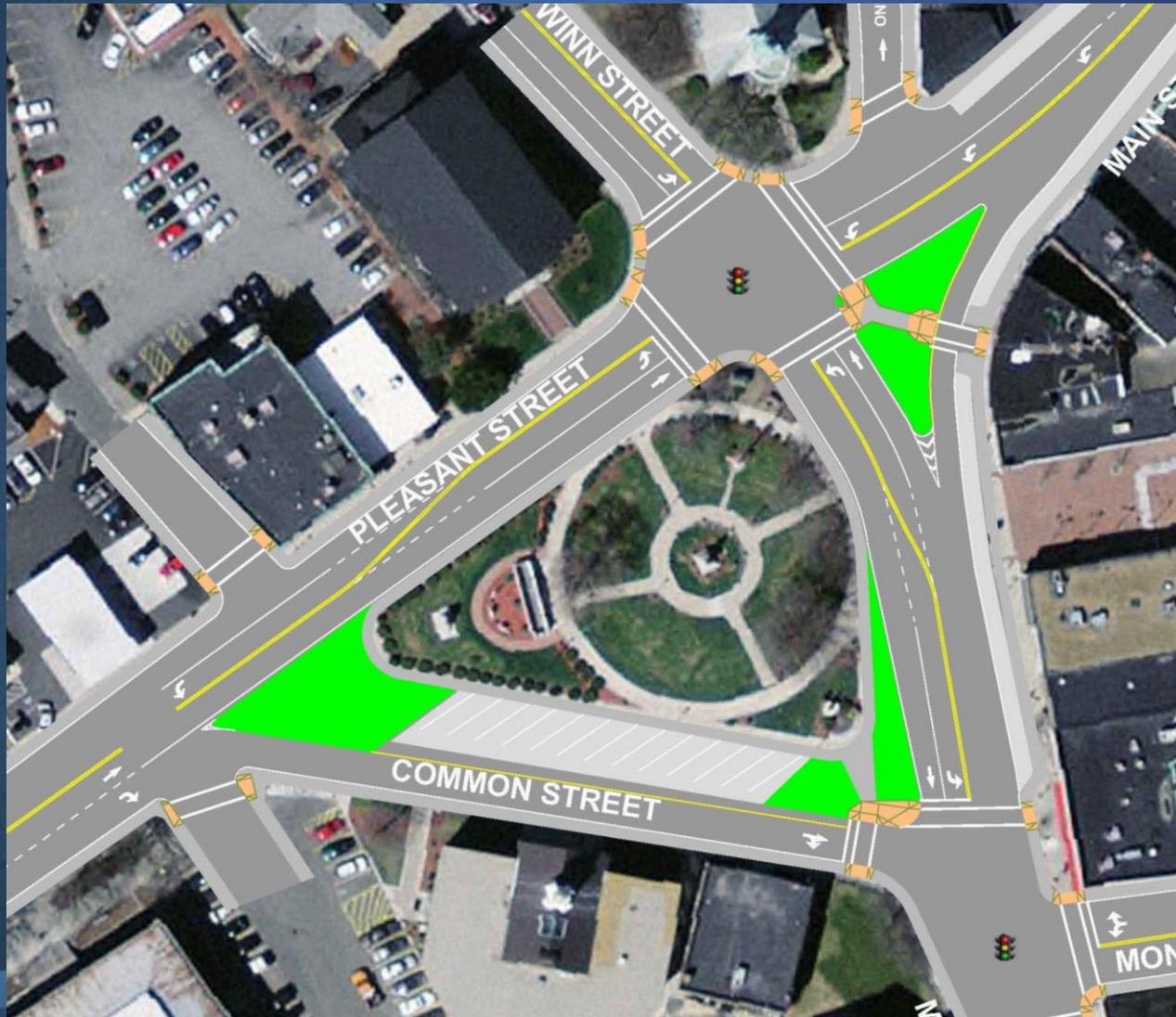
Alternative 2

Summary

- Layout is Identical to Alternative 1
 - Parking/Signals
- Adds Right-Turn Channelized Lane for Critical Movement (EB Pleasant Street)
 - Allows for split movement of Pedestrians through 4-Approach Intersection
 - Improves LOS
- Minor Impacts to Common Area for Channelized Turn

Alternative 3

Common Street Bypass

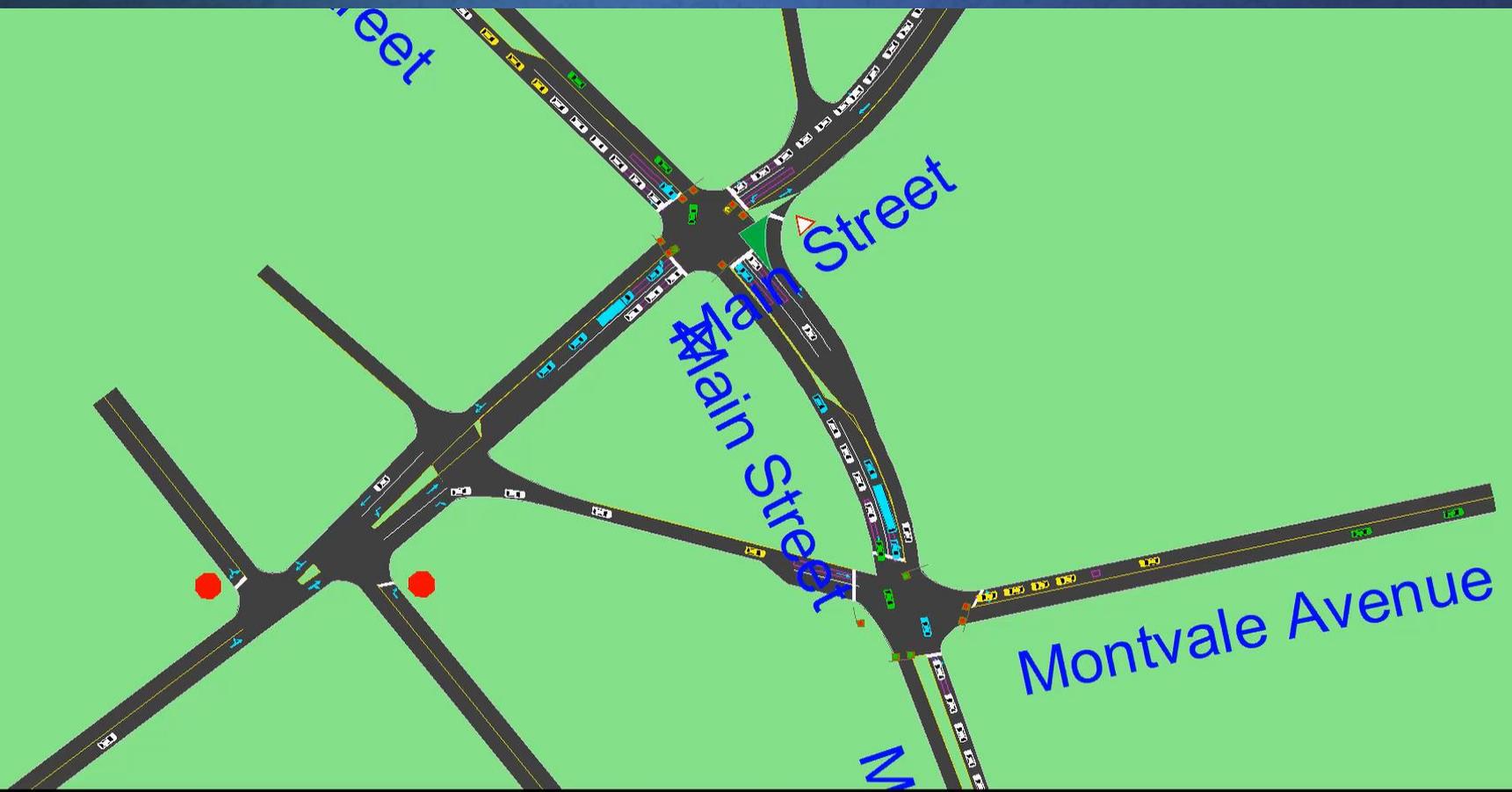


Alternative 3

Summary

- Redirects Critical EB Movement onto Common Street to Montvale Avenue Intersection
- Similar LOS to Alternative 2
- Adds Reduced Parking Adjacent to Common Street
- Opportunity for Transit Stop in front of City Hall.
- Safer Pedestrian Crossing

Alternative 3



Alternative Evaluation

	Alternative 1 City	Alternative 2 Channelized Right	Alternative 3 Common St Bypass
Safety	✓	✓	✓
Pedestrian	✓	✓	✓
Parking	✓	✓	✓
Congestion	✗	✓	✓
Maintain Common	✓	✗	✓
Cost	\$	\$	\$

Summary

Next Steps

- Identify Funding Opportunities
 - PNF/PIF
- Public Information Meeting
- Road Safety Audit
- Coordinate with MBTA
 - Bus Routes
 - Bus Stops

Questions?

