Agenda

- Overview
  - Schedule
  - Data Collection and Review of Existing Conditions
- Summary of Traffic Projections
- Preliminary Alternatives
- Congestion Summary
- Pros and Cons
- Streetscape Themes
- Next Steps

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Growth Projections

From the Cecil/Gibbs growth analysis traffic volume increases were estimated based on the # of residential units and the square footage of commercial/retail space.
Projected Increase in Traffic Volume
PM Peak Hour (2014 – 2034)
PM Peak Level of Service

2014

2034

Legend:
- Good - LOS A, B or C
- Fair - LOS D
- Poor - LOS E or F
- Signalized Intersection
- Unsignalized Approach
Dismissed Improvement Strategies

- One/two-way hybrid alternatives
- Upper Square Circulator
- Lower Square Roundabout
Overall Improvements – Common to All Alternatives

- Lower Square
  - Additional northbound approach lane
  - Tighten intersection geometry
- Upper Square Plaza
- Road Diets: Chestnut Street and Central Ave north of Upper Square
- Washington/Main traffic calming
  - 2 travel lanes on Washington, with on-street parking
Road Diet: Chestnut Street

- Currently provides bypass to downtown
- Potential road-diet north of Orchard Street
Washington Street/Main Street Traffic Calming

Covert from yield to stop controlled
Summary of Alternatives

Alt A: Enhanced One-way Loop

Alt B: Two-way Loop

Alt C: Enhanced Two way loop
Alternative A: Enhanced One-way Loop

- **Lower Square**
  - Close Henry Law Ave access
  - Additional northbound right lane

- **Upper Square**
  - Plaza on western side of square
Alternative A: Lower Square

Reduce from four approach lanes to three

Narrowed intersection

Henry Law Ave Closure reclaimed space (3,800 SF)

Install additional northbound approach lane
Alternative A: Upper Square

- Remove NBL lane
- One through lane in either direction (currently two)
- Reclaimed space (11,000 SF)
- Reduce from four approach lanes to three
Chestnut Street

<table>
<thead>
<tr>
<th>West</th>
<th>East</th>
</tr>
</thead>
<tbody>
<tr>
<td>5' - 6' Sidewalk</td>
<td>5' - 6' Sidewalk</td>
</tr>
<tr>
<td>5' Bike Lane</td>
<td>5' Bike Lane</td>
</tr>
<tr>
<td>3' Buffer/Transit Stop</td>
<td>3' Buffer/Transit Stop</td>
</tr>
<tr>
<td>11' Travel Lane</td>
<td>11' Travel Lane</td>
</tr>
<tr>
<td>6' Median</td>
<td>6' Median</td>
</tr>
<tr>
<td>5' Travel Lane</td>
<td>5' Travel Lane</td>
</tr>
<tr>
<td>3' Buffer/Transit Stop</td>
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Legend: 
- Pedestrian
- Vehicle
- Bicycle
- Bus
- Tree
Alternative B: Two-way Loop

- Lower Square
  - Henry Law Ave access remains open
  - Additional northbound right lane
- Upper Square
  - Plaza on eastern side of square
- Main St/Portland Ave aligned with Young St at four-way stop intersection
Alternative B: Lower Square

Install northbound approach lane

Narrowed intersection

Remains one-way southbound
Alternative B: Upper Square

Reduce to one through lane in either direction (currently two)

Regained space (13,000 SF)

Reverse flow along Chapel St
Alternative B: Main St/Portland Ave

- “Square up” intersection
- Install four-way stop control
Chestnut Street

West

East

5’ - 6’ Sidewalk
5’ Bike Lane
2’ Buffer
11’ Travel Lane
11’ Travel Lane
8’ Parking Lane
2’ Buffer
5’ Bike Lane
5’ - 6’ Sidewalk
Alternative C: Enhanced Two-way Loop

- **Lower Square**
  - Close Henry Law Ave access
  - Additional northbound lane
- **Upper Square**
  - Plaza on eastern side of square
- **Main St/Portland Ave mini roundabout**
Alternative C: Lower Square

Install additional northbound approach lane

Henry Law Ave Closure reclaimed space (3,800 SF)

Narrowed intersection
Alternative C: Upper Square

Reduce to one through lane in either direction (currently two)

Regained space (13,000 SF)

Reverse flow along Chapel St
Alternative C: Main St/Portland Ave

- Install mini roundabout
- Traversable center median

Narrowed intersection and crosswalks
Chestnut Street
## Congestion Summary

- Improved traffic flow at Lower Square
- Improved mobility and safety at Upper Square

### Congestion Summary Table

<table>
<thead>
<tr>
<th></th>
<th>No Build</th>
<th>2014 PM Peak Hour</th>
<th>2034 PM Peak Hour</th>
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<tbody>
<tr>
<td></td>
<td>Alt A</td>
<td>Alt B</td>
<td>Alt C</td>
</tr>
<tr>
<td>Upper Square</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>Lower Square</td>
<td>E</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>Main St/Portland Ave</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Main St/Washington St</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
</tbody>
</table>

### Table Parameters
- **Upper Square**: 2014 PM Peak Hour
- **Lower Square**: 2034 PM Peak Hour
- **Main St/Portland Ave**: 2034 PM Peak Hour
- **Main St/Washington St**: 2034 PM Peak Hour
## Alternatives Evaluation Matrix

<table>
<thead>
<tr>
<th></th>
<th>Alternative A: Enhanced One way Loop</th>
<th>Alternative B: Two way Loop</th>
<th>Alternative C: Enhanced Two way Loop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic Capacity</td>
<td>+</td>
<td>+</td>
<td>++</td>
</tr>
<tr>
<td>Traffic Mobility</td>
<td>+</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>Safety Enhancement</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>Vehicle Emissions</td>
<td>+</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>Ped/bike Mobility</td>
<td>+++</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Reclaimed Space</td>
<td>+++</td>
<td>+</td>
<td>+</td>
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</table>
Streetscape Themes

- Formal and Traditional Urban Orientation
- Pedestrian Orientation
- Place Specific
Streetscape Themes: Formal and Traditional Urban Orientation

Sidewalk treatments
Streetscape Themes: Formal and Traditional Urban Orientation
Street Trees and Buffers

Bicycle racks

Street trees and buffers

Streetscape Themes: Formal and Traditional Urban Orientation
Streetscape Themes: Formal and Traditional Urban Orientation

- Alternative A

Upper Square

Lower Square
Streetscape Themes: Formal and Traditional Urban Orientation

- Alternative B

Upper Square

Lower Square
Streetscape Themes: Formal and Traditional Urban Orientation

- Alternative C

Upper Square

Lower Square
Streetscape Themes: Pedestrian Orientation

Sidewalks treatments

Pedestrian refuge

Crosswalks and intersections
Streetscape Themes: Pedestrian Orientation

- Alternative A
Streetscape Themes: Pedestrian Orientation

- Alternative B

Upper Square

Lower Square
**Streetscape Themes:** Pedestrian Orientation

- Alternative C

**Upper Square**

**Lower Square**
**Streetscape Themes: Place Specific**

- **Sidewalk treatments**
- **Patterns and Art**
Streetscape Themes: Place Specific

- Furniture
- Wayfinding signage
- Recycling receptacles
Streetscape Themes: Place Specific

Urban spaces

Defining vegetation
**Streetscape Themes: Place Specific**

- **Open River Views in the Center of the City to Motorist and Enhance Pedestrian Views of the Horseshoe Falls.**

- **River Themed Accent Pavement Treatment.**

From the Dover Master Plan

**Pedestrian and visual links to amenities**

**Bridge treatments**
Streetscape Themes: Place Specific

- Alternative A
Streetscape Themes: Place Specific

- Alternative B

Upper Square

Lower Square
Streetscape Themes: Place Specific

- Alternative C
## Next Steps:

### Project Initiation and Communication
- **a. Kick-off Meeting**
- **b. Project Coordination Meetings (8)**
- **c. Transportation Advisory Committee Meetings (5)**
- **d. Special stakeholder outreach and workshop meetings (3)**
- **e. Communication support and surveys**

### Interim Reports
- **R1**
- **R2**
- **R3**
- **R4**

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### Task 2. Community Workshop #1 – Data and Analysis Presentation

### Task 3. Development of Alternatives
1. **a. Preliminary Alternatives**
2. **b. Review of Preliminary Concepts**
3. **c. Alternatives**

### Task 4. Community Workshop #2 – Alternatives

### Task 5 Preferred Design
1. **a. Layout and circulation concept for all modes**
2. **b. Streetscape and urban design**
3. **c. Parking strategy**
4. **d. Cost evaluations**

### Task 6: Community Workshop #3 Preferred Design and Draft Final Report

### Task 7: Final Report
1. **a. Report**
2. **b. Design Plans (25%)**

### Task 8: Construction and Bid Documents
1. **a. Survey**
2. **b. Design Development (75%)**
3. **c. Final Construction Documents (100%)**
4. **d. Bidding Documents**

### Task 9: Construction Phase Services (Begin Spring, 2015)