Union Street Corridor Study

Waterfront Commission Meeting #2
August 23, 2012
Agenda

• Open House
• Project Overview
• Site-specific Improvements & Discussion
• Corridor Alternatives & Discussion
• Concept Idea Questionnaire
• Public Meeting & Next Steps
Project Goals and Challenges

• Build upon previous studies
• Facilitate a vibrant waterfront
• Address parking and circulation issues
• Enhance safety for all modes
• Implement Complete Streets
• Balance needs:
  - Of all users
  - On different days and times of the week
Ongoing work

• Existing Transportation Conditions
  - Field Assessments
  - Traffic Counts (all modes!)
  - Parking
  - Overnight Parking
  - Delivery Truck Activity
  - Motorcoach Activity
  - Crash Data

• Public Engagement
  - Stakeholder Interviews
  - Waterfront Commission
  - Trail Intercept Surveys

• Alternatives and Recommendations
# Project Schedule

<table>
<thead>
<tr>
<th>TASK</th>
<th>MAY</th>
<th>JUNE</th>
<th>JULY</th>
<th>AUG</th>
<th>SEPT</th>
<th>OCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fieldwork/Data Collection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analysis and Documentation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop &amp; Refine Recommendations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waterfront Commission Meetings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Public Meeting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Report</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planning Commission Meeting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation Commission Meeting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City Council Meeting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: 'X' indicates tasks scheduled for the corresponding months.
What we’ve heard from you

• Eliminate on street parking right at King and Union in order to build curb extensions/bulb outs.
• Do bulb outs and curbs extensions by Windmill Park to slow down traffic.
• Utilize pilots to test different and possibly “outside of the box” solutions.
• Provide in person traffic management at King and Union.
• Recognize that the issue of bikes not stopping at stop signs is not the same at all intersections.
Framework for Concept Development

- Need to define Union Street as a pedestrian and bicycle priority street
- Limited roadway width
- Serve all users
- Unique solutions for different areas
- Respect historic character of Union Street
Site-specific Improvement
Unit Block of King Street - Background

Waterfront Plan recommended:

• making the unit block of Unit Street a “pedestrian hub”.

• limiting motor access to only emergency vehicles, delivery vehicles, motor coaches and the King Street Trolley.

• creating more space for pedestrians to congregate.
Site-specific Improvement
Unit Block of King Street

Existing Conditions

12’ sidewalk
7’ parking
29’ cars & bikes
12’ sidewalk
Site-specific Improvement
Unit Block of King Street

Widen Sidewalk

17’ sidewalk
7’ parking
19’ cars & bikes
17’ sidewalk
Site-specific Improvement
Unit Block of King Street

Additional design details:
• Enhance trolley stop
• Limit motor vehicle traffic
• Create plaza-like atmosphere
Site-specific Improvement
Union & King Street - Issues

- Pedestrian crowding on corners and sidewalk
- Pedestrians concerned with being hit by a motorist or bicycle
- Bicyclists compliance with stop sign
- Motorists wait time and frustration
Site-specific Improvement
Union & King Street - Options

1 - Install Traffic Signal

2 - Improved crosswalks
(see boards and handouts for additional details)

3 - Curb extensions
Site-specific Improvement
Windmill Hill Park

• Higher speeds between Wolfe Street and Gibbon Street
• Bicycles entering and exiting via Wilkes Street trail
• Desire to connect both sides of Windmill Hill Park
• Build on work done in Windmill Hill Park Concept Plan (2003)
Site-specific Improvement

Windmill Hill Park – Option 1, 1A

(see boards and handouts for additional details)
Site-specific Improvement
Windmill Hill Park– Option 2

Existing

Proposed Chicane

(see boards and handouts for additional details)
Site-specific Improvement
Mt. Vernon Trail Connection - Issues

• Mt. Vernon Trail connection to Pendleton Street
• Pedestrian crossing where Union Street and Pendleton intersect
• Connection of Alexandria Waterfront Walk & park to park
Site-specific Improvement
Mt. Vernon Trail Connection - Options

Short-Term Improvement

(see boards and handouts for additional details)
Site-specific Improvement
Mt. Vernon Trail Connection - Options

Short-Term Improvement

(see boards and handouts for additional details)
Site-specific Improvement
Mt. Vernon Trail Connection - Options

Long-Term Improvement

(see boards and handouts for additional details)
Union Street Today
Multi-Modal Volumes

PENDLETON to CAMERON
Consistent throughout week

CAMERON to DUKE
Busiest on Saturday

DUKE to FRANKLIN
Consistent throughout week
Union Street Today
Multi-Modal Volumes

Time of Day on Saturday

# per hour

700
375
250
Union Street Today

From building face to building face....

8 feet sidewalk 7 feet parking 26 feet cars and bikes 8 feet sidewalk
Union Street Today

How much space do pedestrians have?

- **full sidewalk** = 8 feet
- **effective sidewalk** = 4 ft
How is Union Street distributed today?

By volume...
55% pedestrians  
45% cars and bikes

By space...
25% for pedestrians  
75% for cars and bikes
Corridor Alternative #1

Keep Existing Layout

8’ sidewalk
7’ parking
26’ cars & bikes
8’ sidewalk
(4’ effective)
(4’ effective)
Corridor Alternative #2

Narrow Lanes & Move Tree Boxes

10’ sidewalk (6’ effective) & 7’ parking & tree boxes 22’ cars & bikes 10’ sidewalk (6’ effective)
Corridor Alternative #2

Narrow Lanes & Move Tree Boxes*

*Trees to be removed and replaced with new trees
Corridor Alternative #2

Narrow Lanes & Move Tree Boxes
Corridor Alternative #3

Shared Street

- 10’ sidewalk (6’ effective)
- 7’ parking & tree boxes
- 22’ shared space*
- 10’ sidewalk (6’ effective)

*sidewalk and roadway at same level
Corridor Alternative #3

Shared Street Example:
Ellsworth Street in Silver Spring, MD
Corridor Alternative #3

Shared Street Example

- Harvard Square in Cambridge, MA
- Historic area, narrow sidewalks & streets, high pedestrian volume
Creating a balanced cross-section

Shared Street Example:
• Vordingburg, Denmark 1990-92
• 4,000 veh/day

Union Street, ~4,100 veh/day
Corridor Alternative #3
Benefits of a Shared Street

• Reduces travel speeds for cars & bicycles
• More efficient/balanced: functions differently with different user volumes
• More social activities & civic interaction
• Chaos improves safety
Corridor Alternative #4

Remove Parking

11.5’ sidewalk (7.5’ effective)  26’ cars & bikes  11.5’ sidewalk (7.5’ effective)
Corridor Alternative #4

keep existing trees

OR

move tree boxes out

- 4 feet sidewalk
- 4 feet tree box
- 4 to 5 feet sidewalk
- 8 to 9 feet sidewalk
- 4 feet tree box
Corridor Alternative #5

Make Union Street One Way

13’ sidewalk (9’ effective)  7’ parking  16’ cars & bikes  13’ sidewalk (9’ effective)