STAFF UPDATE ON KING STREET COMPLETE STREETS PROJECT
Background

- Board action at TPB Public Hearing in June 2016 recommended:
  - **Removal of EB travel lane** between Chinquapin & Janney’s and **WB travel lane** between Kenwood & Janney’s
  - Installation of “**No Right Turn on Red**” signs at SB Kenwood at King
  - Reduction in the speed limit from **35mph to 25mph** on King, between Chinquapin & Melrose

- Project implemented between July – October 2016

- Board approved the staff recommendation
  - Requested **staff perform evaluation**
    - If the project failed to meet the staff defined expectations in the project proposal presented to the Board, **take remedial actions** to correct.
  - To comply with the motion:
    - Staff enlisted an **external traffic engineering firm to perform an analysis** along the corridor of
      - Intersection level-of-service
      - Travel time delays
Project Limits: Radford Street to Janney’s Lane
Project Goals

• Improve the safety and convenience of all street users

• Provide facilities for people who walk, bike, ride transit or drive cars

• Implement City Council adopted plans and policies
Project Improvements

• Removal of travel lanes
  • EB travel lane between Chinquapin Dr & Kings Ct
  • WB travel lane between Kenwood Ave & Janney’s Ln

• The addition of left turn lanes at intersections and center turn lane along corridor

• Landscaped pedestrian refuge islands at seven crossings

• 3 new crosswalks across King St and 4 new crosswalks across side streets
Project Improvements (Cont’d)

• No right turn on red signage at southbound Kenwood Ave at King St
  • A leading pedestrian interval (LPI) for pedestrians crossing King St at Kenwood Ave

• Upgraded curb ramps, sidewalk maintenance and ADA compliant bus stops

• Reconfigured intersections at Scroggins Rd, Melrose St & Kenwood Ave

• Speed limit reduction to 25mph on King St between Chinquapin Dr & Melrose St

• Buffered bike lanes along the corridor
Before
After
Evaluation – Key Findings
Evaluation – Key Findings

1. **Zero reported traffic crashes in the first year.**
   - Annual average of 7 crashes during the 10 years prior to this project

2. **Average vehicles speeds on the corridor have reduced.**
   - -18% between Albany Ave. and Hermitage Ct.
   - -4% near T.C. Williams High School

3. **Traffic delay at King & Chinquapin has increased slightly more in the AM peak hour than anticipated.**
   - Other intersections along the corridor have seen minimal or no additional changes to delay.

4. **Traffic diversion onto Scroggins Road has not appeared to increase due to this project.**
   - Concern from several residents.
Zero Traffic Crashes in the First Year

- Between Janneys Ln & Rashford St.:
  - 0 crashes between 9/1/2016 and 8/31/2017
  - 7 crashes annually in 10 year period prior

- Safety was primary public concern

- Preliminary results indicated project has greatly improved safety and met original project goal.
Average Vehicle Speeds Have Been Reduced

<table>
<thead>
<tr>
<th>Segment of King St.</th>
<th>Before</th>
<th></th>
<th>After</th>
<th></th>
<th>Difference</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Speed Limit (mph)</td>
<td>Avg. 85th % Speed (mph)</td>
<td>Speed Limit (mph)</td>
<td>Avg. 85th % Speed (mph)</td>
<td>Avg. 85th % Speed (mph)</td>
<td>Avg. 85th % Speed (%)</td>
</tr>
<tr>
<td>Albany Ave. to Hermitage Ct.</td>
<td>35</td>
<td>43.3</td>
<td>25</td>
<td>35.6</td>
<td>-7.7</td>
<td>-17.8%</td>
</tr>
<tr>
<td>Radford St. to Chinquapin Dr.</td>
<td>25</td>
<td>33.8</td>
<td>25</td>
<td>32.4</td>
<td>-1.4</td>
<td>-4.1%</td>
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AM Peak Delays at King & Chinquapin

- Traffic delay in the AM peak slightly higher at King & Chinquapin than anticipated
  - Expected: 22 seconds of additional delays
  - Observed: 32 seconds of additional delays

- Overall intersections operate at a reasonable level-of-service and delay after implementation

- Traffic volumes are up slightly on King St. during this time.

- Remedial actions taken to reduce excessive travel time delays:
  - Signal timing modifications at the intersections of Chinquapin & Kenwood (Fall 2016)
  - Protected left turn for WB King at Kenwood for vehicles entering TC Williams (Aug. 2017)

Post implementation traffic data collected in May 2017
No Increase in Traffic Diversion on Scroggins

### Vehicle Speeds

<table>
<thead>
<tr>
<th>Segment of Scroggins Rd.</th>
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<th>After</th>
<th>Difference</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Avg. 85th% Speed (mph)</td>
<td>Avg. 85th% Speed (mph)</td>
<td>Avg. 85th% Speed (mph)</td>
</tr>
<tr>
<td>Quincy St. to Cleveland St.</td>
<td>30.2</td>
<td>30.6</td>
<td>0.4</td>
</tr>
</tbody>
</table>

### Traffic Volumes

<table>
<thead>
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<th>Before</th>
<th>After</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Vehicles per Day</td>
<td>Vehicles per Day</td>
<td>Vehicles per Day</td>
</tr>
<tr>
<td>Quincy St. to Cleveland St.</td>
<td>2,233</td>
<td>2,174</td>
<td>-59</td>
</tr>
</tbody>
</table>
Nearby Projects

**Completed**
1. King-Quaker-Braddock Signal Improvements
2. Protected Left Turn on WB King at Kenwood

**Planned**
3. New Scroggins Rd. Sidewalk
4. New Scroggins Rd. Speed Cushions - pre-King St. CS
5. Districtwide ACPS Transportation Management Plan
Next Steps

• More Evaluation
  • Continue to evaluate and monitor conditions on King St. and in adjacent neighborhoods.

• Implement nearby projects.