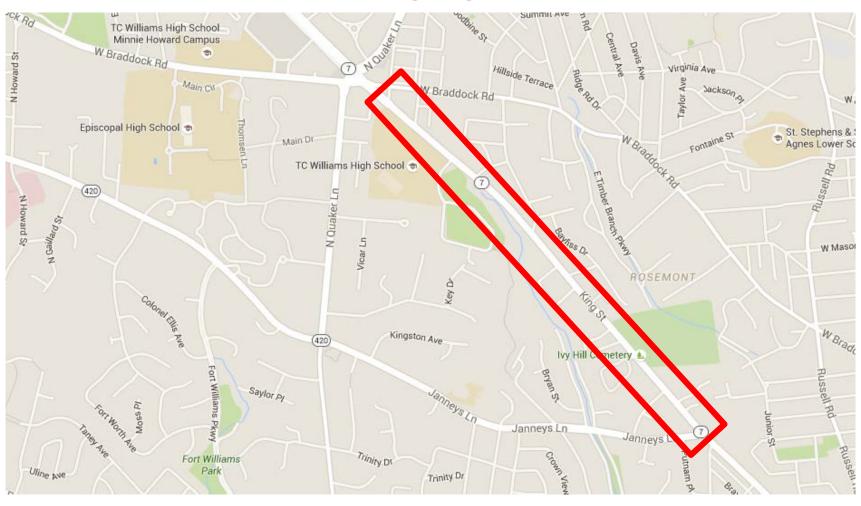
# STAFF UPDATE ON KING STREET COMPLETE STREETS PROJECT



### 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

	Before		After		Difference	
Segment of King St.	Speed Limit (mph)	Avg. 85th % Speed (mph)	Speed Limit (mph)	Avg. 85th % Speed (mph)	Avg. 85th % Speed (mph)	Avg. 85th % Speed (%)
Albany Ave. to Hermitage Ct.	35	43.3	25	35.6	-7.7	-17.8%
Radford St. to Chinquapin Dr.	25	33.8	25	32.4	-1.4	-4.1%

#### 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

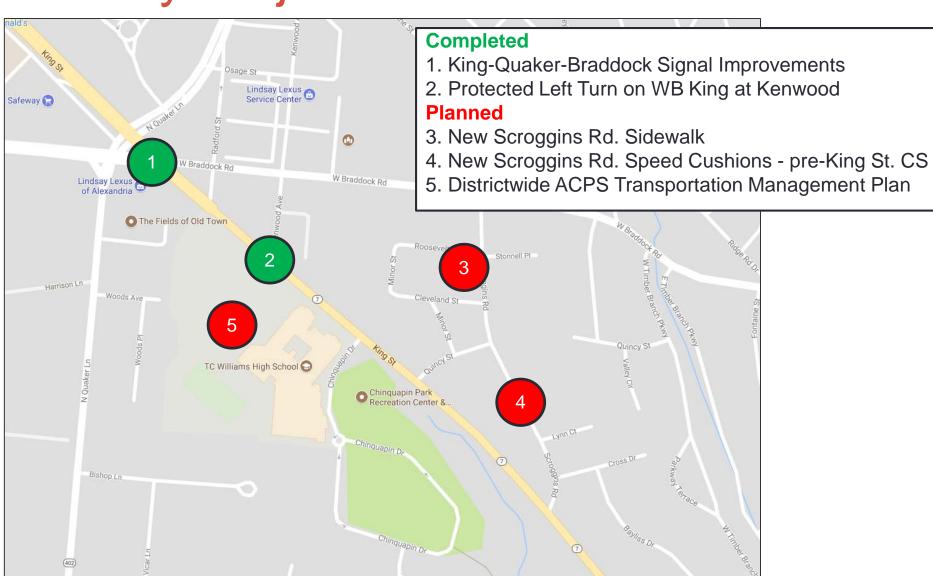
#### **Vehicle Speeds**

	Before	After	Differ	ence
Segment of Scroggins Rd.	Avg. 85th % Speed (mph)	Avg. 85th % Speed (mph)	Avg. 85th % Speed (mph)	Avg. 85th % Speed (%)
Quincy St. to Cleveland St.	30.2	30.6	0.4	1.3%

#### **Traffic Volumes**

	Before	After	Differ	ence
Segment of Scroggins Rd.	Vehicles per Day	Vehicles per Day	Vehicles per Day	Vehicles per Day (%)
Quincy St. to Cleveland St.	2,233	2,174	-59	-2.6%

## **Nearby Projects**



#### Next Steps

- More Evaluation
  - Continue to evaluate and monitor conditions on King St. and in adjacent neighborhoods.
- Implement nearby projects.