



75% Design Open House – May 4, 2017

# Blount/Person/Wake Forest Corridor Phase I Implementation



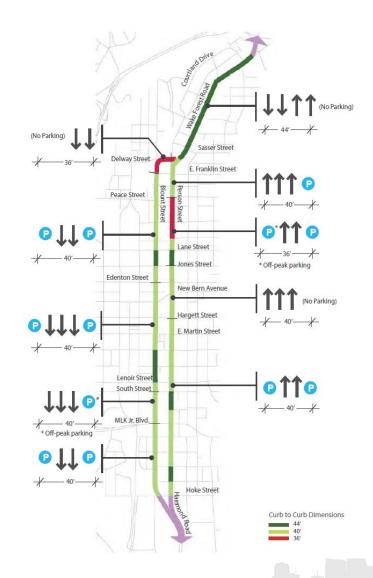
## **BP Corridor Report Review**





## **Existing Conditions**

- Mix of widths
  - -36 to 44 feet
- On-street parking
  - Metered inDowntown Core
  - Off-peak restrictions near Jones St. & Shaw University





#### **Blount-Person Corridor Plan Review**

#### Phase I

- Conversion of Wake Forest Road to 3 lanes and bike lanes
- Conversion of Blount/Person St to consistent 2 lanes with bike lanes
  - Partial two-way conversion between Wake Forest Rd and Peace St
    - Two NB lanes, one SB lane
    - No bike lanes, no additional parking

#### **Phase II Recommendation**

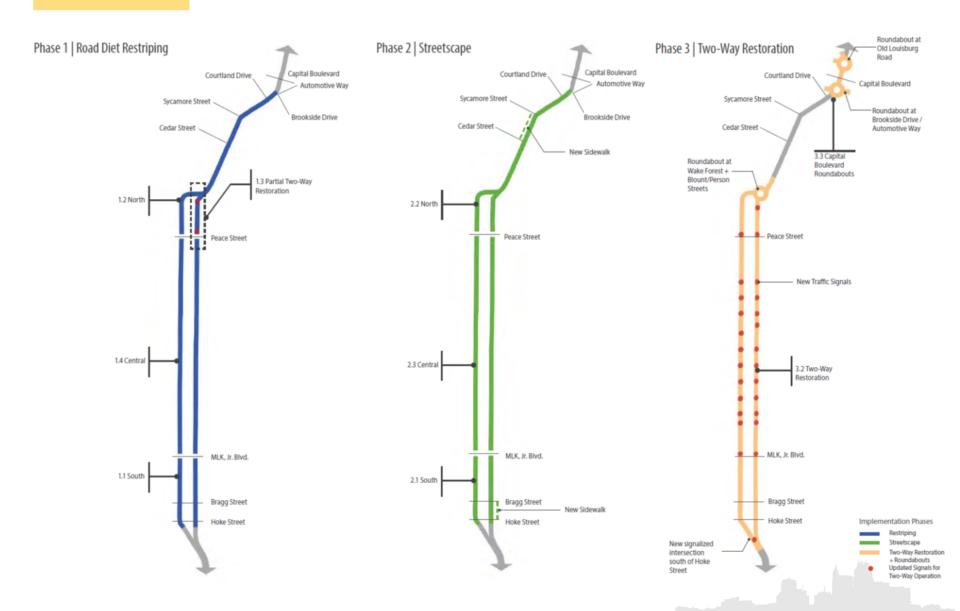
Streetscape improvements

#### **Phase III Recommendation**

Conversion to full two-way, two-lane operation for both streets between Wake Forest and Hammond Roads



### **Blount-Person Corridor Plan Review**





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#### **Phase III Recommendation**

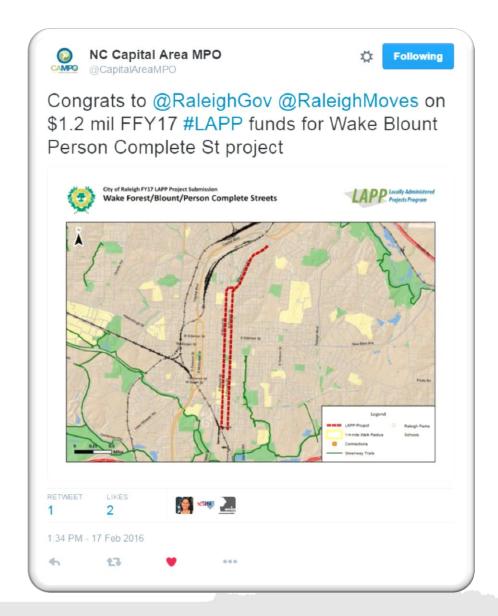
Conversion to full two-way, two-lane operation for both streets between Wake Forest and Hammond Roads



## **Project Funding**

## FY2015 CIP Funding: \$700K City awarded \$1.27M Federal funds for Complete Street project

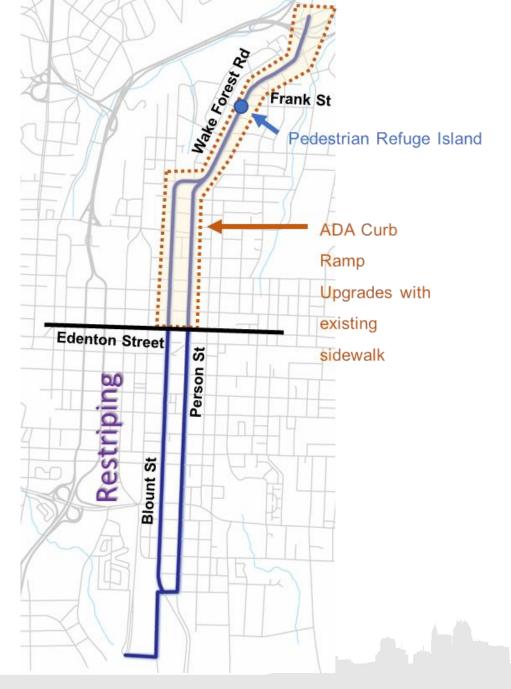
- Wake Forest Road Diet
- Bike lanes on Blount & Person from Hoke to Brookside
- Resurfacing north of Edenton





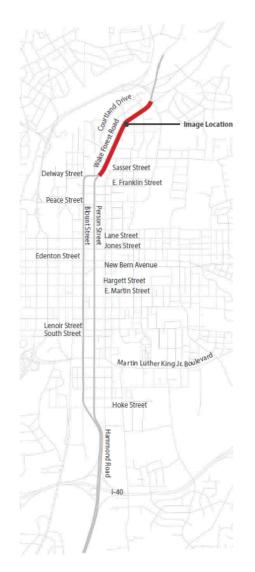
# Restriping vs. Resurfacing

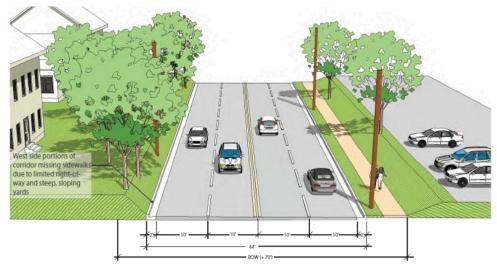
- North of Edenton will be repaved
  - Includes ADA curb ramp improvements
- South of Edenton will be restriped
  - Resurfaced in 2013



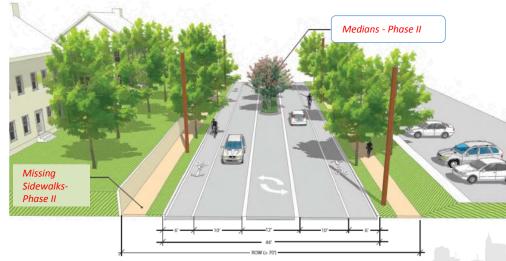


## Wake Forest Reconfiguration





Wake Forest Road: Before



Wake Forest Road Diet: After



# **Blount/Person Bike Lanes**

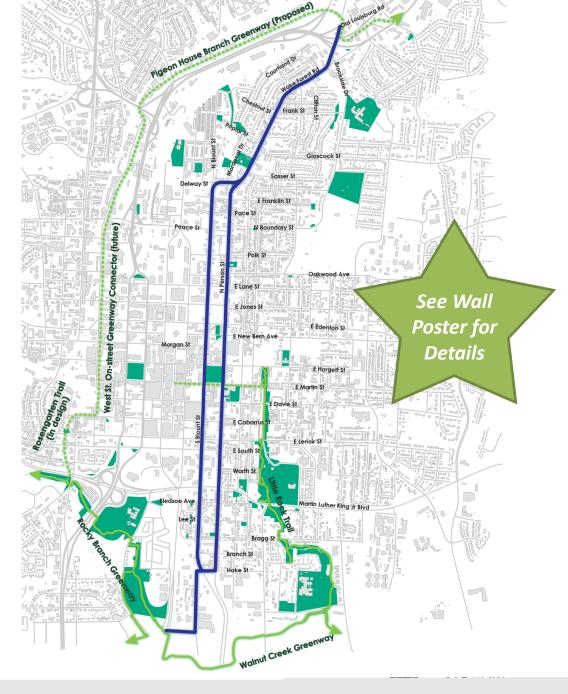


Looping slideshow lasts approximately 5 minutes. Please see staff with any specific questions.



# **Greenway Connections**

- Southern section connects to Walnut Creek Greenway
- Northern section will connect to future Pigeon House Greenway





## **Parking Impacts**

#### Removals

- Right side, 4 blocks in South Park
- Left side, Person from South to Lenoir
- Right side, Moore Sq. MS (off peak)
- Left side, Person from Lane to Peace (off peak)

#### **Additions**

- Right side, Person from MLK to South
- Left side, Person from Edenton to Lane (peak)
- Left side, Person St. Business District
- Blount from South to MLK
  - Left side (peak)
  - Right side (all-day)





# **PSP Request to City**

Person Street Partnership requested if the project could implement a full two-way conversion with just one lane in each direction (Phase III recommendation through Business District)



City performed traffic study to understand if possible



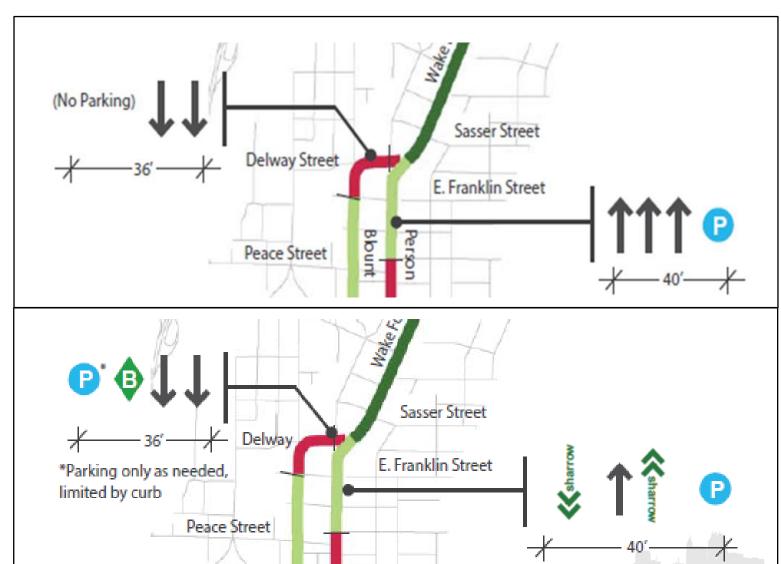
# **Alternatives Analysis**

## Traffic analysis: 2020 PM peak

- A. Partial Two-Way Conversion
  - Peace to Wake Forest/Delway 2 NB lanes, 1 SB lane
- B. Partial Two-Way Conversion (PSP Request)
  - Peace to Wake Forest/Delway one lane each direction
- C. One-Way Road Diet



## Alternative A



**Existing**Laneage

Alt. A Proposed Laneage



## **Traffic Evaluation: Alt. A**

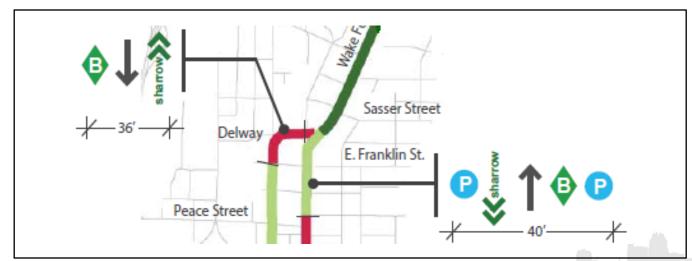
Segment travel speed decrease by 6+ mph?	No - Person Street 22 mph → 18 mph		
Overall signal delay increase by 15+ sec?	No - +2 sec/veh @ Peace/Person +5 sec/veh @Person/Franklin		
Approach delay increase by 15+ sec?	No - approach delay +5 sec/veh		
Segment LOS fall below LOS-D?	<b>No -</b> arterial LOS for both Blount & Person LOS-C or better		
Intersection LOS fall below LOS-D?	No - all intersections LOS-B or better		
Approach LOS fall below LOS-D?	No - all approaches LOS-C or better		
VIABLE?			



# **Alternative B (PSP Request)**



Existing Laneage



Alt. B Proposed Laneage

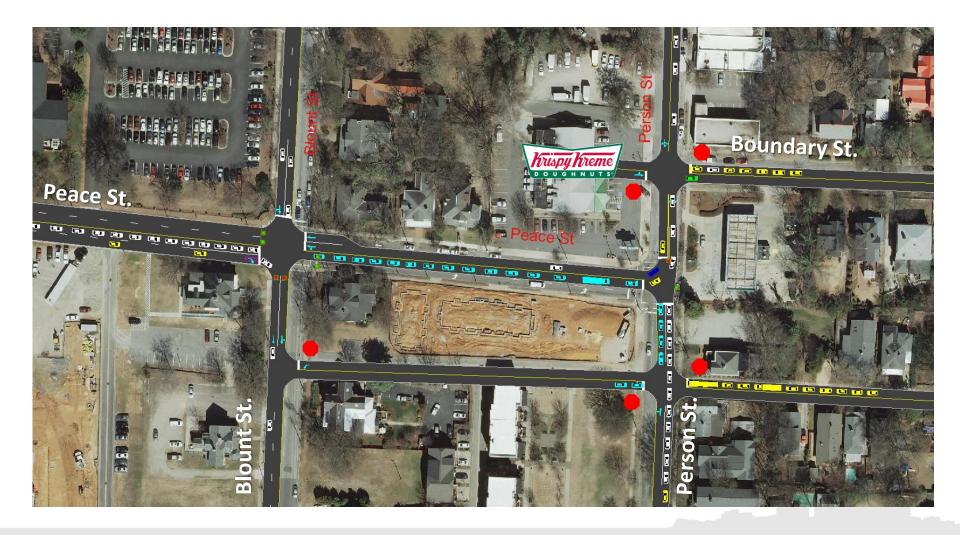


## **Traffic Evaluation: Alt. B**

Segment travel speed decrease by 6+ mph?	Yes - NB Person Street 22 mph → 13 mph			
Overall signal delay increase by 15+ sec?	<b>Yes -</b> +45 sec/veh @ Peace/Person +47 sec/veh @ Person/Franklin			
Approach delay increase by 15+ sec?	<b>Yes -</b> EB Peace/Person approach +71 sec/veh			
Segment LOS fall below LOS-D?	<b>No -</b> arterial LOS for both Blount & Person LOS-D or better			
Intersection LOS fall below LOS-D?	<b>Yes -</b> Person/Peace LOS-E			
Approach LOS fall below LOS-D?	<b>Yes -</b> Peace/Person: NB approach LOS-E, EB approach LOS-F Person/Franklin: Multiple LOS-E			
VIABLE?	×			



# Partial Two-Way Conversion Alt. B Traffic Model Aerial View at Peace St.



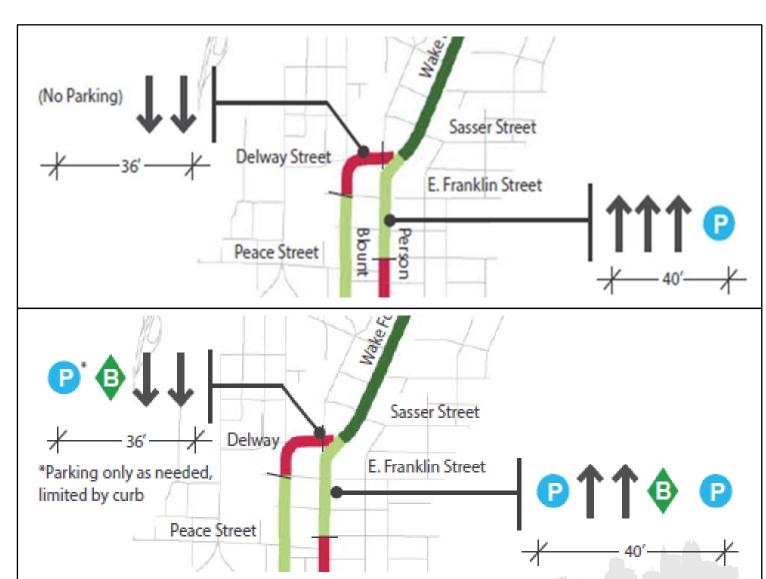


## **×** Alternative B not viable

- Does not meet 5 of 6 traffic evaluation criteria
- Queues traffic on Peace Street without two-way operations on Blount Street
  - May result in cut-thru traffic in Mordecai and Oakwood
  - May negate gains in visibility/accessibility
- Concerns with implementation during Capital Blvd. Bridge Replacement project
  - Eliminates northbound capacity at same time
  - Routes Person St. traffic to the work zone
  - Queues EB traffic towards work zone



## **Alternative C**



**Existing**Laneage

Alt. C Proposed Laneage



## **Traffic Evaluation: Alt. C**

Segment travel speed decrease by 6+ mph?	Yes - Person Street 22 mph → 13 mph		
Overall signal delay increase by 15+ sec?	No - +4 sec/veh @ Peace/Person +3 sec/veh @Person/Franklin		
Approach delay increase by 15+ sec?	No - approach delay +4 sec/veh		
Segment LOS fall below LOS-D?	<b>No -</b> arterial LOS for both Blount & Person LOS-D or better		
Intersection LOS fall below LOS-D?	No - all intersections LOS-B or better		
Approach LOS fall below LOS-D?	No - all approaches LOS-C or better		
VIABLE?	$\overline{\mathbf{V}}$		



# Public Input – Cityzen Poll (2016)

#### **Voters**

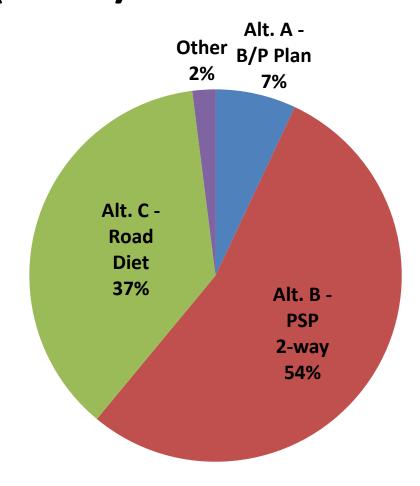
67% Oakwood/Mordecai residents

35% Person St business owners/customers

28% Bicyclists

24% Commuters

22% Downtown





## Public Input – Cityzen Poll (2016)

What aspect is most important to you personally in the **Person Street Business District** for the project?

What aspect is most important to you personally in the Wake Forest/Blount/Person corridors for the project?

- 31% Access
- 22% Mobility/traffic
- 20% Bike lanes
- 14% Intersection safety
- 10% On-street parking

- 27% Mobility/traffic
- 26% Access
- 22% Bike lanes
- 19% Intersection safety
- 2% On-street parking

**Comments:** Vehicular speeds, walkability/pedestrian safety, bikeability, parking needs, traffic volumes



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## **Evaluation Conclusions**

	Road Diet Evaluation	Bike Facility	Access/ Visibility	Additional Parking
A: Partial Two- way (2 NB /1 SB)	6/6	\$\hf\$Sharrows only	Two-way accessibility; no congestion	X No new parking
B: Partial Two- way (1 NB/1 SB)	1/6	Bike Lanes	Two-way accessibility; major PM congestion	±9 new spaces
C: One-way Road Diet	5/6	Bike Lanes	No change in accessibility; no congestion	±9 new spaces



## **Staff & BPAC Recommendation**

- 1. Implement one-way road diet (Alternative C)
- 2. Investigate options for Blount St/City Farm Rd south of RR to connect to Walnut Creek Greenway





## **Project Schedule**

## **May 2017**

75% Design to NCDOT for review after this public meeting

## **July 2017**

Final design, advertise for construction

## September/October 2017

Construction



### **Future Phases**

#### **Phase II Streetscape**

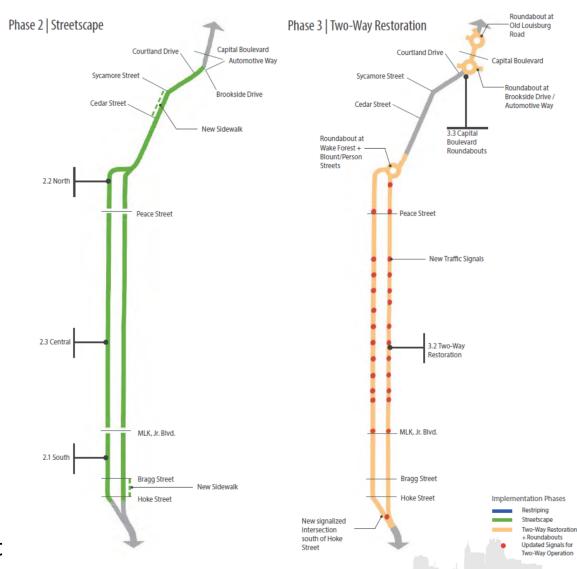
 Eligible for streetscape funding proposed in 2017 Transportation Bond

# Phase III Two-way Conversion/Roundabouts

- Wake Forest/Brookside roundabout under consideration for 2017 Transportation Bond
- Two-way operations to be studied as part of Downtown Operations Study (2017-2018)

# Wake Forest Road Name Change

Rename as N. Person Street





### **Phase III Roundabout**



Two-way operations for both Blount & Person requires changes at Person/Wake Forest/Delway, such as planned roundabout





## **Thank You**

#### Please fill out a comment sheet

Send any questions to:

Jason S. Myers

(Jason.Myers@RaleighNC.gov)

-or-

Todd Delk

(tdelk@stewartinc.com)



End of slides – will return to 1st slide shortly