



OPEN HOUSE JUNE 27, 2013

AGENDA



1. Project Background
2. Project Goals & Process
3. Public Outreach Activities
4. Streetcar Overview
5. Results of Technical Analysis
6. Potential Funding Scenarios
7. Next Steps
8. Questions & Answers

PROJECT BACKGROUND

PREVIOUS STUDIES



- Legacy Comprehensive Plan (2001, Updated in 2012):
 - Promotes the construction of a modern rail streetcar system to connect destinations in the larger Center City area and be a catalyst for development.
 - Promotes transit connections between Downtown and suburban areas to increase ridership.

- 2006 Streetcar Feasibility Study:
 - Established concept for streetcar route through urban core.
 - Envisions a plan that encourages new residential development, establishes better transportation linkages and stimulates other parts of the city and surrounding areas.

LEGACY



2030 Update



Winston-Salem Streetcar
Feasibility Study



Winston-Salem

PROJECT GOALS & PROCESS

PROJECT GOALS



Enhance Economic Competitiveness

- Focus development and coordinate investments to maximize economic return and minimize sprawl
- Encourage a mixture of uses including equitable and affordable housing
- Protect and enhance the City's distinct character

Increase Mobility Options

- Connect key destinations in urban core
- Connect to local and regional transit to provide the "last mile" of service
- Support existing communities and infrastructure
- Extend pedestrian connectivity

Developed using input from Policy Advisory and Technical Committees made up of key organizational and institutional stakeholders such as PTRP and WFBMC, WSSU, DWSP, Chamber, DOT Board, PART, RJR, Goler CDC, WSTA, Council rep., etc.

PROJECT PROCESS



- Initial Screening
- Stakeholder Input



- Conceptual Engineering
- Ridership Estimates
- Public Input



Study required to pursue federal funding.

*Spring
2012*

*Summer
2012*

*Fall
2012*

*Summer
2013*



Select a Route



Select a Technology/
Refine Route



Review and Adoption



ROUTE
AND
VEHICLE
OPTIONS

ROUTE
SELECTION

TECHNOLOGY
SELECTION /
ROUTE
REFINEMENT

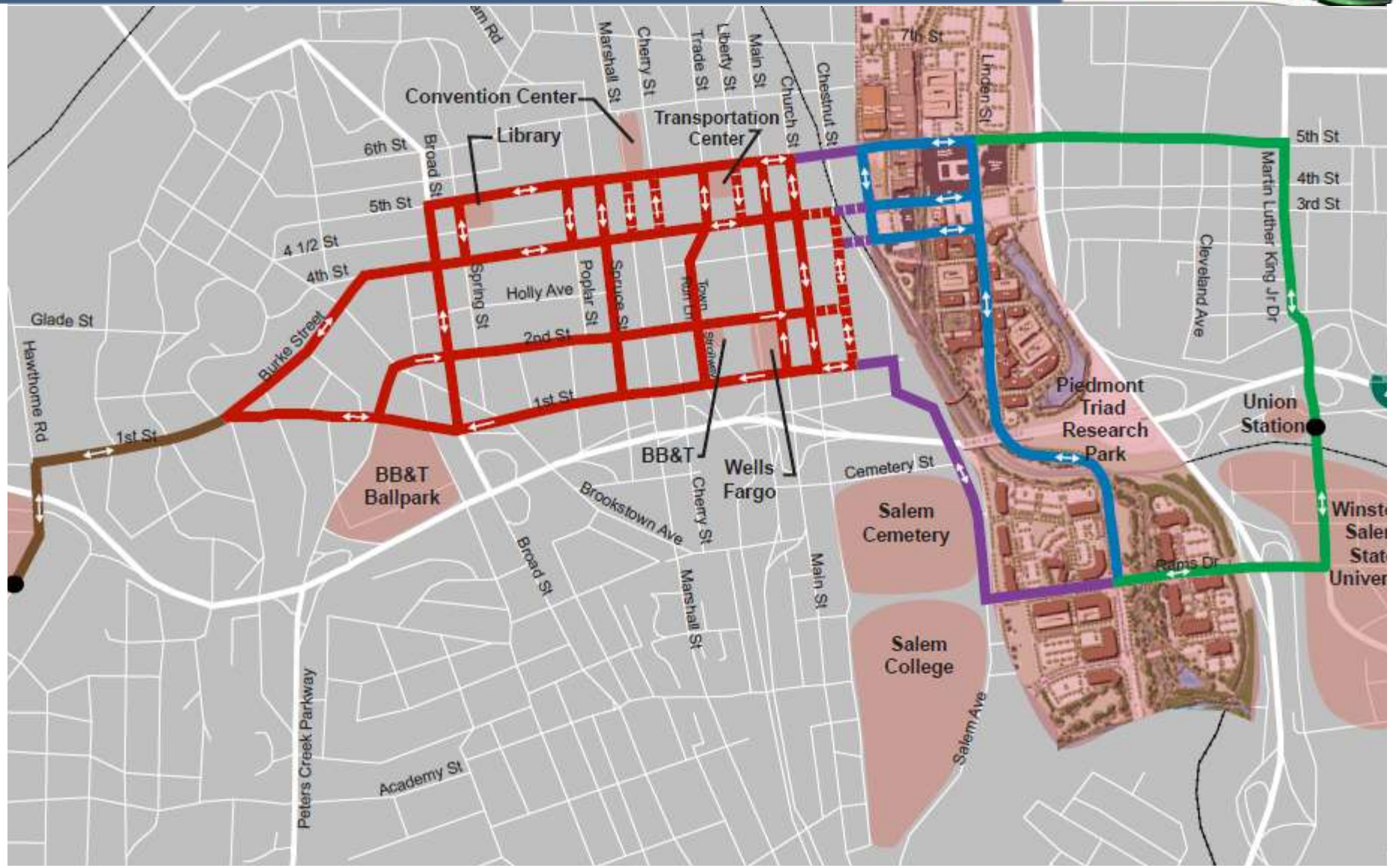
LOCALLY
PREFERRED
ALTERNATIVE

SELECTING A ROUTE

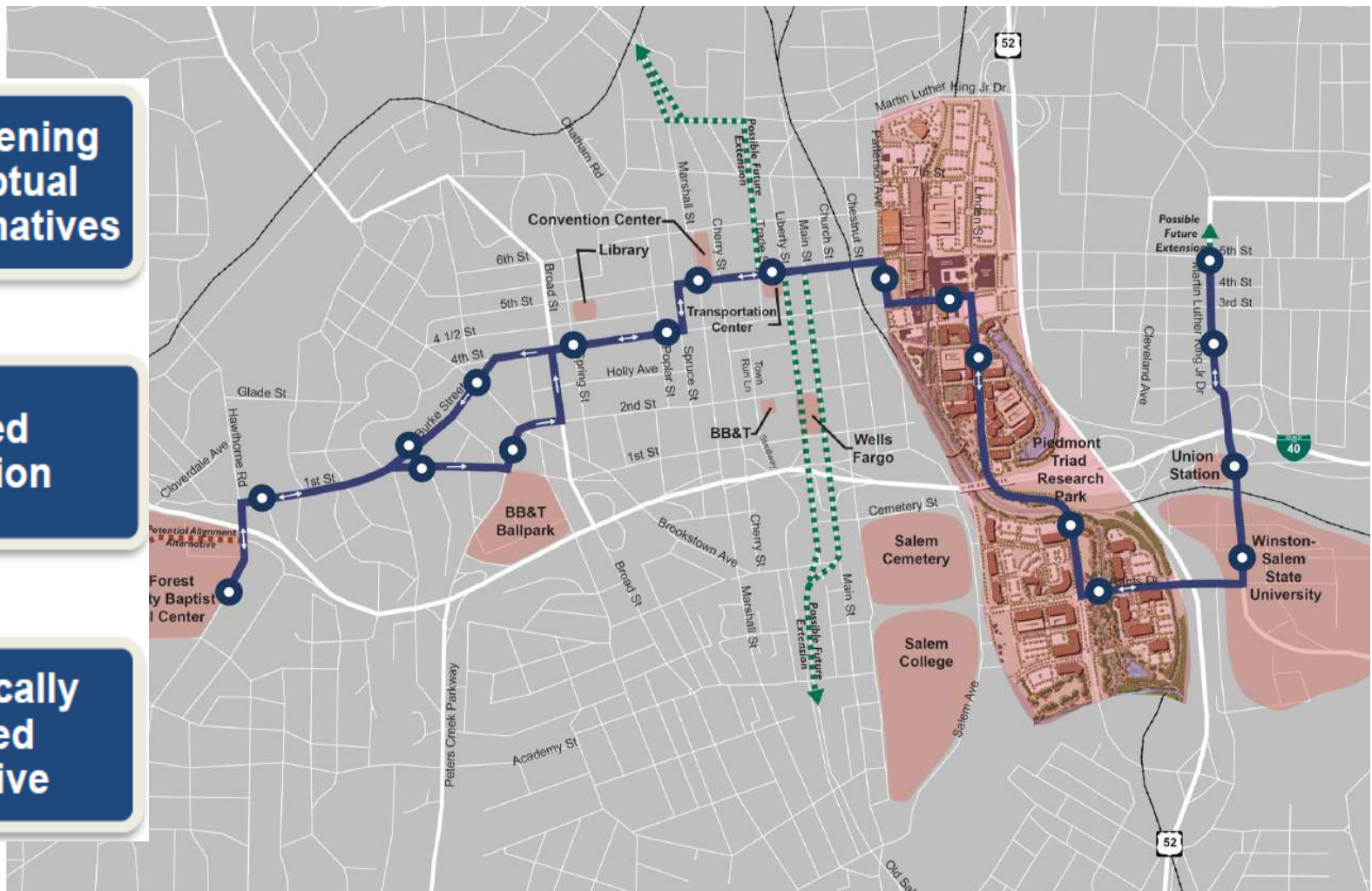


- Route connecting major activity centers:
 - More than 11,000 **Baptist Medical Center** employees;
 - **BB&T Ballpark** with 300,000 game-day and 50,000 non-game day visitors annually,
 - 6.1 million gross square feet of planned redevelopment space and an estimated 20,000 additional employees at **Innovation Quarter** (PTRP);
 - **Downtown** – regional business and arts center, home to special events venues;
 - An additional 20,000 employees and over 2,000 residents throughout greater downtown;
 - The **Transportation Center**, serving nearly 11,000 passengers per day;
 - Nearly 6,500 students attending **Winston-Salem State University**;
 - **Union Station**, which is the planned destination for future commuter and intercity rail; and
 - The commercial center of the **East Winston** community.

SELECTING A ROUTE



SELECTING A ROUTE



Source: HDR Engineering, 2013

SELECTING A MODE



Streetcar

Fixed rail technology, operating in mixed traffic



Enhanced Bus

Bus option offering physical and technological enhancements



Standard Bus

Continuation of current local bus service

PUBLIC OUTREACH

PUBLIC OUTREACH

- 3 Open Houses
- Planning Workshop on August 29, 2012
- Policy Advisory / Technical Committees
- 4th Street Stakeholders
- Creative Corridor Coalition
- Wake Forest Baptist Medical Center
- Innovation Quarter (PTRP)
- BB&T Ballpark
- Convention Center
- WSSU
- Online Survey (200 respondents)
- Public Works Committee



JANUARY 31 OPEN HOUSE SUMMARY



- What we heard:
 - Route preferences
 - Funding/fares
 - Operating hours
 - Connectivity with existing transit services
 - Frequency of service
 - Accessibility by disabled and seniors
 - Preference for streetcar as mode of service



STREETCAR OVERVIEWS

STREETCARS: FACTS



- Low floors/multiple doors for easy boarding.
- Larger than typical transit buses and can carry more passengers.
- They operate on streets with regular traffic and on rails embedded in those streets.
- Most modern streetcars are powered by a single overhead wire to reduce visual clutter.
- Stops are located every 900 – 1,200 feet on average with amenities, built into the adjacent sidewalk and placed in a parking lane.



STREETCARS: BENEFITS IN OTHER CITIES



City	Streetcar Infrastructure Cost	Development Investment along Route	Return on Investment
Portland, OR	\$103.2 million	\$3.5 billion	34 : 1
Little Rock, AR	\$28 million	\$400 million	14 : 1
Tampa, FL	\$48.3 million	\$1 billion	21 : 1
Kenosha, WI	\$5.2 million	\$150 million	29 : 1

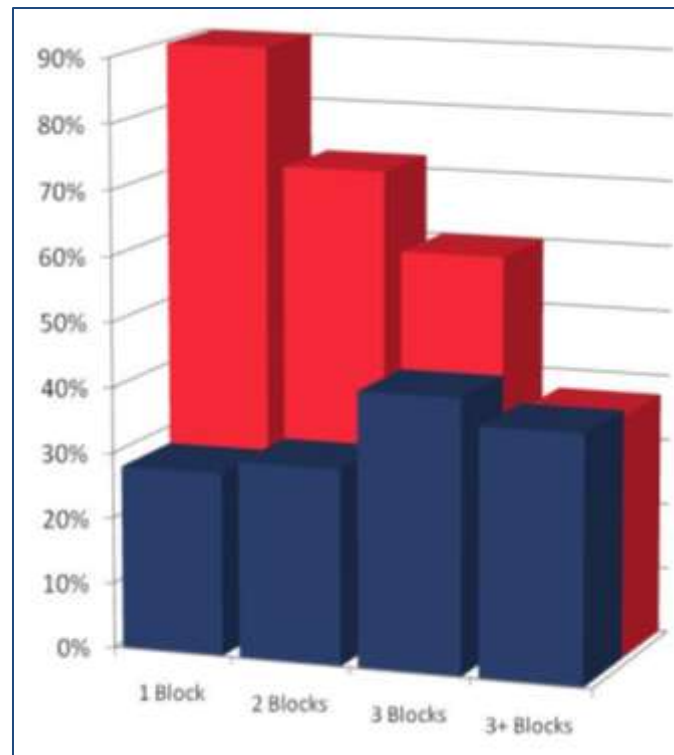
Source: "Streetcars and Cities In The 21st Century – Reconnecting America (2009)

STREETCARS: DEVELOPMENT IMPACT



The case of Portland:

Portland Floor Area Ratio (FAR) Achieved Before and After Streetcar Project



■ Before 1997 ■ After 1997

STREETCARS: BENEFITS TO WINSTON-SALEM



- A new reliable choice of transit service.
- Ability to park once and travel throughout Center City without driving.
- Creates new employment opportunities.
- Provides more housing options.
- Increased tax base in Center City means improved infrastructure and services throughout Winston-Salem.



KEY RESULTS OF ALTERNATIVES ANALYSIS

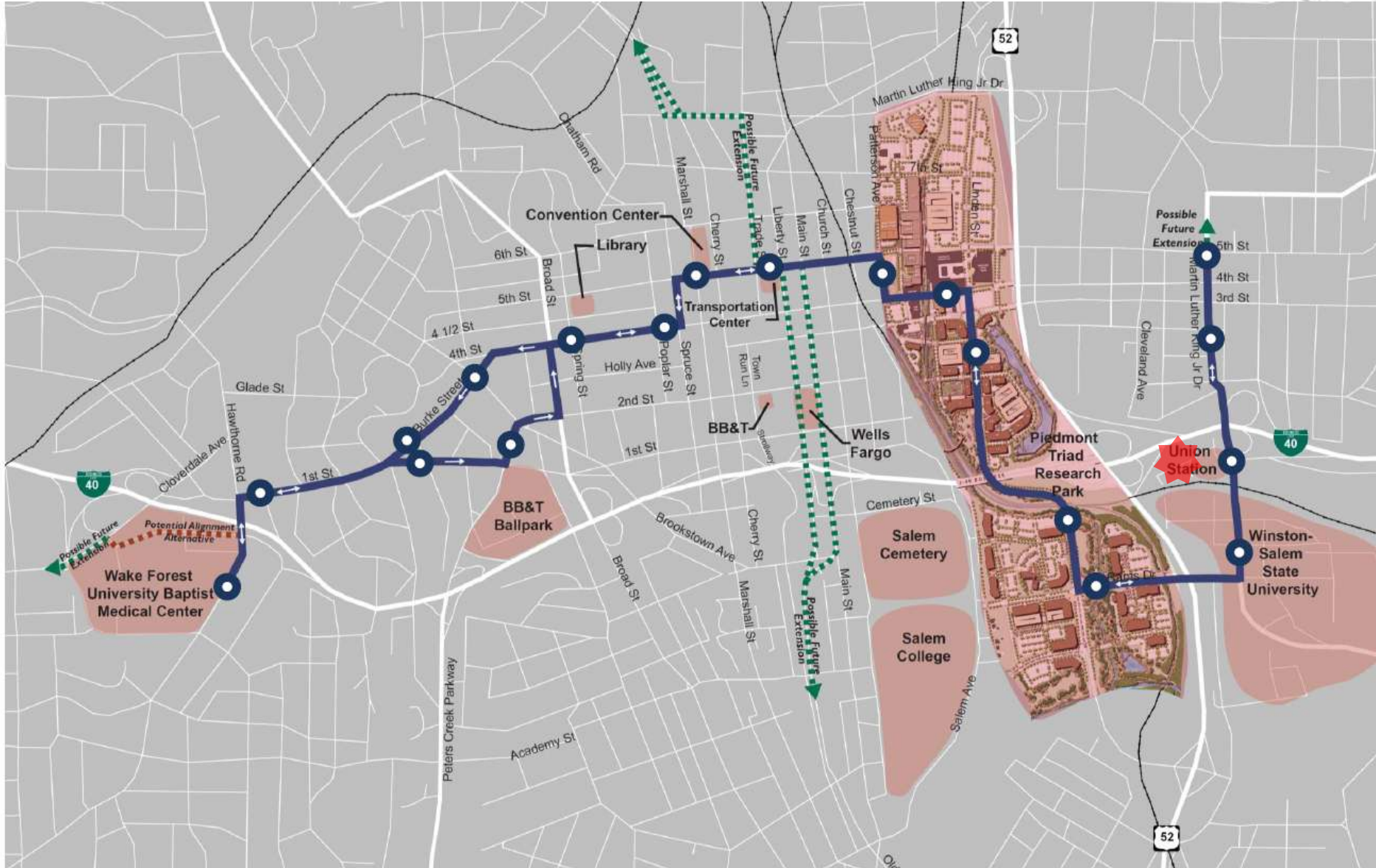
RESULTS OF TECHNICAL ANALYSIS



- Development impacts:
 - additional 4,000 residential units;
 - 2.6 million square feet of commercial development; and
 - 13,000 jobs.
- Projected ridership (2017): 2,250 daily riders
- Capital cost: \$179 million (at full-build in 2017 dollars)
- Annual operating and maintenance cost is \$4.3 million (8 Vehicles)
- Proposed Operating Hours:



POTENTIAL STOPS



POTENTIAL FUNDING SCENARIOS

FUNDING SCENARIOS



Potential Sources	Funding Scenarios		
	Revenue levels may not match total costs due to rounding*		
	Minimum Federal Participation	Moderate Federal Participation*	Maximum Federal Participation*
FHWA Funds	\$20	-	-
Future Competitive Grant	\$25	-	-
State Match – FHWA Funds	\$4	-	-
FTA Small Starts	-	\$88	-
FTA New Starts	-	-	\$88
Other Federal Funding	-	-	\$56
NCDOT SFFGA	-	\$46	\$18
Local Sources	\$130	\$46	\$18
Total	\$179	\$179	\$179

Source: Sharon Green Assoc.; HDR Engineering



TRANSPORTATION COST COMPARISONS



Capital cost: \$179 million (at full-build in 2017 dollars)

Roadway Projects vs. Streetcar Project

Project	Miles	Cost per Mile
Salem Creek Connector	1.1	\$62.6 Million
Rehab US 421, west of 4 th St. to east of Church St.	1.1	\$44.6 Million
Urban Circulator Streetcar	4.0	\$44.7 Million
Future I-74, Winston-Salem Northern Beltway	34.2	\$31.6 Million
Rehab US 421, west of Old Vineyard Road	1.6	\$7.8 Million
US 158, Multi-lanes north of US 421/I-40 Business	18.8	\$5.6 Million

NEXT STEPS

NEXT STEPS



- Federal Transit Administration briefing
- City Council presentation
- City Council decision on Locally Preferred Alternative

<http://www.WinstonSalemCirculator.com>

QUESTIONS & ANSWERS