



City Of Raleigh

NORTH CAROLINA

DATE: January 16, 2015
MEMO TO: Mayor and Council Members
SUBJECT: Council Work Session

The City Council will meet in work session 11:30 a.m. on Tuesday, January 20, 2015, in Conference Room 305, Raleigh Municipal Building, 222 West Hargett Street, Avery C. Upchurch Government Complex, Raleigh, North Carolina.

11:30 a.m. Lunch – Pick up - Conference Room 300

Topic 1 Raleigh Union Station Update
Staff Resource: Eric Lamb and Roberta Fox, Planning

The design phase for Raleigh Union Station is nearing completion. Staff will provide an update on the project's design, cost drivers and available funding. The City has worked with project partners in a value engineering exercise that has resulted in a number of potential scenarios. Staff will present cost and project impacts of the value engineering scenarios and discuss next steps.

Topic 2 Stormwater Management Program Update
Staff Resource: Blair Hinkle, Public Works

Council recently asked that staff review and develop information that would allow the Mayor and City Council to consider the development of a more comprehensive Stormwater Management Program. In order to identify program strengths, weaknesses, challenges, and opportunities, the Stormwater Management team held visioning sessions with staff representatives from across each of the existing Stormwater program service areas. Working closely with the City Manager's team, the comprehensive feedback developed during this team-based process has been translated into a series of key policy questions for Council to consider. Staff will present background information about the Stormwater Management Program as well as share some initial key policy questions.

Louis M. Buonpane
Chief of Staff

cc: City Manager Ruffin Hall
City Attorney Tom McCormick
City Clerk Gail Smith
Assistant City Managers Marchell Adams David, James S. Greene, Jr. and Tansy Hayward

One Exchange Plaza
1 Exchange Plaza, Suite 1020
Raleigh, North Carolina 27601

City of Raleigh
Post Office Box 590 • Raleigh
North Carolina 27602-0590
(Mailing Address)

Municipal Building
222 West Hargett Street
Raleigh, North Carolina 27601

Printed on Recycled Paper



City Of Raleigh

NORTH CAROLINA

DATE: January 16, 2015
MEMO TO: Mayor and Council Members
SUBJECT: Council Work Session Item 1: Raleigh union Station Update

Staff will provide an update on the Raleigh Union Station project's design, cost drivers and available funding at the January 20, 2015 Council Work Session. The attached document will be provided as a handout during the work session.

The handout reflects the preliminary value-engineering results and proposes a series of scenarios to address an identified funding gap. Funding gap estimates range from \$0 - \$16.15 M. The five scenarios propose reduced-scope and/or phased projects within this gap and are presented as options which would require additional City funding within that range (\$0, \$7, \$10, \$13, and \$16.15 million).

The scenarios have been developed by evaluating cost savings and phasing options against a series of criteria including aesthetic, operational, functional, revenue impacts, and construction efficiency. Operational impacts have been projected to allow forecasting of future obligation to own, operate, and maintain the facility per our grant requirements.

A summary of the scenarios is provided below:

Scenario	Staff Conclusion	Additional City Project Funding	Total 20 Year Cost
5	Meets project goals Requires lowest ongoing subsidy	\$16,150,000	\$36,020,000
4	Meets project goals Creates future phasing opportunities Requires lower subsidy	\$13,000,000	\$33,510,000
3	Meets minimal project goals Significantly reduces building quality Requires increased subsidy	\$10,000,000	\$37,020,000
2	Meets minimal project goals Significantly reduces building quality Jeopardizes funding Increased subsidy	\$7,000,000	\$36,610,000
1	Does not meet project goals Creates future West St. obligations Jeopardizes funding Largest on-going subsidy	\$0	\$29,610,000

One Exchange Plaza
1 Exchange Plaza, Suite 1020
Raleigh, North Carolina 27601

City of Raleigh
Post Office Box 590 • Raleigh
North Carolina 27602-0590
(Mailing Address)
Printed on Recycled Paper

Municipal Building
222 West Hargett Street
Raleigh, North Carolina 27601



Tansy Hayward
Assistant City Manager

cc: City Manager Ruffin Hall
City Attorney Tom McCormick
City Clerk Gail Smith
Assistant City Managers Marchell Adams David, James S. Greene, Jr

One Exchange Plaza
1 Exchange Plaza, Suite 1020
Raleigh, North Carolina 27601

City of Raleigh
Post Office Box 590 • Raleigh
North Carolina 27602-0590
(Mailing Address)
Printed on Recycled Paper

Municipal Building
222 West Hargett Street
Raleigh, North Carolina 27601

	Scenario 5	Scenario 4	Scenario 3	Scenario 2	Scenario 1
Additional City Funding	\$16.15 Million (Total budget of \$83.9 Million)	\$13 Million (Total budget \$80.75 Million)	\$10 Million (Total budget \$77.75 Million)	\$7 Million (Total budget \$74.75 Million)	\$0 (Total budget \$67.75 million)
Pros and Cons	<p>Pros: Includes all master plan design elements. Revenue from the retail space, and long-term utility savings, result in the lowest operating subsidy.</p> <p>Cons: Requires the highest capital investment.</p>	<p>Pros: Includes <i>most</i> station and site improvements. It includes all planned retail and civic space, and uses higher-grade HVAC systems. Revenue from the retail space, and long-term utility savings, minimize the increase to the operating subsidy.</p> <p>Cons: Excludes many aesthetic features. Requires a higher capital investment.</p>	<p>Pros: Includes <i>selected</i> site and access improvements, <i>most</i> of the planned retail and civic space, and minimal aesthetic items.</p> <p>Cons: Excludes most aesthetic items. It uses lower-grade building systems, increasing the operating subsidy.</p>	<p>Pros: Includes <i>selected</i> site and access improvements, namely two-grade access, West Street improvements, and a second track.</p> <p>Cons: Excludes most retail and civic space and aesthetic items; includes lower-grade building systems. The foregone revenue and higher utility cost lead to a higher operating subsidy.</p>	<p>Pros: Requires no additional city funding and builds a functional train station.</p> <p>Cons: Excludes most improvements including those desired for operational and safety reasons; excludes most retail and civic space and aesthetic features; includes lower-grade building systems. The foregone revenue and higher utility costs lead to a higher operating subsidy. Requires financial commitment to future West Street improvements.</p>
Major Scope Items	Rail Infrastructure to Include:				
	2 dedicated station tracks	2 dedicated station tracks	2 dedicated station tracks	2 dedicated station tracks	Substitute 1 dedicated station track
	924' Permanent Center Island Platform	558' Permanent Center Platform 366' Temporary Center Platform	558' Permanent Center Platform 366' Temporary Center Platform	558' Permanent Center Platform 366' Temporary Center Platform	558' Permanent Side Platform 366' Temporary Side Platform
	600' Platform Canopy	414' Platform Canopy	414' Platform Canopy	414' Platform Canopy	414' Platform Canopy
	Site Design to Include:				
	Two grade separated entries	Two grade separated entries	Two grade separated entries	Two grade separated entries	Substitute One Grade Separated Entry*
	West Street improvements	West Street improvements	West Street improvements	West Street improvements	
	Functional and Aesthetic Landscaping and Hardscaping	Functional and Aesthetic Landscaping and Hardscaping	Functional Landscaping and Hardscaping	Functional Landscaping and Hardscaping	Functional Landscaping and Hardscaping
	Large Civic Plaza and Canopy				
	Stormwater Garden				
	Building Renovation to include:				
	13,000+ sf of leasable space	13,000+ sf of leasable space	Reduce to 10,000 sf leasable space	Reduce to 2,400 sf leasable space	Reduce to 2,400 sf leasable space
	5,000 sf Civic Hall	5,000 sf Civic Hall	5,000 sf Civic Hall	Reduce to 2,500 sf Civic Hall	Reduce to 2,500 sf Civic Hall
	Amtrak waiting area	Amtrak waiting area	Amtrak waiting area	<i>Smaller</i> Amtrak waiting area	<i>Smaller</i> Amtrak waiting area
	Enclosed and conditioned concourse to platform	Enclosed and conditioned concourse to platform	Enclosed and conditioned concourse to platform	Substitute Open Air Concourse, grade-separated	Substitute Open Air Concourse at grade
	Sawtooth Façade	Sawtooth Façade	Sawtooth Façade		
	Annex for Amtrak ticketing and baggage	Annex for Amtrak ticketing and baggage	Annex for Amtrak ticketing and baggage		
	High efficiency systems	High efficiency systems			
	Green Roof on concourse				
	Exterior Roof Deck at third level				
	Train overlook and viewing area				
	LEED Certified Building				
	Enhanced Building Commissioning				
	Accommodations for future transit services				

	Scenario 5	Scenario 4	Scenario 3	Scenario 2	Scenario 1
Funding Partner Feedback	Partners have accepted this scope	Partners may accept these scope reductions because they do not affect rail operations and safety	Partners may accept these scope reductions because they do not affect rail operations and safety	* FRA objects to open air concourse. Partners may accept these scope reductions because they do not affect rail operations and safety.	FRA funds designated to double station tracks and enclosed, conditioned concourse. NCDOT objects to single grade-separated roadway access and single station track
20 Year Total Capital and Operating Cost	20 Year Total Cost: \$36.0 Million Highest capital investment, but higher-grade building systems and lease revenues lead to lowest operating cost	20 Year Total Cost: \$33.5 Million High capital investment, but higher-grade building systems and lease revenue minimizes the operating cost	20 Year Total Cost: \$37.0 Million More capital investment, but shift to lower-grade building systems and reduced lease revenues lead to higher operating cost	20 Year Total Cost: \$36.6 Million Some additional capital investment, but shift to lower-grade building systems and reduced lease revenues lead to higher operating cost	20 Year Total Cost: \$29.6 Million Lowest capital investment. But higher operating subsidy due to additional utilities and lost revenue from lease space
Delayed Opportunities	Required Future Phase				
	N/A	N/A	N/A	N/A	West Street Bridge Entry and streetscape improvements required for safety and accessibility; These improvements would cost roughly \$6M today, and roughly \$8M in 5 years
	Recommended Future Phase				
	N/A	Accommodations for future transit services	Accommodations for future transit services	Accommodations for future transit services	Accommodations for future transit services
				Enclosed Concourse	Enclosed Concourse
		Green roof on concourse	Green roof on concourse	Green roof on concourse	Green roof on concourse
		Exterior Roof Deck at third level	Exterior Roof Deck at third level	Exterior Roof Deck at third level	Exterior Roof Deck at third level
		Civic Plaza and Canopy	Civic Plaza and Canopy	Civic Plaza and Canopy	Civic Plaza and Canopy
		Stormwater Garden	Stormwater Garden	Stormwater Garden	Stormwater Garden
		Platform and canopy length extension	Platform and canopy length extension	Platform and canopy length extension	Platform and canopy length extension
		(LEED Certification)			
Impact on Project Schedule	No impact on project schedule	Minimal impact on project schedule (2-4 months), some redesign required.	Scenario would lengthen project schedule by 4-6 months due to moderate redesign required.	Scenario would lengthen project schedule by 6-8 months due to significant redesign. May have difficulty meeting federal grant deadlines	Scenario would lengthen project schedule by 8-10 months due to significant redesign. May have difficulty meeting federal grant deadlines
Staff Conclusions	Meets project goals Requires lowest on-going subsidy	Meets project goals Creates future, optional, phasing opportunities Requires lower on-going subsidy	Meets minimal project goals Does not meet City's Sustainability goals Significantly reduces building quality Requires increased on-going subsidy	Meets minimal project goals Does not meet City's Sustainability goals Significantly reduces building quality Jeopardizes funding Requires increased on-going subsidy	Does not meet project goals Creates future obligations Jeopardizes funding Requires greatest on-going subsidy

UNION STATION

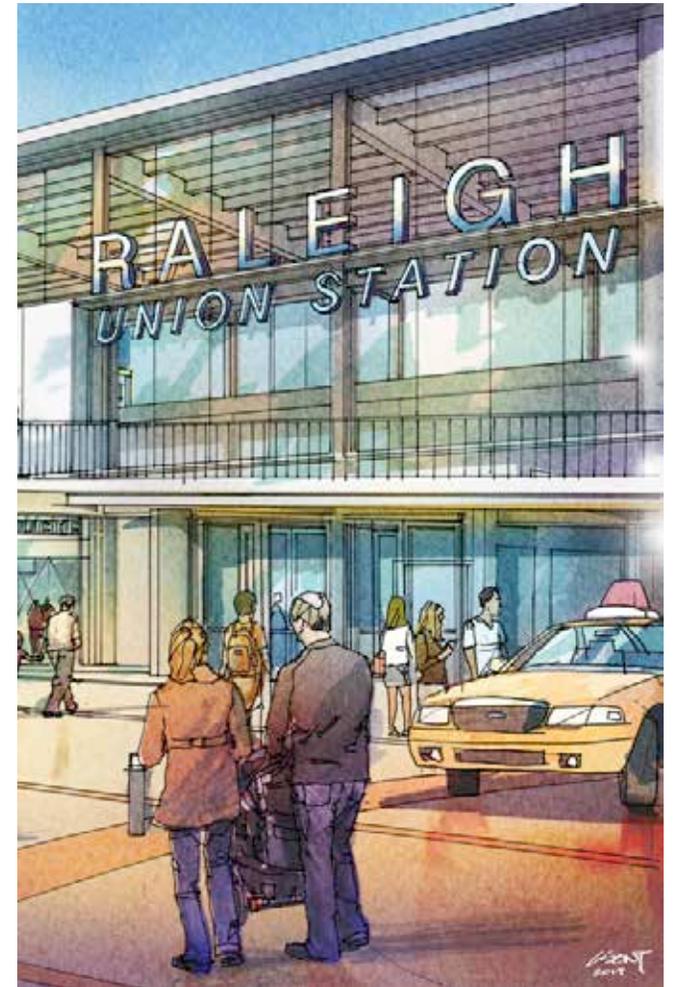


Project Update
City Council Work Session
January 20, 2015



Agenda

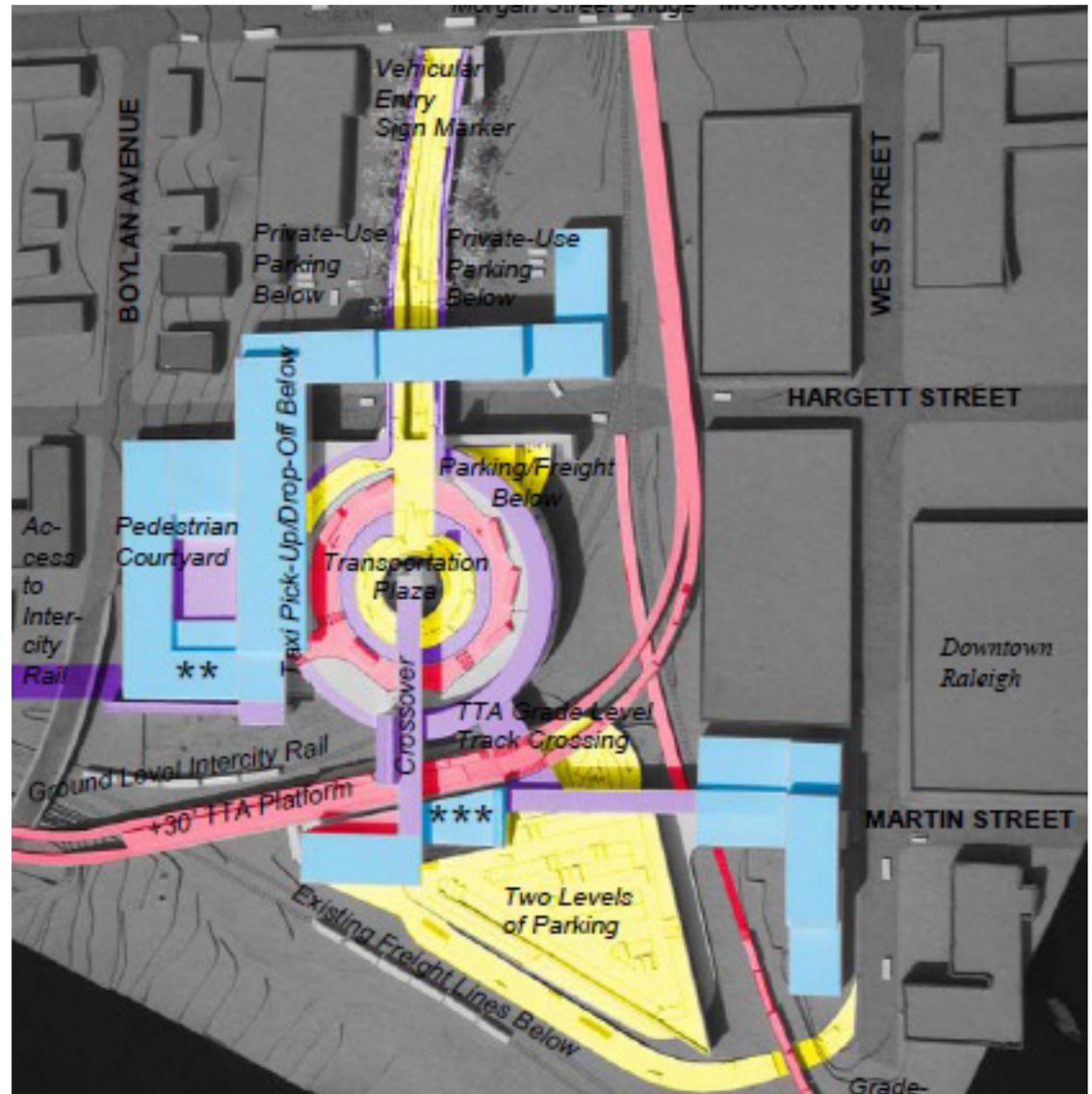
- Introduction
- Project Milestones
- Current Project Estimate
- Unanticipated Costs
- Value Engineering
- Introduction to Scenarios



Early Planning

1993 Intermodal
Station Concept

TTA Acquired
Property in and
around Boylan
Wye



“Union” Station



Southeast High Speed Rail



Ridership Growth

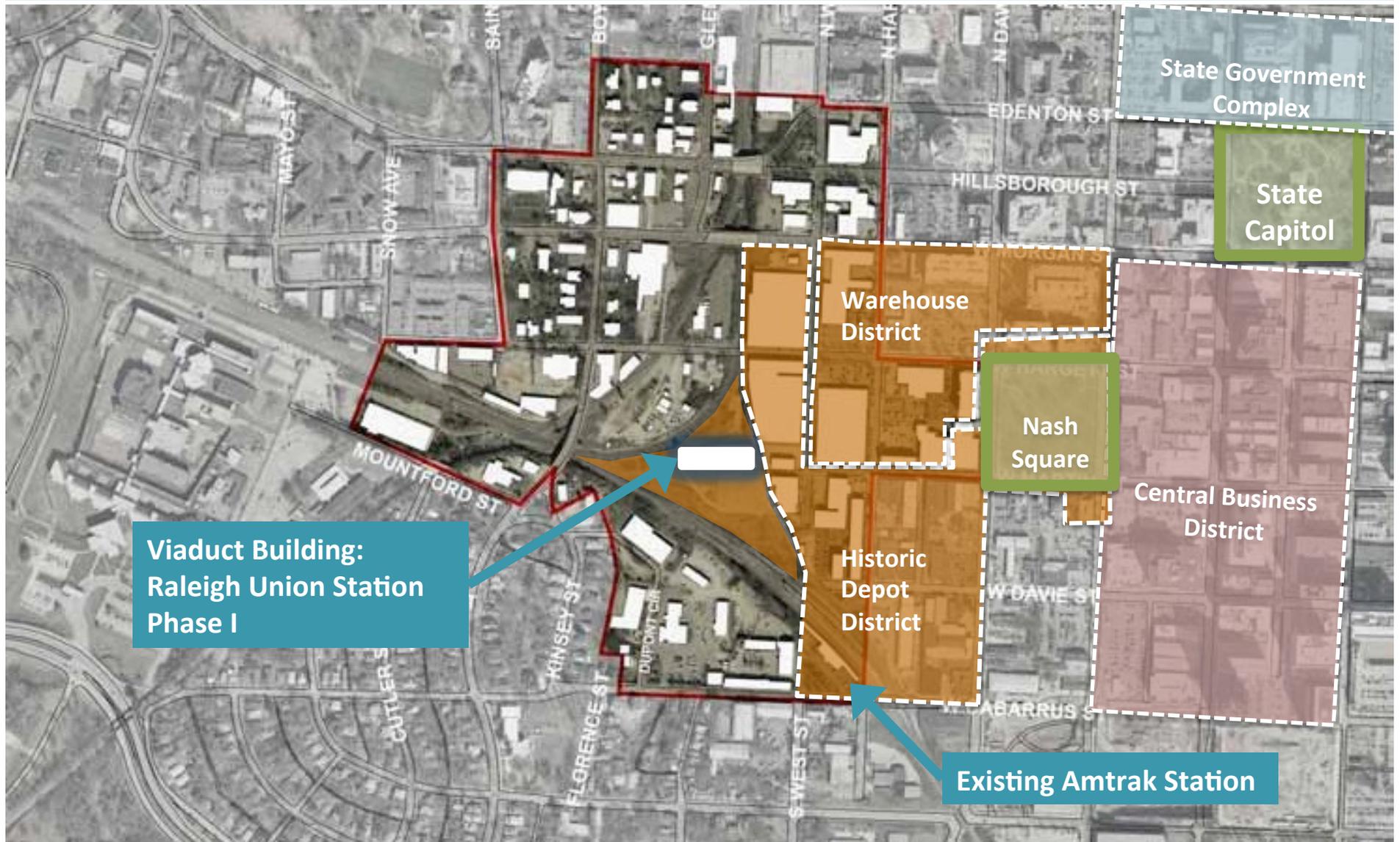
- Raleigh is served by 8 trains per day and is among the highest ridership stations in the southeast
- NCDOT and Amtrak plan to add 4 more trains per day by 2019
- Ridership is expected to increase due to better station and more trains







Boylan Wye



Raleigh Union Station



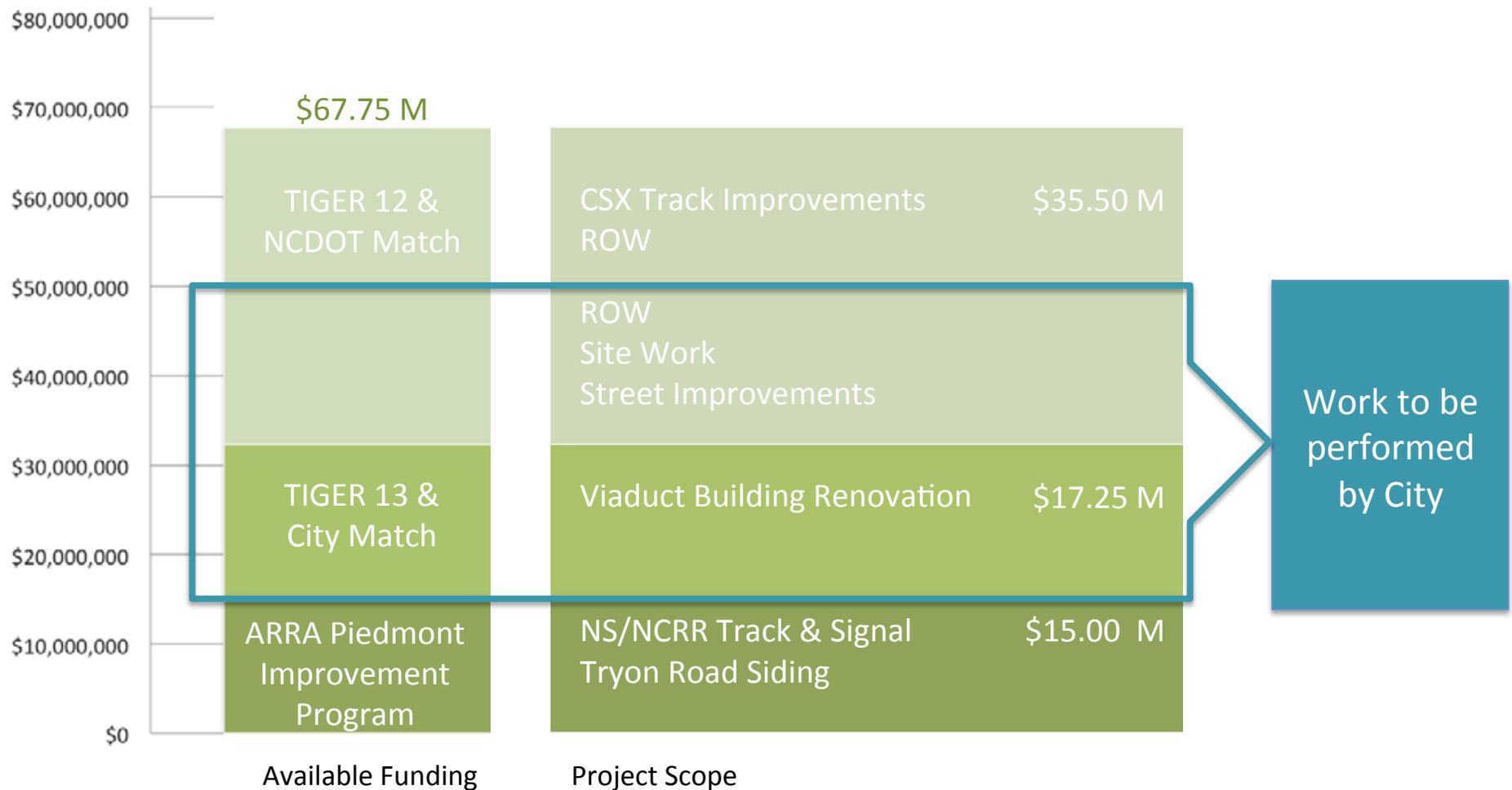
Project Timeline

Date	Milestone
2013 June	Schematic Design presentation to Council
2014 March	Design Development presentation to Council
2014 April	Construction Manager pre-construction services start
2014 November	Value Engineering Study
2015 January	95% Design
2015 Spring	Design & Funding Approval
2015 (TBD)	Begin Construction
2017 (TBD)	Station opening
2017 September	Project closeout (ARRA – NCDOT grant for track & signal)
2018 September	Project closeout (TIGER - City of Raleigh grant for building & site)

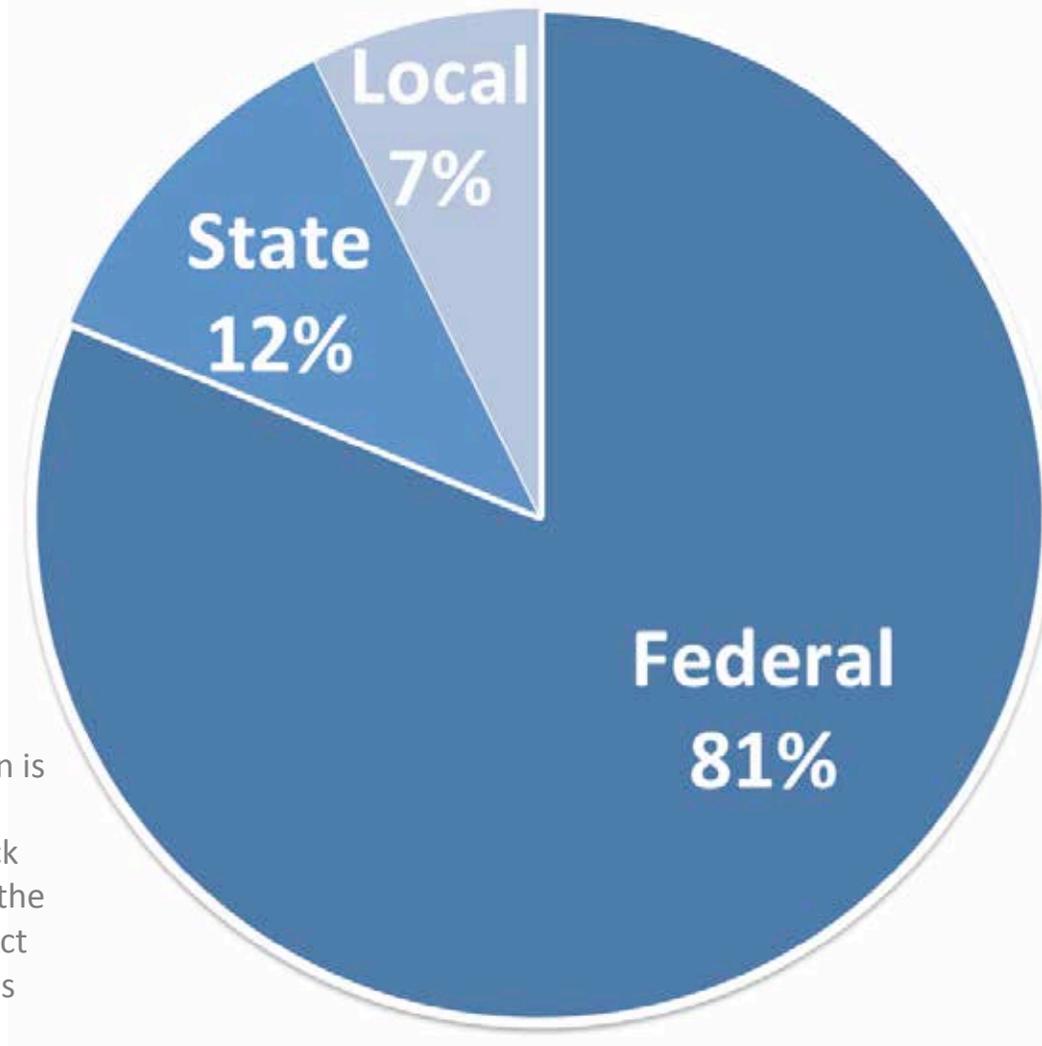
Unfunded & Unanticipated Costs

- Unfunded Items
 - Civic Plaza, Stormwater Garden, Annex, Green Roof, etc
- Unanticipated Scope
 - Soil Mitigation and Remediation
 - Unanticipated Subsurface Utility Work
 - Unanticipated Overhead Utility Work
- Increase in Property Values
- Escalation & Fees

Project Funding & Responsibilities

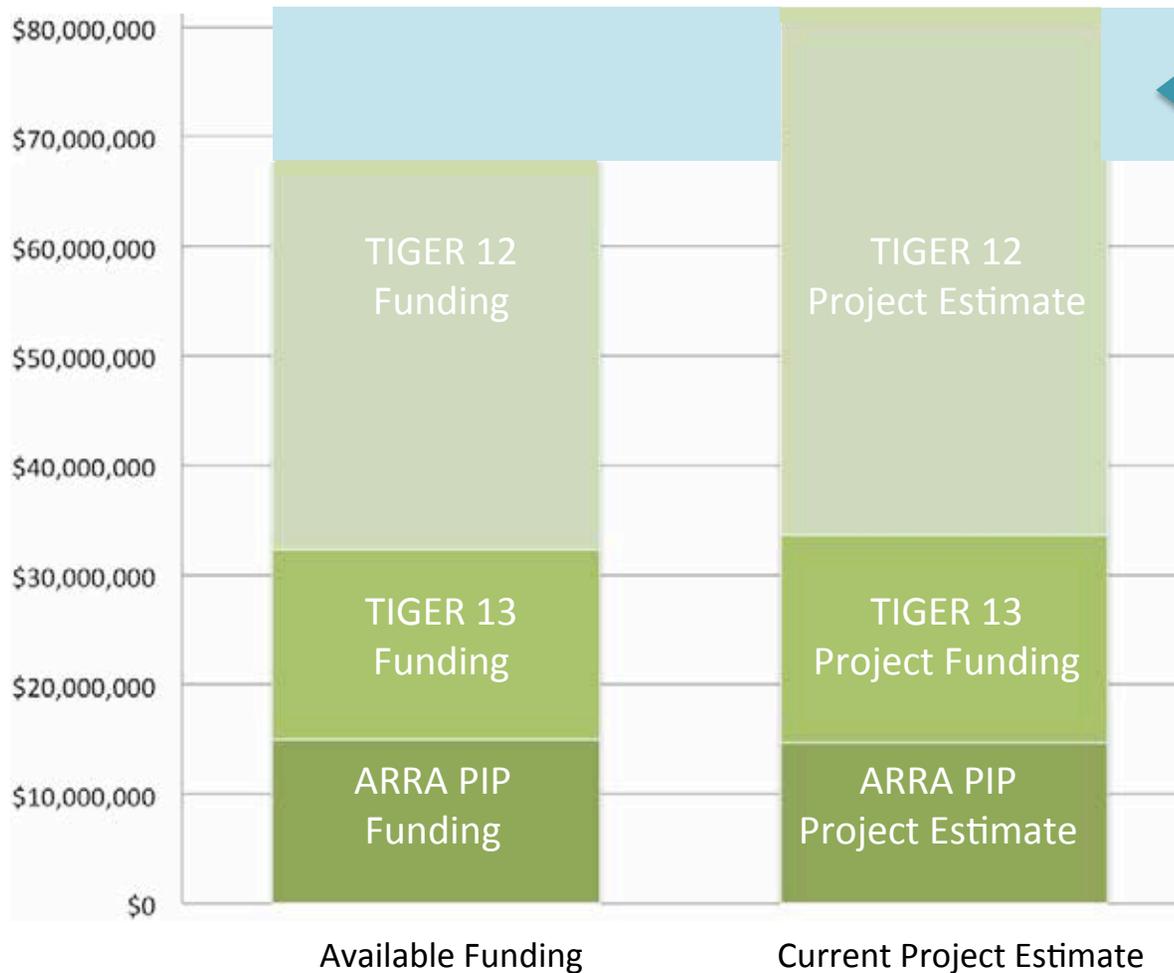


Current Funding Split



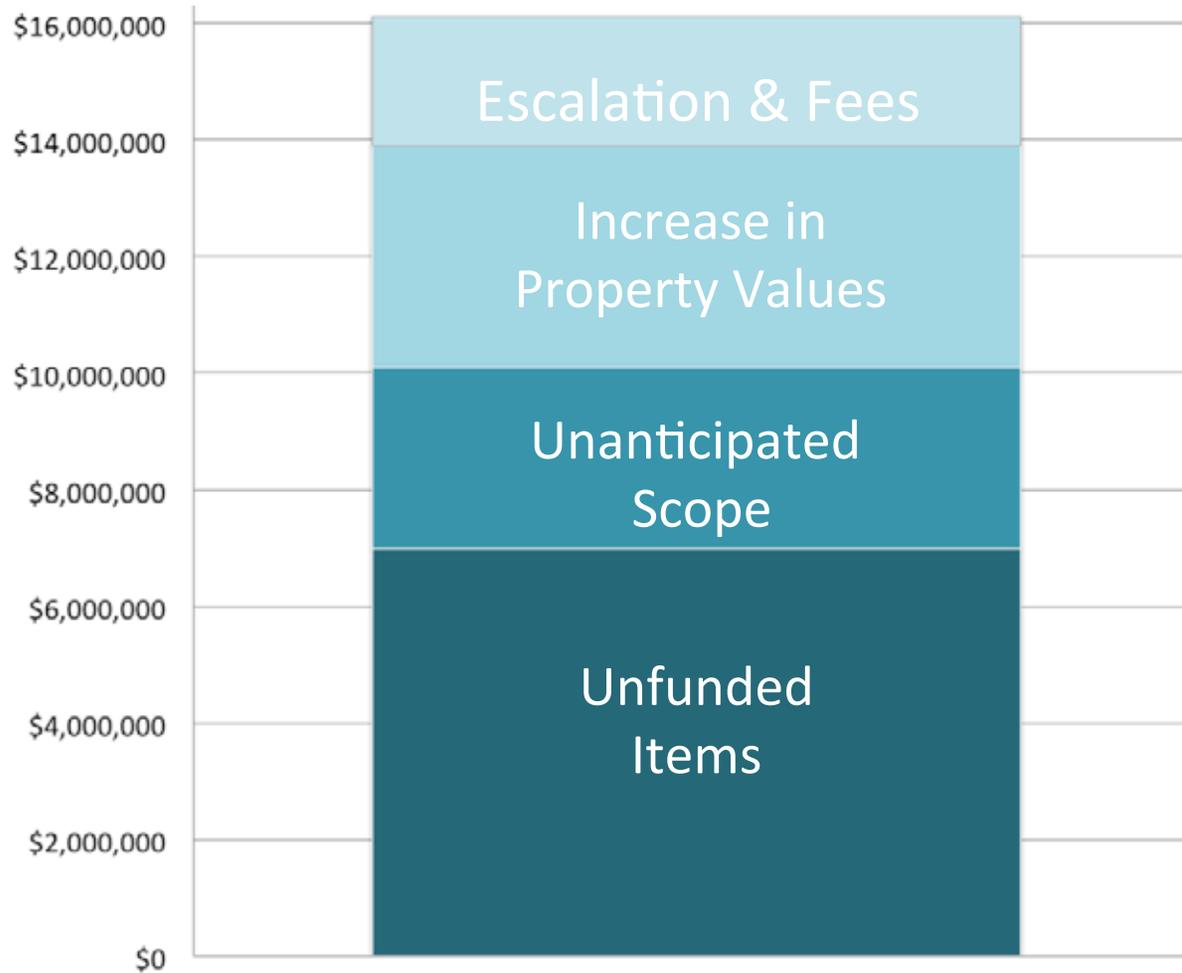
*ARRA Congestion Mitigation is included to represent full investment in necessary track and signal improvements in the Boylan Wye area. This project has independent utility and is made possible through a Federal grant to NCDOT.

Available Funding vs Project Estimate



Total Funding: \$67.75 M
Current Estimate: \$83.9 M
Funding Gap: \$0 - \$16.15 M

Estimated Funding Gap



Value Engineering Process

- Value Engineering Workshop led by NCDOT Value Management Unit in November 2014
- Over 50 experts reviewed the project
- Developed 68 recommendations to reduce cost, remove elements, or phase project
- 30 recommendations carried forward
- Recommendations evaluated against a series of criteria including aesthetic, operational, functional, revenue impacts, safety, and construction efficiency
- Developed 5 Proposed Scenarios

Scenario Summary

Scenario	Description	Funding Gap
5	Full build	\$16,150,000
4	Defer some elements to future phases Aesthetic impacts Increases construction efficiency	\$13,000,000
3	Removes or defers some elements to future phase Operational, Revenue & Aesthetic impacts	\$10,000,000
2	Removes or defers some elements to future phase Functional, Operational, Revenue & Aesthetic impacts	\$7,000,000
1	Removes or defers some elements to future phase Safety, Functional, Operational, Revenue & Aesthetic impacts	\$0

Scenario 5: \$83.9M

PROJECT SCOPE

Rail Infrastructure

- 1 Two Dedicated Station Tracks
- 2 Permanent Center Platform (924')
- 3 Permanent Platform Canopy (600')

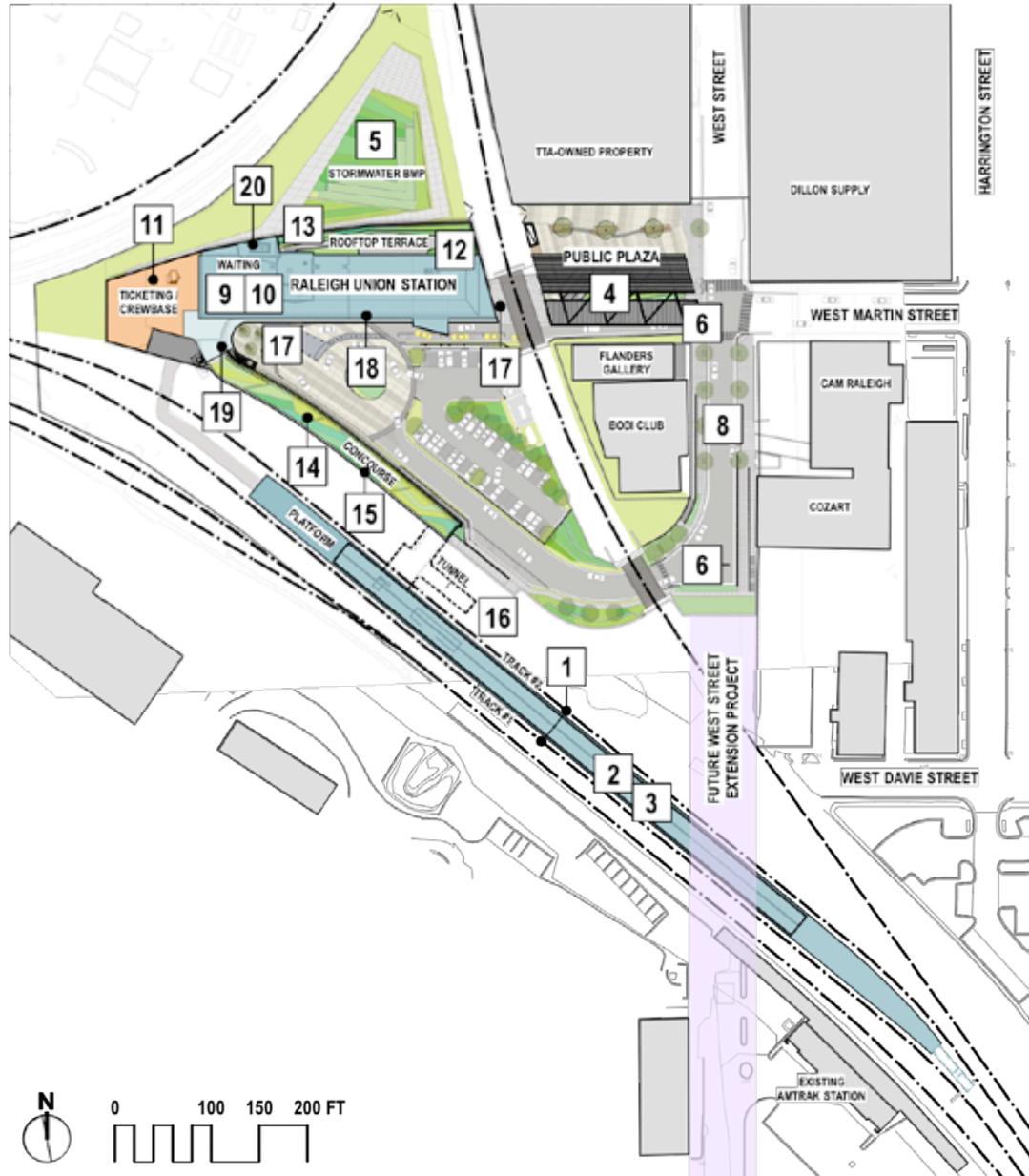
Site Design

- 4 Public Plaza and Entry Canopy
- 5 Stormwater Garden
- 6 Grade Separated Drives at Martin and West Street
- 7 Functional and Aesthetic Landscaping + Hardscaping
- 8 West Street Improvements

Building Design

- 9 Train Station with Waiting Area
- 10 Income Generating Civic Hall (5,000 sf)
- 11 Annex for Amtrak Ticketing and Crewbase
- 12 Income Generating Lease Space (13,000 sf)
- 13 Income Generating Rooftop Terrace
- 14 Descending, Enclosed and Conditioned Concourse
- 15 Green Roof at Concourse
- 16 Accommodations for Future Transit Services
- 17 Two Public Entrances
- 18 Signature Sawtooth Glazed Façade
- 19 Building Canopy / Walkway with Train Overlooks
- 20 High Efficiency PME Systems
- 21 Enhanced Commissioning
- 22 LEED Certification

Full Masterplan



Scenario 4: \$80.75 M

PROJECT SCOPE

Rail Infrastructure

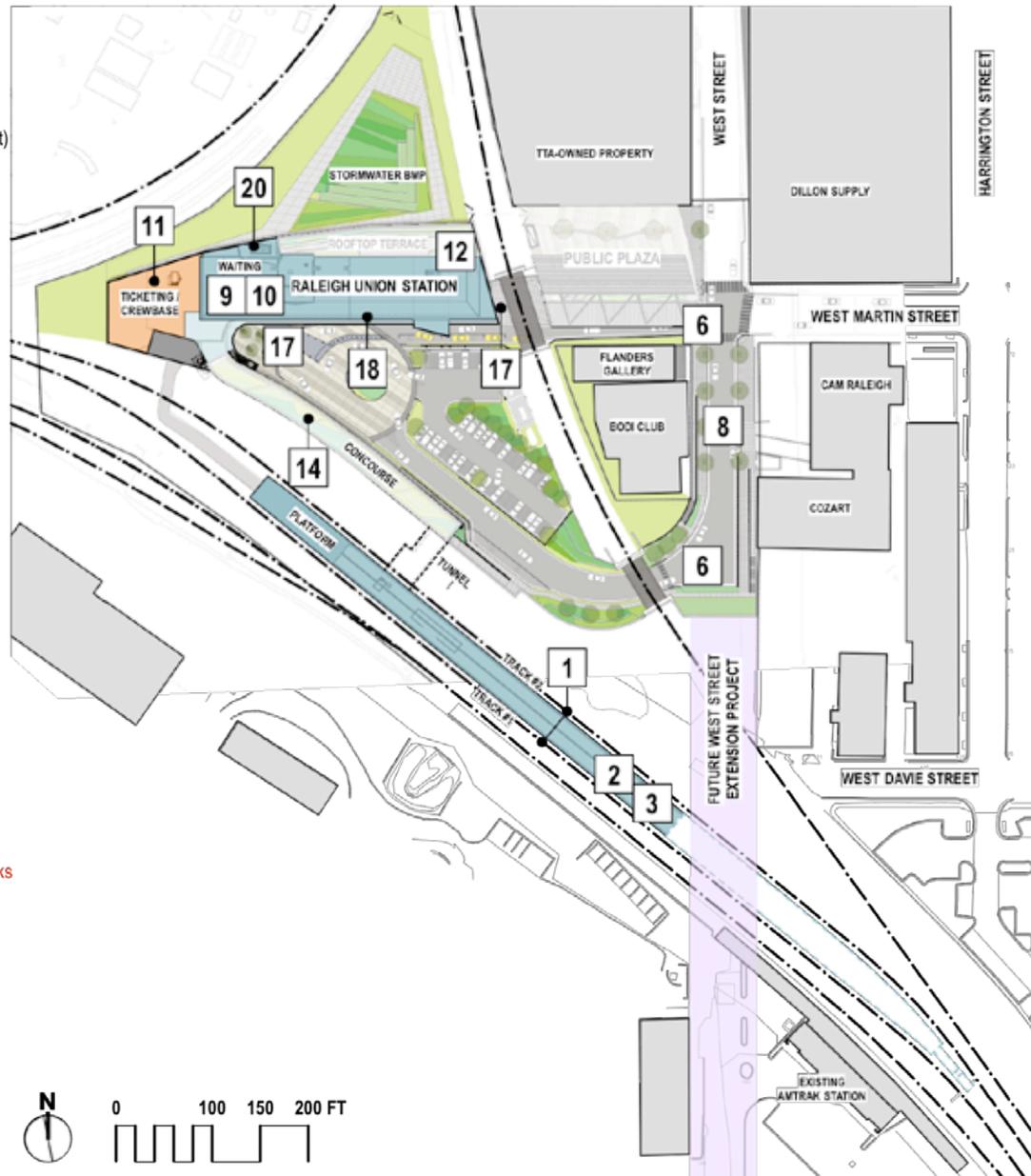
- 1 Two Dedicated Station Tracks
- 2 Center Platform (558' Perm Length, Temp at West Street)
- 3 Platform Canopy (414', Shortened for West Street)

Site Design

- 4 Postpone Public Plaza and Entry Canopy
- 5 Postpone Stormwater Garden
- 6 Grade Separated Drives at Martin and West Street
- 7 Functional and Aesthetic Landscaping + Hardscaping
- 8 West Street Improvements

Building Design

- 9 Train Station with Waiting Area
- 10 Income Generating Civic Hall (5,000 sf)
- 11 Annex for Amtrak Ticketing and Crewbase
- 12 Income Generating Lease Space (13,000 sf)
- 13 Remove Income Generating Rooftop Terrace
- 14 Descending, Enclosed and Conditioned Concourse
- 15 Remove Green Roof at Concourse
- 16 Defer Accommodations for Future Transit Services
- 17 Two Public Entrances
- 18 Signature Sawtooth Glazed Façade
- 19 Remove Building Canopy / Walkway with Train Overlooks
- 20 High Efficiency PME Systems
- 21 No Enhanced Commissioning
- 22 No LEED Certification



Value-Engineered Masterplan

Scenario 3: \$77.75 M

PROJECT SCOPE

Rail Infrastructure

- 1 Two Dedicated Station Tracks
- 2 Center Platform (558' Perm Length, Temp at West Street)
- 3 Platform Canopy (414', Shortened for West Street)

Site Design

- 4 Postpone Public Plaza and Entry Canopy
- 5 Postpone Stormwater Garden
- 6 Grade Separated Drives at Martin and West Street
- 7 Functional Landscaping + Hardscaping
- 8 West Street Improvements

Building Design

- 9 Train Station with Waiting Area
- 10 Income Generating Civic Hall (5,000 sf)
- 11 Annex for Amtrak Ticketing and Crewbase
- 12 Reduce Income Generating Lease Space (10,000 sf)
- 13 Remove Income Generating Rooftop Terrace
- 14 Redesigned Descending Concourse
- 15 Remove Green Roof at Concourse
- 16 Defer Accommodations for Future Transit Services
- 17 Two Public Entrances
- 18 Signature Sawtooth Glazed Façade
- 19 Remove Building Canopy / Walkway with Train Overlooks
- 20 Standard Efficiency PME Systems
- 21 No Enhanced Commissioning
- 22 No LEED Certification



Operationally Reduced Facility



Scenario 2: \$74.75 M

PROJECT SCOPE

Rail Infrastructure

- 1** Two Dedicated Station Tracks
- 2** Center Platform (558' Perm Length, Temp at West Street)
- 3** Platform Canopy (414', Shortened for West Street)

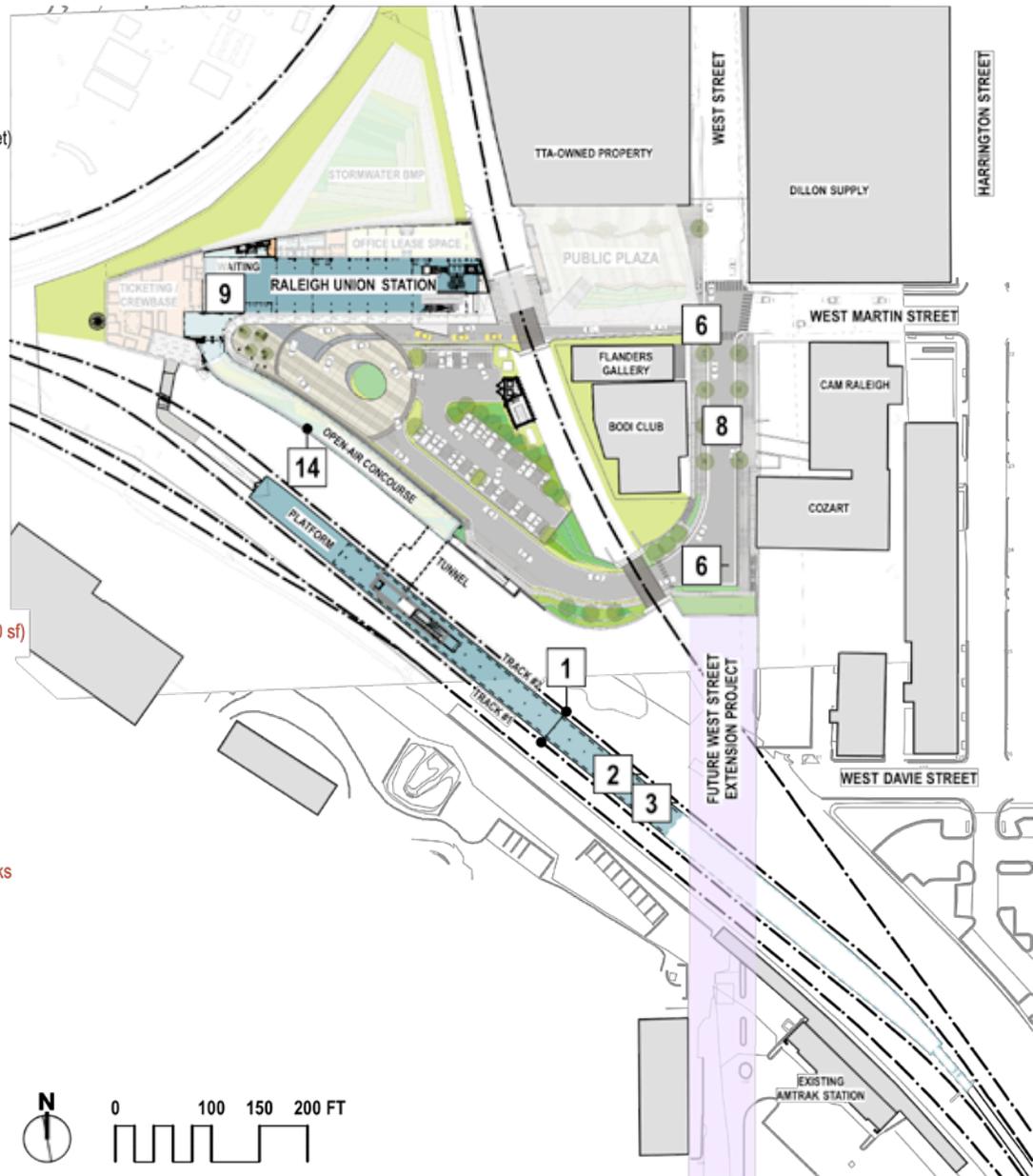
Site Design

- 4** Postpone Public Plaza and Entry Canopy
- 5** Postpone Stormwater Garden
- 6** Grade Separated Drives at Martin and West Street
- 7** Functional Landscaping + Hardscaping
- 8** West Street Improvements

Building Design

- 9** Train Station with Reduced Waiting Area
- 10** Reduced Income Generating Civic Hall (2,500 sf)
- 11** Reduced Amtrak Crewbase and Office Addition
- 12** Further Reduce Income Generating Lease Space (2,400 sf)
- 13** Remove Income Generating Rooftop Terrace
- 14** Redesigned Grade Separated, Open-Air Concourse
- 15** Remove Green Roof at Concourse
- 16** Defer Accommodations for Future Transit Services
- 17** Two Public Entrances, Postpone Escalators
- 18** Simplify Signature Glazed Façade
- 19** Remove Building Canopy / Walkway with Train Overlooks
- 20** Standard Efficiency PME Systems
- 21** No Enhanced Commissioning
- 22** No LEED Certification

**Functionally / Operationally
Reduced Facility**



Scenario 1: \$67.75 M

PROJECT SCOPE

Rail Infrastructure

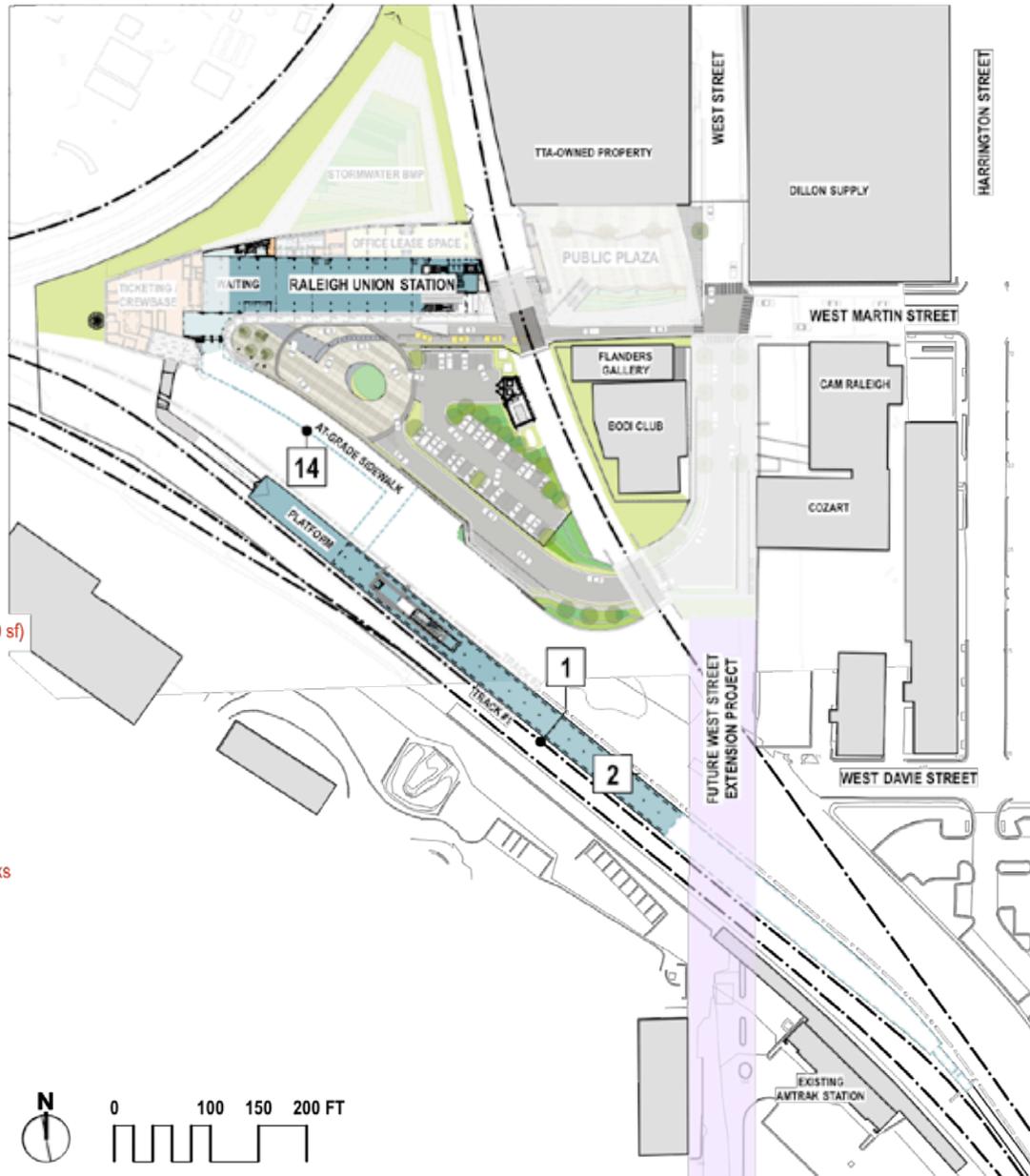
- 1** One Dedicated Station Tracks (Postpone Track #2)
- 2** Side Platform (558' Perm Length, Temp at West Street)
- 3** Platform Canopy (414', Shortened for West Street)

Site Design

- 4** Postpone Public Plaza and Entry Canopy
- 5** Postpone Stormwater Garden
- 6** Grade Separated Drive at Martin Street Only
- 7** Functional Landscaping + Hardscaping
- 8** West Street Improvements

Building Design

- 9** Modest Train Station with Reduced Waiting Area
- 10** Reduced Income Generating Civic Hall (2,500 sf)
- 11** Reduced Amtrak Crewbase and Office Addition
- 12** Further Reduce Income Generating Lease Space (2,400 sf)
- 13** Remove Income Generating Rooftop Terrace
- 14** Redesigned At-Grade Sidewalk
- 15** Remove Green Roof at Concourse
- 16** Defer Accommodations for Future Transit Services
- 17** Two Public Entrances, Postpone Escalators
- 18** Simplify Signature Glazed Façade
- 19** Remove Building Canopy / Walkway with Train Overlooks
- 20** Standard Efficiency PME Systems
- 21** No Enhanced Commissioning
- 22** No LEED Certification



**Safety / Functionally /
Operationally Reduced Facility**



Operating Support

Scenario	Forecasted Annual Operating Support
5	\$460,000
4	\$480,000
3	\$650,000
2	\$730,000
1	\$730,000

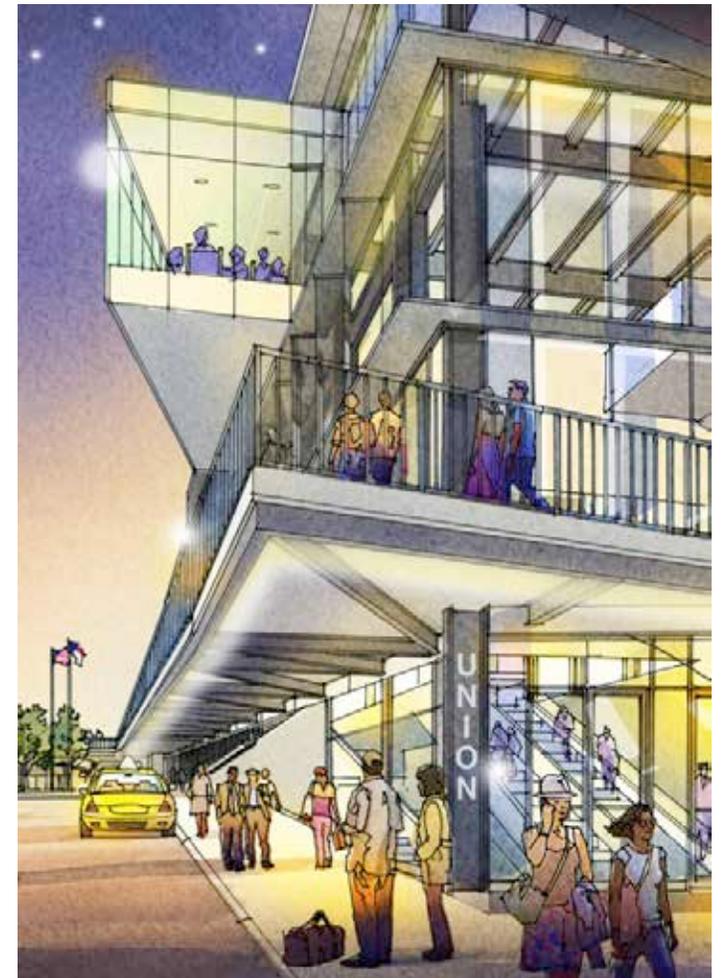
- Amount of operating support most affected by:
 - Amount of leasable space
 - Building systems and level of efficiency
- For all scenarios, one-time funding needed in FY2017 to open facility

Scenario Summary

Scenario	Staff Conclusions	Funding Gap
5	Meets project goals Requires lowest operating support	\$16,150,000
4	Meets project goals Creates future phasing opportunities Requires lower operating support	\$13,000,000
3	Meets minimal project goals Significantly reduces building quality Requires increased operating support	\$10,000,000
2	Meets minimal project goals Significantly reduces building quality Jeopardizes funding Requires increased operating support	\$7,000,000
1	Does not meet project goals Creates future West St. obligations Jeopardizes funding Require largest operating support	\$0

Next Steps

- Core Team continues to review project to identify cost saving opportunities
- NCDOT/COR staff continue to work together to identify additional non-State funding sources
- COR Staff continue to work with Duke Progress Energy on potential partnership opportunities and mitigating utility costs
- Based on Council feedback Staff could return with a recommendation & funding strategy in February/March



**CITY OF RALEIGH
INTEROFFICE MEMO**

TO: City Manager **ROOM:** 228
FROM: Interim Public Works Director
DATE: January 7, 2015
SUBJECT: Council Request for Information to Consider for Comprehensive Stormwater Program Development

This memo provides a brief outline of information that Stormwater staff plans to present to City Council on January 20, 2015 as part of the City Manager's Report.

In response to a growing number of drainage concerns from citizens and the community, Council recently asked that staff review and bring forth information for Council to consider that may begin a discussion regarding development of a more comprehensive Stormwater Management Program.

To help gather and assimilate a listing of current Stormwater program strengths, weaknesses, challenges, and opportunities, the Stormwater Management team held visioning sessions with staff representatives from across each of the existing Stormwater program service areas. Also working closely with the City Manager's team, the comprehensive feedback developed during this team-based process has been translated into a series of five key policy questions for Council to consider in terms of potentially developing more comprehensive stormwater services for the Raleigh community.

The key policy questions identified for Council's consideration are -

In what ways should the City's Stormwater Program become more proactive?

To what extent should stormwater systems be treated as public systems?

How much public benefit is sufficient to merit City participation in a stormwater improvement project?

Should the City's Stormwater Utility adopt prioritized responsibility for managing public runoff conveyed through private property based on public stormwater management benefits?

To what extent should the City invest in local stormwater services?

While regulatory mandates for the Stormwater program must continue to be satisfied under any scenario, an integral theme throughout these policy questions relates to the level of service that the City provides to qualifying drainage concerns on private property. Stormwater systems are somewhat analogous to water mains or sanitary sewer mains in that they are not limited to the street right-of-way. However, the focus of the City's Stormwater Program to date has been upon managing stormwater drainage systems that are within and integral to the public street right-of-way.

The challenge of the City's current approach is that a vast majority of drainage concerns from citizens result from the impacts of "public runoff" and development upon private property. The current approach to alleviating these concerns on private property is the drainage assistance or cost-share program, whereby property owners may petition the City for drainage assistance. Qualifying concerns include structural flooding, severe erosion, and failing drainage infrastructure. There must also be "public runoff" contributing to the qualifying problem(s). Per Council policy, "public runoff" is considered to be stormwater runoff from a public street right-of-way or other City-owned property.

Currently the City allocates \$750,000 per year to the drainage assistance program for qualifying situations on private property. This funding is allocated from part of the overall Stormwater Capital Improvement Program (CIP) funding of approximately \$5 million per year. Over 100 cost-share projects have been constructed since 2000, and there are 74 currently ongoing projects at various stages of completion with dozens more petitions pending review.

One challenge for the existing drainage assistance program involves providing efficient, effective, and equitable stormwater services for all stormwater utility rate payers in Raleigh. The current approach only brings forth those potential projects from property owners that are ready, willing, and able to cost share with the City, up to \$5,000 for each affected land parcel. Another significant challenge is that the individual parcel-based project approach often leads to piecemeal or ineffective stormwater management solutions. As one example, consider a project that stabilizes the stream bank that runs along several properties. Adjacent properties that do not or cannot participate in the cost share program may see continued or increased stormwater impacts following completion of a nearby project.

In contrast, a more efficient, effective, and equitable approach to the community's drainage needs could be to fully integrate the drainage assistance program into the City's Stormwater CIP. Qualifying public drainage concerns citywide could then be prioritized and addressed systematically utilizing any level of funding that Council deems appropriate. Approximately 80% of the City's current Stormwater CIP already follows this systematic approach, where there is an integral stormwater concern related to street right-of-way. Examples of stormwater system-based capital improvement projects include the neighborhood-wide efforts in Yorkshire Downs, greater North

Ridge, the Swift Drive area, the series of Longview Lakes and streams, and many other current and planned future CIP projects.

The well-established Stormwater Utilities of Charlotte and Greensboro have demonstrated success for many years with an integrated Stormwater CIP that does not rely upon cost-sharing for publicly beneficial stormwater system improvement projects. The level of annual investment by Charlotte in its stormwater program (~\$57 million) is significantly higher than Raleigh (~\$17 million) while the investment by Greensboro (~\$9.5 million) is lower than Raleigh. Charlotte's comprehensive five-year stormwater CIP exceeds \$213 million (approximately \$291 per capita and \$712K per square mile of area served). Raleigh's five-year stormwater CIP is approximately \$30 million (around \$74 per capita and \$208K per square mile of area served).

A key takeaway here is that moving to a fully integrated approach to stormwater management in Raleigh does not necessarily imply that greater resources are required. There would certainly be an increase in the number of potentially qualifying projects that would be eligible for inclusion in the program's CIP under a more comprehensive, system-based approach to stormwater services. However, potential projects would be prioritized and implemented based upon available allocated resources and public benefits. At the same time, drawing from the experience of Charlotte's program in particular, it is highly probable that greater capital improvement resources will need to be considered over time to address a growing number of citywide stormwater needs.

During the January 20th presentation to Council, in addition to a brief background of the historical development of the City's Stormwater Program, staff will provide a summary of Raleigh's Stormwater funding and user fee rates relative other large cities in North Carolina. Raleigh's current average monthly stormwater fee of \$4 is close to the \$3.90 median for municipal stormwater utilities in NC. While community needs and service level expectations have grown in recent years and may continue into the future, Raleigh's stormwater fees have remained constant since program inception in 2004.

Staff appreciates the opportunity to begin this discussion with Council and looks forward to providing any additional information that Council requires.

cc: Tansy Hayward, Assistant City Manager
Joyce Munro, Management and Budget Director
Blair Hinkle, Stormwater Program Manager

