

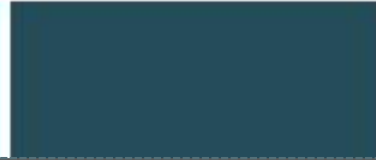


Steering Committee Meeting

Redbud Room, William & Ida Friday Center
March 13, 2015



*Durham-Orange
Light Rail Transit
Project*



Agenda

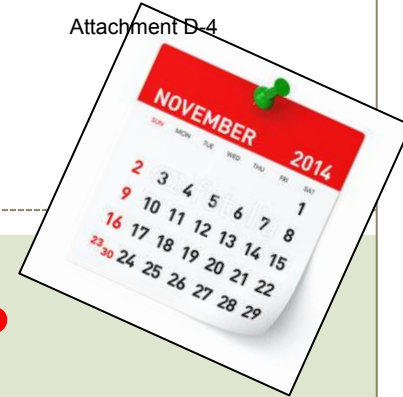


- Welcome and Introductions
- Meeting Objectives
- Quick Project Update
- What We Study
- Five Key Decisions in DEIS: Reviewing the DATA
- Action Items
- Adjourn

Meeting Objectives



Quick Project Update



What's Changed Since November?

- Results of Data Analysis between UNC Hospitals and Trent/Flowers Stations
- Future Railroad Capacity Requirements defined by NCRR for their Right-of-Way
- Alignment Refined between Trent/Flowers and Alston Ave Stations in Collaboration with NCRR and City of Durham
 - Elevated guideway continues over Swift Avenue
 - Shifts in alignment and station locations
 - Bi-directional Transitway: one-way eastbound automobile traffic on Pettigrew Street between Chapel Hill and Dillard Streets
- May 2015: Results of Data Analysis between Trent/Flowers and Alston Avenue Stations

Current Schedule & Milestones



| PROJECT DEVELOPMENT TASKS | PROJECTED SCHEDULE |
|---|-----------------------|
| Technical and Communications Advisory, and Steering Committee Meetings: UNC Hospitals to Trent Flowers | February - March 2015 |
| Open House Public Meetings: UNC Hospitals to Trent/Flowers | March 18 and 19, 2015 |
| Technical and Communications Advisory, and Steering Committee Meetings: UNC Hospitals to Alston Avenue | May 2015 |
| Open House Public Meetings: UNC Hospitals to Alston Avenue | June 4 and 6, 2015 |

Current Schedule & Milestones



| PROJECT DEVELOPMENT TASKS | PROJECTED SCHEDULE |
|---|--------------------|
| Development of Recommended NEPA Preferred Alternative | April – May 2015 |
| Administrative DEIS submitted to FTA | June 2015 |
| 45-day Public Review and Comment Period on DEIS | Sept – Oct 2015 |
| Publication of the FEIS /ROD by FTA | Feb 2016 |

What We Study



- **Transit Ridership**
- **Regional Travel Patterns**
- **Capital & Operating Costs**
- **Noise / Vibration**
- **Cultural & Historic Resources**
- **Public Parklands**
- **Natural Resources**
- **Energy Use**
- **Traffic**
- **Utilities**
- **Air Quality**
- **Water Quality**
- **Land Use**
- **Bicycle & Pedestrian Facilities**
- **Visual & Aesthetic**
- **Minority & Low-Income Population Impacts**
- **Neighborhoods**
- **Business & Residential Impacts**
- **Population Served**
- **Employment Served**
- **Construction Impacts**



**Five Key Decisions
In
“Project Development”**

#1- To Build or Not to Build

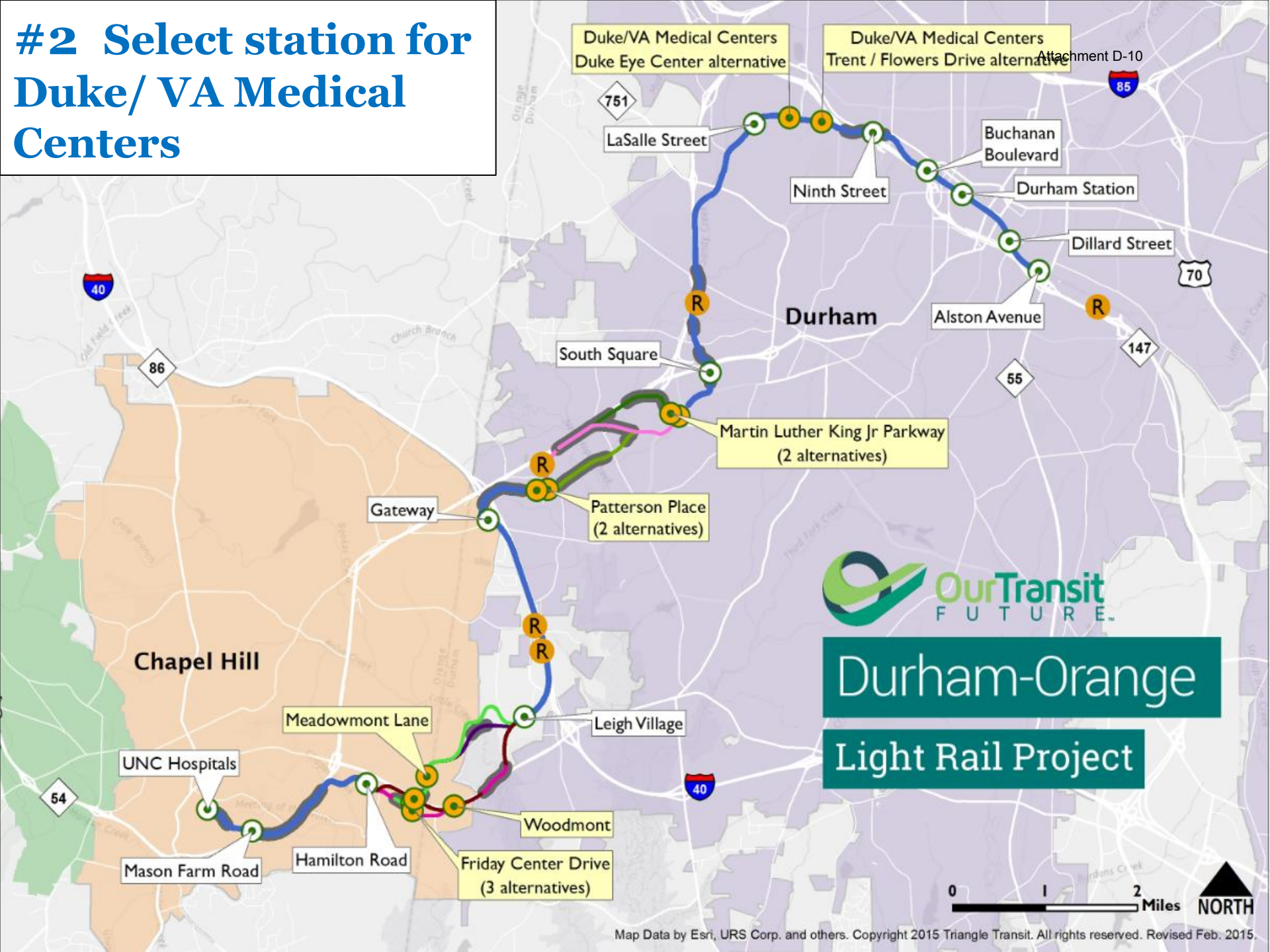


Build

No Build



#2 Select station for Duke/VA Medical Centers



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Map Data by Esri, URS Corp. and others. Copyright 2015 Triangle Transit. All rights reserved. Revised Feb. 2015.

**Duke Eye Center
Alternative**

**Trent/Flowers
Drive Alternative**

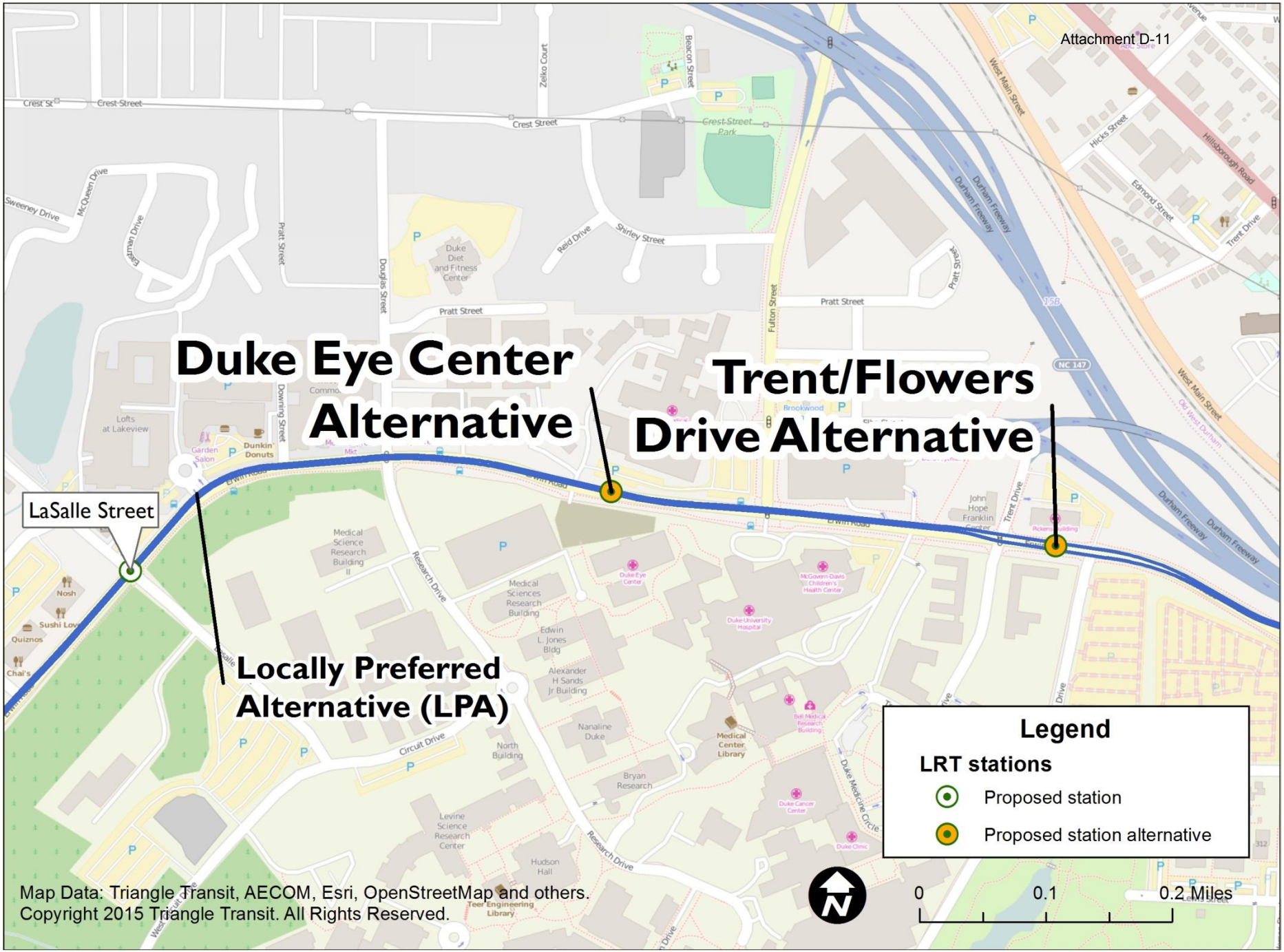
**Locally Preferred
Alternative (LPA)**

LaSalle Street

Legend

LRT stations

- Proposed station
- Proposed station alternative



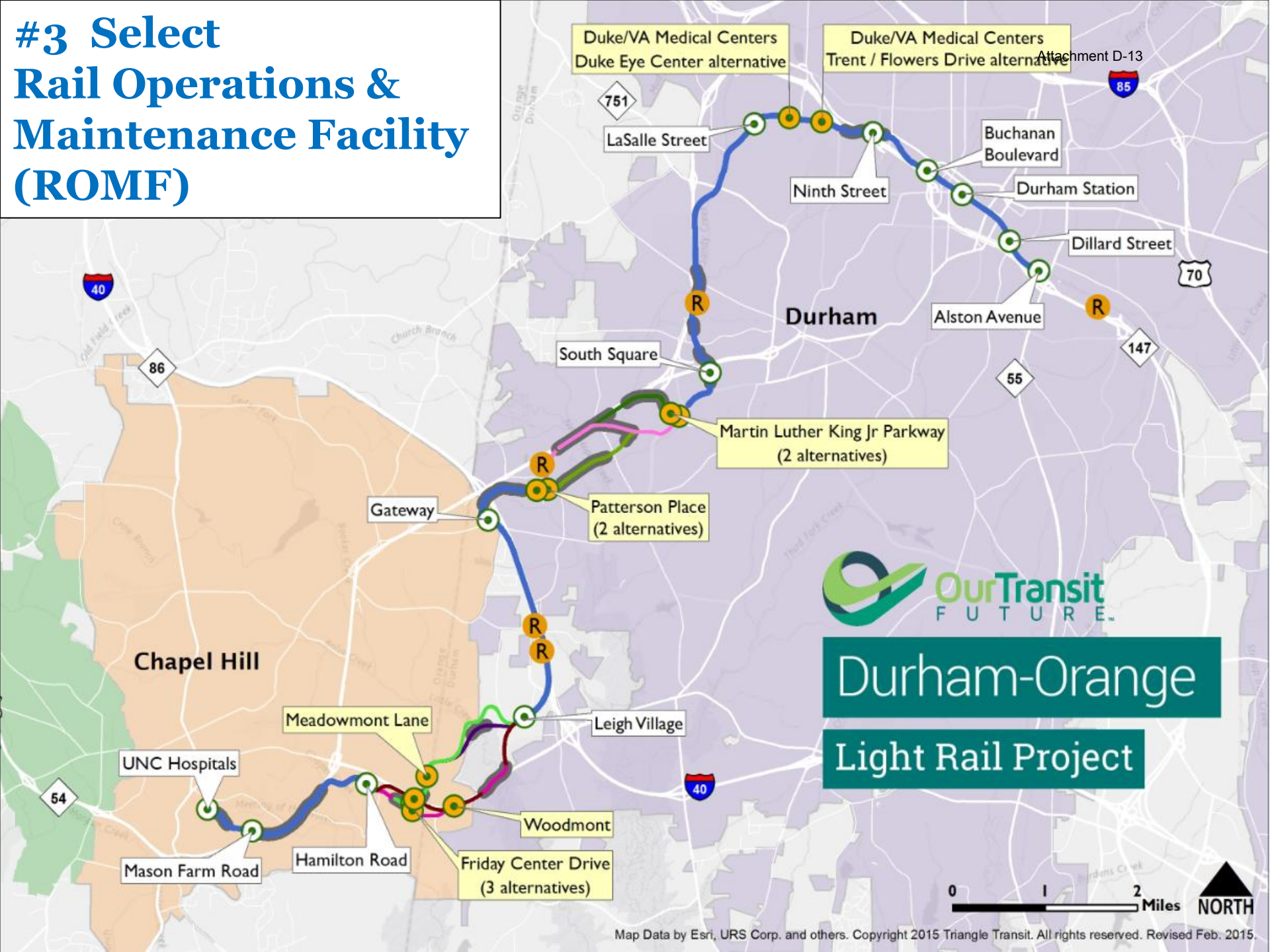
Duke/VA Medical Centers: Summary



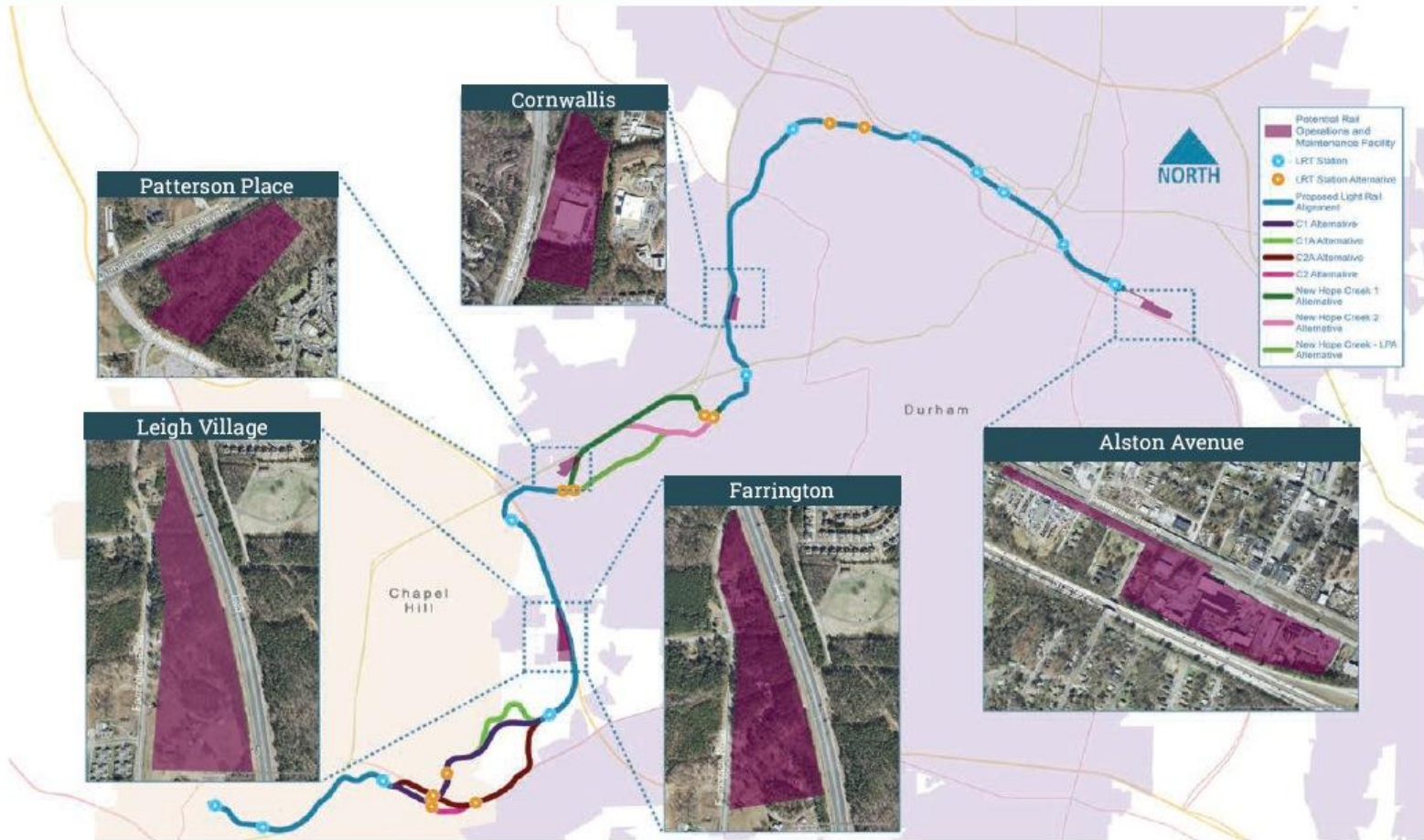
- Duke and VA have expressed preference for Trent/Flowers station location due to:
 - Less traffic and pedestrian congestion compared to Eye Care Center Drive area
 - Future Duke University plans for West Campus
- Eye Care Center and Trent/Flowers station locations largely perform exactly the same across virtually all metrics
- Differences in ridership and population served in 2040 are very minor



#3 Select Rail Operations & Maintenance Facility (ROMF)



Select the Rail Operations & Maintenance Facility Location



The five Rail Operations & Maintenance Facility (ROMF) alternatives under consideration in this area will be evaluated based on the assessment criteria. In certain instances, criteria are uniform across the alternatives while other criteria will help to inform the study and to distinguish and select an alternative.

ROMF: Capital Cost



| Alternatives | Leigh Village | Farrington Rd | Patterson Place | Cornwallis Rd | Alston Ave |
|-----------------------------------|---------------|---------------|-----------------|---------------|------------|
| Capital Cost (millions of \$2015) | \$50-\$65 | \$50-\$65 | \$70-85 | \$65-\$80 | \$55-\$70* |

*Additional costs to be determined pending completion of downtown Durham alignment analysis



ROMF: Acquisitions & Displacements

| Alternative | Leigh Village | Farrington Rd | Patterson Place | Cornwallis Rd | Alston Ave |
|--------------------------|---------------|---------------|-----------------|---------------|------------|
| Residential Acquisitions | 1 | 6 | 0 | 0 | 2 |
| Commercial Acquisitions | 2 | 0 | 0 | 1 | 6 |
| Vacant Land Acquisitions | 2 | 5 | 2 | 0 | 11 |
| Full Acquisitions | 5 | 11 | 2 | 1 | 19* |
| | | | | | |
| Residential (land only) | 2 | 0 | 0 | 0 | 0 |
| Agriculture | 0 | 0 | 1 | 0 | 0 |
| Partial Acquisitions | 2 | 0 | 1 | 0 | 0* |

*Additional impact estimating to be done pending completion of downtown Durham alignment analysis

ROMF: Hazardous, Contaminated & Regulated Materials

Attachment D-17



| Alternatives | Leigh Village | Farrington Rd | Patterson Place | Cornwallis Rd | Alston Ave |
|-------------------|---------------|---------------|-----------------|---------------|------------|
| High Risk Sites | 0 | 0 | 0 | 0 | 2 |
| Medium Risk Sites | 0 | 0 | 0 | 1 | 8 |



ROMF: Socioeconomic & Demographic Conditions

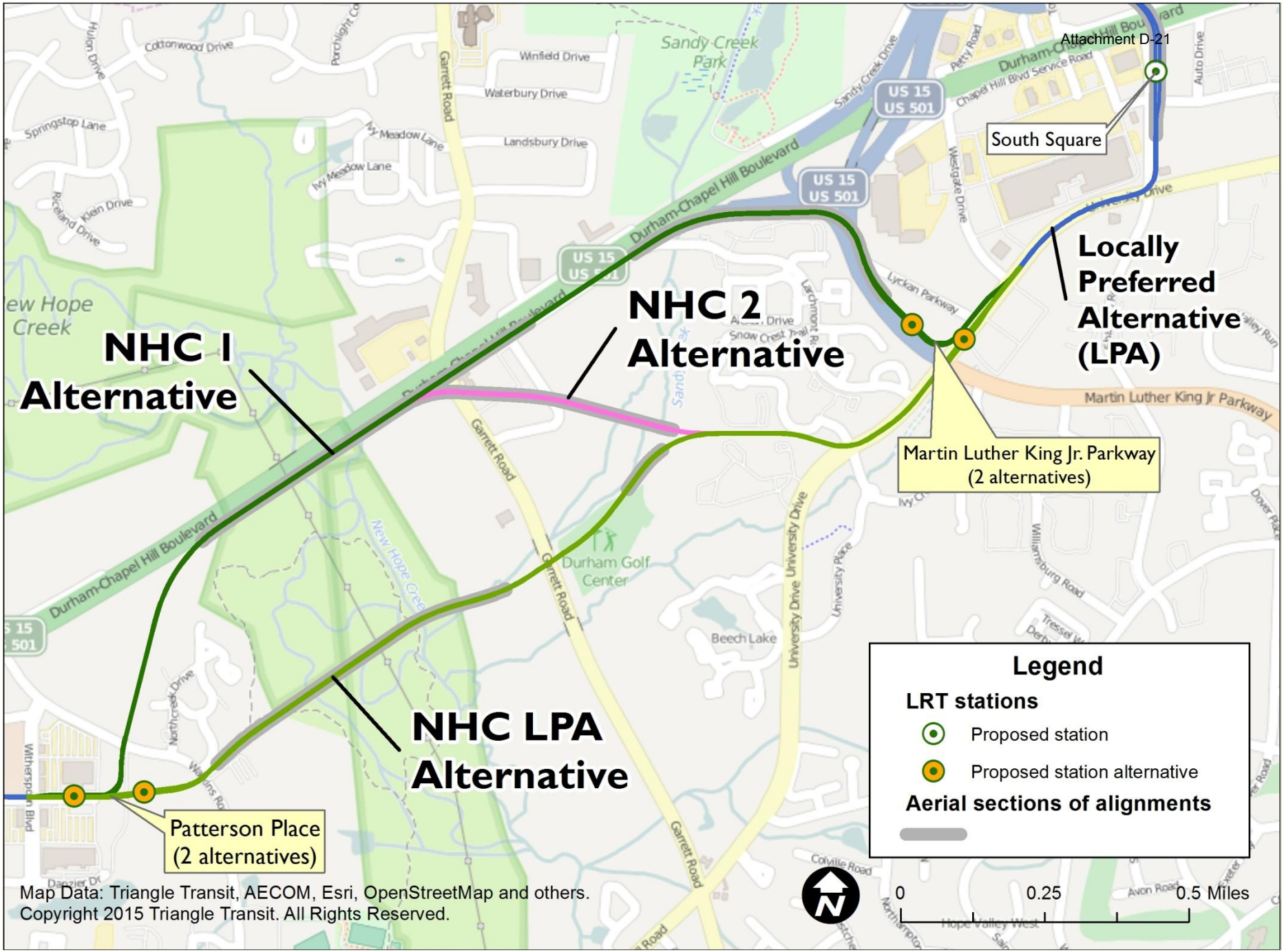


| Alternatives | Leigh Village | Farrington Rd | Patterson Place | Cornwallis Rd | Alston Ave |
|---------------------------------|---------------|---------------|-----------------|---------------|------------|
| Minority Population (%) | 29% | 29% | 55% | 55% | 94% |
| Below Poverty (%) | 15% | 15% | 24% | 24% | 48% |
| Zero Car Households (0%) | 5% | 5% | 12% | 12% | 50% |
| Limited English Proficiency (%) | 5% | 5% | 16% | 16% | 5% |

ROMF Sites: Summary



- Patterson Place ROMF site most expensive, only works with NHC-LPA. Choosing NHC1 or NHC2 alignment eliminates Patterson Place ROMF site
- Leigh Village and Farrington ROMF sites overlap; FTA to determine eligibility of historic resource on Leigh Village ROMF site
- Cornwallis Road ROMF site may have implementation challenges including access, topography, constructability and connection to the LRT alignment
- Alston Avenue ROMF site cost may rise and also result in schedule impacts due to cleanup, and the requirements of business relocations (including one business with a freight rail spur)



**NHC I
Alternative**

**NHC 2
Alternative**

**Locally
Preferred
Alternative
(LPA)**

**NHC LPA
Alternative**

**Patterson Place
(2 alternatives)**

South Square

**Martin Luther King Jr. Parkway
(2 alternatives)**

Legend

LRT stations

- Proposed station (Green circle with white center)
- Proposed station alternative (Orange circle with white center)

Aerial sections of alignments

- (Grey line)



New Hope Creek: Travel Time

| Alternative | NHC-LPA | NHC1 | NHC2 |
|------------------|---------|------|------|
| Minutes: Seconds | 8:44 | 8:47 | 9:15 |



- NHC1 is 3 seconds slower than NHC-LPA
- NHC2 is 28 seconds slower than NHC1

New Hope Creek: Ridership

| Alternative | NHC-LPA | NHC1 | NHC2 |
|----------------------------|---------|------|------|
| Additional Daily Boardings | +220 | +390 | -- |



- Lowest ridership alternative: C1A, NHC2, Duke Eye Care Center Station with 23,560 daily boardings
- NHC-LPA adds 220 daily boardings compared to NHC2
- NHC1 adds 390 daily boardings compared to NHC2

New Hope Creek: Capital Cost



| Alternative | NHC-LPA | NHC1 | NHC2 |
|-------------------------------|---------|-----------|----------|
| Additional Cost (\$ millions) | -- | +\$16.3 m | +\$3.4 m |

- Lowest capital cost alternative: C2, NHC-LPA, either Duke/VA station at \$1.522 billion
- NHC1 adds \$16.3m in capital cost
- NHC2 adds \$3.4m in capital cost

New Hope Creek: Operating Cost



| Alternative | NHC-LPA | NHC1 | NHC2 |
|----------------------|---------|------------------|-----------------|
| Additional Cost (\$) | -- | + \$180,100/year | + \$75,600/year |

- Lowest operating cost alternative: C1, NHC-LPA, either Duke/VA station at \$16,846,000/year
- NHC1 adds \$180,100/year in operating/maintenance cost
- NHC2 adds \$75,600/year in operating/maintenance cost

New Hope Creek: Natural Resources

| Alternative | NHC-LPA | NHC1 | NHC2 |
|---|---------|------|------|
| Bottomland (Acres) | 4 | 2 | 3 |
| Alluvial (Acres) | - | - | - |
| Mesic Mixed (Acres) | 5 | 5 | 8 |
| Maintained/Disturbed (Acres) | 19 | 22 | 17 |
| Total Biotic Resources Impacted (Acres) | 28 | 29 | 28 |



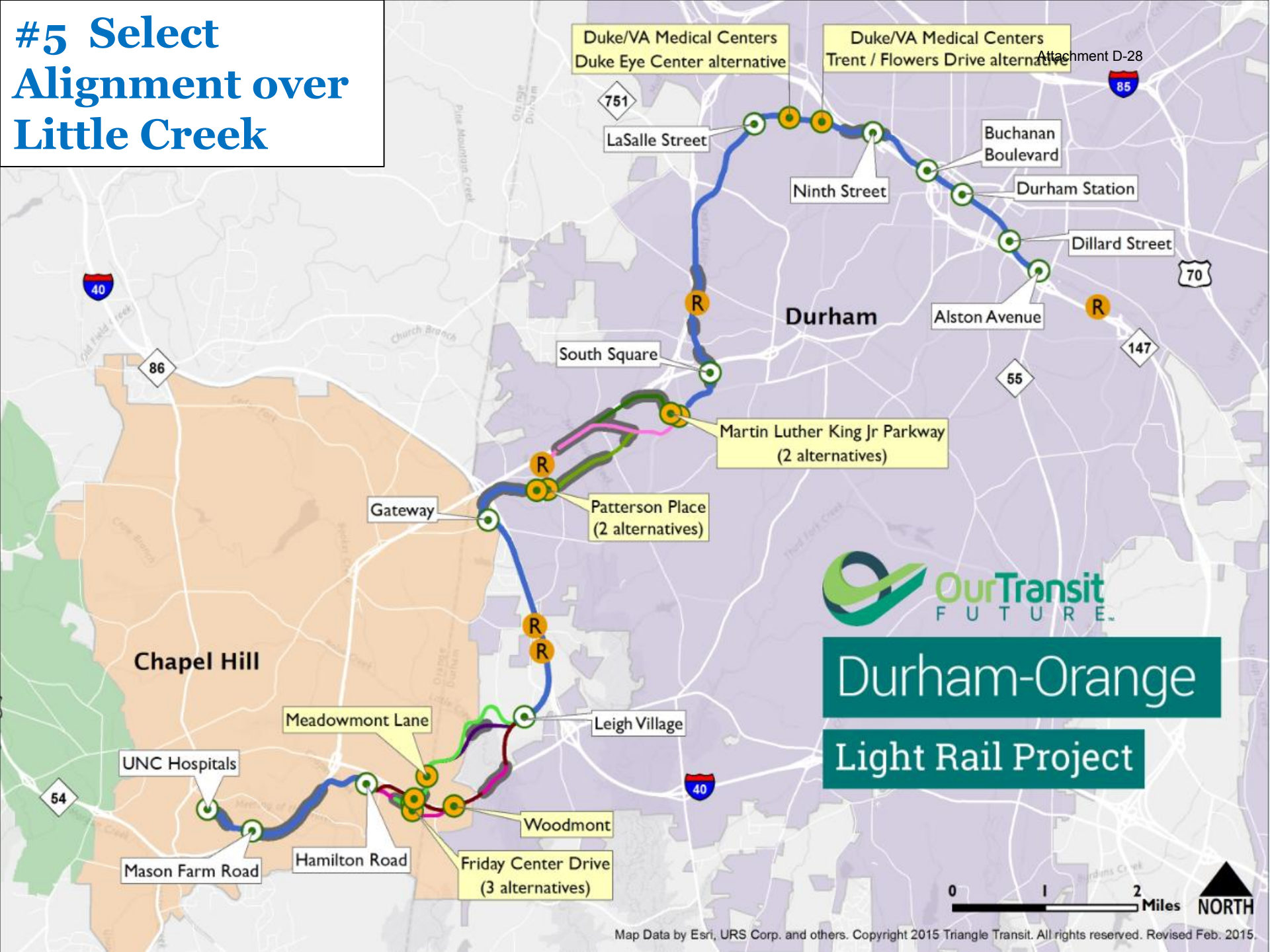
New Hope Creek: Key Differences



- **NHC-LPA**
 - Lowest capital and operating costs
 - Introduces a new transportation corridor
- **NHC Alt 1**
 - Highest capital and operating costs
 - Impacts the highest number of businesses
- **NHC-Alt 2**
 - Less bottomland impact than LPA
 - Slightly less water resource impacts than LPA
 - Capital cost closer to LPA than NHC 1



#5 Select Alignment over Little Creek



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Locally Preferred Alternative (LPA)

CIA Alternative

C2A Alternative

CI Alternative

C2 Alternative

Leigh Village

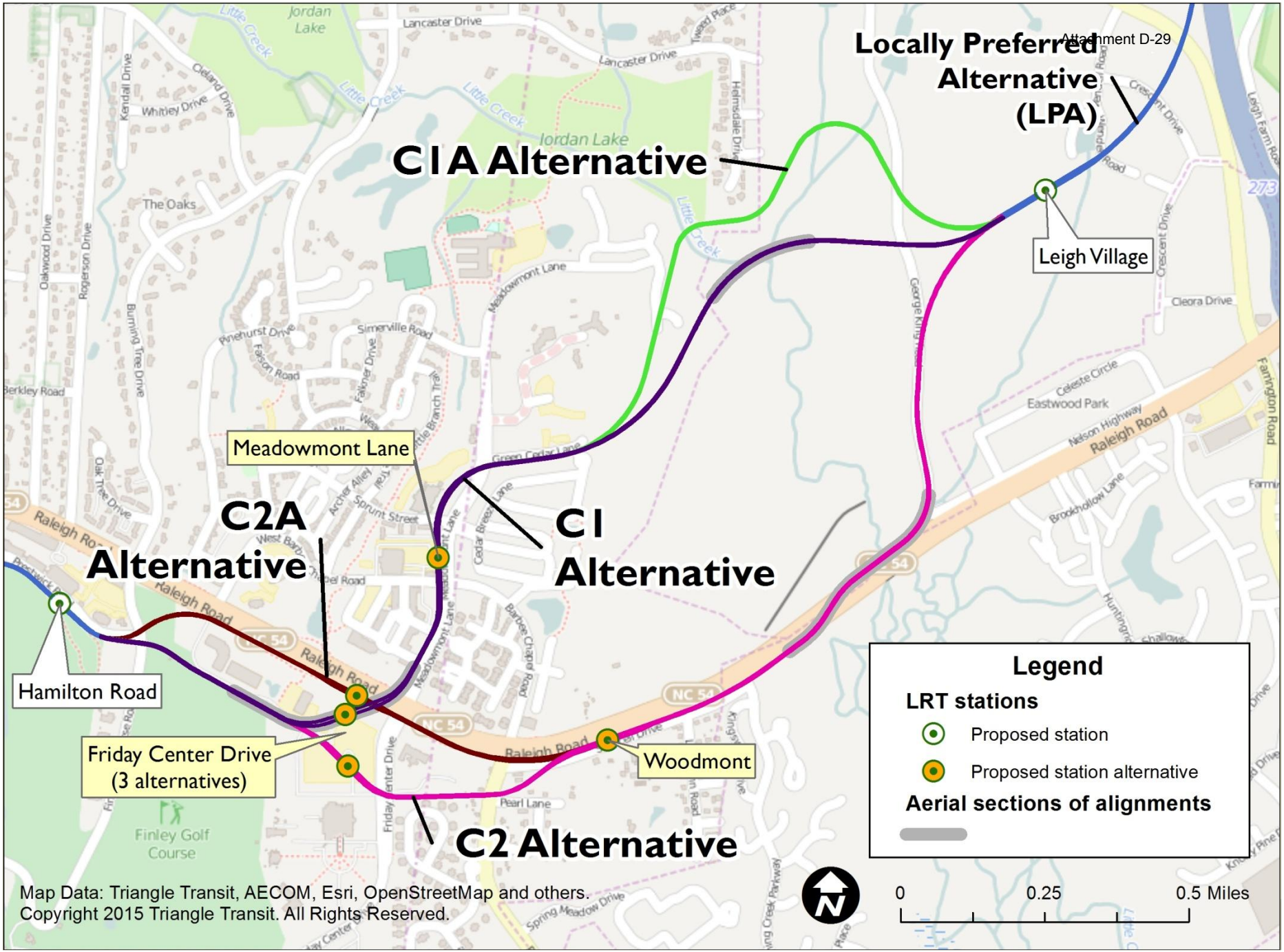
Hamilton Road

Friday Center Drive (3 alternatives)

Woodmont

Legend

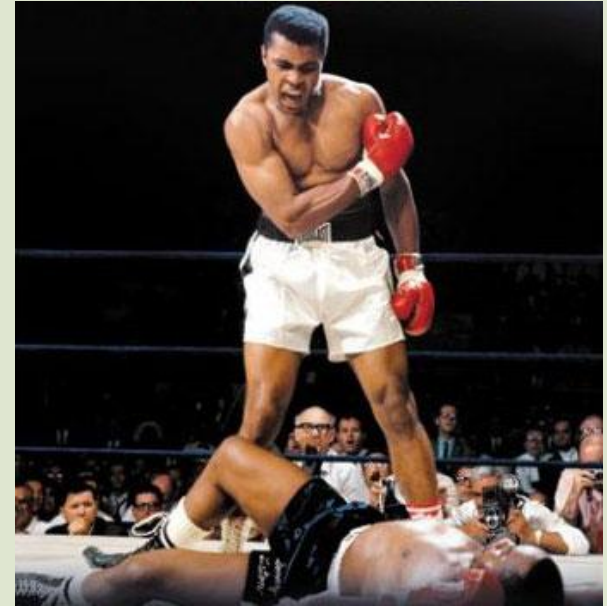
- Proposed station
- Proposed station alternative
- Aerial sections of alignments



Little Creek: C1 Eliminated



- US Army Corps of Engineers provided a letter stating that C1A, C2, and C2A were viable alternatives but that C1 was not.
- USACOE would not authorize use of federal government property (game lands and a waterfowl impoundment) for C1 “given the availability of less damaging alternatives.”



Little Creek: Travel Time



| Alternative | C1A | C2 | C2A |
|------------------|------|------|------|
| Minutes: Seconds | 6:59 | 6:03 | 5:53 |

- C2 time 56 seconds shorter than C1A
- C2A time 10 seconds shorter than C2



Little Creek: Ridership



| Alternative | C1A | C2 | C2A |
|----------------------------|-----|------|------|
| Additional Daily Boardings | -- | +720 | +730 |

- Lowest ridership alternative: C1A, NHC2, Duke Eye Care Center Station with 23,560 daily riders
- C2 and C2A both add over 700 daily riders compared to C1A



Little Creek: Capital Cost



| Alternative | C1A | C2 | C2A |
|-----------------------------------|------------|----|----------|
| Additional Cost (\$2015 millions) | + \$36.0 m | -- | +\$7.6 m |

- Lowest capital cost alternative: C2, NHC-LPA, either Duke/VA station at \$1.522 billion
- C2A adds \$7.6m in capital cost
- C1A adds \$36.0m in capital cost



Little Creek: Operating Cost



| Alternative | C1A | C2 | C2A |
|----------------------|-----------------|-----------------|-----------------|
| Additional Cost (\$) | + \$82,100/year | + \$56,900/year | + \$56,900/year |

- Lowest operating cost alternative: C1 (eliminated), NHC-LPA, either Duke/VA station at \$16,846,000/year
- C2 and C2A add \$56,900/year in operating/maintenance cost
- C1A adds \$82,100/year in operating/maintenance cost

So what do you think?



Our work continues...



- Ongoing Public Outreach – seeking engagement with business and property owners, residents and tenants within the Corridor
- Development of DEIS Technical Reports and Analyses
- Ongoing collaboration with FTA, Resource and Regulatory Agencies, Local Governments and other Project Partners



We could use your help!



- **Steering Committee**
 - Provide Triangle Transit with input on the 5 Key Decisions to inform the proposed NEPA Preferred Alternative (April - May 2015)
 - Request additional information or briefings
 - Develop formal comments from your organization or jurisdiction for submission before or during the 45-day Public Review and Comment Period on the DEIS (Sept-Oct 2015)
- **Next Steering Committee meeting: May 20th or 21st**

Adjourn



For more information, please
check OurTransitFuture.org