

**Table A-1 Characteristics of Candidate Transit Vehicle Technologies**

Item	Std Bus	Mall Bus	Artic Bus	Bi-Artic	Stream	Civis	"GLT"	LRT1	LRT2	DMU1	DMU2	DMU3
See Figure Nos.	1	2	3	4	5	6	7 & 8	9 & 10B	11 & 12	13 & 14	15-20	21-23
Supplier(s)	Many	Neoplan	Many	Volvo	Breda	Matra	2 [a]	Many	Many	3 [b]	Several	2 [c]
Dimensions:												
- Length	40'	40'	60'	80'	40', 60'	~60', 80'	83.3'	~60'-155'	80'-95'	85'	110'-200'	80'-125'
- Width	8.5'	8.5'	8.5'	8.5'	8.2'	8.4'	8.2'	~7.5'-8.7'	8.7'-9.5'	10.5'	9.2'-10.2'	8.7'-9.8'
- Height	10'	9.5'	10'	10'	10'	~10.5'	10.6'	~11'-11.5'	~11.5'-12'	13.1'	12'-12.7'	11'-12.8'
Low Floor:												
- % of Length	70-100%	100%	80-100%	None [d]	100%	100%	100%	70-100%	70-100%	None [d]	60-70%	60-70%
- Entry Height	14.5"	14.5"	14.5"	~36"	14.5"	~13"	~14"	~14"	~14"	51"	24"	~14-22"
Accommodations:												
- Air Conditioning	Yes	Yes	Yes	Yes	??	Yes	No?	Yes & No	Yes	Yes	Yes & No	Yes & No
- Seats/Vehicle	~45	~20	~65	~85	~45 & 65	~45 & 65	48	~25-125	~60-75	~90-110	~90-100	~75-100
- Psgrs/Vehicle [f]	65	45	110	145	65 & 110	110 & 145	150	110-285	~145-175	~165-175	~165-175	~125-175
- Psgrs/Train [g]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	220-285	290-350	330-350	330-350	250-350
Propulsion Alternatives:												
- Diesel, Diesel-Electric	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes
- Battery Electric [i]	No	Yes	No	No	Yes	Yes	Yes	Maybe	Maybe	No	No	No
- Straight Electric [m]	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No	No	No
Operating Capability:												
- Max Speed (mph)	65	~45	65	45?	~45	~45	~45	~45	55-65	80-100	60-100	50-60
- Max Grade (%):												
- Technical	12%+	12%+	12%+	~9-10%?	12%+?	13%	13%	8%	7%	1%-3%	1%-3%	6&
- Practical for Ops [i]	5%	5%	5%	5%	5%	5%	5%	5%	4%	1%	1%	2%
- Miin Curve (Radius):												
- Technical	35'-42'	35'	40'	~40'?	~40'?	40'	40'	50'-60'	82'	250'	328'	85'-265'
- Practical for Ops	45'	40'	45'	45'?	45'?	45'	45'	65' [j]	85'	500'	500' [j]	[k]
- Directionality [h]	SE	SE	SE	SE	SE	SE	SE [n]	SE or DE	DE	DE	DE	DE
FRA Structure	n/a	n/a	n/a	n/a	n/a	n/a	n/a	No	No	Yes	No	No

[a] Bombardier *Tram on Tires*, Lohr Industrie *Translohr*. Data for *Tram on Tires*, but *Translohr* very similar. [b] Siemens *RegioSprinter* (in service), Adtranz *GTW 2/6* (ordered), Bombardier *Tram Train* (concept only). [c] Bombardier & Nippon Sharyo, concepts offered but none built to date. [d] High platforms at same height as vehicle floor used to provide level boarding. [e] Step loading, not set up for level boarding. [f] Standees are calculated at approximately 3 sq ft per person in the interior area not used for seats. [g] Total, seated & standing, 2-car trains where applicable. [h] SE - one operating cab, doors on one side, uni-directional; DE - two operating cabs, doors on both sides, bi-directional. [i] May be exceeded for short stretches of +/- 1-2 blocks or less. [j] For railroad-type cars, allows 25 mph speed with 3 inches of superelevation. [k] Depends on capability of vehicle selected. [l] For limited-range movements, usually in yards and around obstructions. [m] Power from overhead contact system (OCS) except Stream. [n] *Translohr* intends to offer both SE and DE versions of its guided bus, but the DE version - unlike the SE vehicle - would not be intended for operation both on and off the guideway.

# Appendix A

## Candidate Vehicle Illustrations



**Figure A-1:** 40' Low Floor Bus  
(Fuel Cell Propulsion)



**Figure A-2:** New Low Floor Mall Shuttle  
(16th Street Mall, Denver)



**Figure A-3:** Tri-Met Articulated Bus



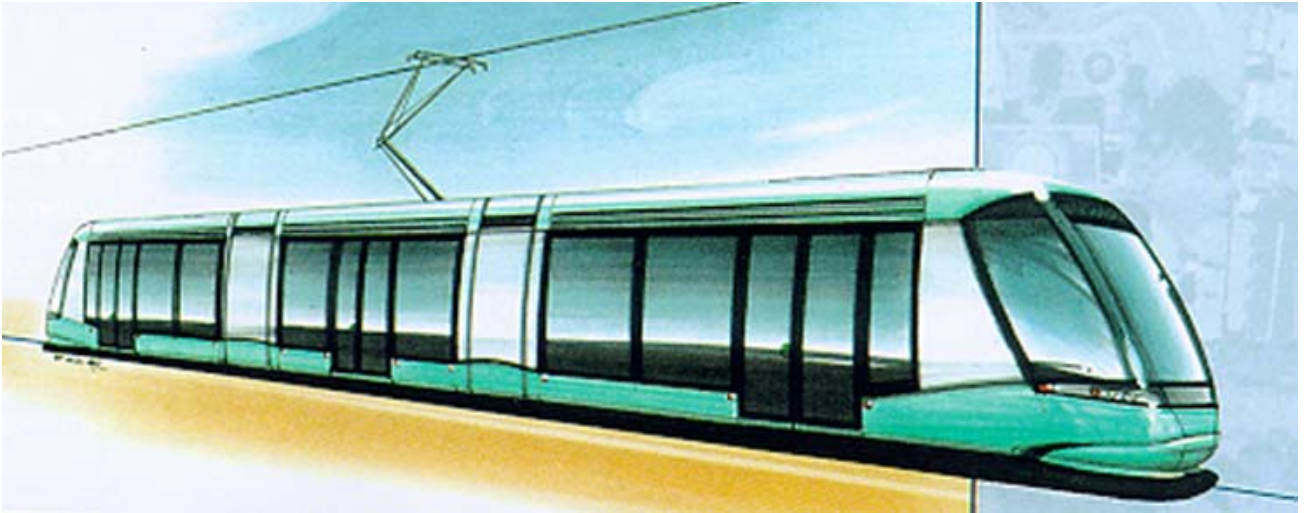
**Figure A-4:** Curitiba Bi-Articulated Bus



**Figure A-5:** Stream, Non-articulated Bus



**Figure A-6:** Civis



**Figure A-7:** Translohr



**Figure A-8:** Tram-on-Tires



**Figure A-9:** Sacramento LRT, 4-Car Train



**Figure A-10:** Astra Low Floor LRV for City-type Service



**Figure A-11:** Combino LRV for City-type Service



**Figure A-12:** Portland Low Floor LRV for Regional Service



**Figure A-13:** Portland Low Floor LRV



**Figure A-14:** Nippon Sharyo Type 1 DMU





**Figure A-15:** Bombardier Type 1 DMU



**Figure A-16:** Dallas RDC (Type 1 DMU)



**Figure A-17:** Coradia Type 2 DMU



**Figure A-18:** Flexliner Type 2 DMU



**Figure A-19:** Regio-Shuttle Type 2 DMU



**Figure A-20:** Talent Type 2 DMU



**Figure A-21:** New Jersey DLRV  
(Type 3 DMU)



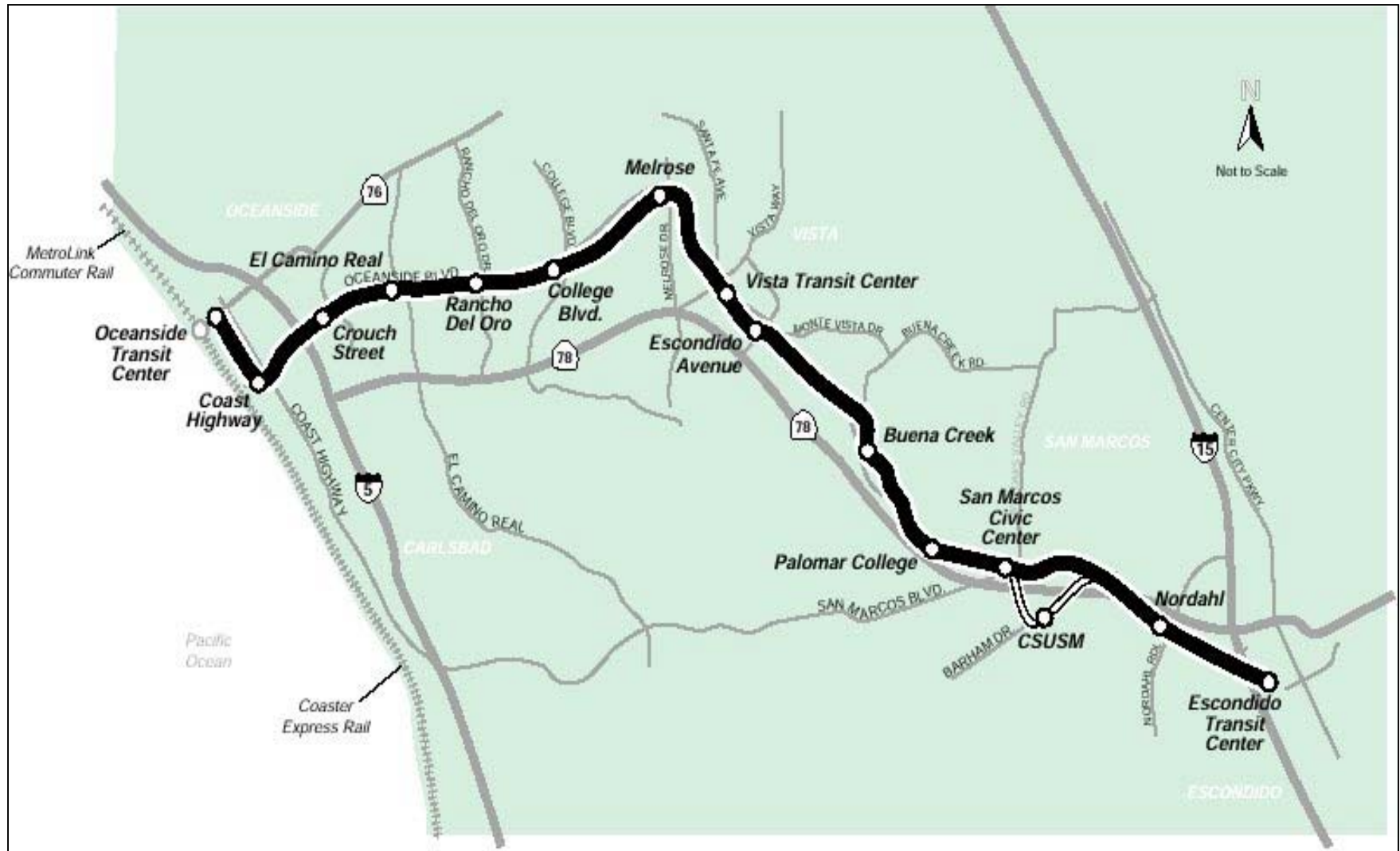
**Figure A-22:** RegioSprinter DLRV (Type 3 DMU)



**Figure A-23: Tram Train (Potential Type 3 DMU)**

# Route Map and Station Locations

## SAN DIEGO - Oceanside-Escondido Line



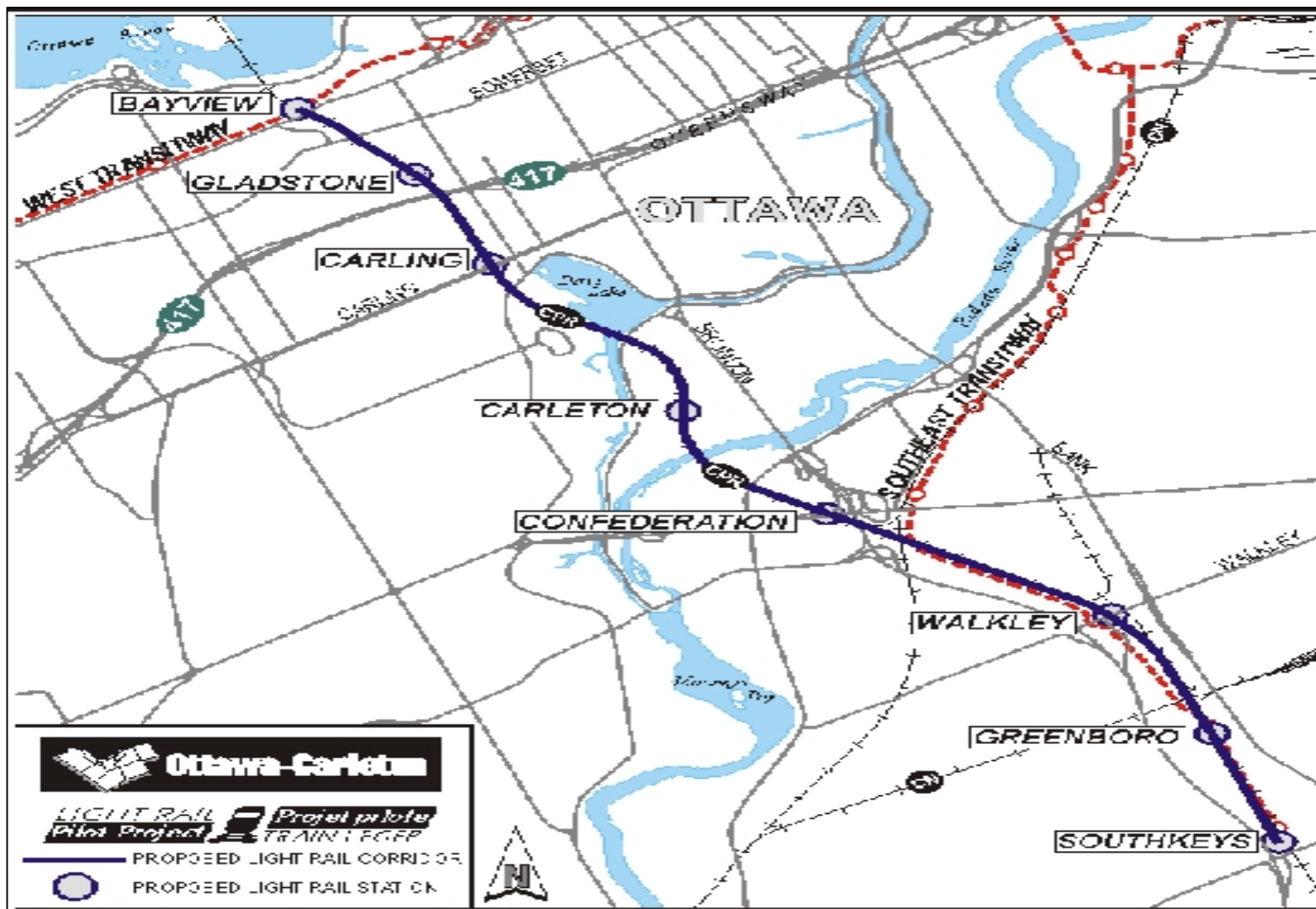
# Route Map and Station Locations

## RALEIGH-DURHAM - TTA Phase I Regional Rail Line



# Route Map and Station Locations

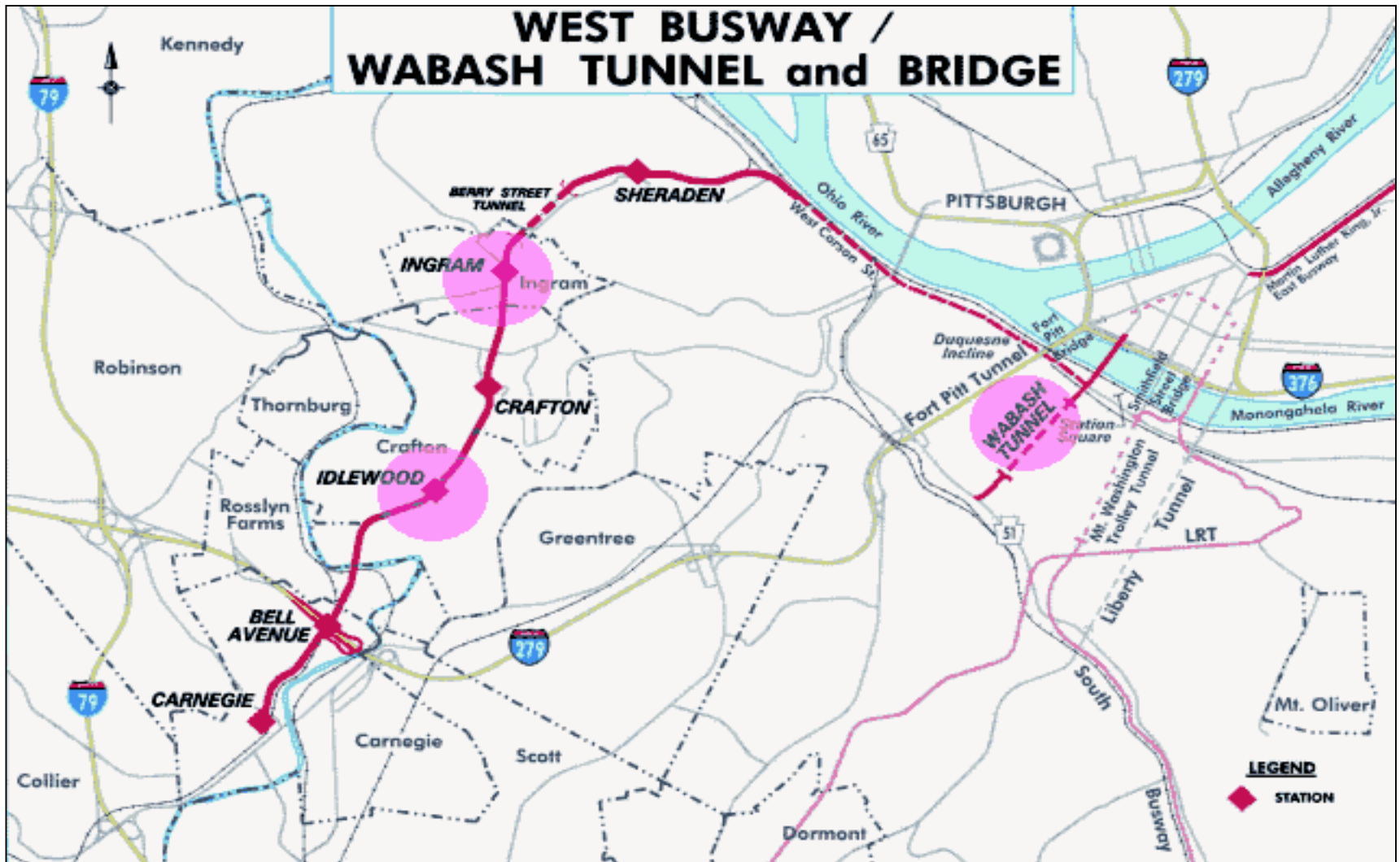
## OTTAWA - Light Rail Pilot Project (LRPP)





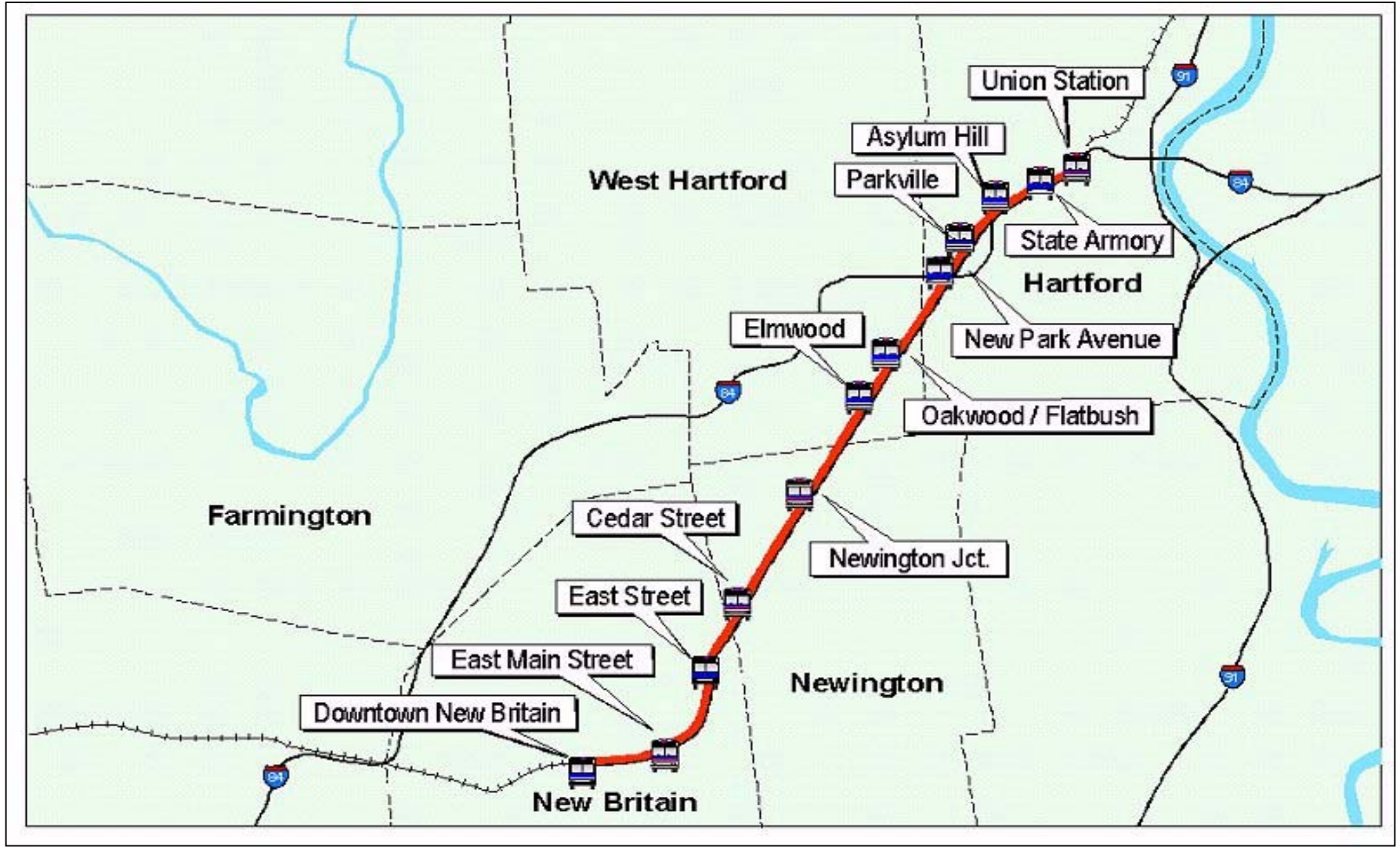
# Route Map and Station Locations

PITTSBURGH - Port Authority West Busway



# Route Map and Station Locations




HARTFORD, CT - New Britain/Hartford Busway



# Route Map and Station Locations

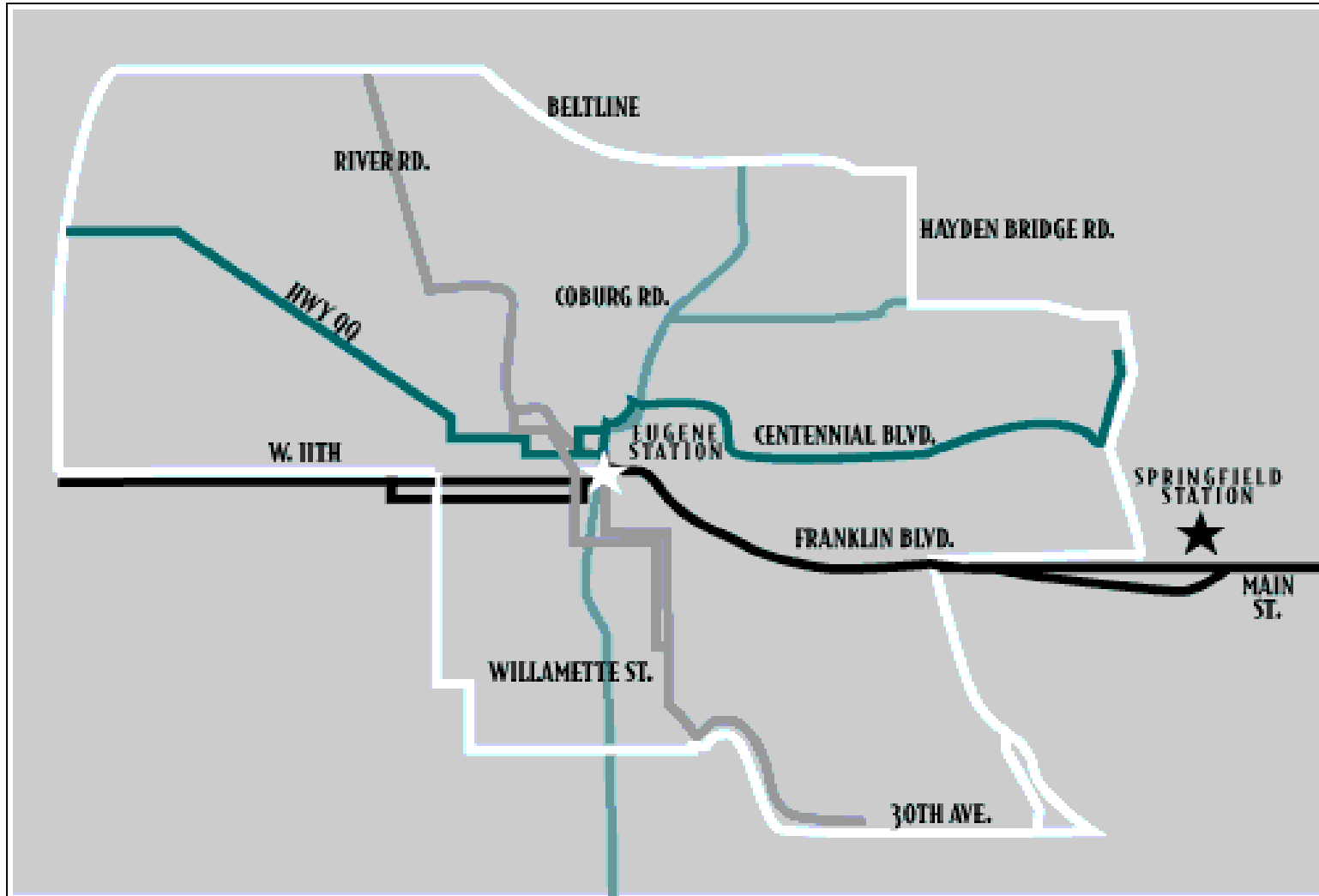
## CLEVELAND - Euclid Corridor Rapid Transit Line



<ul style="list-style-type: none"> <li><span style="color: red;">—</span> ETB Bus Route</li> <li><span style="color: red;">...</span> ETB-Only Zone</li> <li><span style="border: 1px solid yellow; padding: 2px;"> </span> General Bus Route</li> </ul>	<ul style="list-style-type: none"> <li><span style="border-bottom: 1px solid black; width: 20px; display: inline-block;"></span> ETB Turn Back</li> <li><span style="border: 1px solid blue; border-radius: 50%; width: 10px; height: 10px; display: inline-block;"></span> Bus Stop</li> </ul>		 	<p><i>ECTP BRT Environmental Assessment</i></p> <p><b>Bus Rapid Transit (BRT) System Map</b></p> <p>Euclid Avenue and Transit Zone</p> <p><small>Date: April 2000</small></p>
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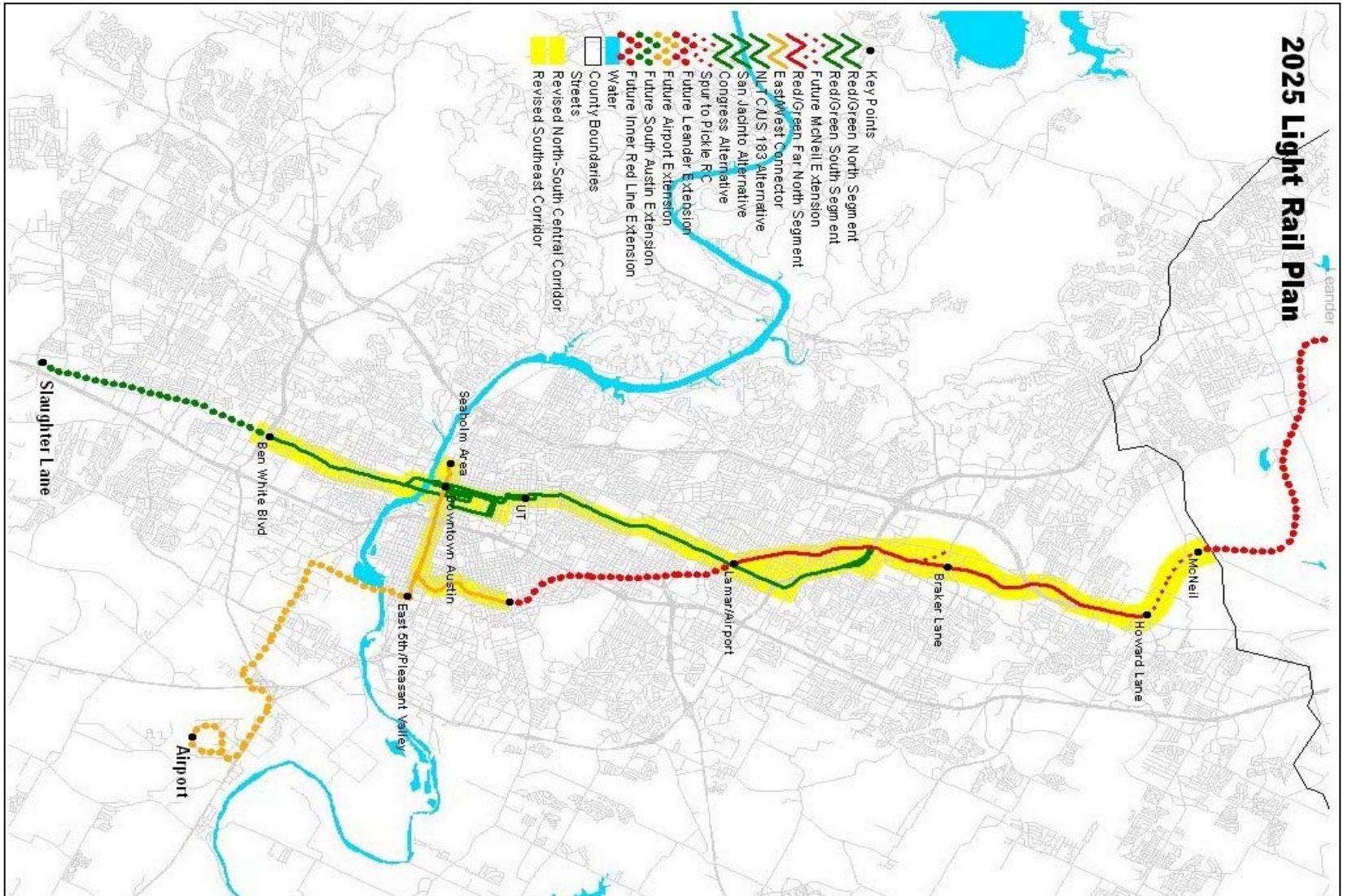
# Route Map and Station Locations

## EUGENE, OR - East-West Rapid Transit Corridor



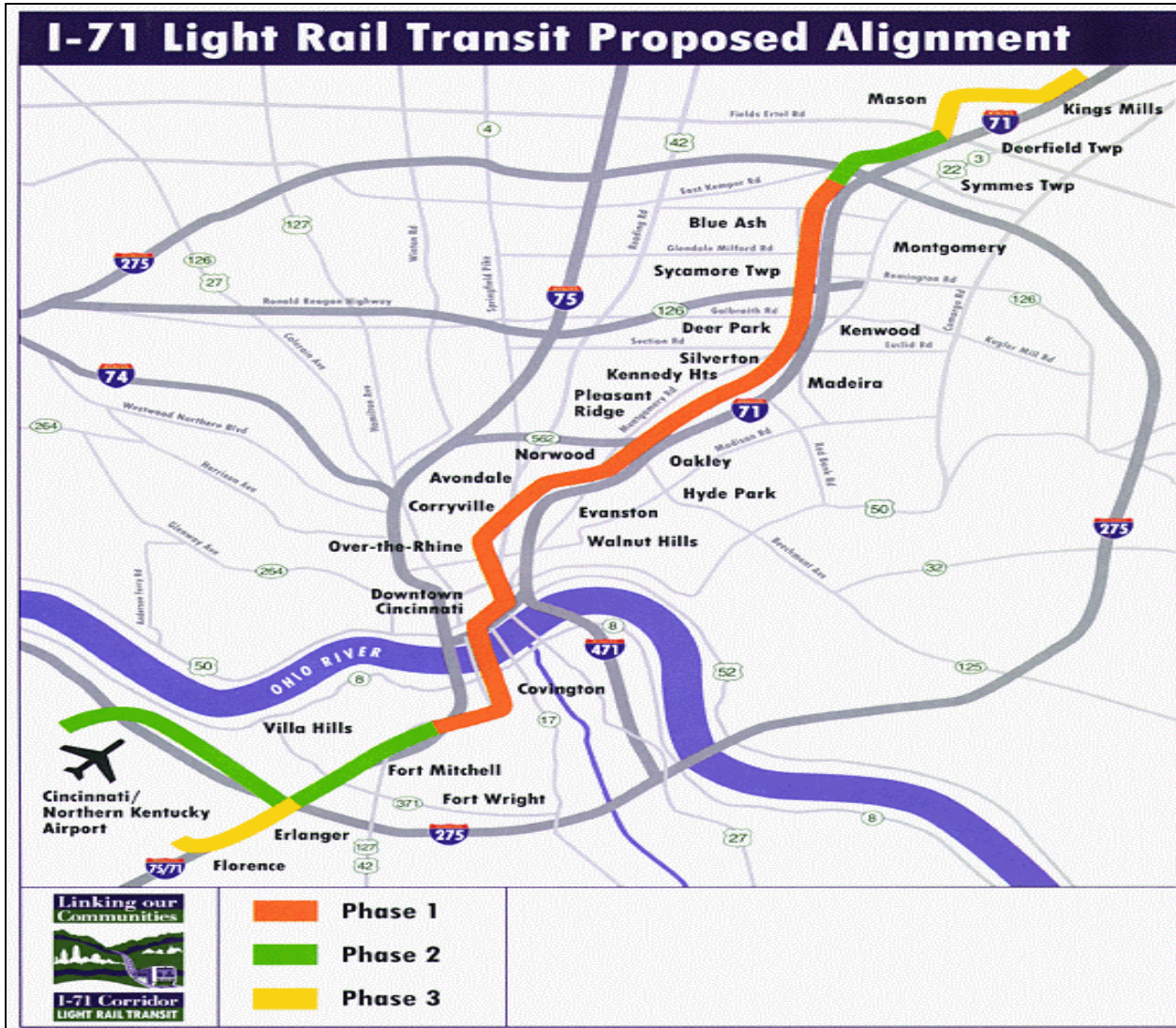
# Route Map and Station Locations

## AUSTIN, TX - Red/Green Light Rail Line



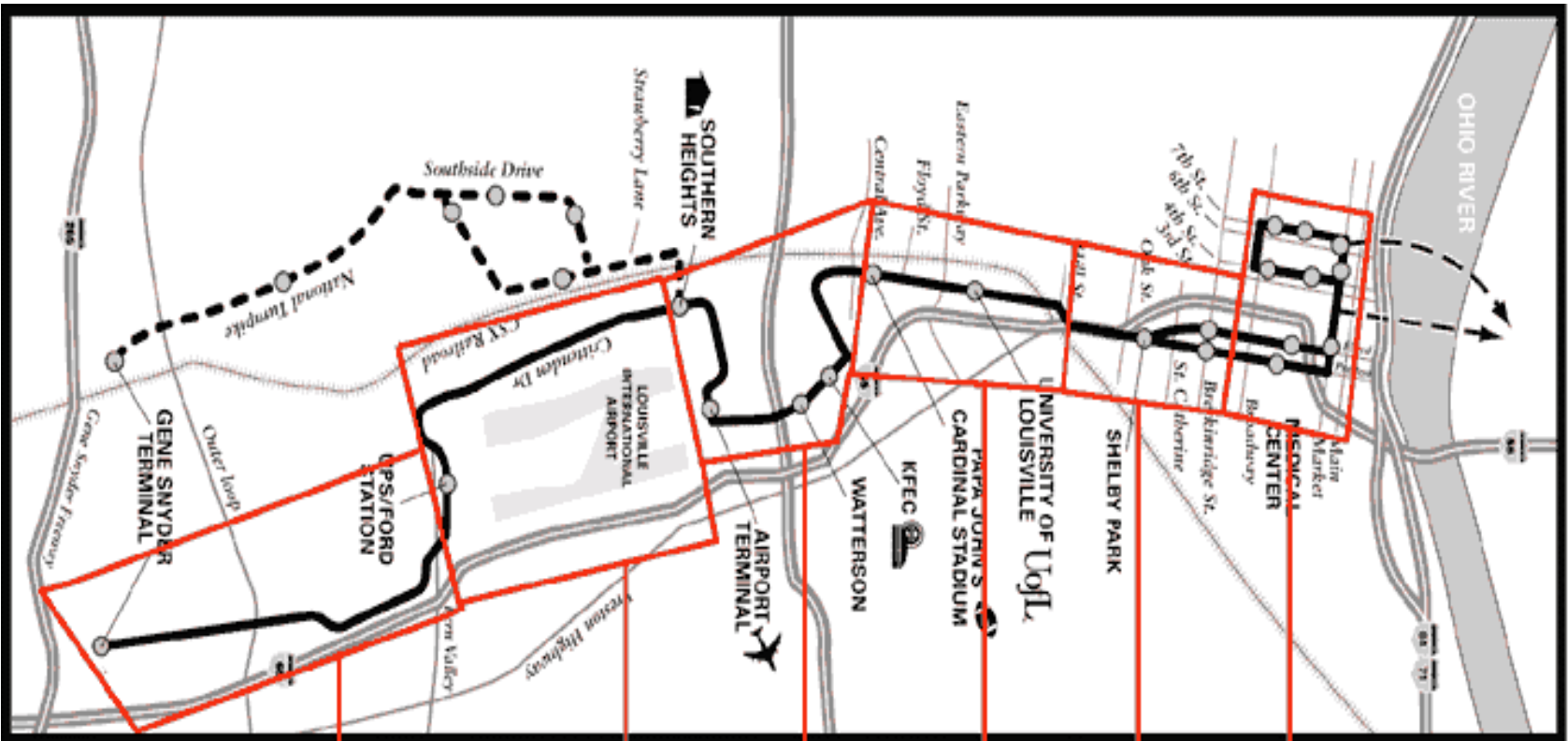
# Route Map and Station Locations

## CINCINNATI - I-71 Corridor Light Rail Project



# Route Map and Station Locations

## LOUISVILLE, KY - T2 Proposed Light Rail Line



**PROPOSED LIGHT RAIL ROUTE** **T2**  
**TRANSPORTATION**  
**TOMORROW**

**Average Daily Boardings by Segment**

**Total: 19,800**

3,100

2,100

900

6,200

1,600

5,900

# Alternative Station Location / Line Alignment

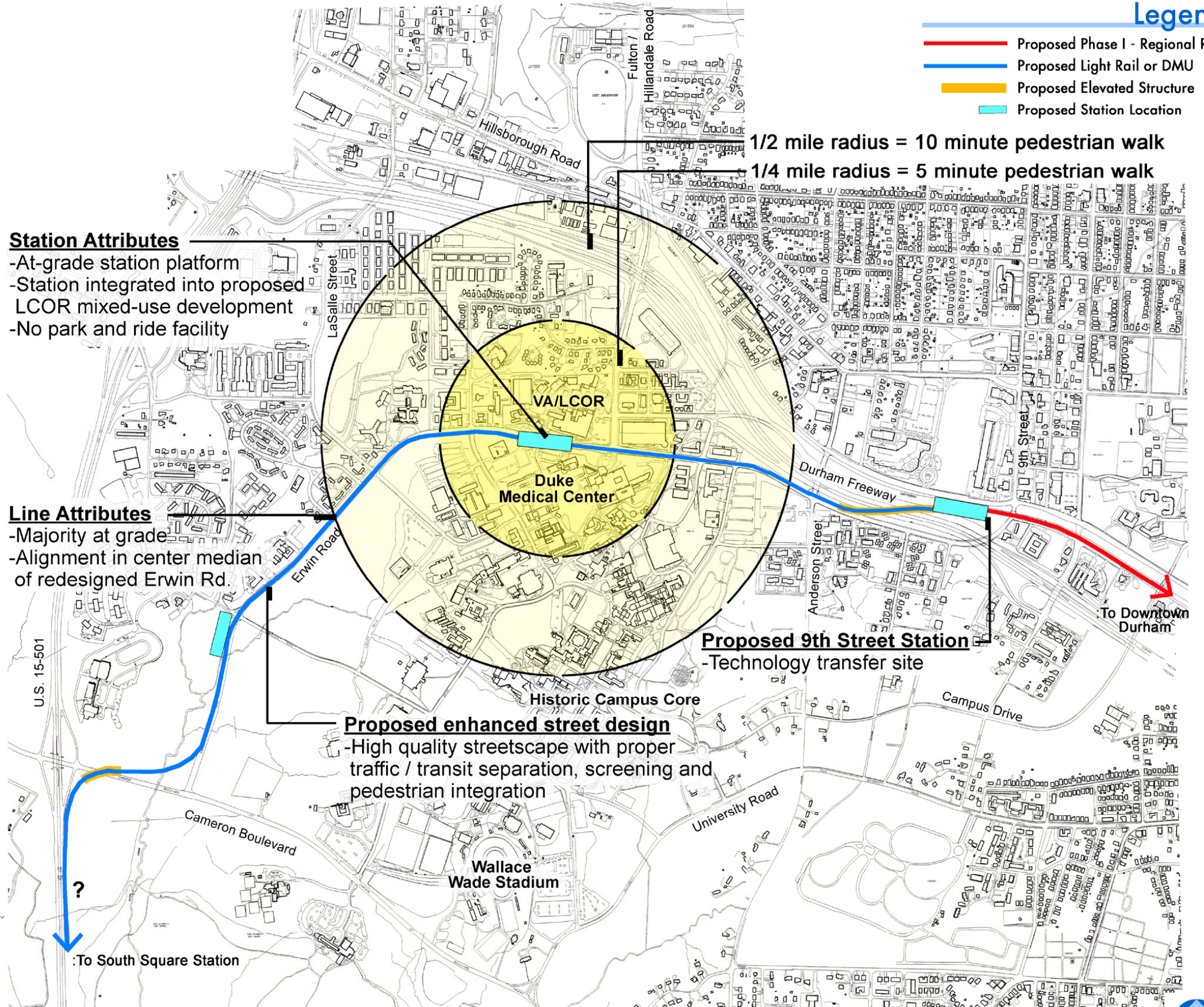
Durham, North Carolina

Station Area Concept Design

## Rail - Option 1

### Legend

- Proposed Phase I - Regional Rail
- Proposed Light Rail or DMU
- Proposed Elevated Structure
- Proposed Station Location



### Station Attributes

- At-grade station platform
- Station integrated into proposed LCOR mixed-use development
- No park and ride facility

### Line Attributes

- Majority at grade
- Alignment in center median of redesigned Erwin Rd.

1/2 mile radius = 10 minute pedestrian walk

1/4 mile radius = 5 minute pedestrian walk

### Proposed 9th Street Station

- Technology transfer site

### Proposed enhanced street design

- High quality streetscape with proper traffic / transit separation, screening and pedestrian integration

1 : 400

## Opportunities

- Station proposed at the densest area of campus - adjacent to Duke Medical Center, VA Hospital, and proposed LCOR development.
- Integration with proposed LCOR development, lessening visual impact.
- Rail alignment is moved north of primary entry into Duke Medical Center.
- Location provides good linkages within Duke University.

## Constraints

- At-grade rail station and alignment will create vehicular and pedestrian traffic congestion and circulation concerns.
- At-grade alignments along Erwin Road require ROW and road redesign.
- Proposed alignment runs adjacent to Duke natural areas.
- Alignment does have elevated on portions regardless of technology.



# Alternative Station Location / Line Alignment

Durham, North Carolina

Station Area Concept Design

## Rail / Bus - Option 2

### Legend

- Proposed Phase I - Regional Rail
- Proposed Light Rail, DMU or Busway
- Proposed Elevated Structure
- Proposed Station Location

### Proposed Hillsborough Road Station

#### Station Attributes

- Station at grade
- Large park and ride facility w/ station
- Station connection to Duke University via transit shuttle transit
- Technology transfer opportunity

1/2 mile radius = 10 minute pedestrian walk

1/4 mile radius = 5 minute pedestrian walk

### Fulton Street Transit Shuttle

- High image streetscape w/ transit way and pedestrian enhancement

### Proposed 9th Street Station

### Proposed Cameron Boulevard Station

:To South Square Station

1 : 400

## Opportunities

- Proposed station location provides good connection with Duke Medical Center through shuttle bus linkage on Fulton Road.
- Proposed station provides a large park and ride facility with primary access off Hillsborough Road.
- Station site will provide good opportunities for redevelopment near the transit facility.
- Good connectivity to Durham neighborhoods is provided by this station location.
- No intrusion on Duke University campus by this station location.
- Fulton Street can become a "Gateway Street" with pedestrian and streetscape amenities.

## Constraints

- Station proposed off Duke University campus, which has some of the highest potential transit ridership.
- Station proposed within a low-density area of Durham.
- At grade crossing of railroad tracks to access station.
- Close proximity to 9th Street station.
- Requires transfer between transit modes for Duke passengers.

# Alternative Station Location / Line Alignment

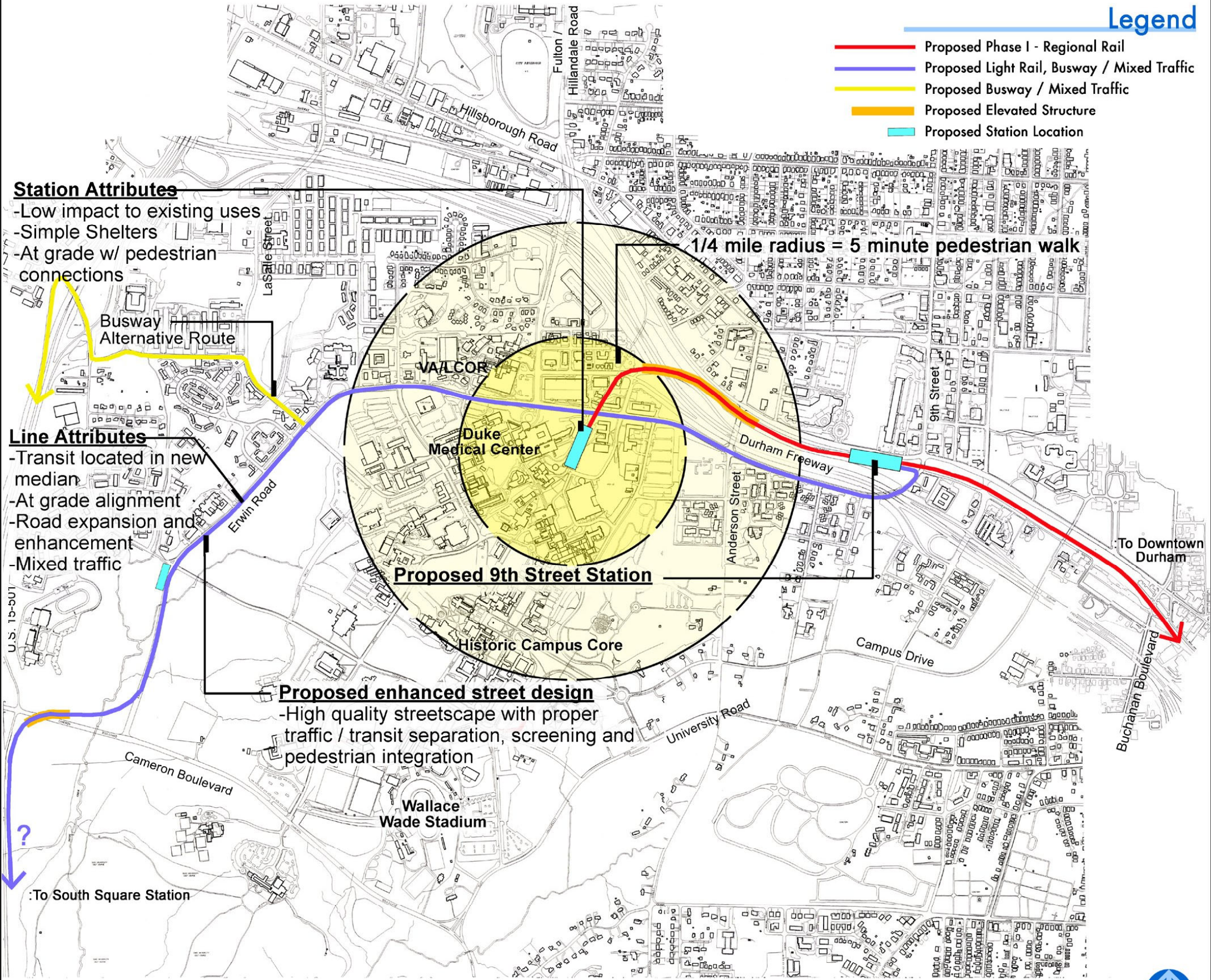
Durham, North Carolina

Station Area Concept Design

## Rail / Bus - Option 3

### Legend

- Proposed Phase I - Regional Rail
- Proposed Light Rail, Busway / Mixed Traffic
- Proposed Busway / Mixed Traffic
- Proposed Elevated Structure
- Proposed Station Location



### Station Attributes

- Low impact to existing uses
- Simple Shelters
- At grade w/ pedestrian connections

### Line Attributes

- Transit located in new median
- At grade alignment
- Road expansion and enhancement
- Mixed traffic

### Proposed enhanced street design

- High quality streetscape with proper traffic / transit separation, screening and pedestrian integration

1 : 400

## Opportunities

- Station proposed within a dense area on the Duke University campus and Medical Center area.
- Station uses existing rail spur r.o.w.
- Proposed phase II technology provides linkages with Duke transit and Erwin Road adjacencies.
- No mode transfer to access Duke.

## Constraints

- Station and alignment have impacts on surface transportation in the area.
- All transit options will require some additional ROW and/or property acquisition.
- Less connectivity to Durham community.
- Requires transfer between modes for Chapel Hill to Durham passengers.





# Alternative Station Location / Line Alignment

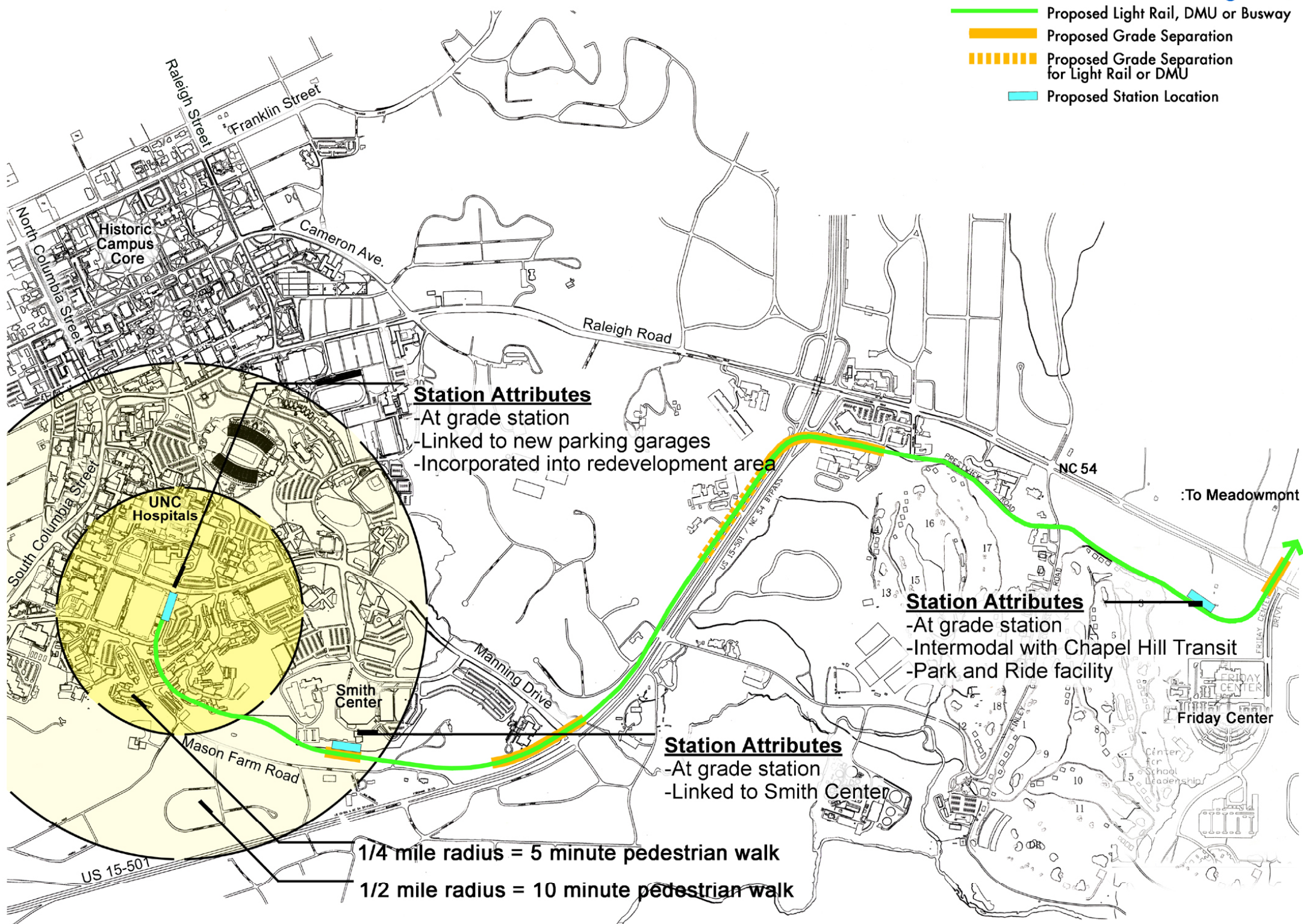
Chapel Hill, North Carolina

Station Area Concept Design

## Rail / Bus - Option 1

### Legend

-  Proposed Light Rail, DMU or Busway
-  Proposed Grade Separation
-  Proposed Grade Separation for Light Rail or DMU
-  Proposed Station Location



### Opportunities

- The terminus station is proposed at the most dense area of the campus, U.N.C. Hospitals.
- The proposed location of the station is adjacent to a large parking structure for integration.
- The redesign of the station area allows for the integration of bus circulation.
- The proposed rail alignment limits the impact to the U.N.C. campus.
- A linkage with Chapel Hill exists via Manning Drive to South Columbia Street.
- The proposed station is sited within a growth area of the U.N.C. campus.
- The station and alignment comply with U.N.C. Campus Master Plan.
- The Friday Center site can accommodate a future park and ride facility.

### Constraints

- An existing neighborhood lies in vicinity of the proposed rail alignment.
- The proposed rail alignment has limited extension opportunities for the future.
- The alignment has grade separated portions regardless of technology.


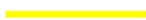


# Alternative Station Location / Line Alignment

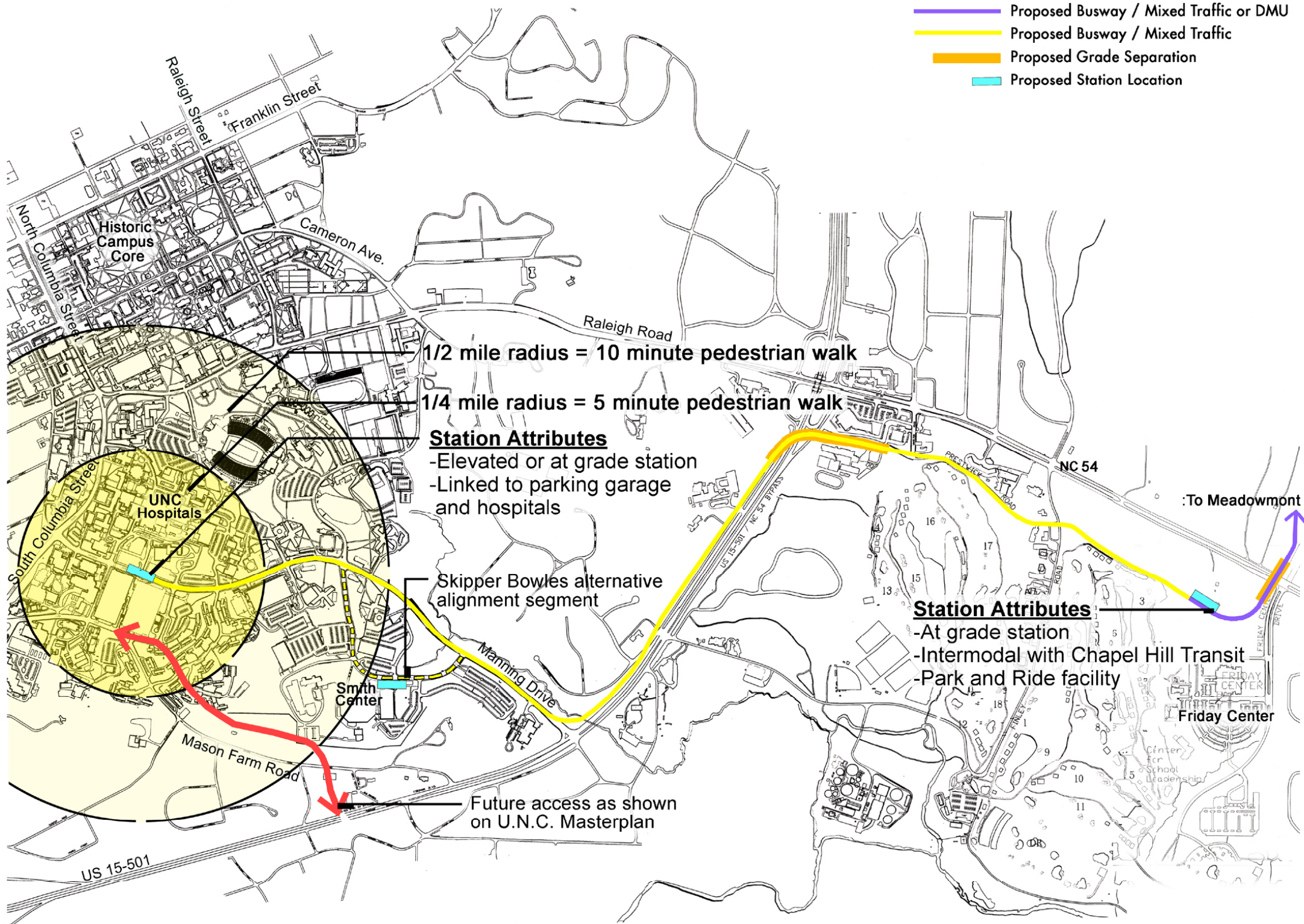
Chapel Hill, North Carolina

Station Area Concept Design

## Rail / Bus - Option 2

### Legend

-  Proposed Busway / Mixed Traffic or DMU
-  Proposed Busway / Mixed Traffic
-  Proposed Grade Separation
-  Proposed Station Location



1/2 mile radius = 10 minute pedestrian walk

1/4 mile radius = 5 minute pedestrian walk

#### Station Attributes

- Elevated or at grade station
- Linked to parking garage and hospitals

Skipper Bowles alternative alignment segment

#### Station Attributes

- At grade station
- Intermodal with Chapel Hill Transit
- Park and Ride facility

Future access as shown on U.N.C. Masterplan

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### Opportunities

- The station is proposed at the most dense area of the U.N.C. campus, the U.N.C. Hospitals.
- The station is proposed adjacent to the large parking structures, providing park and ride opportunities.
- The location of the proposed station allows linkage with Chapel Hill via Manning Drive to South Columbia Street.
- The proposed alignment has extension possibilities along Manning Drive to serve Chapel Hill in the future.
- The Friday Center can accommodate a large park and ride facility.

### Constraints

- The station location is proposed in a tight environment with limited ability to adjust architecture and site layout.
- The alignment does have grade separated portions regardless of technology.
- The alignment runs along Pinetum near Manning Drive.
- Conflicts with emergency vehicle access.

# Alternative Station Location / Line Alignment

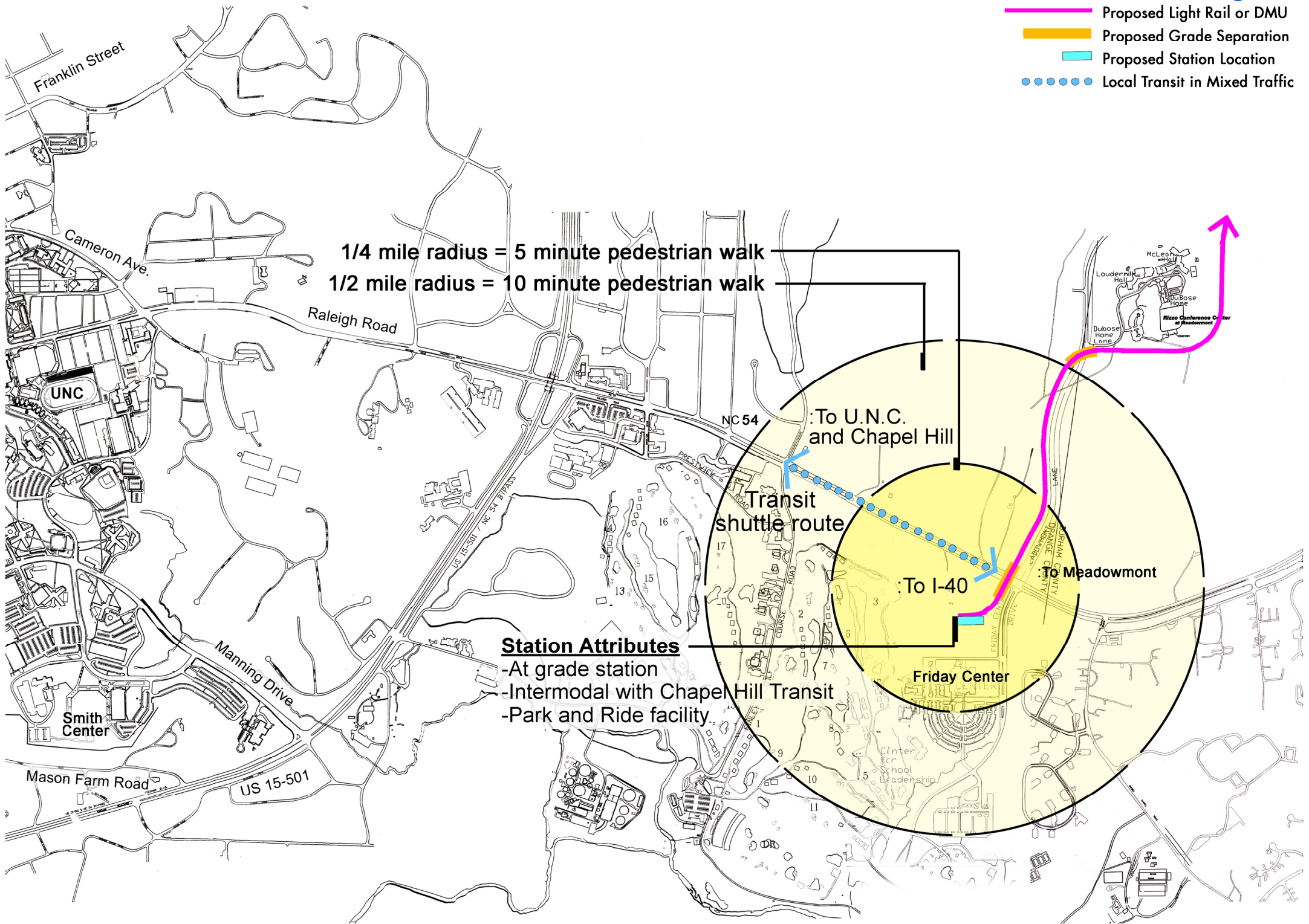
Chapel Hill, North Carolina

Station Area Concept Design

## Rail - Option 3

### Legend

- Proposed Light Rail or DMU
- Proposed Grade Separation
- Proposed Station Location
- Local Transit in Mixed Traffic



1 : 400

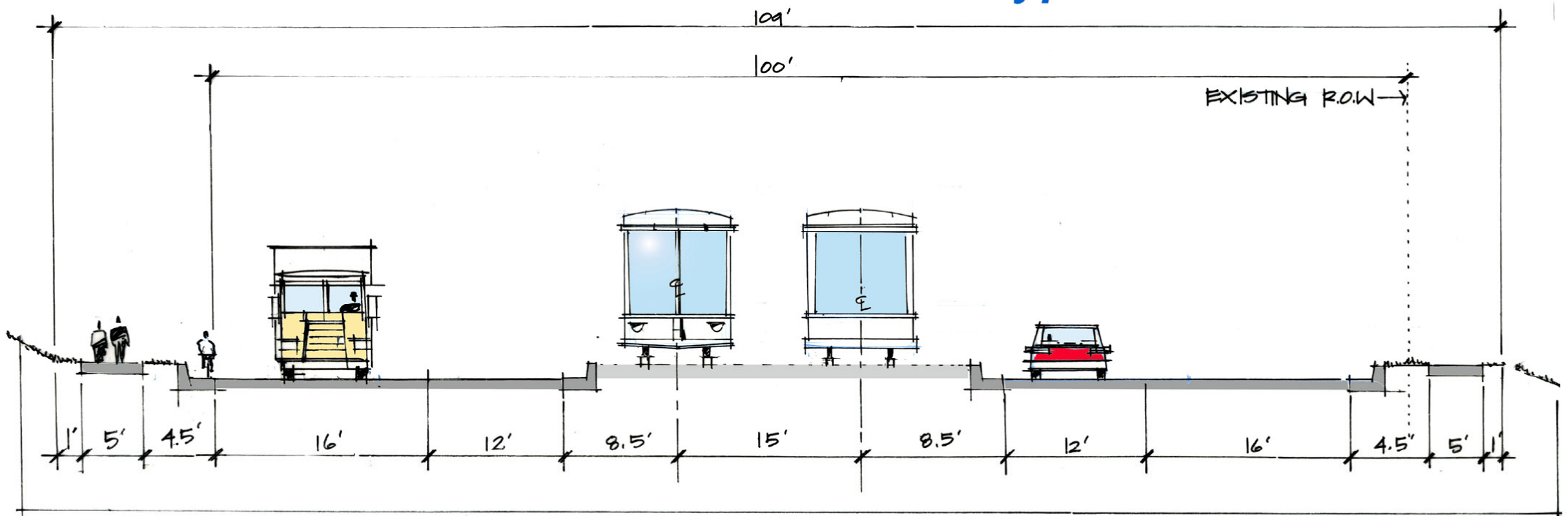
### Opportunities

- The Friday Center site can accommodate a large park and ride facility.
- The proposed site allows good opportunity for intermodal connectivity with Chapel Hill Transit.
- There is no intrusion on the U.N.C. campus.
- The low impact area of the proposed station site provides good vehicular circulation. (shuttle bus, auto, etc.).

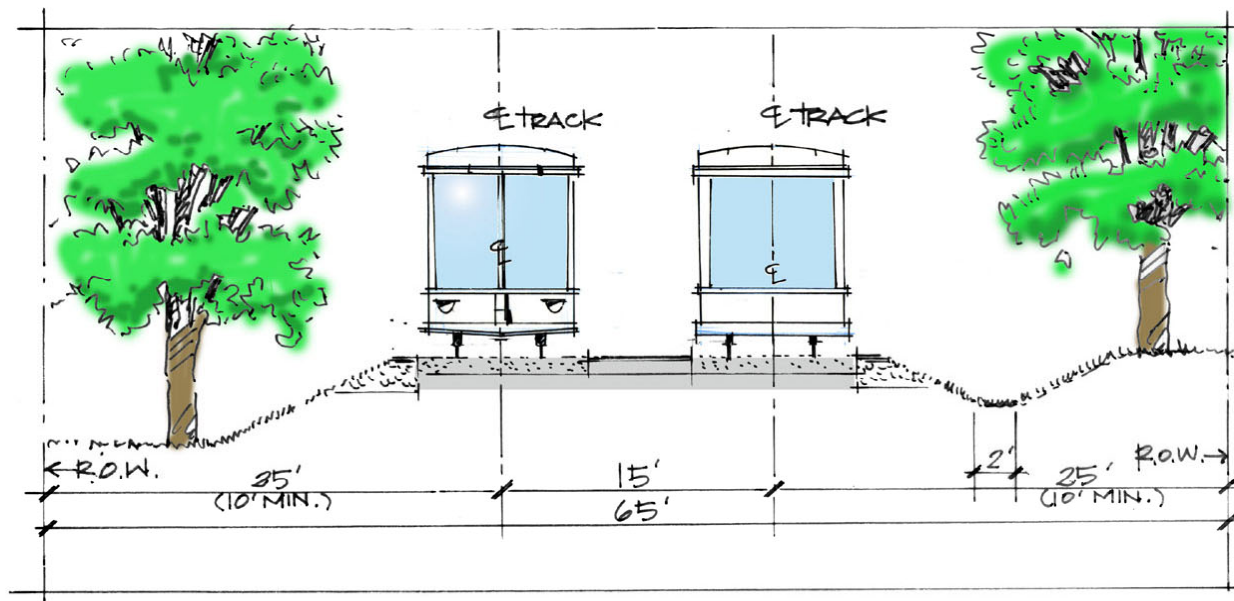
### Constraints

- The Friday Center station location is proposed in a low density area away from campus.
- Transit shuttle system will be necessary to access the U.N.C. hospital site.
- Alignment will require grade separated portions regardless of technology.
- Transit shuttle must operate in mixed traffic along congested NC54 and US15-501 corridors.

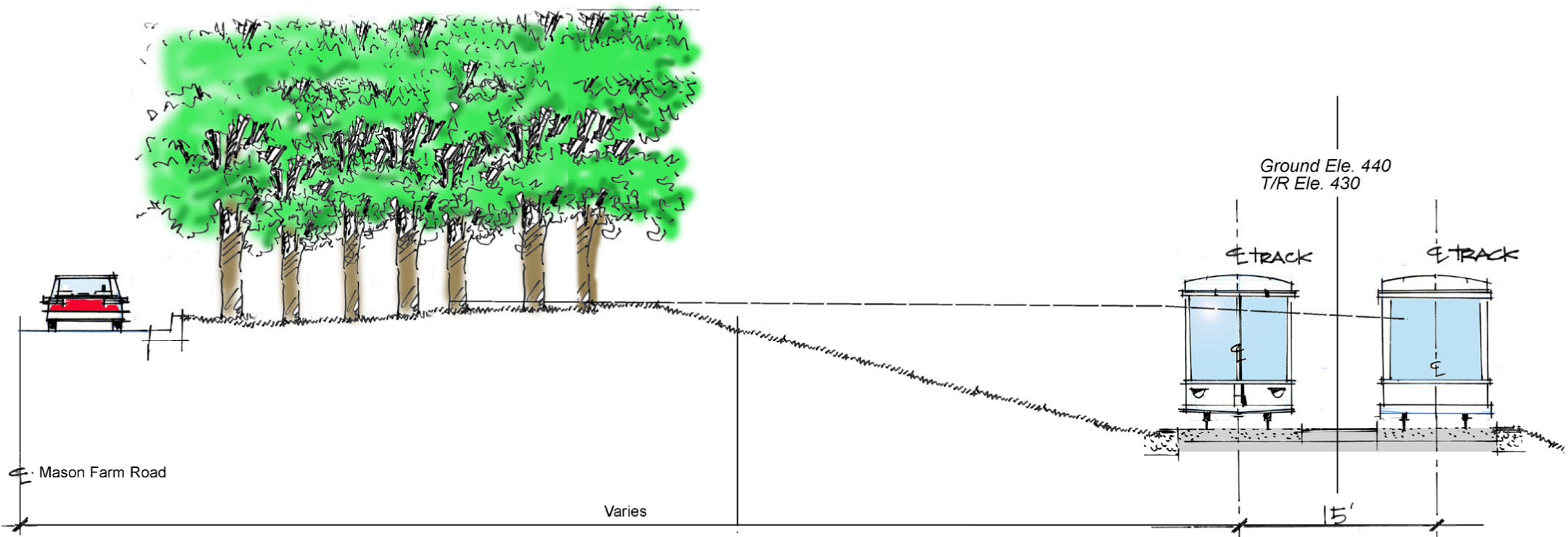
## Typical Sections - Rail



### Rail Section 1 - Erwin Road LRT Alternatives 1&2

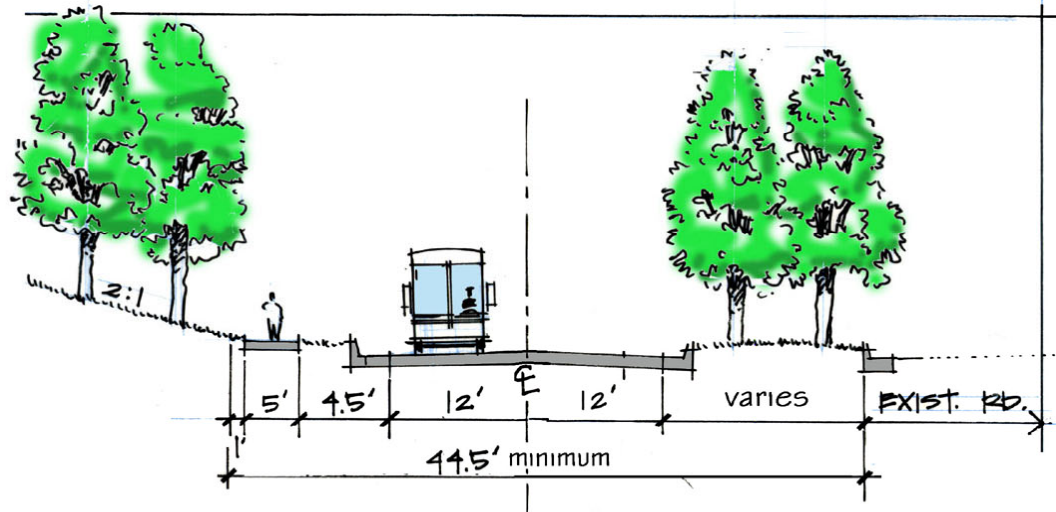


### Rail Section 2 - Rail on New Alignment

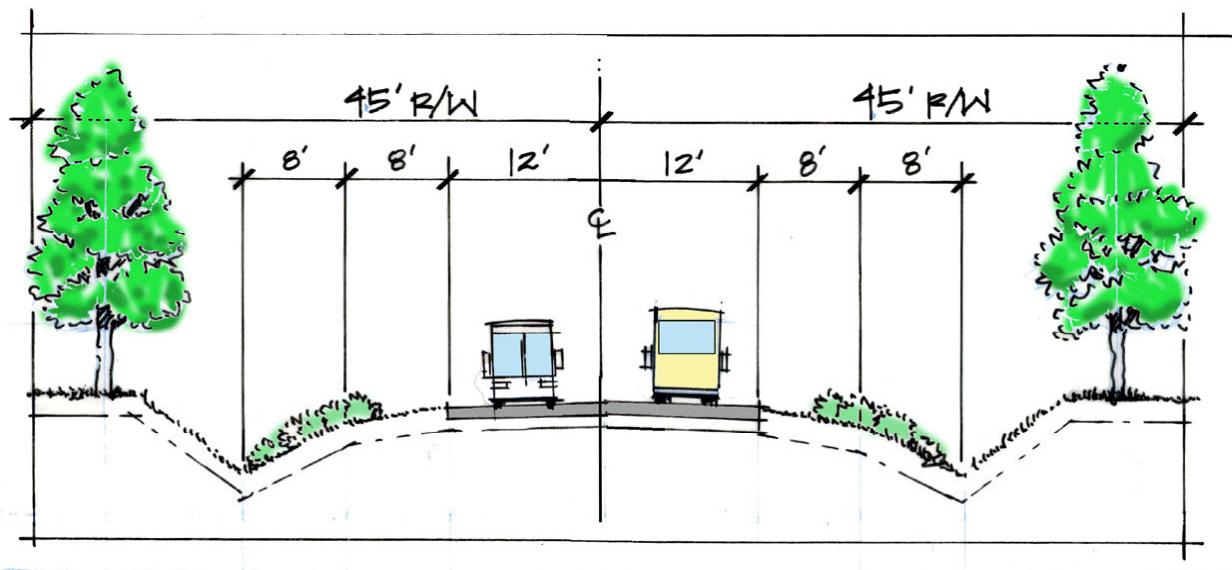


### Rail Section 3 - Southern UNC Alignment (DMU Alternative 1 and LRT Alternatives 1, 2, & 3)

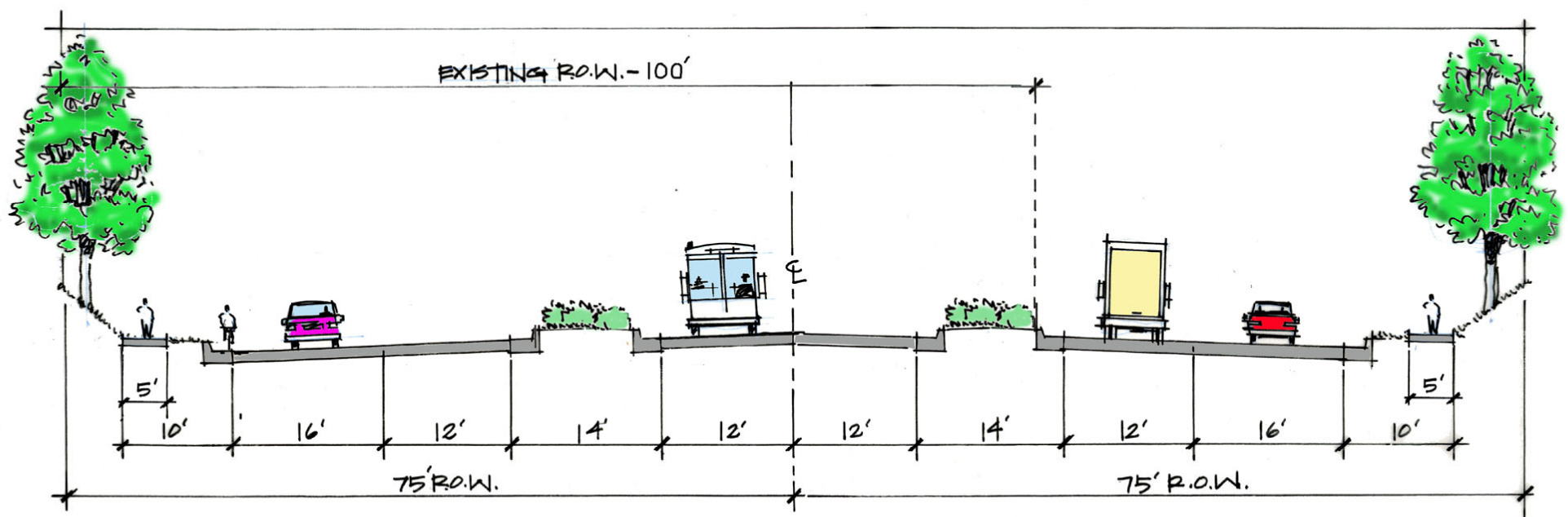
## Typical Sections - Bus



**Bus Section 1 - Exclusive Busway Adjacent to Existing Roadway**

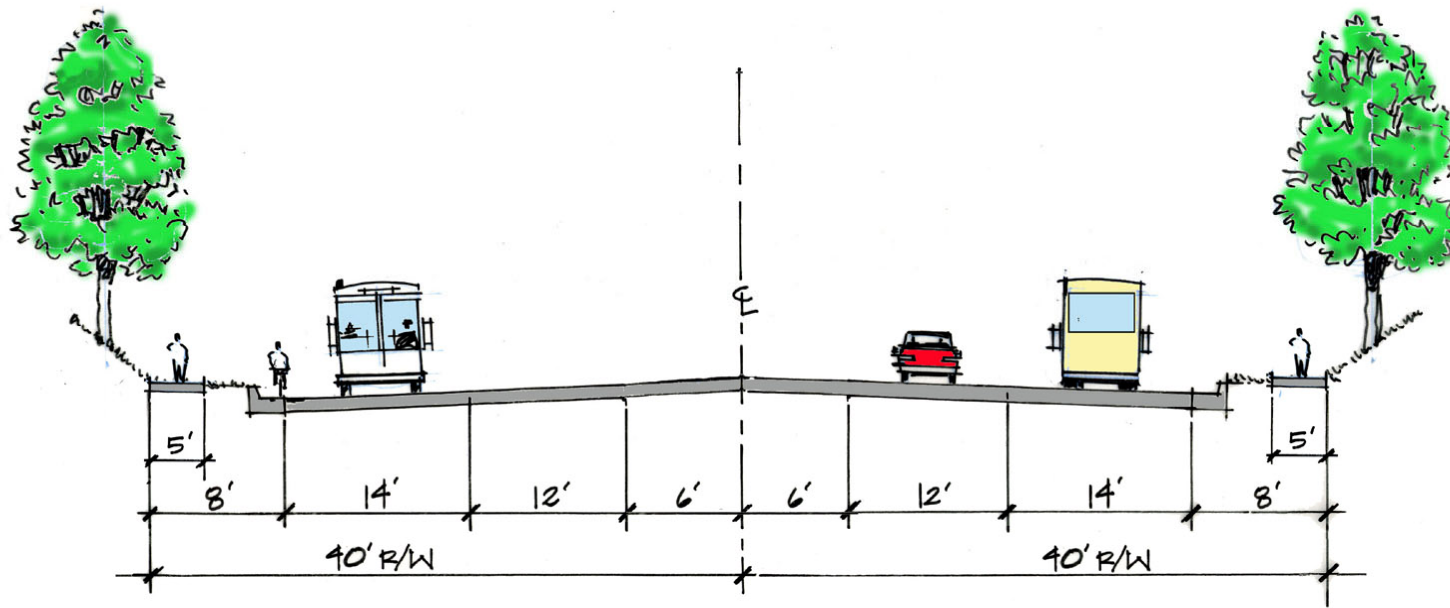


**Bus Section 2 - Exclusive Busway on New Alignment**

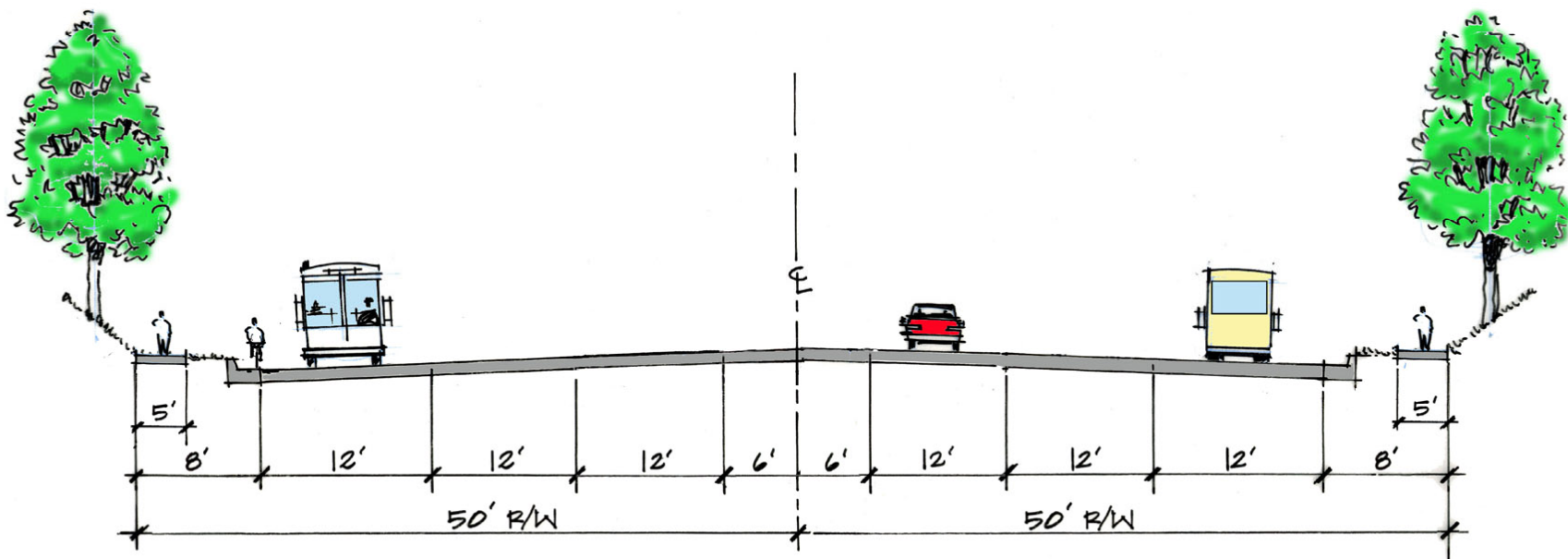


**Bus Section 3 - Exclusive Busway on Erwin Road (Busway Alternatives 1 & 2)**

## Typical Sections - Bus



**Busway/Mixed Traffic Section 1 - Manning Drive (Busway Alternatives 2 & 4 / BMT Alternatives 1 & 2)**

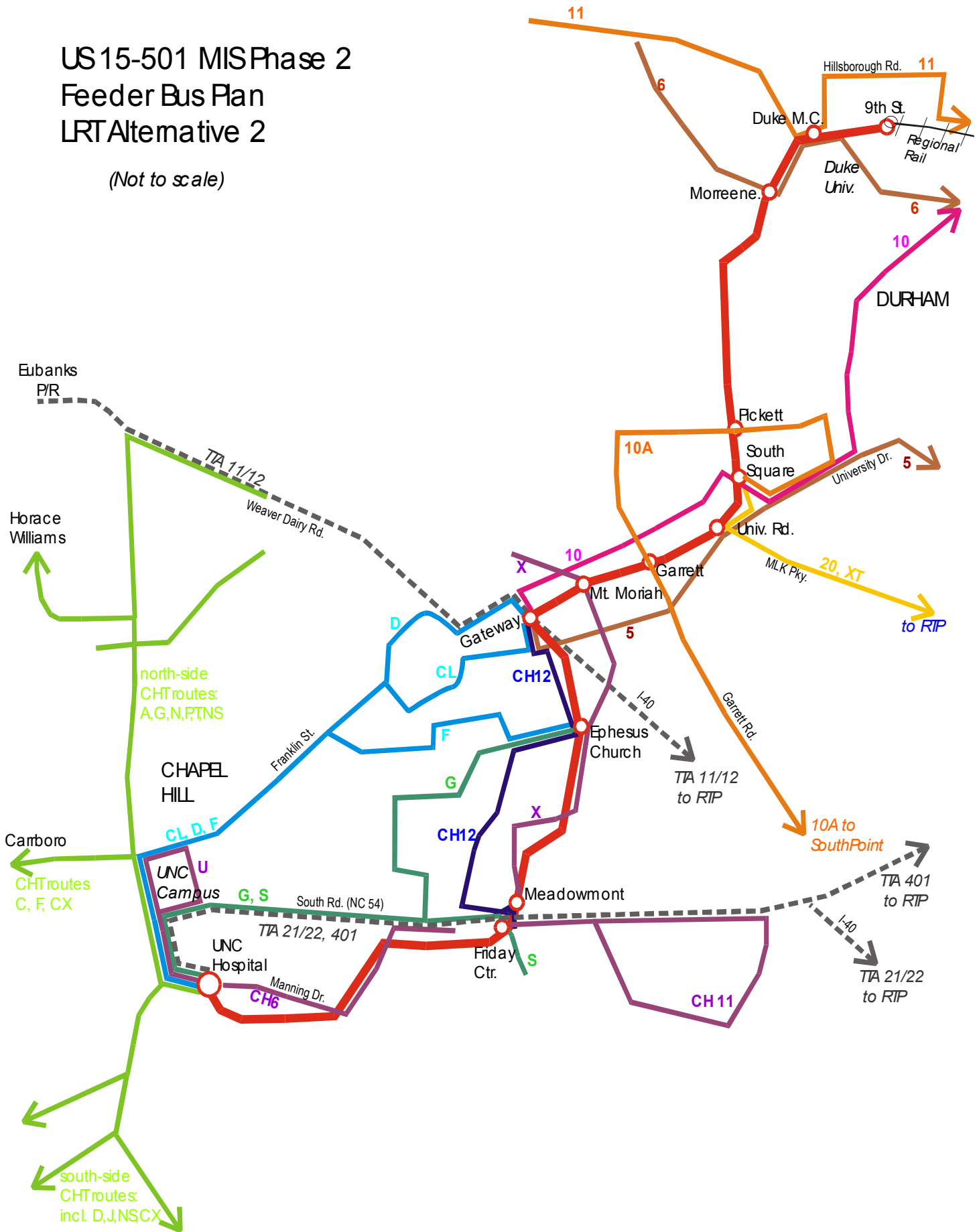


**Busway/Mixed Traffic Section 2 - Erwin Road BMT Alternative 1**

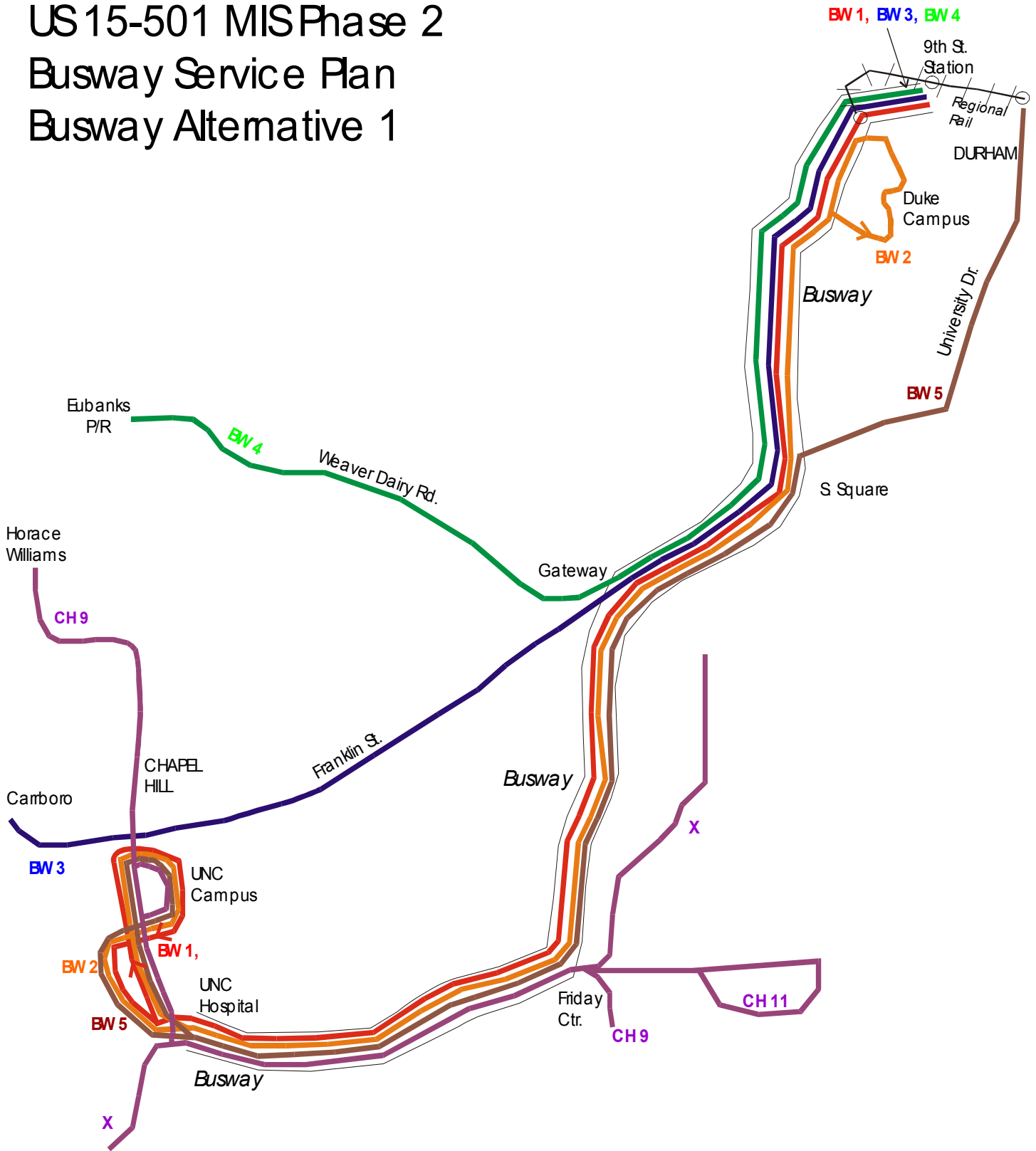


# US 15-501 MIS Phase 2 Feeder Bus Plan LRT Alternative 2

(Not to scale)



# US 15-501 MIS Phase 2 Busway Service Plan Busway Alternative 1



Note: Feeder bus service to on-line stations would be generally similar to feeder service for rail alternatives.

**Table F- 1 US 15-501 Phase II MIS Assumptions**

Alternative	Duke Alignment and Technology	Medical Technology	UNC Alignment and Technology	Station Locations	Headways	Parking Assumptions
DMU Alt. 1	DMU Western Alignment <i>Extension TTA Phase I Technology</i>	DMU	DMU Southern UNC Alignment	9th Street Station (transfer) Hillsborough Road Cameron Blvd South Square Mall Mt. Moriah Road / I-40 Gateway Epheus Church Friday Center Smith Center Special Events Only UNC Hospitals	15 min peak 30 minutes offpeak (DMU Alt 1A) and DMU 7.5 minutes peak 15 minutes offpeak (DMU Alt 1B)	Parking (TTA Conceptual Plans) Parking Walking Station Walking Station Parking Parking Parking Walking Station Walking Station
LRT Alt. 1	DMU Coal Spar Station LRT Erwin Road Alignment <i>Technology Transfer at 9th Street Station Duke Station Area Planning Concept No. 3</i>	LRT	LRT Southern UNC Alignment <i>UNC Station Area Planning Concept No. 1</i>	9th Street Station (transfer) Duke Medical Center Morreene Road Pickett Road South Square Mall University Road Garrett Road Mt. Moriah Rd / I-40 Gateway Epheus Church Meadowmont Friday Center Smith Center Special Events Only UNC Hospitals	LRT - 7.5 min peak 15 minutes offpeak  DMU - 15 min peak 30 minutes offpeak	Parking (TTA Conceptual Plans) Walking Station Walking Station Walking Station Walking Station Parking Walking Station Parking Walking Station Walking Station Walking Station Walking Station
Bus Alt. 1	DMU Coal Spar Station Exclusive Busway Erwin Road Alignment <i>Technology Transfer at 9th Street Station</i>	Exclusive Busway	Exclusive Busway Southern UNC Alignment <i>UNC Station Area Planning Concept No. 1</i>	9th Street Station (transfer) Duke Medical Center Morreene Road Pickett Road South Square Mall University Road Garrett Road Mt. Moriah Rd / I-40 Gateway Epheus Church Meadowmont Friday Center Smith Center Special Events Only UNC Hospitals		Parking Walking Station Walking Station Walking Station Parking Walking Station Parking Walking Station Walking Station Walking Station Walking Station
Bus Alt. 2	DMU Coal Spar Station Exclusive Busway Erwin Road Alignment <i>Technology Transfer at 9th Street Station Duke Station Area Planning Concept No. 3</i>	Exclusive Busway	BMT Manning Drive Alignment "Diamond Lanes" <i>UNC Station Area Planning Concept No. 2</i>	9th Street Station (transfer) Duke Medical Center Morreene Road Pickett Road South Square Mall University Road Garrett Road Mt. Moriah Rd / I-40 Gateway Epheus Church Meadowmont Friday Center Smith Center Special Events Only UNC Hospitals	DMU - 15 min peak 30 minutes offpeak	Parking (TTA Conceptual Plans) Walking Station Walking Station Walking Station Walking Station Parking Walking Station Parking Walking Station Walking Station Walking Station
LRT Alt. 2	LRT Erwin Road Alignment <i>Technology Transfer at 9th Street or Extension of TTA Future Phase I Technology Duke Station Area Planning Concept No. 1</i>	LRT	LRT Southern UNC Alignment <i>UNC Station Area Planning Concept No. 1</i>	9th Street Station (transfer) Duke Medical Center Morreene Road Pickett Road South Square Mall University Road Garrett Road Mt. Moriah Rd / I-40 Gateway Epheus Church Meadowmont Friday Center Smith Center Special Events Only UNC Hospitals	LRT - 7.5 min peak 15 minutes offpeak	Parking (TTA Conceptual Plans) Walking Station Walking Station Walking Station Walking Station Parking Walking Station Parking Walking Station Walking Station Walking Station
LRT Alt. 3	LRT Western Alignment <i>Technology Transfer at Hillsborough Road Duke Station Area Planning Concept No. 2</i>	LRT	LRT Southern UNC Alignment <i>UNC Station Area Planning Concept No. 1</i>	Hillsborough Road (transfer) Cameron Blvd Pickett Road South Square Mall University Road Garrett Road Mt. Moriah Rd / I-40 Gateway Epheus Church Meadowmont Friday Center Smith Center Special Events Only UNC Hospitals	7.5 minutes LRT 15 minutes offpeak	Parking Walking Station Walking Station Walking Station Parking Walking Station Parking Walking Station Walking Station Walking Station
Bus Alt. 3	Exclusive Busway Western Alignment <i>Technology Transfer at Hillsborough Road Duke Station Area Planning Concept No. 2</i>	Exclusive Busway	Exclusive Busway Southern UNC Alignment <i>UNC Station Area Planning Concept No. 1</i>	Hillsborough Road (transfer) Cameron Blvd South Square Mall University Road Garrett Road Mt. Moriah Rd / I-40 Gateway Epheus Church Meadowmont Friday Center Smith Center Special Events Only UNC Hospitals		Parking Walking Station Walking Station Walking Station Parking Walking Station Parking Walking Station Walking Station Walking Station
Bus Alt. 4	Exclusive Busway Western Alignment <i>Technology Transfer at Hillsborough Road Duke Station Area Planning Concept No. 2</i>	Exclusive Busway	BMT Manning Drive Alignment "Diamond Lanes" <i>UNC Station Area Planning Concept No. 1</i>	Hillsborough Road (transfer) Cameron Blvd South Square Mall University Road Garrett Road Mt. Moriah Rd / I-40 Gateway Epheus Church Meadowmont Friday Center Smith Center Special Events Only UNC Hospitals	DMU - 15 min peak 30 minutes offpeak	Parking Walking Station Walking Station Walking Station Parking Walking Station Parking Walking Station Walking Station Walking Station
BMT Alt. 1	DMU Coal Spar Station BMT Erwin Road/Cameron Blvd / Academy Rd / University Dr <i>Technology Transfer at 9th Street Station Duke Station Area Planning Concept No. 3</i>	BMT Exclusive Busway Chapel Hill Dr SW Durham Drive Meadowmont Lane Exclusive Busway	BMT Manning Drive Alignment "Diamond Lanes" <i>UNC Station Area Planning Concept No. 2</i>	9th Street Station (transfer) Duke Medical Center Morreene Road Pickett Road South Square Mall University Road Garrett Road Mt. Moriah Rd (Watkins Road) Epheus Church Meadowmont Friday Center Smith Center Special Events Only UNC Hospitals	DMU - 15 min peak 30 minutes offpeak	Parking (TTA Conceptual Plans) Walking Station Walking Station Walking Station Walking Station Parking Walking Station Parking Walking Station Walking Station Walking Station
BMT Alt. 2	DMU Coal Spar Station BMT Erwin Road / Cameron Blvd / US15-501 / Exclusive Busway University Dr  <i>Technology Transfer at 9th Street Station Duke Station Area Planning Concept No. 3</i>	BMT Exclusive Busway SW Durham Drive Meadowmont Lane Exclusive Busway	BMT Manning Drive Alignment "Diamond Lanes" <i>UNC Station Area Planning Concept No. 2</i>	9th Street Station (transfer) Duke Medical Center Morreene Road Pickett Road South Square Mall University Road Garrett Road Mt. Moriah Road / I-40 Gateway Epheus Church Meadowmont Friday Center Smith Center Special Events Only UNC Hospitals	DMU - 15 min peak 30 minutes offpeak	Parking (TTA Conceptual Plans) Walking Station Walking Station Walking Station Walking Station Walking Station Walking Station Parking Walking Station Walking Station Walking Station

## Summary of Public Comments 15-501 Major Investment Study Community Workshop #1

**Date: September 19, 2000**

**Place: Unitarian church Fellowship Hall, Garrett Road, Durham**

**Number of Attendees: 23 (three people responded on the comment cards)**

### **Comments Cards from Night of Workshop**

#### **General Comments:**

- Like concept of creating foot traffic; making more like a village atmosphere
- Must decide between building a “people mover” system for Chapel Hill/Durham/Raleigh or a public transit system; they are not the same
- Need cost-effective and time competitive transit service
- Freeway between South Square & I - 40

#### **Comments on Refined Study Area:**

- Looks like all the appropriate alternatives have been explored
- Busways

#### **Groups/Neighborhoods Represented:**

- 800 block Ninth Street
- Five Oaks Homeowners Association
- Friends of Durham

## Summary of Public Comments 15-501 Major Investment Study Community Workshop #1

**Date:** September 21, 2000

**Place:** Chapel Hill Public Library

**Number of Attendees:** 51 (nine people responded on the comment cards)

### **Comments Cards from Night of Workshop**

#### **General Comments:**

- Concerned about increasing congestion and greater travel times
- Buses would have much less impact than rail ✓✓
- Aesthetics are important and rail loses with this
- Concerned about location of mass transit in relationship to existing neighborhoods: NO transit corridor through Westwood or impact ANY existing neighborhood ✓✓✓✓
- Consider hidden cost of exhaust fumes and rubber tires; think of the long term costs rather than the short term, up front costs
- Use technology that carries the most people cost effectively with the least environmental and neighborhood impacts
- Chapel Hill needs to expand bus system and the park & ride lots ✓✓✓
- Whatever is chosen should interface with existing greenway system and the local mass transit systems and be pedestrian friendly
- Diesel sounds dirty but advanced technology in diesel may make it okay
- Time-line too long; a transit system is overdue ✓✓
- Ultimate system should be fast, convenient and comfortable ✓✓
- Land use planning needs to be better integrated
- Not sure this would be wise use of money; Chapel Hill's problem is lack of access to RDU, RTP and Raleigh

#### **Comments on Refined Study Area:**

- Mixed modes where possible
- Rail corridors, if used, should parallel existing major roads
- Designated busways on existing major streets/roads ✓✓✓✓
- Designated bus lanes on Manning Drive between 15-501 and S. Columbia and go north ✓✓✓
- Widen ONE lane of S. Columbia between Carolina Inn & McCauley St.
- Buses in mixed traffic
- Second choice light rail

#### **Groups/Neighborhoods Represented:** (checks represent how many individuals claim affiliation with group)

- South Columbia Street (near Mason Farm)
- Westwood
- Carrboro
- Mason Farm
- Whitehead Circle ✓✓
- Elliott & E. Franklin Streets

## Summary of Public Mailed Comments 15-501 Major Investment Study Community Workshop #1

**Date:** As of November 9, 2000

**Place:** Comment Cards Mailed to HNTB

**Number of Card Received:** 7 (5 from Chapel Hill; 1 Carrboro; 1 Hillsborough)

### **Mailed In Comment Cards**

#### **General Comments:**

- Study should explore air quality
- Consider elevated fixed guideway system (provided several pictures)
- 15-501 will remain important thoroughfare between Chapel Hill & Durham and widened lanes will not solve problem
- Phase I of TTA system should be connected to Chapel Hill & 15-501 corridor best option to Gateway; through Meadowmont to UNC
- Transit should not be excuse for increased density in Farrington Road neighborhoods; no stations between Meadowmont and Patterson Place
- 15-501 should become a limited access road with increased public transit that cuts the commute time
- Don't think the money exists to make a train a possibility
- System should use electric trolleys like San Francisco
- TTA Green line could attract more riders by stopping closer to employers
- Goal should be to maximize ridership; should be fast, direct, limit transfers; seamless system ✓✓
- Dedicated busways in other areas are being phased out due to lack of ridership; replaced with trains; invest in rail to start with
- Backing off rail for phase II sends wrong message to federal funding sources; says we are not committed
- Light rail good option for this area; maneuverable and flexible

#### **Comments on Refined Study Area:**

- NC 54 very congested and left out of the study area
- Would prefer rail from 9<sup>th</sup> Street to Chapel Hill but think busway the best option for now; controlled access; covered stops; good parking
- Call it shuttle system; post good maps; drivers announce stops (like downtown Denver system)
- Maintain low density residential along Farrington Road from NC 54 to Old Chapel Hill Road
- Should extend through Chapel Hill, up Airport Road to Horace Williams tract

#### **Groups/Neighborhoods Represented:**

- Booker Creek
- HARP (Homeowners Allied for Residential Preservation)

## Summary of Public Comments 15-501 Major Investment Study Community Workshop #2

**Date:** January 16, 2001

**Place:** Southwest Branch Library, Shannon Road, Durham

**Number of Attendees:** 62

Comments Cards from Night of Workshop	
Chapel Hill	Durham
<b>Option 1 - Rail/Bus</b> ✓✓✓✓✓	<b>Option 1 – Rail</b> ✓✓✓✓
<b>Comments:</b> <ul style="list-style-type: none"> <li>• Bus gives more flexibility in routes, schedules, topography</li> <li>• Has potential for light rail all the way to UNC campus; would never take train to Chapel Hill if the last leg was on a bus in mixed traffic</li> </ul>	<b>Comments:</b> <ul style="list-style-type: none"> <li>• Duke Hospital stop should be underground keeps stop close to hospital; Fulton &amp; Erwin dangerous intersection</li> <li>• preferred because it includes <u>no</u> buses - though concerned about congestion on Erwin Rd.</li> </ul>
<b>Option 2 – Rail/Bus</b> ✓✓	<b>Option 2 – Rail/Bus</b> ✓✓✓
<b>Comments:</b> <ul style="list-style-type: none"> <li>• Prefer location of station</li> <li>• More able to fit with development</li> <li>• Less expensive</li> </ul>	<b>Comments:</b> <ul style="list-style-type: none"> <li>• make Old West Durham Hardware a park and ride lot and have steps/elevator from there to Fulton Street</li> <li>• streetscape Fulton to Duke for pedestrians</li> <li>• have Duke run buses (future tunnel?)</li> <li>• prefer location of station</li> <li>• Hillsborough St. station desirable for access from Watts Hospital-Hillandale neighborhood are and park and ride</li> </ul>
<b>Option 3 – Rail</b>	<b>Option 3 – Rail/Bus</b> ✓✓✓✓
<b>Comments:</b>	<b>Comments:</b> <ul style="list-style-type: none"> <li>• Bus gives more flexibility in routes, schedules, topography</li> <li>• More able to fit with development</li> <li>• Less expensive</li> <li>• Serves Duke campus without negatively impacting the campus</li> <li>• Concerns about traffic at Duke on Erwin Road</li> </ul>
<b>Other Options Suggested:</b>	
<ul style="list-style-type: none"> <li>• None of the above → prefer you keep your systems on existing roads and out of our neighborhood</li> </ul>	<ul style="list-style-type: none"> <li>• None of the above → prefer you keep your systems on existing roads and out of our neighborhood</li> </ul>

**Groups Represented:** (checks represent how many individuals claim affiliation with group)

Morgan Creek ✓

Sierra Club ✓

Triangle T.R.I.P. ✓

Durham Inter Neighborhood Council ✓

Watts Hospital-Hillandale Neighborhood Association ✓

### **Additional Comments:**

- **No intrusion on UNC campus**
- **Important to have a future connection through Chapel Hill to Carrboro; use old rail line; go ultimately to Hillsborough**
- **Hold all activity until a determination is made regarding service to Chapel Hill**
- **Do cost benefit analysis**
- **Do you have legal authority to take people's property and if so will you use it?**
- **There are more critical transportation issues on which the money could be spent**
- **Have you considered the environmental impacts (run-off, etc.) in the Baker's Mill/Hwy 54 area?**
- **There is no demand for this connection; landowners in this rural area have no need for nor interest in mass transit**
- **Bus connections to Chapel Hill should go directly from the multi-modal station in Durham & not from Duke or 9<sup>th</sup> Street; why create a second**
- **Have commuted to work by bus, subway and car and strongly prefer the rail alternative; trains easily accommodate standing and movement on and off vehicle**
- **Buses in mixed traffic are a waste; buses are uncomfortable and lack space for standing and hard to get on and off**
- **One alternative being considered goes through a property on George King Road that is adjacent to property we own and we are proposing a high-end residential development that will soon go before governing board for consideration**



**Summary of Public Comments 15-501 Major Investment Study Community Workshop #2**

**Date: January 18, 2001**  
**Place: Chapel Hill Public Library**  
**Number of Attendees: 82**

<b>Comments Cards from Night of Workshop</b>	
<b>Chapel Hill</b>	<b>Durham</b>
<p><b>Option I - Rail/Bus ✓✓✓✓✓</b></p> <p><b>Comments:</b></p> <ul style="list-style-type: none"> <li>• more convenient for students wanting to commute to either campus for classes or to get to Raleigh</li> <li>• other options don't seem as economical in moving people efficiently</li> <li>• like to see rail that near the heart of UNC campus (option 2 is 2<sup>nd</sup> choice)</li> <li>• this route seems to hit the major employment and residential centers</li> <li>• access to both universities and hospitals seems best</li> <li>• prefer bus options &amp; dedicated lanes &amp; little destruction of additional land</li> <li>• more direct access to primary destinations</li> <li>• less transfers to other modes</li> </ul>	<p><b>Option I – Rail ✓✓✓✓</b></p> <p><b>Comments:</b></p> <ul style="list-style-type: none"> <li>• think it is important to have a site as close to the heart of Duke as well as a no-transfer line between Durham – Chapel Hill</li> <li>• this route seems to hit the major employment and residential centers</li> <li>• access to both universities and hospitals seems best</li> <li>• more direct access to primary destinations</li> <li>• less transfers to other modes</li> <li>• utilizes density at Duke Medical Center which is essential to get enough ridership &amp; be successful</li> <li>•</li> </ul>
<p><b>Option 2 – Rail/Bus ✓✓✓✓</b></p> <p><b>Comments:</b></p> <ul style="list-style-type: none"> <li>• goes with the existing flow of Manning Drive</li> <li>• takes advantage of future development at Meadowmont</li> <li>• has more potential for future connections</li> <li>• prefer bus option specifically using rubber tired alternatives</li> <li>• less impact on Mason Farm Road neighborhood</li> </ul>	<p><b>Option 2 – Rail/Bus</b></p> <p><b>Comments:</b></p>
<p><b>Option 3 – Rail ✓</b></p> <p><b>Comments:</b></p> <ul style="list-style-type: none"> <li>• less intrusive and gets vehicles off the road</li> </ul>	<p><b>Option 3 – Rail/Bus ✓✓✓</b></p> <p><b>Comments:</b></p> <ul style="list-style-type: none"> <li>• more convenient for students wanting to commute to either campus for classes or to get to Raleigh</li> <li>• understand the environmental effects along 15-501 &amp; New Hope Corridor is environmentally sensitive area but/and ridership is also a concern</li> <li>• other options don't seem as economical in moving people efficiently</li> <li>• less intrusive and gets vehicles off the road</li> </ul>
<p><b>Other Options Suggested: ✓</b></p> <ul style="list-style-type: none"> <li>• Dedicated busway – seems more practical in terms of money &amp; use it will get               <ul style="list-style-type: none"> <li>→busway coupled with upgraded roads simplest solution to transportation problems</li> <li>→rail very expensive &amp; impacts on environment and homes tremendously more than busway</li> <li>→rail probably used much less since Americans love their cars &amp; independence: rail brings thoughts of higher crime, expense, high density pockets, more impact on environment &amp; homes</li> <li>→buses will continue to be used by people who use buses now</li> <li>→pave George King Road and upgrade Farrington Road instead of a rail line</li> <li>→women have too many errands during the day to use rail for work trips: daycare, dry cleaners, schools</li> </ul> </li> </ul>	

**Groups Represented:** (checks represent how many individuals claim affiliation with group)

Think Transit ✓✓

Northside Community Development Association ✓

Citizen Advisory Group for Orange County ✓

Triangle T.R.I.P. ✓

**Additional Comments:**

- none of the routes/alternatives will help me with my commute
- why isn't the Triangle to Raleigh connection in this initial plan?
- Concern about all of the Chapel Hill plans, main concern is damage to the Coker Pinetum (if Manning Drive is widened)
- concerns about potential noise and other impacts to the Botanical Garden
- want sound scientific basis for locating terminus at southern edge of campus when majority of faculty, staff & students work & study north of Bell Tower. Want numbers where people work & study
- right-of-way of all options should be pursued immediately
- planning & development in Chapel Hill needs to incorporate transit plans
- intercity continuity is key – transitions should be minimized
- would like to see a shuttle if there is no site closer to New Hope Commons – big destination but not pedestrian friendly
- the airport must be connected to rail system – great opportunity to get riders and reduce traffic
- this is a wonderful effort in terms of making planning and land use decisions in the Triangle
- how does this relate to transit system from Chapel Hill/Carrboro to RTP?
- We must have a bias towards making a decision sooner rather than later. The choices of TTA/Chapel Hill/Durham will affect the choices of institutions & individuals and the sooner the transit plan is settled the easier it will be for these decisions to be made in a way that is complementary

**Summary of Public Mailed Comments 15-501 Major Investment Study Community Workshops #2**

**Date:** As of February 2, 2001

**Item:** Comment Cards Mailed to HNTB

**Number of Cards Received:** 21

Mailed In Comments Cards	
Chapel Hill	Durham
<b>Option I - Rail/Bus</b> ✓✓✓✓ <b>Comments:</b> <ul style="list-style-type: none"> <li>• System should utilize existing rail wherever possible</li> <li>• System should be rail &amp; the whole system should be contiguous &amp; use one type of equipment ✓✓</li> <li>• Stop a major employment and visitation centers</li> </ul>	<b>Option I – Rail</b> ✓✓✓✓✓ <b>Comments:</b> <ul style="list-style-type: none"> <li>• system should utilize existing rail wherever possible</li> <li>• system should be rail and whole system should be contiguous and use one type of equipment ✓✓</li> <li>• system should be placed as close to university center as possible to get best ridership ✓✓</li> </ul>
<b>Option 2 – Rail/Bus</b> ✓✓✓✓ <b>Comments:</b> <ul style="list-style-type: none"> <li>• Station should be placed as close to university centers as possible to get best ridership</li> <li>• Better overall</li> <li>• Bus only</li> </ul>	<b>Option 2 – Rail/Bus</b> ✓✓ <b>Comments:</b> <ul style="list-style-type: none"> <li>•</li> </ul>
<b>Option 3 – Rail</b> ✓✓✓ <b>Comments:</b> <ul style="list-style-type: none"> <li>• provides good link to regional system</li> <li>• will need good park and ride, local bus system coordination and shuttle services regardless of technology used</li> <li>• bus technology is most appropriate within Chapel Hill; if rail should be light rail and run up Manning Drive</li> <li>• should consider elevated structure on Manning Drive if possible</li> <li>• bus only</li> </ul>	<b>Option 3 – Rail/Bus</b> ✓✓✓✓✓✓ <b>Comments:</b> <ul style="list-style-type: none"> <li>• use existing line to extent possible</li> <li>• provides link to Raleigh</li> <li>• technology should be rail</li> <li>• provides flexibility to link to Chapel Hill</li> <li>• better overall</li> <li>• bus only</li> </ul>
<b>Other Options Suggested:</b> <ul style="list-style-type: none"> <li>• →</li> </ul>	<ul style="list-style-type: none"> <li>• red route preferred if, and only if, we must choose an option ✓✓✓</li> <li>• Should use established transportation corridors and use park and ride lots rather than cutting through the last green space between I-40 and Meadowmont. (provided drawing) Make more sense to use I-40/15-501/54 as the “transit hub”: bus option more flexible ✓✓✓✓✓✓</li> <li>• Rail connector along 54/40 to RTP ✓✓✓</li> </ul>

**Groups Represented:** (checks represent how many individuals claim affiliation with group)

- League of Women Voters ✓
- Mason Farm Neighborhood Association ✓
- Westwood Neighborhood ✓
- Farrington Road/HARP ✓✓✓✓

**Additional Comments:** (checks represent number of times comment was received)

- multitude of advantages to utilizing one type of equipment: purchase price, maintenance costs of vehicles & rail bed, capacity, planning and convenience for riders (no transfers) ✓✓
- no preference on alternatives ✓✓✓✓✓✓
  - should be a system that reaches the most places ✓✓
  - use rail without a change at Friday Center; use Manning Drive ✓
  - no rail/bus ✓
- waste of money to have a rail system that does not reach the airport and RTP ✓✓✓✓✓✓
- direct route from Chapel Hill to RTP as well as one from Durham and Raleigh is the only thing that will work
- we wish you would listen to us and that our really comments mattered (and that you not only listen to developers) ✓✓✓
- all alternatives are ill conceived; no one in this area will use the system
- current Durham plans for southwest Durham show low density residential, not conducive to building ridership ✓✓
- not enough known about ridership, headways, environmental impacts on Jordan Lake and other environmentally sensitive areas (New Hope Creek) ✓✓✓✓
- notification process is sadly lacking, people in neighborhoods directly impacted were not notified by mail or sign
- only 12 families live on George King Road which will be heavily impacted – notify individually (get info from any real estate company), believe that are has been kept in the dark on purpose to keep protest to minimum which is unconscionable and should not be tolerated
- eliminate Option 1 in Chapel Hill
- study should plan for extension to Carrboro and Hillsborough on existing rail corridor
- bus option for today might forestall neighborhood problems but the bus option will not make provisions for future needs
- do a loop around Chapel Hill and go back to station at university
- will there be enough parking at the stations?
- can local buses run more frequently?
- Bring on HOV lanes also
- Thanks for doing this
- Workshop would have been more useful if there had been a presentation followed by question/answer/comment from attendees
- Do not support HOV lanes but busways okay
- Need signal preemption system for buses
- Good bus infrastructure needs to be implemented before, or at same time as rail, or else need large park & ride lots
- If the purpose is to reduce, or curb increase, congestion and make journey more enjoyable buses eventually add to congestion
- Need to plan for the density and population we will have and not what we currently have – it will only get worse
- Perhaps the rail corridor that goes to Hillsborough and south to UNC should be considered
- Use buses on Pope road to get people from Meadowmont to Durham; move all back to Pope Road as proposed about 15 years ago ✓✓✓✓
- No station at Ephesus Church Road area ✓✓
- Let's maintain green space where we can
- Oppose alternative that terminates at Meadowmont and bypasses Chapel Hill commercial hubs
- Rail is too costly for demonstrated ridership numbers and environmental impacts; need system that is flexible

**US 15-501 MIS PHASE II  
POLICY OVERSIGHT COMMITTEE  
October 27, 2000**

**MINUTES**

**Members Present:**

Nicholas Tennyson, Mayor, City of Durham  
Jonathan B. Howes, Special Assistant to Chancellor, UNC-CH  
Cal Horton, Manager, Town of Chapel Hill  
Carolyn Elfland, Associate Vice Chancellor, UNC-CH  
Eric Michaux, NCDOT Board of Transportation

Tallman Trask, Executive Vice President, Duke University  
Janet D'Ignazio, Chief Planning & Environmental Officer, NCDOT  
Rosemary Waldorf, Mayor, Town of Chapel Hill  
James Ritchey, General Manager, TTA

**Staff Present:**

Mark Ahrendsen, Director, City of Durham DOT  
Jim Anglin, HNTB  
Monica Toole, Project Manager, HNTB  
Anne Lenart-Redmond, HNTB  
Thomas R. Kendig, Project Manager, NCDOT  
Wesley Parham, City of Durham Transportation  
Jim Kessler, HNTB

Tamra Shaw, Transportation Planner, NCDOT  
David Bonk, Senior Transportation Planner, Town of Chapel Hill  
Linda Convissor, UNC Facilities Planning  
Sandy Ogburn, Assistant to General Manager, TTA  
Raymond S. Magyar, Assistant Director Transportation Planner, UNC-CH  
Whit Webb, HNTB

**Others Present:**

Wib Gulley, NC State Senator, District 13

Ed Harrison, Chapel Hill-Durham County resident

Mike Waldroup, Developer

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**I. Approval of Minutes of 9/22/00 POC meeting**

The Policy Oversight Committee unanimously approved the draft minutes of the September 22, 2000 meeting of the POC.

**II. Discussion of *Lessons Learned from Other Regions Technical Paper***

Ms. Toole distributed to the committee members a revised *Lessons Learned from Other Regions Technical Paper* as well as a memo with comments from TTA and David Bonk including the HNTB response to David Bonk's comments. After discussing the contents of the technical paper the POC determined that the overall lesson that could be gleaned from the paper was that each jurisdiction studied decided upon the technology used as a result of what appeared to work best for that particular community. The POC discussed the TTA comments and agreed that since this technical paper represents what other jurisdictions have learned from that jurisdiction's perspective and not what the consultants interpreted as having been learned the TTA comments should be incorporated as TTA asks. The POC also agreed that it should develop evaluation criteria to assist the members in making a determination of the appropriate vehicle technology. The technical memo containing the evaluation criteria prepared for Phase I of the MIS will be distributed to the POC. Additionally UNC will make available to the POC the criteria they used in evaluating the eleven fixed guideway corridors examined for the UNC Master Plan. The POC will discuss/ratify the criteria at the next meeting.

**III. Discussion of *State of the Art Rail and Bus Vehicle Technology Technical Paper***

Jim Anglin told the POC that the purpose of this Technical Paper was to provide the decision-makers with the best information available about the "state of the art" of vehicle technology and not to provide the final answer as to which technology was appropriate for this project. The information also should assist the technical committee as they look at the various alignments and the technical specifications required for the different vehicles. Monica Toole told the POC that the HNTB sub-contractor has prepared an extensive response to the concerns raised by Jim Ritchey in his memo and she suggested that before the POC dealt with those issues that TTA should have a chance to study the HNTB response. She distributed a copy of these responses to the POC. The Committee discussed how and if the Technical Paper can be useful to this Phase of the study. Mayor Tennyson stated that he thinks it is important that when a decision finally is made about which vehicle to use that those making the decision not be accused of being less than thorough in its analysis of the vehicle technologies available. Cal

Horton said that he thinks the factual errors to which Jim Ritchey refers in his memo need to be corrected. David Bonk explained that as the Scope for this phase of the MIS was developed it was thought that having information about the “state of the art” in vehicle technologies available to the decision-makers would be helpful. He added that the technology has evolved considerably and as it continues to evolve he suggests that deciding about the vehicle technology may become easier. The committee agreed that other than being sure that factual corrections are made to the paper it should stand as written for now.

#### **IV. Status of Project**

Ms. Toole distributed a handout that illustrates the relationship of the various tasks of the study to the Scope of Services. She pointed out that the vast majority of the time thus far has been devoted to the station area workshops. There has not been much accomplished on the second round of stakeholder workshops and she said that at best these could occur next month. This will cause a delay in developing the alternatives and transit operating plans. She told the POC that the model has not been available to the technical team but should be within the next couple of weeks. She said that the project is now pushed back by about two months. Janet D’Ignazio pointed out that there are differences of opinion amongst the technical team partners about the regional model (Model 2.0). She said that resolution must be reached soon because there are many regional projects that are being held up due to the inability to use the model. It appears that the model partners have forged an agreement that allows each party to proceed to use the model, making the necessary modifications and specifically documenting the how and why of any modifications made. Mayor Tennyson asked how and where this disagreement would delay this project. Senator Gulley pointed out that the timeline just distributed showed that the model work was scheduled for early February and that it appears that this should not further delay the project. Mayor Waldorf asked at what point must the model be available to prevent further delay of this particular study. The committee discussed the accuracy of and need for the model. Mayor Tennyson summarized the discussion as general agreement that the model is sufficient for highway traffic projections and that further delays to this study is something that will become apparent as the study moves along. He said that the consensus appeared to be that we would move forward with this study fully aware of a small risk that KPMG might determine in the future that there are flaws with the traffic projections.

Mayor Tennyson asked what was expected to happen between now and the next time that the POC meets at the end of November other than the workshops at UNC and Duke. Jim Anglin said that HNTB will distribute the technical paper on evaluation criteria from Phase I of the study and next week when the technical committee meets he expects to resolve any differences remaining regarding the vehicle technology paper.

Mayor Tennyson asked who was invited to the station area workshops. The POC discussed who should attend these technical review sessions and determined that the agencies and institutions would attend these meetings and invite the public to participate in station area workshops at a later time. The Technical Review Session at Duke is scheduled for November 14<sup>th</sup> and the Chapel Hill participants agreed to hold the UNC Session immediately after the next POC meeting, November 29<sup>th</sup>.

#### **V. Adjourn**

With no further business to discuss the October 27, 2000 meeting of the 15-501 Policy Oversight Committee was adjourned.

**US 15-501 MIS PHASE II  
POLICY OVERSIGHT COMMITTEE  
Chapel Hill Public Library, Chapel Hill, NC  
November 29, 2000**

**MINUTES**

**Members Present:**

Nicholas Tennyson, Mayor, City of Durham  
Jonathan B. Howes, Special Assistant to Chancellor, UNC-CH  
Cal Horton, Manager, Town of Chapel Hill  
Carolyn Elfland, Associate Vice Chancellor, UNC-CH  
Eric Michaux, NCDOT Board of Transportation  
Rachel Willis, TTA Board of Trustees

Tallman Trask, Executive Vice President, Duke University  
Janet D'Ignazio, Chief Planning & Environmental Officer, NCDOT  
Rosemary Waldorf, Mayor, Town of Chapel Hill  
James Ritchey, General Manager, TTA  
Greg Bethea, Interim Durham City Manager

**Staff Present:**

Mark Ahrends, Director, City of Durham DOT  
John Tallmadge, TTA  
Doug Mann, HNTB  
Anne Lenart-Redmond, HNTB  
Thomas R. Kendig, Project Manager, NCDOT  
Ryan Bricker, HNTB  
Jim Kessler, HNTB

Tamra Shaw, Transportation Planner, NCDOT  
David Bonk, Senior Transportation Planner, Town of Chapel Hill  
Linda Convissor, UNC Facilities Planning  
Sandy Ogburn, Assistant to General Manager, TTA  
Nathan Phillips, HNTB  
Whitmel Webb, HNTB

**Others Present:**

Wib Gulley, NC State Senator, District 13

Ed Harrison, Chapel Hill-Durham County resident  
Lydia Sigmund, Chapel Hill citizen  
Chris Berndt, Chapel Hill Planning Department

Mike Waldroup, Developer  
Ray Gronberg, *Chapel Hill Herald*

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**I. Approval of Minutes of October 27, 2000 POC meeting**

The Policy Oversight Committee unanimously approved the draft minutes of the October 27, 2000 meeting.

**II. Evaluation Criteria**

Mayor Tennyson asked if the Technical Committee had reviewed the *Evaluation and Methodology Criteria* document that was given to the Policy Oversight Committee and was told that the Technical Committee had reviewed it. Their comments and modifications have been incorporated into the document before the POC. Senator Gulley asked that the language in the fifth bullet under Goals and Objectives read "Support the areas existing and *desired future* land use..." instead of "projected land use..." Mr. Webb said that HNTB would make that modification. The POC discussed the criteria proposed and asked how the qualitative items would be examined. Mr. Webb told the committee that HNTB had envisioned putting the information in matrix format to compare the various alternatives. The committee members indicated that it is important for HNTB to document how they made determinations for those criteria that are subjective and qualitative. Mayor Waldorf expressed concern that there was no specific criteria listed that posed the question of connectivity to the local transit systems. The committee agreed that the fourth bullet under 1. Transportation Services/Mobility Issues should read "Connectivity with local transit systems." The committee also agreed that the following language should be added to the measure of effectiveness in the final bullet in 4. Financial Issues/Impacts "...including projected users of further expansions." Mr. Webb clarified that the financial projections will be broad-brush estimates using general parameters.

**III. Report on Duke Technical Workshops**

Doug Mann, HNTB, reported that tremendous progress has been made as a result of the Duke Station Technical Workshops held November 17 and 28, 2000. Representatives from Duke, TTA, and the City of Durham attended both technical workshops. At the beginning there were seven alternatives to be considered and at the end of the first workshop there was unanimous agreement to pursue two "rail-bus" alternatives and agreement to keep the "baseline" Erwin Road alignment on the table for now. The quality and nature of Erwin Road is important to the

Duke and VA medical facilities and pursuit of this option would depend on the technology chosen for TTA Phase I regional rail. Mr. Mann outlined the three alternatives to the POC. Dr. Trask told the POC that Duke accepts leaving the Erwin Road baseline option on the map for now and Mr. Ritchey clarified that TTA understands that use of an Erwin Road alignment would be acceptable to Duke if it is at grade and does not include an elevated structure. It was agreed that the final nature of the Duke station to a great extent will depend on what technology and alignment is proposed to complete the line from Duke to Chapel Hill. Dr. Trask told the POC that with all three of the proposed station locations it should be understood that the Duke bus system will help to distribute passengers from the rail station to other points within Duke University.

Mayor Tennyson suggested that since we now have proposed alternatives on which there is agreement amongst the various partners it is time to bring the neighborhoods in the area into the process so that they have the opportunity to look at and comment on the proposed alternatives. It was agreed that it will be the responsibility of the local jurisdiction's staff to arrange and set up these meetings and the consultants will attend in order to answer questions.

Doug Mann told the POC that there still is one outstanding issue. Duke has concerns about the alignment once it leaves Erwin Road and parallels the US 15-501 Bypass going to the South Square area. There is a question about the limit of the highway right-of-way and how close it is to the Duke golf course, particularly the jogging path between the golf course and the highway. Duke is concerned about losing the buffer that now exists between the highway and the jogging path. Mr. Mann said that there is still work to be done to resolve this issue. TTA has offered to have its engineers collect good baseline information and report back to the Technical Committee about this part of the study area. Dr. Trask clarified for the POC that Duke did not want to lose the buffer and said that he would be prepared to recommend that Duke offer land that it owns on the other side of the highway if it would help keep the buffer in tack.

#### **IV. Conceptual Alignments Duke to South Square**

Whitmel Webb told the POC that the primary concern in the area between Duke and South Square at this time is the area adjacent to the Duke golf course. The Technical Committee has narrowed the number of alignments between South Square and I-40. Mr. Webb explained the proposed alignments to the POC pointing out the areas of concern along the New Hope Creek corridor and the potential impacts to the Wetlands. Mr. Webb showed the POC the alignment previously proposed along Pope Road. He said that Technical Committee recommends dropping the Pope Road alignment from the study and he asked the POC for their concurrence. After discussion of the potential impacts of this alignment Mayor Tennyson asked if there was disagreement from the POC to dropping this alignment from the study. There was none and the POC agreed that the Pope Road alignment should be removed from the study.

Mayor Waldorf told the POC that the Town of Chapel Hill sponsored a design competition for the property known as "Gateway" and the Town agreed to send copies of the plans to HNTB. Mr. Webb told the POC that the consultant and the Technical Committee are looking at various alignments from I-40 to the UNC Hospital.

#### **V. Status of Project/Project Timeline**

Whitmel Webb distributed a revised project timeline. Mr. Webb asked that the POC scheduled for January 12<sup>th</sup> be moved to the following week. After discussion the POC determined that the next POC meeting would remain as scheduled January 12, 2001, from 9:00 to 11:00 a.m. Mayor Waldorf said she thinks that public meetings need to be scheduled in January. The POC determined that the public meetings should be held during the week of January 16 to 19. Mr. Webb told the POC that the revised timeline shows the project being completed by May.

Mayor Tennyson asked that POC members look at their calendars to schedule the March POC meeting. They agreed on March 9, 2001, from 9:00 to 11:00 a.m. for the meeting. The City of Durham will host this meeting.

#### **VI. Adjourn**

With no further business to discuss the November 29, 2000 meeting of the 15-501 Policy Oversight Committee was adjourned.



**US 15-501 MIS PHASE II  
POLICY OVERSIGHT COMMITTEE  
Allen Building Board Room, Duke University  
January 12, 2001**

**MINUTES**

**Members Present:**

Nicholas Tennyson, Mayor, City of Durham  
Jonathan B. Howes, Special Assistant to Chancellor, UNC-CH  
Cal Horton, Manager, Town of Chapel Hill  
Carolyn Elfland, Associate Vice Chancellor, UNC-CH  
Eric Michaux, NCDOT Board of Transportation

Tallman Trask, Executive Vice President, Duke University  
Janet D'Ignazio, Chief Planning & Environmental Officer, NCDOT  
Rosemary Waldorf, Mayor, Town of Chapel Hill  
James Ritchey, General Manager, TTA  
Rachel Willis, TTA Board of Trustees

**Staff Present:**

Mark Ahrendsen, Director, City of Durham DOT  
John Tallmadge, TTA  
Whit Webb, HNTB  
Anne Lenart-Redmond, HNTB  
Jim Kessler, HNTB

Thomas R. Kendig, Project Manager, NCDOT  
David Bonk, Senior Transportation Planner, Town of Chapel Hill  
Linda Convissor, UNC Facilities Planning  
Sandy Ogburn, TTA

**Others Present:**

Wib Gulley, NC State Senator, District 13

Ed Harrison, Chapel Hill-Durham County resident  
Anne Blythe, *News & Observer*

Mike Waldroup, Developer  
Ray Gronberg, *Chapel Hill Herald*

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**I. Approval of Minutes of November 29, 2000 POC meeting**

The Policy Oversight Committee unanimously approved the draft minutes of the November 29, 2000 meeting.

**II. Report on Chapel Hill Technical Work Session 11/29/00**

Anne Lenart-Redmond presented four options that were agreed upon by consensus at the Chapel Hill technical workshop held November 29, 2000. Two alignments serve the medical complex directly: a northern alignment that follows Manning Drive; and, a southern alignment that follows the topography and is buffered from and on the northern border of Mason Farm Road. She told the POC that the Town of Chapel Hill has asked for a follow-up technical session but the university and the town are not in agreement on several issues. She said that no more can be brought to the table for a follow-up session because the issues of disagreement are qualitative and not quantitative and further engineering and modeling will not yield more useful information. Because of this, she said that HNTB did not believe a follow-up session would be beneficial to the process. Jonathan Howes told the POC that the UNC Chancellor and Mayor Waldorf had set up a committee to deal with a broad range of issues between the university and the town and that this issue was on the agenda of that committee. The POC discussed the process that will be followed to reach a final decision.

Whit Webb said that there are two issues about which the POC needs to be aware: the alignment between the Meadowmont development on Highway 54 and the UNC Golf Course; and, the alignment at the elementary school. It was suggested that the Chapel Hill School Board might have opinions about the suggested grade separation over the parking lot of the elementary school. The consultant told the POC that as the process moves forward these two issues will be further defined and refined.

The Policy Oversight Committee directed the consultant to change the color of the yellow line on Option 2 to green which then makes this alignment consistent with Option 2 at Duke. They also directed that the yellow alignment in Option 4 be changed to green.

The POC discussed the third option: bus/rail on Raleigh Road. Concerns about this option were raised and discussed. The POC expressed concern that the existing parking lot would not be large enough to serve both as a park and ride lot and provide sufficient room for a station, and that a station on Raleigh Road does not directly serve the medical complex, the primary generator of transit traffic. The POC voted to do no

further evaluation of this alternative but to continue to show it as an option that was looked at and dismissed for specific reasons.

The fourth option terminates the rail/bus alignment at the Friday Center and is included in the event that the University and the Town of Chapel Hill do not agree on an alignment terminating on the UNC campus. The POC discussed the merits of this option at length and as part of the discussion looked at the various proposed alignments between South Square and the Friday Center. They also discussed how riders of the system would get to RTP. Mayor Waldorf informed the POC that the Durham Chapel Hill Carrboro MPO was formally asking NCDOT to initiate a study of the Highway 54 corridor and that NCDOT also is studying the feasibility of HOV lanes on I-40. She said that these two studies should help answer the question of how riders get from Chapel Hill to RTP.

In response to a question the consultants told the POC that contacting the Corps of Engineers had been taken out of the Scope of Work. Tom Kendig told the POC that after the completion of Phase I of the 15-501 MIS he had talked with the Corps of Engineers. At that time the Corps raised concerns about the proximity of the proposed alignment to New Hope Creek and the potential that raised for intensification of development along that corridor. HNTB agreed to show the proposed alignments to the Corps of Engineers to see if there is strong opposition to any particular one. The POC asked that they be informed when HNTB had a response from the Corps.

HNTB told the POC that the number of alternatives to be run has increased rather than decreased and that the Scope of Work called for twelve. The POC discussed this issue at length and concluded that they will work to reduce the number of alternatives to twelve but for now eighteen plus the Duke "baseline" alternative remain "on the table."

### III. Materials for Upcoming Workshops

Ms. Lenart-Redmond distributed the materials that will be given out at the public meetings in Durham (January 16, 2001) and Chapel Hill (January 18, 2001). She told the POC that over 1,900 post cards announcing the public workshops had been mailed out to individuals in the area. There was also an extensive number of email messages sent out. NCDOT will also set up "intelligent" signs along the 15-501 corridor announcing the meeting dates, times and places.

### IV. Status of Project

- **Duke Medical Center Alternatives** After the last Duke technical workshop it was agreed to look at a station location on the coal spur with the station across from the helicopter landing-pad. TTA is having the Regional Rail Phase I engineering consultant look at the site and produce drawings. By consensus the POC agreed that the Duke "baseline" alternative, a DMU at grade in the right-of-way on Erwin Road, should continue to be studied.
- **Model** The work for which TTA contracted with KPMG (now AECOM) has been completed. The material has come back to the Model Committee and this Committee will begin to work on the re-calibration January 16th. The projected finish time for the re-calibration work is March 1. Also, the 15-501 consultants now can begin to encode the alternatives and begin to run the various alternatives in March. It is unlikely that there will be model results before mid-March or the first of April. This is later than what is indicated on the current project schedule.
- **Project Timeline** The consultant distributed a revised timeline based on the new information about the model. The POC scheduled an additional meeting on April 27<sup>th</sup> from 9:00 – 11:00 at TTA.

### V. Adjourn

With no further business to discuss the January 12, 2001 meeting of the 15-501 Policy Oversight Committee was adjourned.

**US 15-501 MIS PHASE II  
POLICY OVERSIGHT COMMITTEE  
Durham City Hall Committee Room, Second Floor  
March 9, 2001  
MINUTES**

**Members Present:**

Nicholas Tennyson, Mayor, City of Durham  
Rosemary Waldorf, Mayor, Town of Chapel Hill  
Cal Horton, Manager, Town of Chapel Hill  
Carolyn Elfland, Associate Vice Chancellor, UNC-CH  
Eric Michaux, NCDOT Board of Transportation

Greg Bethea, Durham Interim City Manager  
Janet D'Ignazio, Chief Planning & Environmental Officer, NCDOT  
Jonathan B. Howes, Special Assistant to Chancellor, UNC-CH  
James Ritchey, General Manager, TTA  
Rachel Willis, TTA Board of Trustees

**Staff Present:**

Mark Ahrendsen, Director, City of Durham DOT  
Ray Magyar, UNC Assist. Dir. Transportation Planner  
Whit Webb, HNTB  
Anne Lenart-Redmond, HNTB

Thomas R. Kendig, Project Manager, NCDOT  
Tamra Shaw, NCDOT  
Linda Convissor, UNC Facilities Planning  
Sandy Ogburn, TTA

**Others Present:**

Wib Gulley, NC State Senator, District 13

Ed Harrison, Chapel Hill-Durham County resident  
Vicki Hyman, *News & Observer*

Mike Waldroup, Developer  
John Waldroup, Developer

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**I. Approval of Minutes of January 12, 2000 POC meeting**

The Policy Oversight Committee unanimously approved the draft minutes of the January 12, 2001 meeting with the addition of two changes in the section titled *Report on Chapel Hill Technical Work Session 11/29/00*. Jonathan Howes asked that the minutes reflect that it was the UNC Chancellor and Mayor Waldorf that set up the town/gown committee to resolve differences between the Town of Chapel Hill and UNC. Also, Sandy Ogburn told the POC that in the same paragraph the minutes should reflect that the Town of Chapel Hill, not UNC, requested a follow up meeting to the November 29, 2000 workshop.

**II. Report on Public Workshops Series #2**

Anne Lenart-Redmond told the POC that Sandy Ogburn had compiled the comments received after the two public meetings held in January. The chart distributed contained a compilation of the comments received at each of the public meetings and the comments subsequently mailed to HNTB. Mayor Tennyson observed that the responses were quite varied. He told the POC that he believed that the comments did not show any consensus and that the points made by people at these meetings needed to be kept in mind as the process moves forward. Eric Michaux asked what the term "light rail" meant to the people who mentioned it. Ms. Ogburn told him that none of the comment cards had defined what was meant by "light rail" and that she has just copied to the chart what people had put on their cards.

**III. Status of Project**

**UNC Hospital Access** Janet D'Ignazio told the POC that there was a difference of opinion between UNC and the Town of Chapel Hill about the feasibility of dedicating two lanes of Manning Drive to buses. She said that she has asked HNTB to review the traffic analysis and data collected and used for the UNC Master Plan development by UNC consultant, George Alexiou of Martin Alexiou and Bryson (MAB). Ms. D'Ignazio told the POC that HNTB had just completed their analysis and she was bringing this to the group for information purposes only today. HNTB reported that they reviewed the MAB analysis and found the assumptions reasonable. Anne Lenart-Redmond reported the MAB traffic volume forecasts for 2025 shows the four general-purpose lanes on Manning Drive carrying 32,000 vehicles per day. HNTB estimated the 2025 vehicle capacity of a four-lane Manning Drive to be 27,900 vehicles per day. Today Manning Drive carries 16,500 vehicles per day. Ms. Redmond said that a two-lane road, with a level of service D, typically can carry 13,000 vehicles a day. Therefore, Manning Drive cannot function as a two-lane facility, even today. She said that HNTB does not expect significant differences in the numbers

between the model used by MAB and the new regional model. HNTB concluded that Manning Drive will have to remain four general-purpose traffic lanes unless some other access to campus is provided.

Ms. Redmond told the POC that two diamond lanes, for buses only, on Manning Drive would be viable if model forecasting shows a significant reduction to 13,000 vehicles per day. Whit Webb told the POC that in order to attain that number, a fifty-percent transit ridership requirement would be necessary to reduce Manning Drive to two general-purpose lanes. He also pointed out that many of the trips on Manning Drive are hospital trips that are not necessarily transit conducive. Cal Horton asked what assumptions Mr. Alexiou had made about park and ride lots at the periphery of the community. Mr. Webb said that HNTB does not have that information. Ms. D'Ignazio pointed out that a policy shift would be necessary to force a significant number of vehicle trips to be transferred to transit. She told that POC that the Committee needed to think about the purpose of the road, determine what options are available and if it is feasible to make such a significant shift to transit.

Ms. D'Ignazio reiterated to the POC that the data is brought to them so that committee members can determine what additional information they want/need to assist them with the discussions to resolve this issue and to determine who will do the additional work. Jonathan Howes asked when the new regional model would be available. Mr. Webb cautioned the POC that traffic models can not be exact and that in the model vehicle trips are ascribed to zones and that traffic in any one zone is not assigned to a particular road but assumed to be disbursed amongst the major roads within that zone. He said that the regional model will not be able to determine exactly how many cars would be assigned to Manning Drive and to any other road within the same zone.

Ms. D'Ignazio noted that there was a difference between the University and the Town of Chapel Hill and that she did not want to see the issues that are legitimately part of the 15-501 study get mixed up with the "push and pull" between the Town and UNC. The POC members discussed what additional information would assist them with this issue. Mayor Tennyson asked if further study of this particular issue was part of the Scope of Work. Ms. D'Ignazio answered that it would depend on the nature of the information for which the POC asked. Carolyn Elfland told the POC that the University had a GIS map that showed where all University employees come from and she noted that many of the employees come from Alamance and other counties to the south and west and would not use transit coming from Durham using the 15-501 corridor. Ms. D'Ignazio asked that all parties at the table frame their questions and transmit them to HNTB so that it can be determined if the data asked for is available. If all of the information is not currently available then the POC can decide at the next meeting how to proceed.

The POC discussed at length what information would be helpful. Cal Horton asked that the University provide to HNTB all the relevant information used by the University in developing the Master Plan related to Manning Drive. Mr. Webb asked if it would assist the POC if George Alexiou came to a meeting and Mr. Howes suggested that Mr. Alexiou meet with the Technical Committee. Mayor Tennyson said that the Technical committee should review all of the data available, as well as the assumptions behind the data, and bring to the POC the policy questions that need to be answered as a result of this review. He also told the members present that the POC will have to review the contract with HNTB and make choices as to how the remaining money is to be spent.

Ms. D'Ignazio summarized the discussion to clarify what is being asked of the Technical Committee and HNTB. She said that she understands that the POC wants: George Alexiou to meet with the Technical committee (April 20 and UNC will pay for Mr. Alexiou's time); the Technical Committee will review the presentation, make "visible" the assumptions used to conduct his analysis, and validate the reasonableness of the technical judgements he made. HNTB (and Tom Kendig) will report to the POC any differences of opinion, and identify any constraints that are placed on the POC if George Alexiou's information is accepted as good information for the purposes of this study.

**South Square to Friday Center Alignment** Ms. Redmond reported that at the February 12, 2001 Technical committee meeting HNTB distributed a matrix that compared, using various criteria, the alignments being considered in this area. She distributed the material to the POC. She reported that the Technical Committee had looked at the alignments proposed from South Square to I-40 and tentatively chose the southern alignment. HNTB has set up a meeting with several resource agencies, including the Army Corps of Engineers, to get some response from them regarding this alignment. Mr. Ritchey cautioned that HNTB should clearly identify the land owned by Durham County. He told the POC that he

had been asked by TTA Trustee and Durham County Commissioner Ellen Reckhow why the alignment along the 15-501 corridor had been dropped. Ms. Redmond told the POC that HNTB had investigated the issue of county property. The POC discussed the issues raised by impacting wetlands and potential parklands. The POC said that Durham County should be contacted to determine their plans for a future park.

Mike Waldroup stated that he wanted to go on record as favoring the southern alignment that the Technical Committee was recommending. He said that he has told both the Durham City/County Planning staff and Commissioner Reckhow that the alignment recommended was the best and would not impact the future park land. He said that, as the property owner, he is willing to reserve the right-of-way and possibly otherwise make it available as a transit corridor. He said that he has been approached by the County and asked to dedicate that land and he has resisted pending the selection of an alignment primarily because he wants to make it easy for transit to cross that floodplain.

Ms. Redmond showed the POC three alignments proposed in the area of Ephesus Church Road. She said that the Technical Committee had looked an alignment west and one east of the middle alignment shown on the handout, the carryover alignment from the Phase I MIS. She reported that the Technical Committee reached consensus on the middle alignment, the Phase I carryover alignment, because it had the lowest impacts and the highest ridership potential.

She also said that, due to operational issues, the Technical Committee agreed that Manning Drive (as opposed to Skipper Bowles) was the better alignment for the BMT alternative.

**Project Timeline** Ms. Redmond reported that the HNTB sub-contractor is beginning to develop the operating plans and HNTB is beginning to put together the right-of-way costs for some of the alignments. A new schedule was distributed which is premised on the availability of the model by April 1. The Phase II schedule has been extended to reflect the delay in the availability of the model. Mr. Webb pointed out that there are still too many alignments on the table and the POC will have to trim the number to be further studied. Ms. D'Ignazio said that the POC also will have to revisit the Scope of Work and make the appropriate adjustments at the next meeting.

#### **IV. Adjourn**

With no further business to discuss the March 9, 2001 meeting of the 15-501 Policy Oversight Committee was adjourned.

# MINUTES

## US 15-501 MIS PHASE II POLICY OVERSIGHT COMMITTEE TTA Conference Room, 50 Park Drive, RTP, NC April 27, 2001

### Members Present:

Nicholas Tennyson, Mayor, City of Durham  
Rosemary Waldorf, Mayor, Town of Chapel Hill  
Cal Horton, Manager, Town of Chapel Hill  
Carolyn Elfland, Associate Vice Chancellor, UNC-CH  
Rachel Willis, TTA

Tallman Trask, Executive Vice President, Duke University  
Janet D'Ignazio, Chief Planning & Environmental Officer, NCDOT  
Jonathan B. Howes, Special Assistant to Chancellor, UNC-CH  
James Ritchey, General Manager, TTA

### Staff Present:

Mark Ahrendsen, Director, City of Durham DOT  
Ray Magyar, UNC Assist. Dir. Transportation Planner  
Whit Webb, HNTB  
Anne Lenart-Redmond, HNTB

Thomas R. Kendig, Project Manager, NCDOT  
Tamra Shaw, NCDOT  
David Bonk, Town of Chapel Hill Transportation Planner  
Sandy Ogburn, TTA

### Others Present:

John Waldroup, Developer  
Andrew Pike, UNC Student

Mike Waldroup, Developer

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Mayor Tennyson called the meeting to order at 9:05 a.m.

### **I. Approval of Minutes of March 9, 2001 POC meeting**

The Policy Oversight Committee unanimously approved the draft minutes of the March 9, 2001 meeting.

### **II. Status of Project**

Janet D'Ignazio suggested that the POC discuss the Status of the Project first. Anne Lenart-Redmond told the POC that the project schedule has been updated premised on the receipt of the calibrated model on April 25, 2001. She directed their attention to the flow chart handed out at the meeting. She told the POC that the schedule is aggressive and depends on the following: a "flaw" free model; the 2025 model accepted by all stakeholders "as is"; elimination of several tasks (such as prior distribution of the operating plans for review and comment by the technical committee); and only one model run for each of the alternatives. She said that HNTB would distribute the operating plans to the technical committee by email. Ms.Redmond said that HNTB also has looked at the remaining tasks to determine which could be eliminated without harming the end result and to accelerate the schedule. She used as an example the twelve models that are to be run. If the POC decides to eliminate some of those based on qualitative criteria, for each one that is eliminated there is an approximate savings of one to one and one-half days on the schedule. If the POC eliminated technologies then the time saving could be more significant, possibly a week for each one eliminated. In order to meet a July or August completion date, all modeling would have to be eliminated.

The POC members discussed the impacts of eliminating the modeling of alternatives. Ms. D'Ignazio pointed out that the determination of what to study from a technical perspective is different then from the political perspective. She predicted once the models are run that the technical differences between the various alternatives will be minimal and that no alternative will stand out as particularly better then any of the others. The POC members agreed that since the success of the project is to be determined in the political process the modeling will have to be completed.

Mayor Waldorf asked that information about the status of the project be shared with the DCHC TAC in August. She said that beginning the information-sharing process in August will give the policy makers the time needed to make informed decisions.

Jim Ritchey told the POC that the *Phase I Regional Rail Draft Environmental Impact Statement* (DEIS) will be published during May. He said that the elevated station in front of Duke Medical Center parking deck remains in the document and is the final station for Phase I. He said that TTA and Duke continue to look at acceptable alternatives to that station location with the goal of reaching agreement on a station prior to the FEIS publication.

The POC agreed that an October completion date is acceptable, that all modeling work needs to be done, and that completed work will be shared with elected officials in order to arm them with necessary information to assist with decision making.

Ms. Redmond briefed the POC on the last Technical Committee meeting. She said that George Alexiou attended that meeting and shared with the members the assumptions used in making the decision about the new southern access road in the UNC Master Plan. Ms. Redmond said that there was considerable discussion about the assumptions and not everyone agreed to these assumptions. After reviewing the information the Technical Committee members decided that the assumptions were irrelevant to discussing the vehicle capacity of Manning Drive. She said that there was consensus that there was sufficient traffic relief on Manning Drive to accommodate transit with two diamond lanes for buses if the proposed UNC four-lane southern access road was built. She reported that the Technical Committee agreed that even with today's traffic counts, there would not be sufficient capacity on Manning Drive for two general-purpose lanes and two diamond lanes for buses without the new access road. After the Committee meeting Ms. Redmond circulated a memorandum summarizing the conclusions. She said that after the memo was circulated there was disagreement with the conclusions and subsequently the Town of Chapel Hill wrote the letter included with the information distributed today that outlined their concerns.

David Bonk said that the technical staff, at the meeting, agreed "intuitively" that if another four-lane facility were added to the system there would be sufficient capacity on Manning Drive to accommodate two lanes for buses. He said that none of this was done from a specific technical analysis which also assumed a series of policy changes that encourage the use of transit: different land use patterns, promoting biking, moving parking away from Manning Drive, etc. He said that these policy changes would encourage users to find alternative modes to get to their destinations and therefore reduce traffic volumes on Manning Drive. Cal Horton said that in order for him to present the results of this study to the Chapel Hill Town Council he will have to be able to say that an analysis of Manning Drive with two diamond lanes for buses and without the new road had been done. Mayor Waldorf said that she needs a defensible, believable analysis that determines if Manning Drive can function without another access road and with diamond lanes to move the process forward with the Town Council. Carolyn Elfland pointed out that the mission of the University and the Hospital are statewide and that people must have access to the facilities and she did not think anyone believed that two-lane roads will serve that need. She said that much of the traffic on Manning Drive is patient related and the university does not believe that traffic could be shifted to transit. Mr. Bonk suggested that the analysis does not need to be a major undertaking and could be accomplished by putting each road into a separate node using a series of assumptions about parking fees and policy decisions encouraging alternative modes of travel. The POC discussed the assumptions contained in the regional model.

Mayor Tennyson said that it appears that everyone agreed that the project should hold to the calendar that was distributed and incorporate the additional link (splitting Manning Drive and the "new" access road) in the study. He said that staff needs to inform the POC of the time and money implications of adding the new link. Mayor Waldorf also asked that the assumptions be written down so that everyone knows the assumptions upon which the modeling results are based.

Ms. D'Ignazio summarized the process and timeline. She said that the POC will get in writing by Monday, April 30, the assumptions that are in the model and provide those assumptions to Jonathan Howes and Carolyn Elfland. The Town of Chapel Hill and UNC representatives will then confer to reach agreement, if possible, on the assumptions. If agreement is reached, the consultant will develop a time and cost estimate for doing a minimal amount of work to accomplish the analysis that the POC has directed needs to be completed regarding Manning Drive.

The POC set June 29, 2001 as the next meeting date from 9:00 to 11:00 in Chapel Hill.

### **III. Scope**

Ms. Redmond told the POC that as of April 1, 2001, the amount remaining in the HNTB budget for Task I is \$59,900. She said that the cost of the tasks yet to be completed in Phase II Task I is \$175,424 leaving a significant deficit. She went on to explain that a number of tasks that have been completed actually had been expected to be completed during Task II. The funds for Task II items have not been released although a significant amount of the work has been completed at the direction of the POC. She said that originally only one public workshop had been planned and to date there have been three. She said that at the beginning of this phase of the MIS it had been assumed that we would stay with the alignment identified during Phase I between South Square and the Friday Center. There have been five alignments studied at the direction of the POC. She said that HNTB has worked closely with Tom Kendig to identify the tasks on the chart in the memorandum distributed. HNTB asks that the funds for Phase II be released to pay for the work completed. Tom Kendig said that DOT recommends that the POC release of \$87,275 of the money reserved for Task II items with the understanding that release of the money now takes money away from preliminary engineering later. Mayor Waldorf made the motion that the POC affirm the agreement reached between DOT and HNTB and authorize the release of the \$87,275. The motion was seconded by Cal Horton and passed unanimously by the POC.

Ms. Redmond clarified for the POC that the remaining public involvement will consist of a brochure that will be mailed to individuals on the mailing list.

### **IV. Resource Agency Meeting Report**

Ms. Redmond reported that HNTB and DOT did meet with the resource agencies on March 16. They met with the US Fish and Wildlife Service, ACOE, the NC Wildlife Resources Commission, the Natural Heritage and the NC Division of Water Quality. HNTB presented the southern alignment between South Square and Mt. Moriah Road and asked for the agencies' reactions. The agencies agreed that they will be "open" to a southern alignment although they still want an alignment along the 15-501 corridor considered during the EIS phase of the study. The POC asked that a summary of the responses of the resource agencies be included in the final report.

### **V. Adjourn**

With no further business to discuss the April 27, 2001 meeting of the 15-501 Policy Oversight Committee was adjourned.



# MINUTES

## US 15-501 MIS PHASE II POLICY OVERSIGHT COMMITTEE Chapel Hill Town Library June 29, 2001

### **Members Present:**

Nicholas Tennyson, Mayor, City of Durham	Tallman Trask, Executive Vice President, Duke University
Rosemary Waldorf, Mayor, Town of Chapel Hill	Janet D'Ignazio, Chief Planning & Environmental Officer, NCDOT
Rachel Willis, TTA	Jonathan B. Howes, Special Assistant to Chancellor, UNC-CH
Carolyn Elfland, Associate Vice Chancellor, UNC-CH	Marcia Conner, Manager, City of Durham

### **Staff Present:**

Mark Ahrendsen, Director, City of Durham DOT	Thomas R. Kendig, Project Manager, NCDOT
Ray Magyar, UNC Assist. Dir. Transportation Planner	Tamra Shaw, NCDOT
Whitmel Webb, HNTB	David Bonk, Town of Chapel Hill Transportation Planner
Anne Lenart-Redmond, HNTB	Sandy Ogburn, TTA
John Tallmadge, TTA	Linda Convissor, UNC

### **Others Present:**

Wib Gulley, NC Senator	Mike Waldroup, Developer
Kelly, Intern	Ed Harrison

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Mayor Tennyson called the meeting to order at 9:10 a.m.

#### **I. Approval of Minutes of April 27, 2001 POC meeting**

Mayor Waldorf reminded members that at the April 27 meeting the POC had been told there would be preliminary recommendations ready for the August 8, 2001 DCHC TAC meeting. The POC discussed this and agreed that by the August 8, 2001 meeting the consultant would have options available and present them to the TAC for discussion.

Mayor Waldorf moved approval of the minutes of the April 27, 2001 Policy Oversight Committee meeting. The motion was seconded by Janet D'Ignazio and passed unanimously by the Policy Oversight Committee.

#### **II. BMT Alternatives**

Anne Lenart-Redmond told the POC that HNTB hosted a BMT Workshop on June 8, 2001. She cautioned that the materials she was handing out had not been reviewed by the Technical Committee and are therefore preliminary. She said that as a result of the June Workshop HNTB has finalized two BMT Alternatives, 5 and 10. Ms. Redmond said that with Alternative 5 the transfer is at the 9<sup>th</sup> Street Station and went on to describe the specific route for this Alternative. She said that two additional lanes, for buses, would have to be added to Academy Road with this alternative. Mayor Tennyson said that he did not think that the widening of Academy Road by two lanes was feasible. The POC discussed this and determined that if the road is left at two lanes the result would be a time-delay.

Ms. Redmond explained that Alternative 5 terminates at the UNC Hospital. From the hospital there will need to be a "fly-over" Manning Drive to facilitate eastward movement back onto the 15-501 Bypass. Carolyn Elfland said according to the UNC Master Plan consultants, dedicating two lanes for buses on Manning Drive would not leave sufficient road capacity for the projected traffic.

The discussion turned to the model and the assumptions in the model. Ms. Elfland said that UNC has problems with two aspects of the model: the model can not accurately predict current day traffic leaving one to suspect the accuracy of predicting traffic in 2025; and, UNC does not believe that it is appropriate to assume one "flat" rate for parking. The POC discussed the assumptions built into the model. They concluded that although the tool can not predict with complete accuracy, and several of the stakeholders have raised concerns about how this will impact the results, they agree to move forward with the modeling. All parties reserve the right to reject the results at the end of the process if they believe that the model results are incorrect or inaccurate.

Ms. Redmond described the route for Alternative 10 starting with the transfer at Hillsborough Road. She said that there are significant capital costs with this alternative due to the construction of the exclusive bus-way. The POC discussed the flexibility of the Bus in Mixed Traffic option and talked about opportunities to vary the routes of Alternatives 5 and 10.

Jonathan Howes asked why the “new” Mason Farm Road was not shown on the maps. Ms. Redmond pointed out that not all of the model runs include this road. The POC discussed this and decided that the road should be shown on the map and that there should be an indication somewhere on the map of those model runs that do not include this new road.

Mayor Tennyson asked what decisions the POC needed to make today. After some discussion, Mayor Tennyson moved that Academy Road not be shown as widened on the maps and that it remain a two-lane road. The motion was seconded by Mr. Howes and passed unanimously by the POC.

Ms. Redmond explained that when the Scope of Work was completed and the tasks of this Phase of the 15-501 Study were divided into two segments the modeling for the BMT alternatives was not funded in the first segment. Tom Kendig said that HNTB and DOT were still discussing this budget issue and will bring a recommendation to the POC at the August meeting.

Tallman Trask told the POC that in mid-August Duke will begin to run a bus from the Duke campus directly to UNC terminating at the Morehead Planetarium, the “Roberson Scholars” bus. He said that with this service Duke can make observations about routes, timing, etc. and that they will make that information available to the 15-501 study.

### **III. Build Alternative Coding Status**

Ms. Redmond told the POC that the sub-consultant, AECOM, has coded the light rail alternatives and is close to completing the bus-ways. She said that all of the coding should be complete and ready for discussion by the Technical Committee at the July 10, 2001 meeting.

### **IV. Status of Project**

Ms. Redmond said that in looking at the station locations for the DMU alternative from South Square south, the station locations are almost identical to those for the light rail alternative. HNTB anticipated DMU stations at South Square, Mt. Moriah, Ephesus Church Road, Meadowmont and the Friday Center. She said that in the discussions it is clear that Gateway is an ideal station location, but she says, this poses two problems. With a station at Gateway the DMU alternative then will have the same station locations as the light rail alternative. With DMU vehicles ideally one wants stations at least one mile apart. A station at Gateway is very close, less than a mile, to the Mt. Moriah station. She told the POC that at the July 10 Technical Committee meeting HNTB will have more information available and the Technical Committee will discuss the DMU alternative and these two stations specifically and make the decision. Ms. Redmond said that a decision needs to be made now in order to assure that there is no further delay in completing the project. Mayor Waldorf said that she could not envision a train coming to Chapel Hill and not stopping at Gateway given the high-density development proposed there. The result of maintaining both the Mt. Moriah and Gateway stations is that the DMU alternative will be penalized when the modeling is done since it will take longer than the light rail or bus-way alternatives. Ms. Redmond said that the same situation exists between Meadowmont and the Friday Center, the stations are too close together.

Ms. Redmond distributed an updated schedule. She explained that there has been a two-week delay in the project but the plan is still to wrap up the project in October. The POC set Wednesday, August 22, 2001, 9:00 to 11:00 a.m. as the next meeting date. Mayor Waldorf offered to host the meeting. Mayor Waldorf reiterated her concern that the project remain on schedule from this point forward.

Ms. Redmond told the POC that all of the stakeholders at the first round of station area workshops will be invited to the next round scheduled for August. She asked that the POC members let her know if there are any other groups or individuals that they think should be invited.

Ms. Redmond said that HNTB will have a draft copy of the “wrap-up” brochure in August. She reminded everyone that HNTB will produce the brochure, print and label them with the 1800+ names that are on the mailing list and give the brochures to the various agencies to distribute.

### **V. Adjourn**

With no further business to discuss the June 29, 2001 meeting of the 15-501 Policy Oversight Committee adjourned at 10:41 a.m.

# MINUTES

## US 15-501 MIS PHASE II POLICY OVERSIGHT COMMITTEE AUGUST 1, 2000

### Members Present:

Nicholas Tennyson, Mayor, City of Durham  
Rachel Willis, Trustee, TTA  
Cal Horton, Manager, Town of Chapel Hill  
Carolyn Elfland, Associate Vice Chancellor, UNC-CH  
Eric Michaux, NCDOT Board of Transportation

Tallman Trask, Executive Vice President, Duke University  
Janet D'Ignazio, Chief Planning & Environmental Officer, NCDOT  
Rosemary Waldorf, Mayor, Town of Chapel Hill  
James Ritchey, General Manager, TTA  
P. Lamont Ewell, Manager, City of Durham

### Others Present:

Mark Ahrendsen, Director, City of Durham DOT  
John Tallmadge, Transportation Planner, TTA  
Monica Toole, Project Manager, HNTB  
Sandy Ogburn, Assistant to General Manager, TTA  
Judy Meyer, HNTB, Public Participation  
Thomas R. Kendig, Project Manager, NCDOT

Ray Magyar, Assistant Director Transportation Planner, UNC-CH  
David Bonk, Senior Transportation Planner, Town of Chapel Hill  
Jim Anglin, Project Director, HNTB  
Kirk Ross, Reporter, Chapel Hill News  
Jim Kessler, HNTB

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### **I. Role and Process of POC**

Those present agreed that each entity would have two representatives and two votes on the Policy Oversight Committee. Representation will be as follows:

NCDOT	Janet D'Ignazio (or David King) & Eric Michaux
Chapel Hill	Rosemary Waldorf & Cal Horton
Durham	Nick Tennyson & Lamont Ewell
Duke	Tallman Trask & President Nan Keohane
UNC-CH	Jonathan Howes & Carolyn Elfland
TTA	Rachel Willis & Jim Ritchey

By acclamation the members appointed Mayor Tennyson chair of the POC.

Mayor Tennyson told the group that the process of the POC should lead to a decision/determination in order for local jurisdictions to know what and where a "system" will be and to begin to reserve right-of-way. Janet D'Ignazio said that NCDOT wants to be sure that the process moves forward and leads to a decision. Both Ms. D'Ignazio and Mr. Ritchey suggested that this phase of the MIS does not need to provide too much detail, the details will be examined in the environmental process.

Mayor Tennyson suggested that if a POC member asks for a vote on an issue there will be a vote. If only one representative from an organization is at the meeting that person will get two votes. One-half the members of the POC will constitute a quorum (6). The members of the POC, by consent, agreed with these procedures. Mayor Tennyson announced that TTA has offered the services of Sandy Ogburn to assist the POC with meeting agendas and minutes and scheduling and arranging the meetings.

### **II. Review of Scope of Services for Phase II**

Mr. Ritchey explained the Federal Transit Administration New Start Process to the POC. The group discussed the federal process and its implications for this part of the region. Janet D'Ignazio summarized the discussion by stating that the role of this phase of the MIS is to determine a technology for TTA Phase II and to determine a "locally preferred alternative." The locally preferred alternative, along with a number of other alternatives, would then move into the NEPA process for in-depth study.

Jim Anglin told the POC that the technical team was recommending that the MIS Phase II be completed in two steps. The first step would take the study to approximately January and at this time the local jurisdictions will decide if they have sufficient information to make the decisions. If not then the project will move on into the second step. The calendar that has been distributed takes the schedule to January.

Mayor Tennyson asked that the memos that are to be produced and that are noted on the calendar, once reviewed by the technical committee, be distributed to the POC. Mayor Waldorf also encouraged the Technical Committee to ask for an unscheduled meeting of the POC if there is a need. Janet D'Ignazio suggested that the POC schedule additional meetings right now with the understanding that if the meeting is not needed the meeting will be cancelled. In addition to the meetings on October 27<sup>th</sup> and January 12<sup>th</sup>, the POC scheduled meetings for September 22<sup>nd</sup> and December 1<sup>st</sup>.

Ms. Toole told the POC that there are many more opportunities for the public and media to get information about the progress of this phase of the study than there was during Phase I. The POC suggested that all individuals that participated in the Citizens Advisory Committee during Phase I of the study should be specifically invited to all of the public meetings. The Technical Committee has recommended that each time during this phase of the study that there are workshops for the public one be held in both Durham and Chapel Hill. Mr. Ritchey also suggested that all of the elected bodies be kept up to date with the progress of the study. Ms. Toole said that the consultant will produce periodic update documents which can be distributed to the elected officials. Mayor Waldorf asked that these documents be written in a format that is easily understood by non-technical people. The POC asked that the County Commissioners be included in the group of elected officials to whom these documents are sent.

With no further business to discuss the August 1, 2000 meeting of the 15-501 Policy Oversight Committee was adjourned.

# DRAFT MINUTES

## US 15-501 MIS PHASE II POLICY OVERSIGHT COMMITTEE Chapel Hill Public Library August 22, 2001

### **Members Present:**

Nicholas Tennyson, Mayor, City of Durham  
Rosemary Waldorf, Mayor, Town of Chapel Hill  
Rachel Willis, TTA  
Carolyn Elfland, Associate Vice Chancellor, UNC-CH  
Cal Horton, Manager, Town of Chapel Hill

Jim Ritchey, General Manager, TTA  
Janet D'Ignazio, Chief Planning & Environmental Officer, NCDOT  
Jonathan B. Howes, Special Assistant to Chancellor, UNC-CH  
Marcia Conner, Manager, City of Durham

### **Staff Present:**

Mark Ahrendsen, Director, City of Durham DOT  
Ray Magyar, UNC Assist. Dir. Transportation Planner  
Whitmel Webb, HNTB  
Anne Lenart-Redmond, HNTB  
Linda Convissor, UNC

Thomas R. Kendig, Project Manager, NCDOT  
Tamra Shaw, NCDOT  
David Bonk, Town of Chapel Hill Transportation Planner  
Sandy Ogburn, TTA

### **Others Present:**

Bill Hutchins  
Ed Harrison

Mike Waldroup, Developer

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Mayor Tennyson called the meeting to order at 9:05 a.m. and told the POC that TTA was going to oversee a study of the NC 54/I – 40 corridor. Jim Ritchey said that the TTA Board had approved a scope of services and that the study would be limited to the geographic area from Meadowmont to the RTP Metro Center. Mayor Waldorf asked if there would be a Policy Oversight Committee with this study and Mr. Ritchey said that the TTA Board of Trustees would make that determination.

### **I. Approval of Minutes of June 29, 2001 POC meeting**

Mayor Waldorf moved approval of the minutes of the June 29, 2001 Policy Oversight Committee meeting. The motion was seconded by Jonathan Howes and passed unanimously by the Policy Oversight Committee.

Anne Lenart-Redmond said that she wanted to wrap up an item that was on the agenda last month but not on this agenda. At the last POC meeting HNTB had presented the BMT Alternatives prior to discussion of the materials by the Technical Committee. After the Technical Committee reviewed the alternatives one modification was recommended. She explained that the Technical Committee recommended that BMT Alternative Number 1 not follow the western alignment along NC 147, but that both BMT Alternatives follow Erwin Road instead. The Technical Committee did not think that Duke University was served directly by using the NC 147 alignment.

### **II. Build Alternatives Comparison**

Ms. Redmond explained the materials in the meeting handout. She told the POC for clarity purposes the alternatives have been renamed; the cost estimates have been broken out by alternative; right-of-way and utility relocation costs are not included in the cost estimates on the matrix and that the utility relocation costs will likely be in the millions. She pointed out that the cost estimates are very conservative on all alignments. Ms. Redmond said that HNTB had received the right-of-way and utility relocation costs just the day before and therefore should be considered very preliminary at this point.

The POC discussed the various impacts outlined in the handouts. Ms. Redmond said that “community sensitive land use” were those uses considered to be noise sensitive areas such as the Duke Wellness Center, churches, both hospitals, Glenwood Elementary, etc. Ms. Redmond said that all of the columns

will be filled in with the appropriate information before the release of the draft report. She explained that the \$11.5 million for Glenwood Elementary School is the estimated displacement cost for the existing facilities and does not assume construction costs for new facilities.

Ms. Redmond clarified that the draft report will include a section with the projected ridership figures for the various alternatives. Mr. Ritchey told the POC that the model results will not produce the kinds of specificity that most people would like to have. Ms. Redmond said that the Technical Committee asked HNTB to do another model run on the DMU Alternative so that the headways were the same on all the alternatives and could be better compared.

Mr. Howes asked if the POC had specifically decided not to have a stop at the Smith Center. Although the study assumes a special events station to be located at the Smith Center, the POC agreed that the determination on whether or not to stop there would be made at a future stage in the study once a technology and corridor is determined.

### **III. Preliminary Right-of Way Cost Estimates**

Ms. Redmond reminded the POC that the right-of-way costs in the handouts did not include the utility relocation costs. The POC suggested that HNTB include the electrification cost for the Light Rail alternatives in the cost estimates and that the “lighter” DMU alternative should be labeled LDMU. Mayor Tennyson informed Ms. Redmond that Durham Public Schools was looking at a site near the Ephesus Church Road station for an elementary school.

### **IV. Modeling Forecast Status**

Ms. Redmond told the POC that the Technical Committee had raised concerns about the ridership projections for some of the stations in the light rail alternatives. She said that HNTB took another look at the feeder bus network and checked station accessibility to see that the model was coded appropriately. She said that TTA recommended that they increase a link between the feeder bus network and the premium rail mode at the station locations. She said that the result was an increase in ridership on the light rail alternatives. Ms. Redmond said that the overall ridership numbers, when compared with other systems across the country with similar project area characteristics, are good. In response to a question Ms. Redmond said that the figures do include numbers for new riders. She cautioned that with only one model run the figures are very preliminary. She said that for the purposes of this study and at this stage these figures are appropriate to use for comparison purposes.

Mr. Howes asked Mr. Ritchey his opinion of the numbers presented. Mr. Ritchey said that TTA has found that some of the ridership figures do not make sense intuitively such as those at the Duke station (coal spur). He said that TTA continues to work with the model to refine the ridership figures at some of the stations. Mr. Ritchey said that TTA will do model runs for the Duke coal spur station for the 15-501 MIS project and re-run them for the 9<sup>th</sup> Street station with the inclusion of the Duke station.

### **V. Status of Project**

Ms. Redmond told the POC that the busway forecasts will not be available from AECOM until the end of August. She said that the busway forecasts are not simple but require considerable re-coding work.

She said that the Technical Committee agreed to cancel the next set of station area workshops. She said that the Technical Committee suggested that a public hearing be held in October. HNTB will have a “Findings” brochure available for this public hearing. After the DCHC/TAC makes a recommendation HNTB will produce the final “wrap-up” brochure.

Mayor Tennyson suggests that the POC meet soon after the Technical Committee receives the draft report on September 11 and before the October public hearings. He said that the POC needs to be reviewing the draft report at the same time as the Technical Committee to alert HNTB and the Technical Committee of any “red flags” POC members note. The POC agreed to meet on Monday, September 17 from 2:00 p.m. – 4:00 p.m. in the Committee Room on the second floor of Durham City Hall.

Mayor Waldorf asked about the nature of the “public” hearing. Mark Ahrendsen said that the DCHC-TAC will receive the Draft 15-501 MIS Phase 2 Report at the October 10, 2001 meeting and take action at the November 14, 2001 TAC meeting. In between these meetings the local governments need to review the

report, hear from the public and give comments, and possibly recommendations, to their TAC representatives. The POC agreed to the following timeline:

September 11, 2001 – Technical Committee receives draft report and begins review

September 17, 2001 – POC receives draft report and comments on any glaring errors

October 10, 2001 – DCHC/TAC receives draft report with “findings” brochure from HNTB

Between October 10/October 25 public comment “meetings”; one each in Chapel Hill and Durham

Between October 25 and November 14 – Chapel Hill Town Council and Durham City Council make recommendations

November 14, 2001 – DCHC/TAC makes final recommendations

After November 14, 2001 HNTB produces the final brochure

Tom Kendig told the POC that NCDOT and HNTB are continuing to work on the budget implications of the changes that have been made to the schedule and scope.

**VI. Adjourn**

With no further business to discuss the August 22, 2001 meeting of the 15-501 Policy Oversight Committee adjourned at 10:47 a.m.

**US 15-501 MIS PHASE II  
POLICY OVERSIGHT COMMITTEE  
September 22, 2000**

**MINUTES**

**Members Present:**

Nicholas Tennyson, Mayor, City of Durham  
Rachel Willis, Trustee, TTA  
Cal Horton, Manager, Town of Chapel Hill  
Carolyn Elfland, Associate Vice Chancellor, UNC-CH  
Eric Michaux, NCDOT Board of Transportation

Tallman Trask, Executive Vice President, Duke University  
Janet D'Ignazio, Chief Planning & Environmental Officer, NCDOT  
Rosemary Waldorf, Mayor, Town of Chapel Hill  
James Ritchey, General Manager, TTA  
P. Lamont Ewell, Manager, City of Durham

**Staff Present:**

Mark Ahrendsen, Director, City of Durham DOT  
John Tallmadge, Transportation Planner, TTA  
Monica Toole, Project Manager, HNTB  
Anne Lenart-Redmond, HNTB  
Thomas R. Kendig, Project Manager, NCDOT

Tamra Shaw, NCDOT  
David Bonk, Senior Transportation Planner, Town of Chapel Hill  
Linda Convisor, UNC Facilities Planning  
Sandy Ogburn, Assistant to General Manager, TTA

**Others Present:**

Wib Gulley, NC State Senator, District 13

Ed Harrison, Chapel Hill-Durham County resident

Mike Waldroup, Developer

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**I. Approval of Minutes of 8/1/00 POC meeting**

The Policy Oversight Committee unanimously approved the draft minutes of the August 1, 2000 POC meeting.

**II. Station Area Reconnaissance Meeting Summaries**

Monica Toole, HNTB, reported that the consultant has met with representatives from TTA, Duke, Durham, UNC and the Town of Chapel Hill so far. She said that all of the meetings have been productive and HNTB has learned a great deal. She said that they have not yet met with representatives from the VA Hospital, nor have they met with Chapel Hill Transit or DATA. She said that she would characterize all of the meetings as successful and when asked, explained that meant that HNTB has learned a great deal from all of the meetings but that did not mean that there was total agreement on the ultimate project at this point in time. Rachel Willis asked that should HNTB find a "deal breaker" during this process the POC would want to know that information immediately.

**III. Feedback from Public Workshops**

Monica Toole reported that two public workshops were held this week, on Tuesday in Durham and on Thursday evening in Chapel Hill. There was not a large turnout in Durham but there were quite a number of people at the Chapel Hill Workshop. Ms. Toole said that the Chapel Hill Workshop was not contentious as had been expected and that she believed that technical staff were able to dispel a number of misperceptions that people had about this phase of the MIS project.

Mayor Waldorf said that she thought that many people in Chapel Hill are very concerned about a bulleted item on the first page of the Scope of Work that reads "UNC to Horace Williams (qualitative assessment only)." Mayor Waldorf said that many citizens are very concerned about what this means. David Bonk explained that no specific corridors would be examined but that for each of the technologies studied from Duke to UNC they would also study the implications on ridership of extending that technology to Horace Williams. He said that this study would not be recommending a corridor or technology from UNC to Horace Williams. Carolyn Elfland said that as UNC has moved forward with its Master Plan they have provided for no fixed guideway beyond the southern medical end of the campus and do not intend to provide for a fixed guideway through the campus. She suggested that if this clause is creating such trouble with the public that the POC should take it out of the study. Mayor Waldorf moved that the POC delete the paragraph on page one of the Scope of Service for the US 15-501 Major Investment Study Phase 2, Task 1, under the heading "Basic Defined Corridors" that refers to "UNC Horace Williams Property." The Study assumes that there will be no fixed guideway between UNC Hospital and the UNC co-generation plant. The motion, seconded by Carolyn Elfland, passed unanimously.

Ms. Toole suggested that a press release be sent on the action taken by the POC. The members concurred with this action.

Mayor Tennyson asked the committee if they were pleased with the turnout at the public workshops, particularly in Durham. Rachel Willis expressed concern that the advertisements for these meetings is mainly focused on those members of the public



that are immediately “impacted” which is clearly important but that we should also be seeking those individuals who need, and will use, the system. She suggested that we notify people who are on university parking lists and those on the various Triangle transportation interest group listserves to seek out potential riders. The committee concluded that as more specific information and recommendations become available, more people will pay attention and this should increase attendance at public meetings. The committee also suggested that we proactively seek press coverage when more specific information and recommendations are ready. This also should generate more interest from the general public. Cal Horton made the suggestion that the public workshops be held in places where it is possible to televise the meetings on Cable TV.

#### **IV. Summary of Alternative Methodology**

Monica Toole announced that drafts of the Alternative Methodology were now ready but were past due to the Technical Committee. HNTB is currently conducting an internal review of the document and will send it to the Technical Committee when that review is completed.

#### **V. Summary of “Lessons Learned”**

Monica Toole told the POC that HNTB had distributed to the Technical Committee, for comments/suggestions, a list of communities that HNTB believes are peer cities. Ms. Toole told the POC that they found that there were not a lot of communities that have gone through the “rigor” of determining a technology the way this group is doing it. Typically technology has been a fore drawn conclusion. The “Lessons Learned” paper will be sent to the Technical Committee when the document is ready.

#### **VI. Corridor and Technology Approach; Bus in Mixed Traffic**

Ms. Toole said that they had shared some information on this technology with the Technical Committee a couple of weeks ago and that this alternative will be the most challenging of the alternatives at which we look. HNTB will bring their proposal to the Technical committee for review before they bring it to the POC.

Mayor Tennyson pointed out that this highlights the fact that we are behind schedule and it is his opinion that we do not have time to be behind schedule.

#### **VII. Status of Regional Forecasting Model**

Mr. Ritchey told the POC that as TTA was using the regional model to forecast travel times for Phase I of the Regional Rail Project, TTA discovered that the bus speed calibration was off. The TTA Board just this week appropriated money to have KPMG recalibrate the model. This means that it could be late November or early December before the model is re-calibrated and ready for use for this study.

Janet D’Ignazio said that the two Triangle MPOs have been asked to “approve” the regional model. TTA has requested that the MPOs only give “conditional” approval until the re-calibration is completed. Jim Ritchey said that the model is generating current bus speeds in mixed traffic that are totally unrealistic and not a reflection of current real-time travel. He believes ultimately that this model must be “above reproach” and he therefore believes that it must be fixed.

Ms.D’Ignazio suggested that right now the regional model is fine for road modeling and she hopes that the MPOs will “approve” that part of the model. Currently all road planning for the area is delayed because of the problems with the model. She said that due to a lack of trust amongst all of the regional model team partners she also believes it is important that all parties have a clear understanding of what the model can do and how it will be used. This is why she has asked the MPOs to “approve” the model. She hopes that the MPOs will at least approve the road modeling so that those projects can move forward. Senator Gulley reminded the POC that the problems with the model are “second generation” issues and that the region is way ahead of where it was a few years with the model that we now have.

#### **VIII. Adjourn**

With no further business to discuss the September 22, 2000 meeting of the 15-501 Policy Oversight Committee was adjourned.