

Transit Operating Plan

Durham-Orange Light Rail Transit Project

Triangle Regional Transit Program
our transit future



September 2012

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1. Introduction

The Durham-Orange (D-O) Light Rail Transit (LRT) Project is one of three priority corridors that had been selected for further consideration in the Raleigh-Durham-Chapel Hill area. An Alternatives Analysis (AA) was recently completed for this particular corridor, with light rail transit (LRT) selected as the Locally Preferred Alternative (LPA). The proposed LRT alignment is just over 17-miles in length, with end-of-line stations at Alston Avenue as the end-of-line station in Durham (east of downtown Durham) and the University of North Carolina (UNC) Hospitals as the end-of-line station in Chapel Hill. There are a total of 17 stations that include stops in downtown Durham, Duke Medical Center, and the South Square shopping area. Figure 1.1 illustrates the Durham-Orange LPA's proposed LRT alignment, station locations, and potential maintenance facility sites.

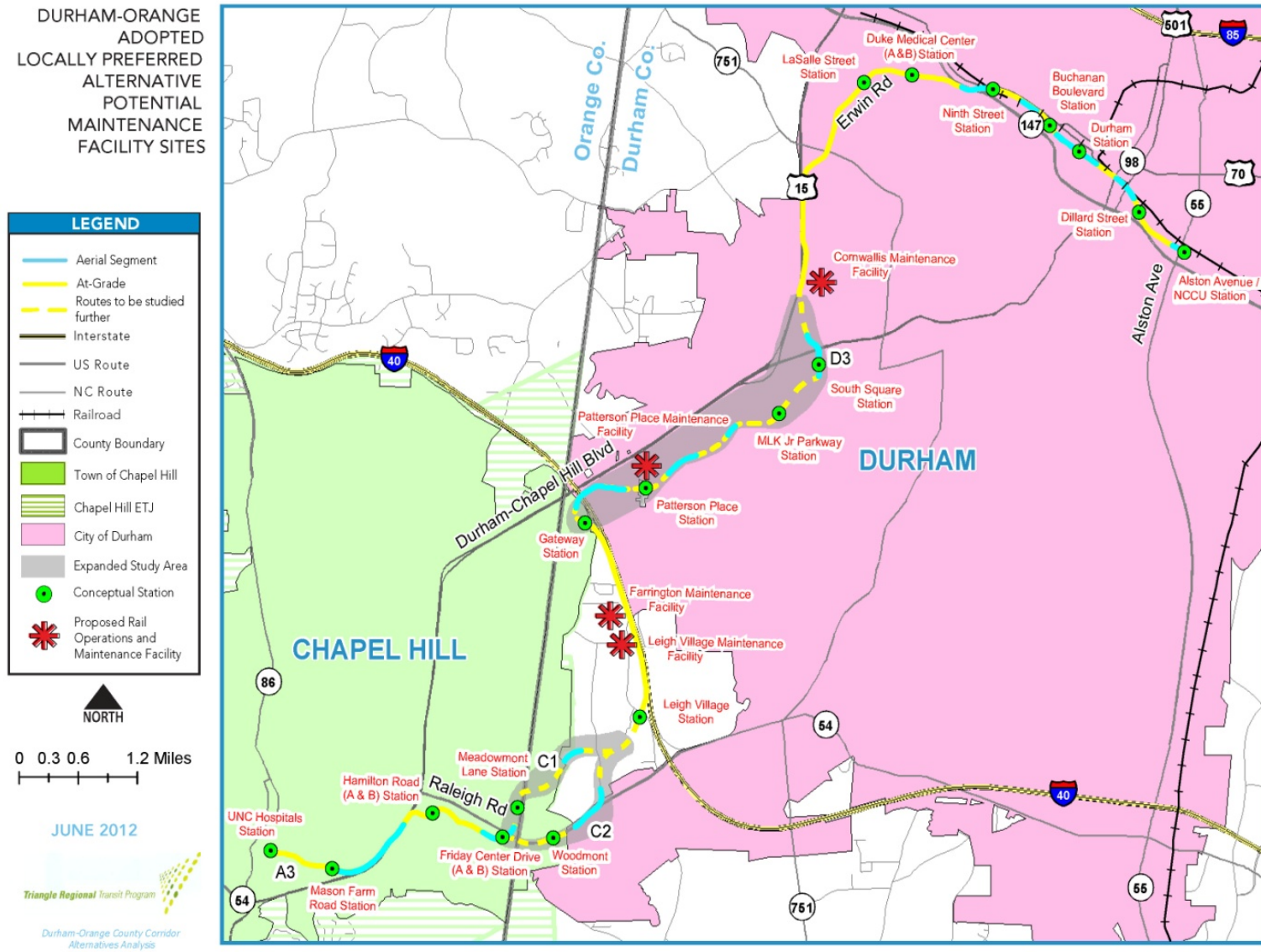
This report presents detailed descriptions of bus and rail operations plans for each project alternative that has been defined for this project. This report begins with a brief description of existing transit services in the study area. This project's No-Build Alternative is then presented. The No-Build network is the basis on which both the Baseline and LRT Alternatives have been defined.

A transit project must meet several requirements to be eligible for funding through Federal Transit Administration (FTA)'s New Starts Program. One of those requirements is the definition of a "Baseline" Alternative. This alternative is used as a means to identify incremental costs and benefits of the selected LPA. A Transportation System Management (TSM) Alternative was previously defined in this project's AA. This report presents refinement of the AA's TSM Alternative in a manner that meets FTA's requirements for a Baseline Alternative.

Service plans for the LRT Build Alternative are then presented. The proposed LRT alignment, stations, the proposed operating plan and resulting operating requirements are described.

This report then ends with a description of the proposed supporting background bus service for both the Baseline and Build Alternatives. The supporting background bus service has been defined to be identical for both the Baseline and Build Alternatives. Some parallel bus routes have been eliminated. Others have been modified to provide connections to LRT or Baseline bus service. There are also proposed new feeder routes. Operating requirements have been calculated for the supporting background bus service for all project alternatives.

Figure 1.1 Durham-Orange Adopted Preliminary Locally Preferred Alternative



2. Existing Service Characteristics

The following four transit service providers presently serve the Durham-Orange County Corridor:

- Triangle Transit
- Durham Area Transit Authority (DATA)
- Chapel Hill Transit (CHT)
- Duke Transit

Following are descriptions of each operator and the services they provide within the Durham-Orange County Corridor.

2.1. Triangle Transit

Triangle Transit provides regional and express bus service in the Raleigh-Durham-Chapel Hill area. Triangle Transit presently operates 14 regional routes, 5 express routes, and 4 shuttle routes on weekdays. Five of the regional routes also operate on Saturdays. Triangle Transit presently does not operate Sunday service. Saturday service hours are presently about 22 percent of weekday service hours. Several of the routes connect at Triangle Transit's Regional Transit Center, located off of Slater Road, near I-40 and I-540. Fares are \$2.00 for regular Triangle Transit routes and \$2.50 for express routes. Regional passes (day pass and multi-day passes) are also available and can be used on other transit systems in the region (i.e., DATA, Capital Area Transit (CAT), Cary Transit (C-Tran)).

Existing Triangle Transit routes that either operate entirely within the Durham-Orange County Corridor or provide service to locations within the corridor are as follows:

- **Route 400: Durham-New Hope Commons-Chapel Hill** – This route provides service from downtown Durham to Chapel Hill, and includes service to the Duke/VA Hospitals, South Square shopping center, New Hope Commons, the University of North Carolina, and UNC Hospitals. This route operates at 30-minute frequencies in the peak periods, 60-minute frequencies in the midday and evening periods, with service until approximately 11:00 p.m. This route also operates on Saturdays at 60-minute service frequencies.
- **Route 405: Durham-Chapel Hill** – This route provides service along the same general alignment as Route 400, but without the deviations to South Square shopping center and New Hope Commons. This route operates in the peak periods only at 30-minute service frequencies.
- **Route 420: Hillsborough-Chapel Hill** – This route operates from Hillsborough to Chapel Hill, following Highway 86. This route includes a mid-route stop at the Durham Tech Orange County Campus (OCC) park-and-ride. Service frequencies are approximately 30-minutes in the peak periods, with additional trips to Chapel Hill in the a.m. and from Chapel Hill in the p.m.
- **Route 700: Durham-RTC** – This route provides service from the Regional Transit Center (RTC) in Research Triangle Park to downtown Durham, utilizing the Durham Freeway (Highway 147). This route includes a mid-route stop at Durham Technical Community College. Route 700 operates at 30-minute frequencies in the peak periods, 60-minute frequencies in the midday and evening periods, with service until approximately 11:00 p.m. This route also operates Saturdays at 60-minute frequencies.
- **Route 800: Chapel Hill-Southpoint Mall-RTC** – This route operates from Chapel Hill to the RTC in Research Triangle Park with a mid-route stop at Southpoint Mall. Midday and evening routing is

via Highway 54 and peak period routing is via I-40. Within Chapel Hill, this route includes stops on the UNC Campus and at the UNC Hospitals. Route 800 operates at 30-minute frequencies in the peak periods, 60-minute frequencies in the midday and evening periods, with service until approximately 11:00 p.m. This route also operates Saturdays at 60-minute frequencies.

- **Route 805: Chapel Hill-Woodcroft-RTC** – This route operates from Chapel Hill to the RTC in Research Triangle Park, with mid-route stops at the Woodcroft Shopping Center. Route 805 operates at 30-minute peak period frequencies. There are also three midday round trips that operate only between Chapel Hill and Woodcroft Shopping Center.
- **Route CRX: Chapel Hill-Raleigh Express** – This route operates from Chapel Hill to downtown Raleigh. In Chapel Hill, this route makes a loop. In the morning, inbound buses enter Chapel Hill via Raleigh Road, loop around the UNC Hospitals, and then travel north on Martin Luther King Jr. Parkway to I-40. Routing is reversed in the p.m. This route includes a stop at the Eubanks Road park-and-ride lot near Martin Luther King Jr. Parkway and I-40 in Chapel Hill. Route CRX operates at approximately 30-minute frequencies in the peak periods (both directions of travel).
- **Route DRX: Durham-Raleigh Express** – This route operates from Durham to downtown Raleigh. Within Durham, this route includes stops in downtown Durham (Durham Station), Duke University, and Duke/VA Hospitals. Route DRX operates at 30-minute frequencies in the peak periods (both directions of travel).

Table 2.1 presents route characteristics for all Triangle Transit routes.

Table 2.1 Triangle Transit Route Characteristics

Day of Week	Route #	Route Name	Span of Service	Service Frequency			
				AM Pk	Midday	PM Pk	Eve.
Weekdays	100	Raleigh-Airport-RTC	6:05 am-11:15 pm	30	60	30	60
	102	Garner-Raleigh	Peak Periods Only	60	n/a	60	n/a
	105	Raleigh-RTC	Peak Periods Only	30	n/a	30	n/a
	201	North Raleigh-RTC	Peak Periods Only	30	n/a	30	n/a
	301	Raleigh-Cary-RTC	Peak Periods Only	30	n/a	30	n/a
	303	Cary-Raleigh	Midday Period Only	n/a	60	n/a	n/a
	305	Lake Pine-Cary-Raleigh	Peak Periods Only	60	n/a	60	n/a
	311	Apex-RTC	Peak Periods Only	30	n/a	30	n/a
	400	Durham-New Hope-Chapel Hill	6:00 am-11:00 pm	30	60	30	60
	405	Durham-Chapel Hill	Peak Periods Only	30	n/a	30	n/a
	420	Hillsborough-Chapel Hill	Peak Periods Only	30	n/a	30	n/a
	700	Durham-RTC	6:00 am-10:00 pm	30	60	30	60
	800	Chapel Hill-Southpoint Mall-RTC	6:00 am-11:00 pm	30	60	30	60
	805	Chapel Hill-Woodcroft-RTC	6:00 am-7:00 pm	30	n/a	30	n/a
		UNC Hosp-Woodcroft	6:00 am-7:00 pm	n/a	60	n/a	n/a
	CRX	Chapel Hill-Raleigh Express	Peak Periods Only	30	n/a	30	n/a
	DRX	Durham-Raleigh Express	Peak Periods Only	30	n/a	30	n/a
	KRX	Knightdale-Raleigh Express	Peak Periods Only	60	n/a	60	n/a
	WRX	Wake Forest-Raleigh Express	Peak Periods Only	60	n/a	60	n/a
	ZWX	Zebulon/Wendell-Raleigh Express	Peak Periods Only	60	n/a	60	n/a
	42	Shuttle	Peak Periods Only	30	n/a	30	n/a
	46	Shuttle	Peak Periods Only	30	n/a	30	n/a
	47	Shuttle	Peak Periods Only	30	n/a	30	n/a
	49	Shuttle	Peak Periods Only	30	n/a	30	n/a
Saturdays	100	Raleigh-Airport-RTC	6:30 am-6:30 pm	60	60	60	n/a
	303	Cary-Raleigh	7:00 am-6:30 pm	60	60	60	n/a
	400	Durham-New Hope-Chapel Hill	7:00 am-7:00 pm	60	60	60	n/a
	700	Durham-RTC	7:00 am-7:00 pm	60	60	60	n/a
	800	Chapel Hill-Southpoint Mall-RTC	7:00 am-7:00 pm	60	60	60	n/a

2.2. DATA

DATA provides local route service within the City of Durham. DATA presently operates 18 weekday, 16 Saturday, and 16 Sunday routes. Most weekday routes operate at 30-minute frequencies in the peak periods and 60-minute frequencies in the midday and evening periods, with service until about 12:00 midnight. Saturday service hours are approximately 97% of weekday hours (i.e., Saturday service almost mirrors weekday service). Sunday service hours are about 42% of weekday hours. The cash fare for a one-way ride is \$1.00. One-day and multiple day regional passes are also available and can be utilized on other public transit service providers in the region. The Bull City Connector is a special branded route that operates primarily along Main Street (parallel to the Durham-Orange LRT corridor). This route does not charge fares to passengers (i.e., the City of Durham prepays fares for Bull City Connector passengers).

DATA's routes are structured in a radial fashion, with all but 2 routes operating to/from the Durham Transit Station, located in downtown Durham and adjacent to this project's proposed LRT alignment.

Given the nature of this project's alignment and DATA's existing radial route structure, all but one route has the potential to connect to the proposed LRT alignment. Routes that operate somewhat parallel to the proposed LRT alignment between downtown Durham and Duke University are: the Bull City Connector, Routes 6 and 11. Routes that operate between South Square shopping center and downtown Durham are: Routes 5 and 10.

Table 2.2 presents DATA route characteristics.

Table 2.2 DATA Route Characteristics

Day of Week	Route #	Route Name	Span of Service	Service Frequency			
				AM Pk	Midday	PM Pk	Eve.
Weekdays	BCC	Bull City Connector	6:23 am-12:00 am	15	15	15	20
	1	Northgate Mall & North Pointe via Broad Northgate Mall & North Pointe via Guess	5:30 am-12:30 am	60 60	60 60	60 60	60 60
	2	East Durham & Highway 70	5:28 am-12:28 am	30	30	30	60
	3	Holloway Street & The Village	5:25 am-12:25 pm	30	30	30	60
	4	Durham Regional Hospital & N Roxboro Road	5:30 am-12:30 am	30	30	30	60
	5	Fayetteville Street & South Square	5:35 am-12:27 am	30	30	30	60
	6	Duke University & VA Hospital via Cameron Duke University & VA Hospital via Forest Apts	5:35 am-12:30 am	60 60	60 60	60 60	60 60
	7	Fayetteville Road & Southpoint Mall	5:29 am-12:25 am	30	30	30	60
	8	McDougald Terrace & Durham Tech	5:29 am-12:20 am	30	30	30	60
	9	Dearborn Drive & Durham Regional Hospital	5:20 am-12:30 am	30	30	30	60
	10	Woodcroft & New Hope Commons	5:17 am-12:37 am	30	30	30	60
	11	Duke University & Hillsborough Road	5:25 am-12:25 am	30	30	30	60
	12	Highway 55 & Highway 54	5:28 am-12:28 am	60	60	30	60
	13	Durham Tech & The Village	5:30 am-12:30 am	60	60	60	60
	15	Brier Creek	6:15 am-10:15 am	60	n/a	60	60
	16	Southern High School & The Village	5:30 am-12:30 am	60	60	60	60
	16B	Neal Middle School & Southern High School	Peak periods only	60	n/a	60	n/a
	17	Snow Hill Road & Horton Road	5:52 am-12:27 am	60	60	60	60
Saturdays	BCC	Bull City Connector	6:23 am-12:00 am	20	20	20	20
	1	Northgate Mall & North Pointe via Broad Northgate Mall & North Pointe via Guess	5:30 am-12:30 am	60 60	60 60	60 60	60 60
	2	East Durham & Highway 70	5:28 am-12:28 am	30	60	30	60
	3	Holloway Street & The Village	5:25 am-12:25 pm	30	60	30	60
	4	Durham Regional Hospital & N Roxboro Road	5:30 am-12:30 am	30	60	30	60
	5	Fayetteville Street & South Square	5:35 am-12:27 am	30	60	30	60
	6	Duke University & VA Hospital via Cameron Duke University & VA Hospital via Forest Apts	5:35 am-12:30 am	60 60	60 60	60 60	60 60
	7	Fayetteville Road & Southpoint Mall	5:29 am-12:25 am	30	60	30	60
	8	McDougald Terrace & Durham Tech	5:29 am-12:20 am	30	60	30	60
	9	Dearborn Drive & Durham Regional Hospital	5:20 am-12:30 am	30	60	30	60
	10	Woodcroft & New Hope Commons	5:17 am-12:37 am	30	60	30	60
	11	Duke University & Hillsborough Road	5:25 am-12:25 am	30	60	30	60
	12	Highway 55 & Highway 54	5:28 am-12:28 am	60	60	30	60
	13	Durham Tech & The Village	5:30 am-12:30 am	60	60	60	60
	16	Southern High School & The Village	5:30 am-12:30 am	60	60	60	60
	17	Snow Hill Road & Horton Road	5:52 am-12:27 am	60	60	60	60
Sundays	1	Northgate Mall & North Pointe via Broad	6:30 am-7:30 pm	60	60	60	n/a
	2	East Durham & Highway 70	6:28 am-7:28 pm	60	60	60	n/a
	3	Holloway Street & The Village	6:25 am-7:25 pm	60	60	60	n/a
	4	Durham Regional Hospital & N Roxboro Road	6:30 am-7:30 pm	60	60	60	n/a
	5	Fayetteville Street & South Square	5:27 am-7:27 pm	60	60	60	n/a
	6	Duke University & VA Hospital via Cameron	6:30 am-7:30 pm	60	60	60	n/a
	7	Fayetteville Road & Southpoint Mall	6:00 am-8:00 pm	60	60	60	n/a
	8	McDougald Terrace & Durham Tech	6:25 am-7:20 pm	60	60	60	n/a
	9	Dearborn Drive & Durham Regional Hospital	6:30 am-7:30 pm	60	60	60	n/a
	10	Woodcroft & New Hope Commons	6:31 am-7:31 pm	60	60	60	n/a
	11	Duke University & Hillsborough Road	6:25 am-7:25 pm	60	60	60	n/a
	12	Highway 55 & Highway 54	6:28 am-7:28 pm	60	60	60	n/a
	13	Durham Tech & The Village	6:30 am-7:30 pm	60	60	60	n/a
	16	Southern High School & The Village	6:30 am-7:30 pm	60	60	60	n/a
	17	Snow Hill Road & Horton Road	6:32 am-7:27 pm	60	60	60	n/a

2.3. Chapel Hill Transit

CHT provides bus service within the Town of Chapel Hill, the Town of Carrboro and the UNC campus. CHT presently operates 24 weekday routes, 8 Saturday routes, and 2 Sunday routes. All routes provide service to the UNC campus/UNC Hospital area. Weekday route frequencies vary from 5 to 60 minutes. Saturday service hours are approximately 9% of weekday service. Sunday service hours are approximately 3% of weekday hours. Select weekday routes do not operate when UNC is out of session. CHT does not charge passengers fares on its buses (i.e., UNC prepays fares for CHT passengers).

CHT provides service to five park-and-ride lots located in the Chapel Hill/Pittsboro/Carrboro area. An additional six lots are available for use by CHT riders with a UNC park-and-ride permit.

Table 2.3 presents CHT route characteristics.

2.4. Duke Transit

Duke Parking and Transportation Services provide bus service within the Duke University campus and surrounding area. This entity presently operates more than 30 buses. Students, staff, faculty, and visitors can ride campus buses at no charge. There are three campus routes (C-1, C-2, and C-3), and four “to and from” campus routes (LaSalle Loop, H-5, PR-1, and Robertson Scholars). There are also Hospital shuttle routes that connect nearby surface and garage parking to the Hospital buildings (H-1, H-3, H-5, and H-6). Frequencies are as often as 10-minutes on some routes.

Table 2.3 Chapel Hill Transit Route Characteristics

Day of Week	Route #	Route Name	Span of Service	Service Frequency			
				AM Pk	Midday	PM Pk	Eve.
Weekdays	A	MLK Jr. Blvd./Northside	6:26 am-7:09 pm	30	60	30	n/a
	CCX	Chatham County Express	6:00 am-7:58 pm	15	40	15	n/a
	CL	Colony Lake/Sage Road/UNC Hosp.	Peaks Only	60	n/a	60	n/a
	CM	Carrboro/Merritt Mill Rd/Family Medicine	6:10 am-9:30 pm	50	50	50	60
	CPX	Carrboro Plaza Express	Peaks Only	15	n/a	15	n/a
	CW	Carrboro/Weaver Street	7:20 am-9:19 pm	30	60	30	60
	D	Cullbreth Rd/Franklin St/Eastowne	6:27 am-9:49 pm	20	45	20	60
	DX	UNC/Old Durham/Old Sterling/Sage Rd. Express	Peaks Only	50	n/a	50	n/a
	F	Colony Woods/Franklin St./McDougle School	6:55 am-8:40 pm	25	60	50	60
	FCX	Friday Center Express	5:15 am-8:22 pm	5	30	10	n/a
	G	Booker Crk/UNC Hosp./Glen Lennox	6:23 am-8:40 pm	50	50	50	50
	HS	High School/Airport Dr. at MLK/Downtown	Peaks Only	60	n/a	60	n/a
	HU	UNC Hosp./54 P&R/Hedrick Bldg.	5:20 am-10:43 pm	15	40	15	40
	J	Carrboro/Downtown Chapel Hill/Jones Ferry Rd.	6:25 am-11:56 pm	15	20	15	60
	JFX	Jones Ferry Rd. Express	Peaks Only	15	n/a	15	n/a
	N	Estes Park, UNC Hosp., Family Medicine	6:25 am-7:20 pm	30	60	30	n/a
	NS	Eubanks Road/Southern Village	5:40 am-10:38 pm	10	45	10	60
	NU	RR Lot/UNC Hospitals	7:05 am-10:40 pm	20	40	20	40
	PX	Pittsboro to UNC Hospitals	Peaks Only	60	n/a	60	n/a
	S	UNC Campus/NC 54 East P&R	6:20 am-7:38 pm	10	35	10	n/a
	T	MLK Jr. Blvd./UNC Hospitals	6:50 am-6:45 pm	30	35	30	n/a
	U	Campus Shuttle-UNC/Downtown	7:00 am-7:54 pm	15	15	15	n/a
	RU	Campus Shuttle-UNC/Downtown	7:00 am-7:54 pm	15	15	15	n/a
	V	Southern Village/Meadowmont	6:23 am-8:06 pm	35	80	35	n/a
Saturdays	CM	Carrboro/Merritt Mill Rd/Family Medicine	9:20 am-5:15 pm	n/a	70	70	n/a
	CW	Carrboro/Weaver Street	8:30 am-4:38 pm	n/a	70	70	n/a
	D	Cullbreth Rd/Franklin St/Eastowne	9:05 am-5:05 pm	n/a	60	60	n/a
	FG	Colony Woods/Franklin St./UNC Hosp.	8:50 am-4:55 pm	n/a	80	80	n/a
	JN	Carrboro/Downtown Chapel Hill/UNC Hosp.	9:45 am-7:03 pm	n/a	75	75	n/a
	NU	RR Lot/UNC Hospitals	11:30 am-11:17 pm	n/a	45	45	45
	T	MLK Jr. Blvd./UNC Hospitals	8:15 am-6:13 pm	n/a	60	60	n/a
	U	Campus Shuttle-UNC/Downtown	10:38 am-7:08 pm	n/a	25	25	n/a
Sundays	NU	RR Lot/UNC Hospitals	11:30 am-11:17 pm	n/a	45	45	45
	U	Campus Shuttle-UNC/Downtown	10:38 am-7:08 pm	n/a	25	25	n/a

3. No-Build Alternative

FTA's guidance for the No-Build Alternative indicates that the transit and highway networks in this alternative can be defined in either of the following ways:

- An alternative that incorporates "planned" improvements that are included in the fiscally constrained long-range plan for which need, commitment, financing, and public and political support are identified and are reasonably expected to be implemented.
- A conservative definition that adds only "committed" improvements – typically those in the annual element of the Transportation Improvement Program or local capital programs – together with minor transit service expansions and/or adjustments that reflect a continuation of existing service policies into newly developed areas.¹

For the Durham-Orange project, the definition of the No-Build Alternative began with the first approach. The 2035 Long Range Transportation Plan (LRTP) was adopted by the Durham-Chapel Hill-Carrboro (DCHC) Metropolitan Planning Organization (MPO) and Capital Area Metropolitan Planning Organization (CAMPO) in April 2009. The LRTP assumes significant expansion of the region's transit network with revenues from the planned sales tax referendum and vehicle registration fees; the LRTP includes the Durham-Orange Corridor project in its transit network. The following modifications were required to the LRTP transit network for modification as this project's No-Build Alternative:

- The Durham-Orange LRT line was removed from the 2035 LRTP network.
- Existing Triangle Transit Routes 400 and 405 were added back into the No-Build network. These are two existing regional routes that presently operate in the Durham-Orange corridor (from Downtown Durham to Downtown Chapel Hill) that are not presently included in the 2035 LRTP network (for the LRTP network had assumed rail in this corridor).
- Existing DATA Route, Bull City Connector, was added into the No-Build Alternative. This is an existing local route that operates in Durham that is not presently included in the 2035 LRTP network. This route began service after the LRTP network was created.
- The 2035 LRTP network assumed the Durham-Orange LRT line, thus included several new feeder routes. Since this No-Build network does not include this LRT line, these feeder routes were removed.
- The 2035 LRT network assumed significant expansion of bus service throughout the region through improved service frequencies and new bus routes. The level of service expansion assumed in the network is greater than current anticipated revenues from the planned sales tax and vehicle registration fees. The No Build network provides a level of service that is consistent with the current transit expansion plans in each county, including the voter-approved Durham County Bus and Rail Transit Investment Plan, adopted June 2011, and the Draft Orange County Bus and Rail Investment (pending voter approval in November 2012). Thus, service growth assumptions have been adjusted to better match anticipated revenues from the planned sales tax and vehicle registration fees.

It is important to note that the DCHC MPO and CAMPO are in the process of updating their LRTP to 2040, with adoption anticipated in 2013. Transit network growth assumptions will be updated with the

¹ FTA New Starts Baseline Alternative Review and Approval Procedures, FTA web site

new LRTP and are likely to assume a less robust transit network than the 2035 network. Thus, this project's definition of the No-Build Alternative should be revisited at that time.

Following are descriptions of transit service improvements in the Durham-Orange Corridor that are included in the No-Build network.

3.1. Triangle Transit Service Changes

The No-Build transit network assumes some new and restructured transit service to Triangle Transit routes that operate within the Durham-Orange Corridor. It also assumes expanded Saturday service and the introduction of new Sunday service. Following are descriptions of proposed Triangle Transit routes in the No-Build network that operate within the Durham-Orange Corridor.

- **Route 100: Raleigh-Airport-RTC** – This existing route is not in the original LRTP network that was used as a starting point in the development of transit networks for this project. Instead, Routes 500/550 are in the network (see description below for Routes 500/550).
- **Route 105: Raleigh-RTC** – This existing route is not in the original LRTP network that was used as a starting point in the development of transit networks for this project. Instead, Routes 500/550 are in the network (see description below for Routes 500/550).
- **Route 400: Durham-New Hope Commons-Chapel Hill** – This route presently operates at 30-minute peak/60-minute midday service. The No-Build Alternative assumes midday service frequencies are improved to 30 minutes. Existing Saturday service frequencies are also improved 60 to 30-minutes, with Saturday evening service. New Sunday service is also proposed at 60-minute frequencies.
- **Route 405: Durham-Chapel Hill** – No changes are proposed to this route in the No-Build transit network.
- **Route 420: Hillsborough-Chapel Hill** – This route presently operates at 30-minute frequencies in the peak periods only. The No-Build network assumes 20-minute peak and 60-minute midday service frequencies.
- **Routes 500/550: Chapel Hill-RTC-Raleigh** – These are routes that are presently in the MPO's 2035 LRTP network. These routes were in operation prior to recent route in the Chapel Hill/RTC/Raleigh corridor. Routes 500/550 service in the 2035 LRTP network is provided primarily along I-40, and includes stops at Southpoint Mall and RTC. Proposed frequencies are 15-minutes in the peak periods and 30-minutes in the midday service, with 30-minute Saturday and 60-minute Sunday service.
- **Route 700: Durham-RTC** – Saturday service frequencies on this route are assumed to improve from 60-minutes to 30-minutes, with Saturday evening service. New Sunday service is also proposed at 60-minute frequencies.
- **Route 800: Chapel Hill-Southpoint Mall-RTC** – Saturday service frequencies on this route are assumed to improve from 60-minutes to 30-minutes, with Saturday evening service.
- **Route 805: Chapel Hill-Woodcroft-RTC** – No changes are proposed to this route in the No-Build transit network.
- **Route CRX: Chapel Hill-Raleigh Express** – No changes are proposed to this route.

- **Route DRX: Durham-Raleigh Express** – Peak period service frequencies are improved from 30-minutes to 15-minutes.
- **Route: BurDX: Burlington-Durham Express** – This is a proposed new route in the 2035 LRTP network that provides peak period express service from Burlington to Duke University and Durham. Proposed frequencies are 30-minutes in the peak periods.
- **Route PDX: Person-Durham Express** – This is a proposed new route in the 2035 LRTP network that provides peak period express service from Person County to downtown Durham. Proposed frequencies are 30-minutes in the peak periods.
- **Route BDX: Butner-Durham Express** – This is a proposed new route in the 2035 LRTP network that provides peak period express service from Butner to downtown Durham. Proposed frequencies are 30-minutes in the peak periods.

Table 3.1 presents proposed No-Build transit network service changes for just those Triangle Transit routes that operate in the Durham-Orange corridor.

**Table 3.1 Triangle Transit Route Improvements in No-Build Alternative
(Corridor Routes Only)**

Day of Week	Route	Service Frequency		Change from Existing
		Peak	Midday	
Mon-Fri	100	n/a	n/a	Not included in the original 2035 LRTP network.
	102	30	n/a	Improve peak freq. from 60 to 30 min.
	105	n/a	n/a	Not included in the original 2035 LRTP network.
	201	30	n/a	No change
	400	30	30	Add 30 min. midday service
	405	30	n/a	No change
	420	20	60	Improve freq. from 30/-- to 20/60
	500/550	15	30	Route from 2035 LRTP - similar to 100, 105 and CRX
	700	30	60	No change
	800	30	60	No change
	805	30	60	No change
	CRX	15	n/a	Improve peak freq from 30 to 15 min.
	DRX	15	n/a	No change
	BurDX	30	n/a	New exp route: Burlington to Durham
	PDX	30	n/a	New exp route: Person to Durham
	BDX	30	n/a	New exp route: Butner to Durham
Saturday	100		n/a	Replaced with new Route 500
	400		30	Improve freq from 60 to 30 min. Add eve. Service
	500		30	New route - replaces 100
	700		30	Improve freq from 60 to 30 min. Add eve. Service
	800		30	Improve freq from 60 to 30 min. Add eve. Service
Sunday	400		60	New Sunday service
	500		60	New Sunday service
	700		60	New Sunday service

3.2. DATA Service Changes

Service improvements assumed for DATA routes are described below. In addition to service frequency improvements, the No-Build Alternative includes two new DATA routes from the MPO's 2035 LRT transit network.

- **Bull City Connector** – This project's No-Build Alternative assumes introduction of Sunday service at 20-minute frequencies.
- **Route 1: Northgate Mall and North Pointe Drive** – Peak period service frequencies are improved from 30 to 15-minutes. The 2035 LRTP transit network has this route coded with Route 3 as interlined service.
- **Route 3: The Village and Glenview Station** – Peak period service frequencies are improved from 30 to 15-minutes. The 2035 LRTP transit network as this route coded with Route 1 as interlined service.
- **Route 5: Fayetteville Road and South Square** – Peak period service frequencies are improved from 30 to 15-minutes. The 2035 LRTP transit network has this route coded with Route 6 as interlined service.
- **Route 6: Duke University and VA Hospital** – Peak period service frequencies are improved from 30 to 15-minutes. The 2035 LRTP transit network has this route coded with Route 5 as interlined service.
- **Route 8: McDougald Terrace/Durham Technical Community College (DTCC)** – Peak period service frequencies are improved from 30 to 15-minutes. The 2035 LRTP transit network has this route coded with Route 10 as interlined service.
- **Route 10: Woodcroft and New Hope Commons** – Peak period service frequencies are improved from 30 to 15-minutes. The 2035 LRTP transit network has this route coded with Route 8 as interlined service.
- **Route 12: Highway 55 and Highway 54** – Morning peak period service frequencies are improved from 60 to 30-minutes to match with p.m. peak period service frequencies. Saturday morning frequencies are also improved to 30-minutes.
- **Route 13: DTCC and The Village** – Peak period service frequencies are improved from 60 to 30-minutes.
- **Route 16: The Village and Highway 98** – Peak period service frequencies are improved from 60 to 30-minutes.
- **Route 25: Durham Regional-Duke Medical Center** – This is a proposed new crosstown route in the 2035 LRTP transit network that provides service from Durham Regional Hospital to the Duke Medical Center via Carver Street and Hillandale Road. Proposed frequencies are 30-minutes in the peak period and 60-minutes in the midday, with weekday evening and Saturday service.
- **Route 30: Duke Medical Center-North Duke Mall** – This is a proposed new crosstown route in the 2035 LRTP transit network that provides service from Duke Medical Center to North Duke Mall and Durham Regional Hospital via Hillandale Road, Horton Road, and Roxboro Street. Proposed frequencies are 30-minutes in the peak period and 60-minutes in the midday, with weekday evening and Saturday service.

Figure 3.1 presents the proposed two new DATA routes for the No-Build transit network. Table 3.2 presents proposed No-Build transit network service changes for all DATA routes.

Figure 3.1 Proposed New DATA Routes in No-Build Alternative

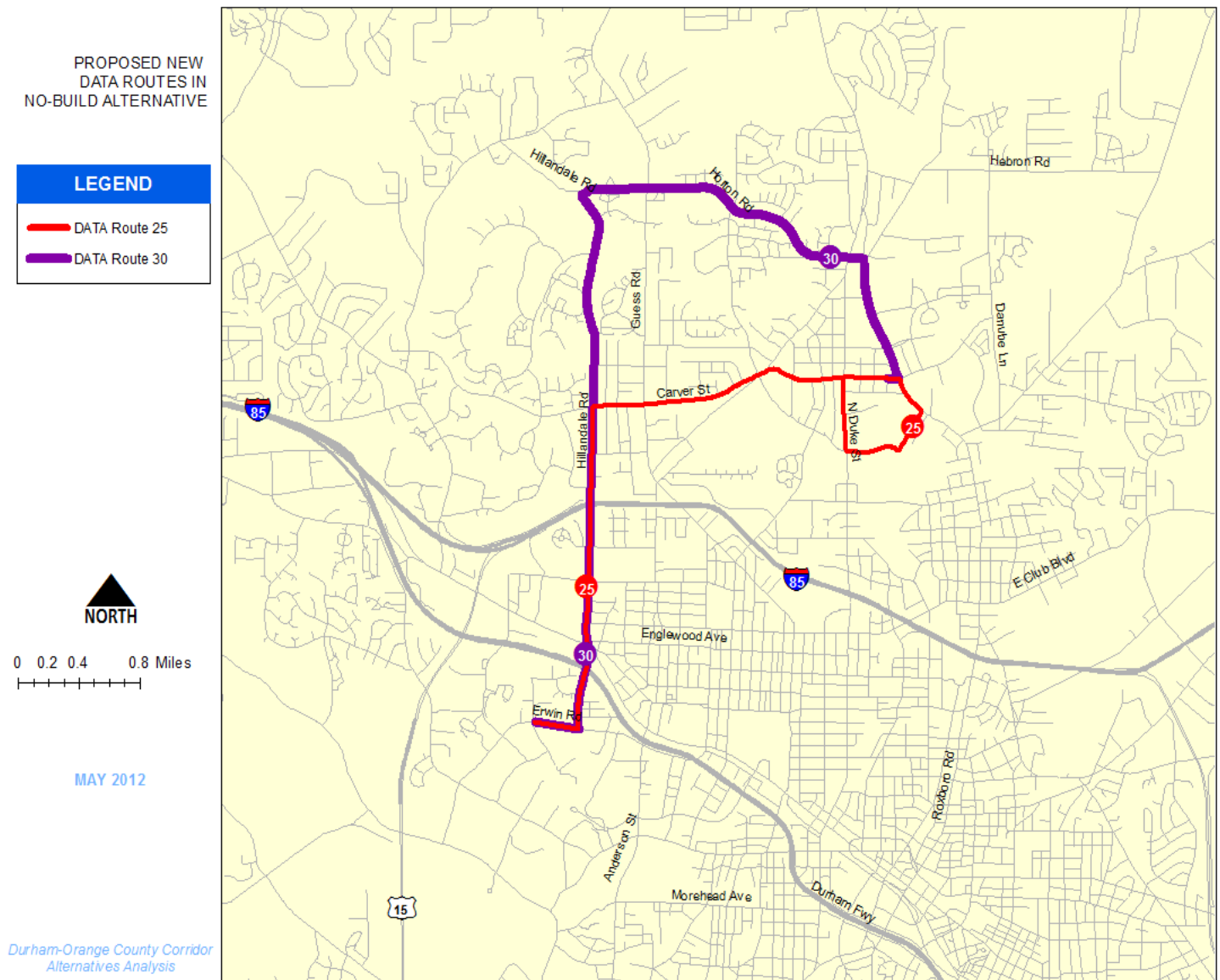


Table 3.2 DATA Route Improvements in No-Build Alternative

Day of Week	Route	Service Frequency Peak	Midday	Change from Existing
Mon-Fri	BCC	15	15	
	1	15	30	Improve peak freq. from 30 to 15 min.
	2	30	30	
	3	15	30	Improve peak freq. from 30 to 15 min.
	4	30	30	
	5	15	30	Improve peak freq. from 30 to 15 min.
	6	15	30	Improve peak freq. from 30 to 15 min.
	7	30	30	
	8	15	30	Improve peak freq. from 30 to 15 min.
	9	30	30	
	10	15	30	Improve peak freq. from 30 to 15 min.
	11	30	30	
	12	30	60	Improve am peak freq. from 60 to 30 min.
	13	30	60	Improve peak freq. from 60 to 30 min.
	15	60	n/a	
	16	30	60	Improve peak freq. from 60 to 30 min.
	16B	60	n/a	
	17	60	60	
	25	30	60	Proposed new route to Duke Med. Ctr.
	30	30	60	Proposed new route to Duke Med. Ctr.
Saturday	BCC		20	
	12		30	
	3		30	
	4		30	
	5		30	
	6		30	
	7		30	
	8		30	
	9		30	
	10		30	
	11		30	
	12		30	Improve am peak freq. from 60 to 30 min.
	13		60	
	16		60	
	17		60	
	25		60	Proposed new route to Duke Med. Ctr.
	30		60	Proposed new route to Duke Med. Ctr.
Sunday	BCC		20	Begin new Sunday service
	1		60	
	2		60	
	3		60	
	4		60	
	5		60	
	6		60	
	7		60	
	8		60	
	9		60	
	10		60	
	11		60	
	12		60	
	13		60	
	16		60	
	17		60	

3.3. Chapel Hill Transit Service Changes

Service improvements assumed for CHT routes are described below. Many of the service changes include expanded evening and weekend service, as described below.

- **Route A: MLK Jr. Parkway/Northside** – Improve midday frequencies from 60 to 30minutes.
- **Route CL: Colony Lake/Sage Road/UNC Hosp.** – Improve peak period frequencies from 60 to 30-minutes.
- **Route CM: Carrboro/Merritt Mill Rd/Family Medicine:** Extend Saturday evening service and begin new Sunday service.
- **Route CW: Carrboro/Waver Street:** Extend Saturday evening service and begin new Sunday service.
- **Route D/DX: Culbreth Rd./Franklin St./Eastowne** – Eliminate Route DX and replace with improved Route D frequencies to 15 peak/30 midday. Improve Saturday service frequencies from 60 to 30-minutes and extend Saturday evening service. Begin new Sunday service.
- **Route F: Colony Woods/Franklin St./McDougle School** – Improve peak frequencies to a consistent 30-minute increment.
- **Route G: Booker Crk/UNC Hosp./Glen Lennox:** Improve frequencies to 30 peak/60 midday.
- **Route FG: Colony Woods/Frankly St./UNC Hospitals:** This route only operates on weekends. Improve Saturday service frequencies from 80 to 40-minutes and extend Saturday evening service. Begin new Sunday service.
- **Route HU: UNC Hospitals/54 park & ride/Hendrick Bldg:** Improve midday frequencies from 40 to 30-minutes.
- **Route JN: Carrboro/Downtown Chapel Hill/UNC Hospitals:** This route operates only on weekends. Improve Saturday service frequencies from 75 to 40-inutes and extend Saturday evening service. Begin new Sunday service.
- **Route NS: Eubank Roads/Southern Village:** Improve midday frequencies from 45 to 30-minutes.
- **Route NU: RR Lot/UNC Hospitals** – Improve Saturday service frequencies from 45 to 40-minutes. Begin new Sunday service.
- **Route T: MLK Jr. Parkway/UNC Hospitals** – Extend Saturday evening service.
- **Route U: Campus Shuttle-UNC/Downtown** – Extend Saturday evening service.
- **Route V: Southern Village/Meadowmont:** Improve frequencies to 30 peak/40 midday.

Table 3.3 presents proposed No-Build transit network service changes for Chapel Hill Transit routes.

Table 3.3 Chapel Hill Transit Route Improvements in No-Build Alternative

Day of Week	Route	Service Frequency Peak	Midday	Change from Existing
Mon-Fri	A	30	30	Improve midday freq. from 60 to 30 min.
	CCX	15	40	
	CL	30	n/a	Improve peak freq. from 60 to 30 min.
	CM	50	50	
	CPX	15	n/a	
	CW	30	60	
	D	15	30	Improve freq. from 20/45 to 15/30
	DX	n/a	n/a	Eliminate. Replaced w/ more freq. D serv.
	F	30	60	Improve peak freq. from 25-50 to 30 min.
	FCX	5-10	30	
	G	30	60	Improve freq. from 50 to 30 pk/60 midday
	HS	60	n/a	
	HU	15	30	Improve midday freq. from 40 to 30 min.
	J	15	20	
	JFX	15	n/a	
	N	30	60	
	NS	10	30	Improve midday freq. from 45 to 30 min.
	NU	20	40	
	PX	60	n/a	
	S	10	35	
	T	30	35	
	U	15	15	
	RU	15	15	
	V	30	40	Improve freq. from 35/80 to 30/40
Saturday	CM		70	Extend Eve. Serv.
	CW		70	Extend Eve. Serv.
	D		30	Extend Eve. Serv. Improv freq. from 60 to 30 min
	FG		40	Extend Eve. Serv. Improve freq. from 80 to 40 min.
	JN		40	Extend Eve. Serv. Improve freq. from 75 to 40 min.
	NU		40	Improve freq. from 45 to 40 min.
	T		60	Extend Eve. Serv.
Sunday	U		25	Extend Eve. Serv.
	CM		70	New Sunday Service
	CW		70	New Sunday Service
	D		60	New Sunday Service
	FG		80	New Sunday Service
	JN		80	New Sunday Service
	NU		40	Improve freq. from 45 to 40 min.
Sunday	U		25	

3.4. No-Build Alternative Service Requirements

Route level operating statistics were calculated for each service provider in the Durham-Orange corridor. Weekday, Saturday and Sunday route statistics were calculated based on proposed frequency and alignment changes, estimated route travel times and distances. Appendices A through C present weekday, Saturday, and Sunday operating statistics for the No-Build Alternative for Triangle Transit, DATA, and CHT. Estimates of revenue bus-hours and bus-miles are summarized below in Table 3.4.

**Table 3.4 Estimates of No-Build Alternative Operating Statistics
(Additional Statistics Over Existing)**

Service Provider	Day of Week	Add'l Bus-Hours	Add'l Bus-Miles
Triangle Transit	Weekday	194	4,039
	Saturday	102	2,162
	<u>Sunday</u>	<u>69</u>	<u>1,293</u>
	Annual	58,800	1,217,400
DATA	Weekday	247	2,908
	Saturday	98	1,159
	<u>Sunday</u>	<u>35</u>	<u>366</u>
	Annual	70,100	823,100
CHT	Weekday	69	391
	Saturday	35	404
	<u>Sunday</u>	<u>30</u>	<u>372</u>
	Annual	20,900	140,300

4. Baseline Alternative

The Baseline Alternative is designed to reflect the “best that can be done” to improve transit service in the corridor without a major capital investment in new infrastructure. For this project, the Baseline Alternative reflects significant expansion of limited bus service in the corridor with stops at the same locations as proposed LRT stations, and with the addition of several new “feeder” routes to enhance connectivity to/from the corridor’s new premium transit service. Following are descriptions of each element of this project’s proposed Baseline Alternative.

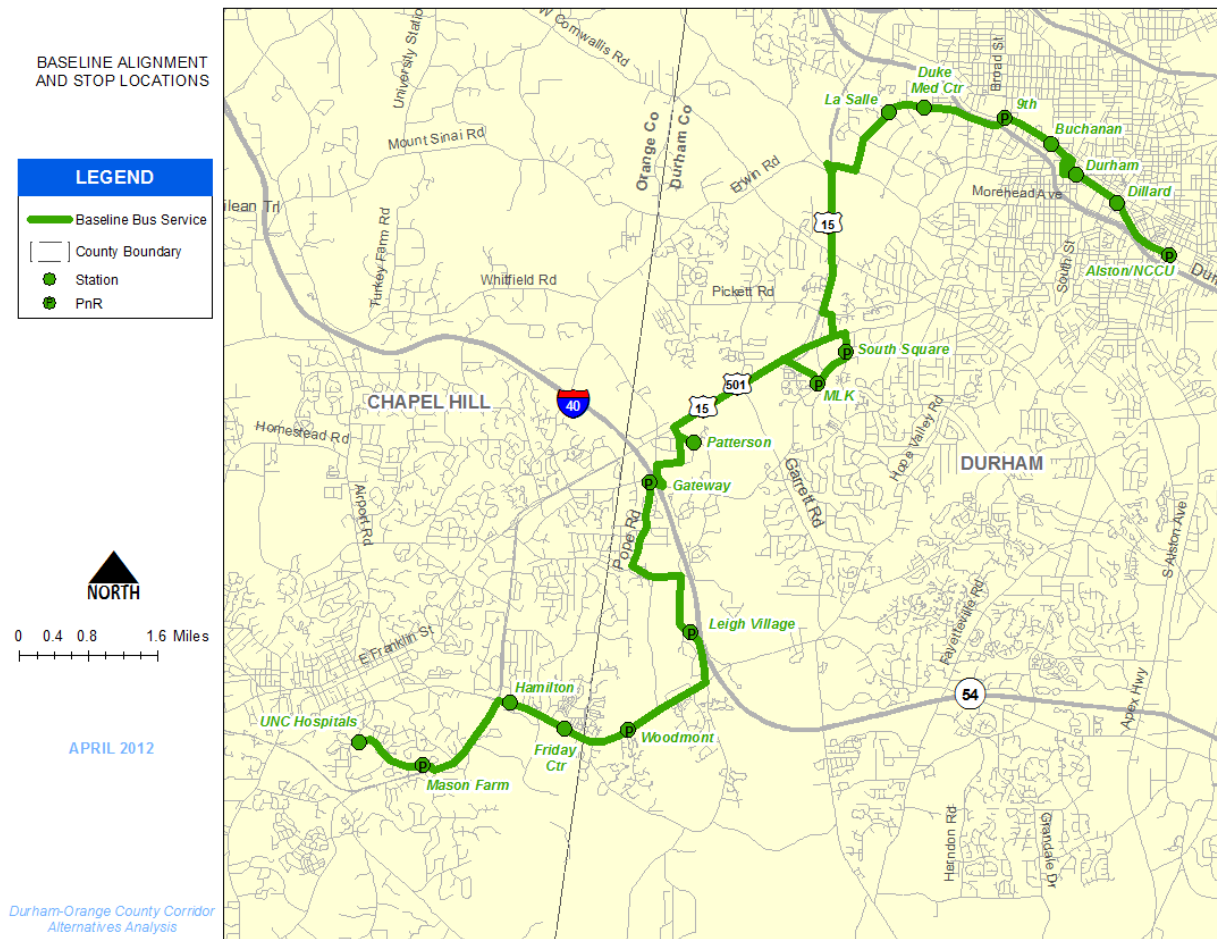
4.1. Premium Bus Service Alignment

The major service improvement introduced in the Baseline Alternative is new limited stop bus service that operates from Alston Avenue in Durham to the UNC Hospitals in Chapel Hill. This service would use existing roads, generally following the same alignment as proposed for LRT in the LPA. There would be a total of 17 bus “stations” (two platforms at each station for each direction of service) at locations close in proximity to proposed LRT stations. Hybrid buses (40’ standard-sized buses) will be used for this premium bus service. Beginning at Alston Station in Durham, the proposed Baseline Alternative’s alignment is as defined follows:

The Baseline Alignment follows Pettigrew Street with stops at Dillard Street and existing Durham Station (DATA’s primary transit facility) in downtown Durham. An on-street stop is assumed on Pettigrew Street adjacent to the Durham Station transit facility. From this location, the alignment follows Duke Street (Gregson Street would be used for the southbound direction) and Main Street, with stops at Buchanan Boulevard/Main Street and Ninth Street/Main Street. The alignment then follows Erwin Road with stops at Duke Medical Center and LaSalle Street. The Baseline Alignment then follows Cameron Boulevard and US 15 to South Square. The alignment accesses the South Square and Martin Luther King Jr. Parkway Stops via Durham-Chapel Hill Blvd. and Academy Road and University Drive. Southbound buses must backtrack to Academy Blvd. and Durham-Chapel Hill Blvd. to continue south towards Chapel Hill. A stop is proposed at Patterson Place. The alignment then follows Danzier Drive and Mt. Moriah Road to Old Chapel Hill Road and the proposed Gateway stop. The alignment then follows Pope Road, Ephesus Church Road, and Farrington Road to the Leigh Village stop. The remaining alignment follows Raleigh Road and Fordham Blvd. (NC 54) and Mason Farm Road to UNC Hospitals, with stops along the way at Woodmont, Friday Center Drive, and Mason Farm Road.

Figure 4.1 illustrates the proposed Baseline Alternative premium bus service route alignment. Measures such as queue jumper lanes and transit signal prioritization are included to maximize bus speeds as much as possible in general traffic.

Figure 4.1 Baseline Alignment and Stop Locations



4.2. Premium Bus Service Stop Locations

The Baseline Alternative's proposed premium bus service includes stops at locations similar to those proposed in the LRT Alternative, thus providing comparable service to the same travel markets that are being served by LRT. Those stops are at the following locations:

Alston Avenue/NCCU*	Dillard Street
Durham Station	Buchanan Blvd.
Ninth Street*	Duke Medical Center
LaSalle Street	South Square*
Martin Luther King Jr. Parkway*	Patterson Place
Gateway Station*	Leigh Village*
Woodmont*	Friday Center Drive
Hamilton Road	Mason Farm Road*
UNC	

(Note: Stations with "*" indicate stops with park-and-ride facilities)

Amenities at each stop are anticipated to be consistent with those proposed in the LRT Alternative. Baseline bus stops with park-and-ride lots are at the same locations where park-and-ride lots are proposed in the LRT Alternative. Baseline bus stops will also include bus bays for connecting feeder bus routes, and will include kiss-and-ride drop-off spaces. Off vehicle boarding collection is also assumed (same as in the Build Alternative), thus ticket vending machines (TVMs) are to be included at each Baseline stop location.

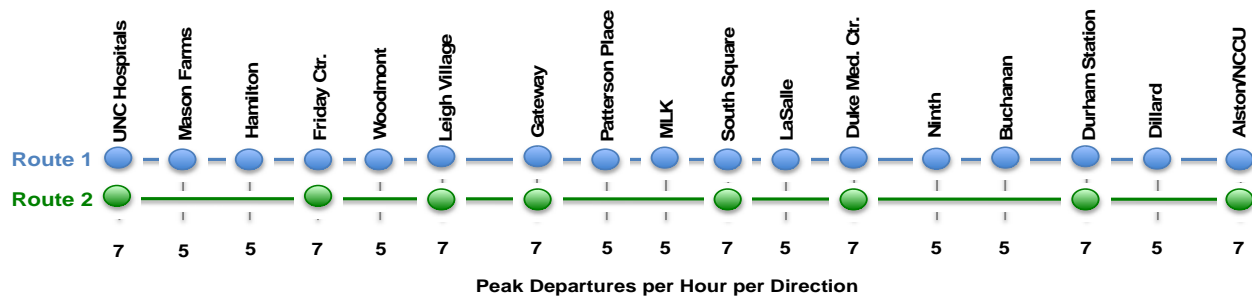
4.3. Proposed Service Plan

Operating hours for the new premium bus service are the same as proposed for LRT service and are generally from 5:30 a.m. to 12:00 midnight on weekdays and Saturdays, and 6:30 a.m. to 12:00 midnight on Sundays. Bus service frequencies are the same as proposed in the LRT Build Alternative, with the exception of the peak periods. Bus travel times in the Baseline Alternative are estimated to be significantly slower than LRT travel times, particularly in the peak periods. To compensate for these slower times, a limited stop bus service pattern is proposed in the peak periods, in addition to an all-stop bus service pattern. Proposed stops for this limited stop route pattern are at the following locations:

- Alston Avenue/NCCU
- Durham Station
- Duke Medical Center
- South Square Station
- Gateway Station
- Leigh Village
- Friday Center
- UNC Hospitals

Figure 4.2 illustrates the proposed bus stop service patterns for the Baseline Alternative's premium bus route service. Table 4.1 identifies proposed service frequencies.

Figure 4.2 Proposed Baseline Alternative Bus Route Patterns



Baseline Service Frequencies

Route 1 – 12/20

Route 2 – 30/--

Table 4.1 Baseline Alternative Proposed Service Frequencies

Day of Week	Service Pattern	5:30-9:00 a.m.	9:00 a.m.-3:30 p.m.	3:30-7:00 p.m.	7:00 p.m.-Midnight
Weekdays	All-Stop	12 min.	20 min.	12 min.	20 min.
	Limited Stop	30 min.	n/a	30 min.	n/a
Saturdays	All-Stop	20 min.	20 min.	20 min.	30 min.
Sundays	All-Stop	30 min.	20 min.	20 min.	30 min.

Note: Sunday Service would begin at 6:30 a.m.

4.4. Operating Requirements

Ridership results were reviewed to verify that service levels identified in Table 4.1 are sufficient to accommodate peak period line loads. Route travel times and distances were obtained from the travel demand model. Table 4.2 presents estimated operating requirements for the Baseline Alternative's proposed premium bus service. Overall, a total of 21 peak/26 fleet buses are required.

Table 4.2 Baseline Alternative Operating Requirements

From	To		Time (minutes)	Distance (miles)	Day	Frequency (Min.)				Vehicles		Bus-Miles	Annual Bus-Hrs	Bus-Hrs
						AM	Mid	PM	Eve	Peak	Total			
Route 1	Alston to UNC Hosp.	Pk	74.60	20.39	M-F	12	20	12	20	15	18	738,100	51,300	51,300
		Opk	61.56	21.21	Sat	30	20	20	30			101,800	6,500	6,500
					Sun	30	20	20	30			108,800	7,000	7,000
Route 2	UNC Hosp to Alston Ltd.	Pk	72.54	20.37	M-F	30	0	30	0	6	8	145,400	10,700	10,700
TOTALS										21	26	1,094,100	75,500	75,500

5. LRT Build Alternative

The Build Alternative consists of LRT service from UNC Hospitals in Chapel Hill to Alston Avenue in Durham. As was noted in this report's introduction, 17 stations are proposed along this 17.1 mile alignment. Following are descriptions of the proposed alignment by segment, station locations, estimated LRT travel times, the proposed service plan, and estimated operating requirements.

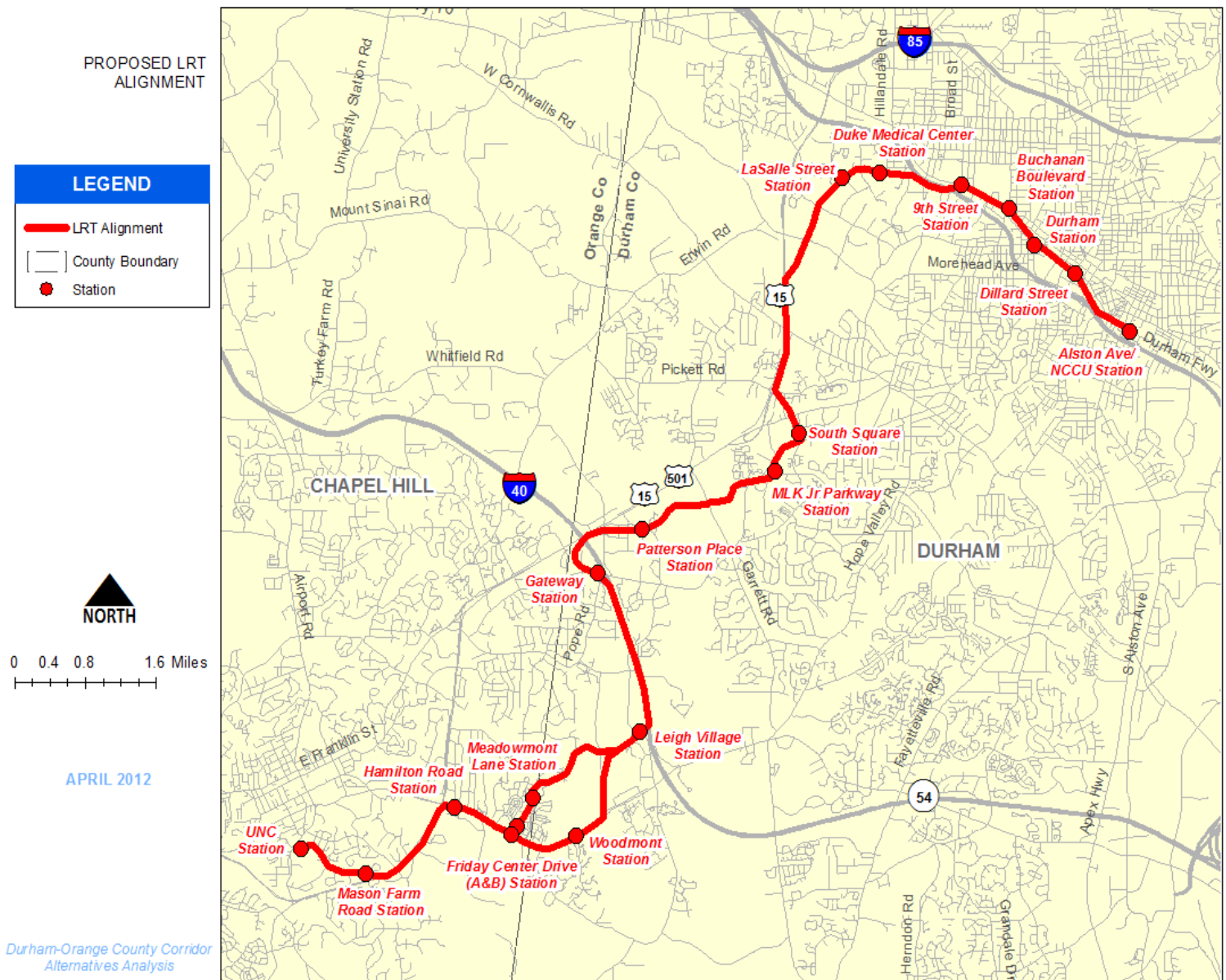
5.1. LRT Alignment

A description of the alignment is provided below by subarea, beginning in Chapel Hill at UNC Hospitals.

- **UNC Hospitals to Friday Center** – The LRT alignment begins in Chapel Hill at UNC Hospitals on the southern portion of the UNC campus, near the UNC Dogwood Parking Deck, southwest of the intersection of Manning and Hibbard Drives. The alignment continues through Odum Village to Mason Farm Road, where it parallels Mason Farm Road and the east side of Fordham Blvd. (US 15/501, NC 54) to just south of Raleigh Road (NC 54). The alignment turns east and stays on the south side of Raleigh Road (parallel to Prestwick Road) to the Friday Center.
- **Friday Center to Leigh Village** – Two alignment options are being considered for this segment. Alternative C1 crosses NC 54 on aerial structure and follows Meadowmont Lane and then travels through undeveloped land north and east to the proposed Leigh Village Station at Farrington Road. Alternative C2 continues along the south side of NC 54, eventually crossing NC 54 at George King Road and then continuing to the proposed Leigh Village Station at Farrington Road.
- **Leigh Village to South Square** – The alignment continues north along Farrington Road and the west side of I-40 to the proposed Gateway Station, just south of the US 15/501 and I-40 interchange and north of Old Chapel Hill Road. The alignment crosses I-40 and continues northeast, crossing Mt. Moriah Road and remaining on the east side of US 15/501, providing service to the Patterson Place development. The alignment crosses Martin Luther King, Jr. Parkway and travels east along University Drive (on the north side of the road) turning north along Shannon Road. It crosses Durham Chapel Hill Blvd and then continues north along the east side of US 15/501.
- **South Square to Duke Medical Center** – The alignment continues north along the east side of US 15/501 to a point north of Cornwallis Road, where it turns east to cross Cameron Blvd and transitions into the median of Erwin Road. The alignment runs along Erwin Road to the Duke Medical Center.
- **Duke Medical Center to Durham Station** – The alignment continues along the median of Erwin Road, transitioning to the North Carolina Railroad (NCRR) corridor. LRT tracks would be constructed on the south side of the railroad tracks and continue east to Durham Station
- **Durham Station to Alston Avenue** – The LRT alignment continues east along the south side of the freight rail tracks from Durham Station to the proposed end-of-line station just east of Alston Avenue.

Figure 5.1 presents the proposed LRT alignment.

Figure 5.1 Proposed LRT Alignment



Note: Two optional alignments are depicted in above figure between Leigh Village and Friday Center Stations – via Meadowmont Lane (C1) and Woodmont (C2).

5.2. LRT Stations

The LRT Build Alternative's proposed LRT alignment includes 17 stations at locations similar to those noted for the Baseline Alternative. Those stations are at the following locations:

- UNC Hospitals
- Mason Farm Road*
- Hamilton Road
- Friday Center Drive

- Meadowmont Lane (C1) or Woodmont (C2) *
- Leigh Village*
- Gateway Station*
- Patterson Place
- Martin Luther King Jr. Parkway*
- South Square*
- LaSalle Street
- Duke Medical Center
- Ninth Street*
- Durham Station
- Dillard Street
- Alston Avenue/NCCU*

(Note: Stations with "*" indicate stops with park-and-ride facilities)

5.3. Proposed Service Plan

Operating hours for the new LRT service is the same as was previously noted for the Baseline Alternative. Proposed operating hours are generally from 5:30 a.m. to 12:00 midnight on weekdays and Saturdays, and 6:30 a.m. to 12:00 midnight on Sundays. LRT service frequencies by time period are noted below in Table 5-1.

Table 5.1 LRT Build Alternative Proposed Service Frequencies

Day of Week	5:30-9:00 a.m.	9:00 a.m.-3:30 p.m.	3:30-7:00 p.m.	7:00 p.m.-Midnight
Weekdays	10 min.	20 min.	10 min.	20 min.
Saturdays	20 min.	20 min.	20 min.	30 min.
Sundays	30 min.*	20 min.	20 min.	30 min.

Note: Sunday Service would begin at 6:30 a.m.

5.4. LRT Travel Time Estimates

Station-to-station rail travel times were previously calculated for this project's AA. The travel time estimates took into consideration horizontal curves, vertical grades and operating environment (i.e., exclusive right-of-way vs. mixed traffic). A 20 second dwell time was assumed for each station stop. A 3.0 mph/s acceleration and deceleration rate was used. Travel time estimates are documented in the Alternative Analysis' *Volume 3: Capital Cost Estimates, Operations and Maintenance Cost Estimates, Travel Time and Distance Calculations, Ridership Summaries and Station-to-Station Ridership Forecasts* (July 2011). The station-to-station travel time estimate from this document is presented below in Table 5-2. Note that this travel time estimate is for the "C1" alignment option (Meadowmont). Travel times are anticipated to be very similar for the "C2" (Woodmont) alignment option.

5.5. Operating Requirements

Ridership results were reviewed to determine the number of rail cars that might be required to accommodate anticipated ridership. The Durham-Orange Corridor project has unique ridership characteristics, four major employment centers along the alignment are located at downtown Durham (north end of the alignment), Duke Medical Center, Southpoint Square (middle segment of the alignment), and UNC campus/UNC Hospitals (south end of the alignment). Thus, this alignment is not anticipated to have the traditional build-up of ridership along the alignment like a typical radial-oriented LRT line into a major central business district. Ridership forecasts from the travel demand model were

reviewed to determine peak period volumes between stations. These volumes were then factored to a peak hour by using a 20% peak hour factor (to represent 40% of the a.m. peak period ridership occurring in the a.m. peak hour). The travel demand model's Production to Attraction assignment was used to estimate directional split for each segment. The resulting maximum line load was estimated to occur just east of downtown Durham between Alston and Durham Station, as noted in Table 5.3. It was determined that a mix of one and two-car trains was sufficient to accommodate this demand and remain below a 2.0 load factor (i.e., one standing passenger for every seated passenger in the a.m. peak hour). One quarter of the trains in service would be two-car trains with the remaining as one-car trains. Table 5.4 presents estimated LRT Alternative operating requirements.

**Table 5.2 LRT Station-to-Station Travel Time Estimate
(for C1 Alignment Option)**

Station	Distance (Miles)	Cumulative Distance	Time (min.) w/ dwell	Cumulative Time
UNC Hospitals		0.0		0.0
	0.6		1.8	
Mason Farm Road		0.6		1.8
	1.3		2.5	
Hamilton Road		1.9		4.3
	0.8		2.2	
Friday Center Drive		2.7		6.5
	0.3		1.1	
Meadowmont Lane		3		7.6
	1.7		2.7	
Leigh Village		4.7		10.3
	2.1		2.9	
Gateway		6.8		13.2
	1		2.3	
Patterson Place		7.8		15.5
	1.7		2.8	
MLK Jr. Parkway		9.5		18.3
	0.6		1.9	
South Square		10.1		20.2
	3.0		4.9	
LaSalle Street		13.1		25.1
	0.5		1.4	
Duke Medical Center		13.6		26.5
	0.9		2.6	
Ninth Street		14.5		29.1
	0.7		1.4	
Buchanan Blvd.		15.2		30.5
	0.4		1.1	
Durham Station		15.6		31.6
	0.7		1.6	
Dillard Street		16.3		33.2
	0.8		1.6	
Alston Avenue		17.1		34.8
TOTAL		17.1		34.8
Average Speed (mph)				29.5

Notes:

1. Travel time obtained from Durham-Orange AA Travel Time and Distance Calc's - July 2011

Table 5.3 LRT Alternative Peak Hour, Peak Direction Line Loads

Rail Segment		Pk Period Volume	AM Peak Volume	NB Direction		SB Direction		Max. Pass. Volume	Pass./Train	Seats/Car	Load Fact. 1.25-car Trains
UNC Hospitals	Mason Farm Road	4,520	904	14%	130	86%	774	774	129	68	1.52
Mason Farm Road	Hamilton	4,020	804	29%	232	71%	572	572	95	68	1.12
Hamilton	Friday Center	4,230	846	30%	252	70%	594	594	99	68	1.16
Friday Center	Meadowmont	4,230	846	29%	246	71%	600	600	100	68	1.18
Meadowmont	Leigh Village	4,370	874	30%	258	70%	616	616	103	68	1.21
Leigh Village	Gateway	4,460	892	72%	646	28%	246	646	108	68	1.27
Gateway	Patterson Place	4,640	928	72%	666	28%	262	666	111	68	1.31
Patterson Place	Martin Luther King	4,600	920	73%	668	27%	252	668	111	68	1.31
Martin Luther King	South Square	4,390	878	76%	668	24%	210	668	111	68	1.31
South Square	LaSalle	4,610	922	75%	696	25%	226	696	116	68	1.36
LaSalle	Duke Med. Ctr.	4,810	962	62%	596	38%	366	596	99	68	1.17
Duke Med. Ctr.	Ninth St.	5,510	1,102	32%	352	68%	750	750	125	68	1.47
Ninth St.	Buchanan	5,490	1,098	34%	372	66%	726	726	121	68	1.42
Buchanan	Durham Station	5,530	1,106	33%	366	67%	740	740	123	68	1.45
Durham Station	Dillard	5,260	1,052	8%	88	92%	964	964	161	68	1.89
Dillard	Alston	5,050	1,010	4%	40	96%	970	970	162	68	1.90

Table 5.4 LRT Alternative Operating Requirements

Day	Frequency (Min.)				Train Consist				Vehicles		Annual			Train Requirements			
	AM	Mid	PM	Eve	AM	Mid	PM	Eve	Peak	Total	Car-Miles	Train-Hrs	Car-Hrs	AM	Mid	PM	Eve
M-F	10	20	10	20	1.25	1.0	1.25	1.0	10	12	771,800	26,500	30,100	8.0	4.0	8.0	4.0
Sat	30	20	20	30	1.0	1.0	1.0	1.0			85,400	3,500	3,500	3.0	4.0	4.0	3.0
Sun	30	20	20	30	1.0	1.0	1.0	1.0			91,200	3,700	3,700	3.0	4.0	4.0	3.0
									10	12	948,400	33,700	37,300				

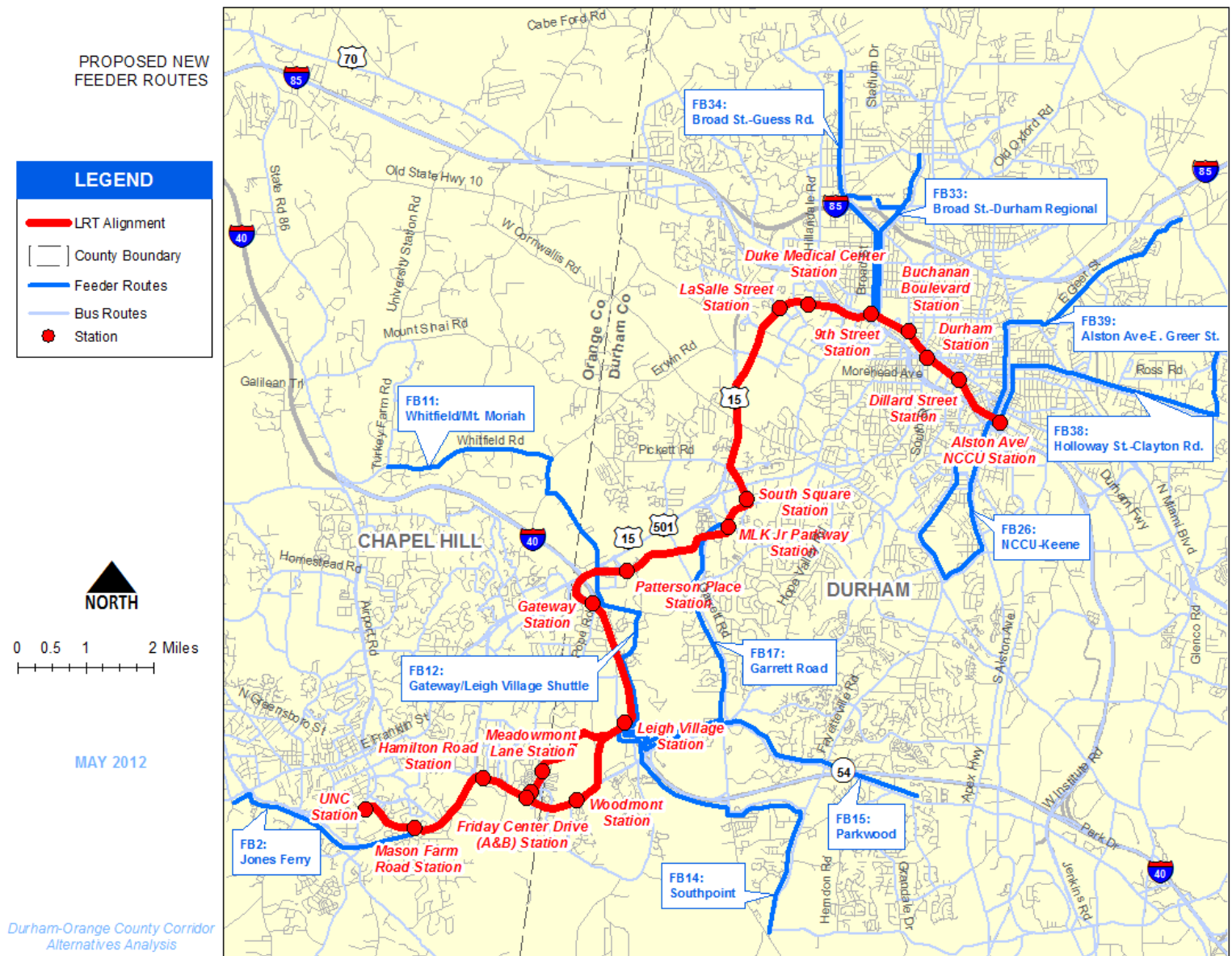
6. Supporting Bus Service

With the introduction of new premium bus or LRT service in the Durham-Orange Corridor, several changes have been proposed for Triangle Transit, DATA, and CHT routes in the corridor. These changes can be categorized as follows:

- Elimination of Competing Bus Service
- Modifications to the Background Bus Network
- Introduction of New Feeder Bus Routes

Proposed changes to the bus network for the Baseline Alternative and LRT Build Alternatives (C1 and C2) are the same, and are described in the following paragraphs. Figure 6-1 illustrates the eleven proposed new feeder bus routes for this alternative, which are described in the following sections.

Figure 6.1 Proposed New Feeder Routes



6.1. Triangle Transit Service Changes

Proposed changes to Triangle Transit corridor routes are listed in Table 6.1, and are described below.

- **Route 400: Durham-New Hope-Chapel Hill** – This route is eliminated from the transit network.
- **Route 405: Durham-Chapel Hill** – This route is eliminated from the transit network.
- **Route 500/550: Raleigh-Airport-RTC-Chapel Hill** – This route is modified to operate to/from the Leigh Village station in the Chapel Hill area.

Table 6.1 Triangle Transit Route Modifications in the Baseline Alternative

Day of Week	Route	Service Frequency		Change from No-Build
		Peak	Midday	
Mon-Fri	102	30	n/a	
	201	30	n/a	
	400	n/a	n/a	Route eliminated from network
	405	n/a	n/a	Route eliminated from network
	420	20	60	Route connects at UNC Hosp.
	500/550	15	30	Route modified to begin/end at Leigh Village
	700	30	60	Route connects at Durham Station
	800	30	60	Route connects at UNC Hosp.
	805	30	60	Route connects at UNC Hosp.
	CRX	15	n/a	Route connects at UNC Hosp.
	DRX	15	n/a	Route connects at Durham and Duke Stations
	BurDX	30	n/a	Route connects at Duke Med. Ctr. Station
Saturday	PDX	30	n/a	Route connects at Durham Station
	BDX	30	n/a	Route connects at Durham Station
	400		n/a	Route eliminated from network
	500/550	30		Route modified to begin/end at Leigh Village
Sunday	700	30		Route connects at Durham Station
	800	30		Route connects at UNC Hosp.
	400		n/a	Route eliminated from network
	500/550	60		Route modified to begin/end at Leigh Village
	700	60		Route connects at Durham Station

6.2. DATA Service Changes

Proposed changes to DATA routes are listed in Table 6.2, and are described below:

- **Bull City Connector** – This route is eliminated from the transit network.
- **Route 2: East Durham & Highway 70** – This route's alignment is modified slightly to include a mid-route stop at the Alston Avenue Station.
- **Route 5: Fayetteville Street & South Square** – This route's alignment is modified slightly to include stops at the South Square and MLK Stations.
- **Route 10: Woodcroft & New Hope Commons** – This route's alignment is modified slightly to include stops at the South Square, MLK and Gateway Stations.
- **Route 13: Durham Tech & The Village** – This route's alignment is modified slightly to include a stop at the Alston Avenue Station.

- **New Feeder Bus (FB) Route 14: Southpoint** – This is a proposed new feeder bus route that operates between Southpoint and Leigh Village Station via Old Durham Road and Farrington Road. Proposed frequencies are 20-minutes in the peak periods and 40-minutes in the midday. For purposes of this study, this route is assumed to be operated by DATA.
- **New Feeder Bus (FB) Route 15: Parkwood** – This is a proposed new feeder bus route that operates from Leigh Village to the Parkwood area via Highway 54. Proposed frequencies are 30-minutes in the peak periods and 60-minutes in the midday. For purposes of this study, this route is assumed to be operated by DATA.
- **New Feeder Bus (FB) Route 17: Garrett Road** – This is a proposed new feeder bus route that would operate primarily along Garrett Road and Hope Valley Road between the South Square and MLK Stations, and Leigh Village. Proposed service frequencies are 30-minutes in the peak periods, 60-minutes in the midday period, with 60-minute Saturday service. For purposes of this study, this route is assumed to be operated by DATA.
- **New Feeder Bus (FB) Route 26: NCCU-Keene** – This is a proposed new feeder bus route that would operate along Alston Avenue, providing service between North Carolina Central University (NCCU) and the Alston Avenue Station. Proposed service frequencies are 30-minutes in the peak and midday periods. For purposes of this study, this route is assumed to be operated by DATA.
- **New Feeder Bus (FB) Route 33: Broad Street-Durham Regional** – This route is a proposed new feeder bus route that would operate from the Ninth Street Station to Durham Regional Hospital via Broad Street, and includes a deviation to the North Pointe Shopping Center. Proposed frequencies are 30-minutes in the peak periods and 60-minutes in the midday, with 60-minute Saturday service. For purposes of this study, this route is assumed to be operated by DATA.
- **New Feeder Bus (FB) Route 34: Broad Street-Guess Road** – This route is a proposed new feeder bus route that would operate from the Ninth Street Station to Willowdale Shopping Center via Broad Street and Guess Road, and includes a deviation to the North Pointe Shopping Center. Proposed frequencies are 30-minutes in the peak periods and 60-minutes in the midday, with 60-minute Saturday service. For purposes of this study, this route is assumed to be operated by DATA.
- **New Feeder Bus (FB) Route 38: Holloway Street-Clayton Road** – This is a proposed new feeder bus route that would operate from the Alston Avenue Station to Holloway Street and Clayton Road. Proposed frequencies are 30-minutes in the peak periods and 60-minutes in the midday, with 60-minute Saturday service. For purposes of this study, this route is assumed to be operated by DATA.
- **New Feeder Bus (FB) Route 39: Alston Avenue-East Greer Street**– This is a proposed new feeder bus route that would operate from the Alston Avenue Station to the Walmart at I-85 and Glenn School Road via Alston Avenue and East Greer Street. Proposed frequencies are 30-minutes in the peak periods and 60-minutes in the midday, with 60-minute Saturday service. For purposes of this study, this route is assumed to be operated by DATA.

Table 6.2 DATA Route Modifications in the Baseline Alternative

Day of Week	Route	Service Frequency		Change from No-Build
		Peak	Midday	
Mon-Fri	BCC	15	15	Route eliminated from network
	1	15	30	Route connects at Durham Station
	2	30	30	Route connects at Alston & Durham Stations
	3	15	30	Route connects at Durham Station
	4	30	30	Route connects at Durham Station
	5	15	30	Route connects at MLK, South Sq, Dillard & Durh.
	6	15	30	Route connects at La Salle, Duke, Durham Stat's
	7	30	30	Route connects at Durham Station
	8	15	30	Route connects at Durham Station
	9	30	30	Route connects at Durham Station
	10	15	30	Route connects at MLK, South Sq & Durham
	11	30	30	Route connects at Durham Station
	12	30	60	Route connects at Durham Station
	13	30	60	Route connects at Alston Station
	15	60	n/a	Route connects at Durham Station
	16	30	60	Route connects at Durham Station
	16B	60	n/a	Route connects at Durham Station
	17	60	60	
	25	30	60	Route connects at Duke Station
	30	30	60	Route connects at Duke Station
	FB 14	30	40	New feeder route to Leigh Village
	FB 15	30	60	New feeder route to Leigh Village
	FB 17	30	60	Proposed new feeder route to MLK & Leigh Vill.
	FB 26	30	30	Proposed new feeder route to Alston Station
	FB 33	30	60	Proposed new feeder route to Ninth St. Station
	FB 34	30	60	Proposed new feeder route to Ninth St. Station
	FB 38	30	60	Proposed new feeder route to Alston Station
	FB 39	30	60	Proposed new feeder route to Alston Station
Saturday	BCC	n/a		Route eliminated from network
	1	30		Route connects at Durham Station
	2	30		Route connects at Alston & Durham Stations
	3	30		Route connects at Durham Station
	4	30		Route connects at Durham Station
	5	30		Route connects at MLK, South Sq, Dillard & Durh.
	6	30		Route connects at La Salle, Duke, Durham Stat's
	7	30		Route connects at Durham Station
	8	30		Route connects at Durham Station
	9	30		Route connects at Durham Station
	10	30		Route connects at MLK, South Sq & Durham
	11	30		Route connects at Durham Station
	12	30		Route connects at Durham Station
	13	60		Route connects at Alston Station
	16	60		Route connects at Durham Station
	17	60		
	25	60		Route connects at Duke Station
	30	60		Route connects at Duke Station
	FB 14	60		Proposed new feeder route to Leigh Village
	FB 17	60		Proposed new feeder route to MLK & Leigh Vill.
	FB 33	60		Proposed new feeder route to Ninth St. Station
	FB 34	60		Proposed new feeder route to Ninth St. Station
	FB 38	60		Proposed new feeder route to Alston Station
	FB 39	60		Proposed new feeder route to Alston Station
Sunday	BCC	n/a		Route eliminated from network
	1	60		Route connects at Durham Station
	2	60		Route connects at Alston & Durham Stations
	3	60		Route connects at Durham Station
	4	60		Route connects at Durham Station
	5	60		Route connects at MLK, South Sq, Dillard & Durh.
	6	60		Route connects at La Salle, Duke, Durham Stat's
	7	60		Route connects at Durham Station
	8	60		Route connects at Durham Station
	9	60		Route connects at Durham Station
	10	60		Route connects at MLK, South Sq & Durham
	11	60		Route connects at Durham Station
	12	60		Route connects at Durham Station
	13	60		Route connects at Alston Station
	16	60		Route connects at Durham Station
	17	60		

6.3. Chapel Hill Transit Service Changes

Proposed route changes to CHT are listed in Table 6.3, and are described below:

- **Route A: MLK Jr. Parkway/Northside** – Modify route slightly to include stop at UNC Hospitals Station.
- **Route CCX: Chatham County Express** – Modify route slightly to include stop at UNC Hospitals Station.
- **Route CL: Colony Lake/Sage Road/UNC Hospitals** - Modify route slightly to include stop at UNC Hospitals Station. Extend north end of route to Gateway Station.
- **Route CM: Carrboro/Merritt Mill Road/Family Medicine** – Modify route slightly to include stop at UNC Hospitals Station.
- **Route D: Cubreth Road/Franklin Street/Easttown** - Modify route slightly to include stop at UNC Hospitals Station. Extend north end of route to Gateway Station. Peak period service frequencies are improved from 15-minutes to 10-minutes.
- **Route FCX: Friday Center Express** – Route is eliminated from the transit network.
- **Route G: Booker Creek/UNC Hospitals/Glen Lennox** – Modify route slightly to include stop at UNC Hospitals and Hamilton Road Stations.
- **Route HU: UNC Hospitals/54 Park and Ride/Hendrick Building** – Route is eliminated from the transit network.
- **Route N: Estes Park/UNC Hospitals/Family Medicine** – Modify route slightly to include stop at UNC Hospitals Station.
- **Route NS: Eubanks Road/Southern Village** – Modify route slightly to include stop at UNC Hospitals Station.
- **Route NU: R Lot/UNC Hospitals** – Modify route slightly to include stop at UNC Hospitals Station.
- **Route PX: Pittsboro/UNC Hospitals** – Modify route slightly to include stop at UNC Hospitals Station.
- **Route S: UNC Campus/NC 54 East Park and Ride** – Route is eliminated from the transit network.
- **Route T: MLK Jr. Parkway/UNC Hospitals** – Modify route slightly to include stop at UNC Hospitals Station. Extend north end of route to Gateway Station.
- **Routes U/RU: Campus Shuttle** – Modify routes slightly to include stop at UNC Hospitals Station.
- **New Feeder Bus (FB) Route 2: Jones Ferry** – This is a proposed new feeder bus route that operates between the Mason Farm Station and Jones Ferry Road. This route would use Highway 54 to travel between these two locations. Proposed frequencies are 30-minutes in the peak periods and 60-minutes in the midday. For purposes of this study, this route is assumed to be operated by CHT.
- **New Feeder Bus (FB) 11 Route: Whitefield/Mt. Moriah** – This is a proposed new feeder bus route that operates from the Gateway Station to Mt. Moriah Road/New Hope Commons and Whitfield Road. Proposed frequencies are 30-minutes in the peak periods and 60-minutes in the midday. For purposes of this study, this route is assumed to be operated by CHT.

- **New Feeder Bus (FB) Route 12: Gateway/Leigh Village Shuttle** – This is a proposed new feeder bus route that operates between Gateway and Leigh Village Stations via Old Durham Road and Farrington Road. Proposed frequencies are 20-minutes in the peak periods and 40-minutes in the midday. For purposes of this study, this route is assumed to be operated by CHT.

Table 6.3 CHT Route Modifications in the Baseline Alternative

Day of Week	Route	Service Frequency		Change from No-Build Alternative
		Peak	Midday	
Mon-Fri	A	30	30	Connect route to UNC Hosp. Station
	CCX	15	40	Connect route to UNC Hosp. Station
	CL	30	n/a	Connect route to UNC Hosp. & Gateway Stations
	CM	50	50	Connect route to UNC Hosp. Station
	CPX	15	n/a	
	CW	30	60	Connect route to UNC Hosp. Station
	D	10	30	Connect route to UNC Hosp. & Gateway Stations
	F	30	60	
	FCX	n/a	n/a	Route eliminated from network
	G	30	60	Connect route to UNC Hosp. & Hamilton Stations
	HS	60	n/a	
	HU	n/a	n/a	Route eliminated from network
	J	15	20	
	JFX	15	n/a	
	N	30	60	Connect route to UNC Hosp. Station
	NS	10	30	Connect route to UNC Hosp. Station
	NU	20	40	Connect route to UNC Hosp. Station
	PX	60	n/a	Connect route to UNC Hosp. Station
	S	n/a	n/a	Route eliminated from network
	T	30	35	Connect route to UNC Hosp. & Gateway Stations
	U	15	15	Connect route to UNC Hosp. Station
	RU	15	15	Connect route to UNC Hosp. Station
	V	30	40	Connect route to UNC Hosp. & Meadowmont Stat.
	FB 2	30	60	Proposed new feeder route to Mason Farm
	FB 11	30	60	Proposed new feeder route to Gateway
	FB 12	20	40	Proposed new feeder route to Gateway & Leigh Vill.
Saturday	CM		70	Connect route to UNC Hosp. Station
	CW		70	Connect route to UNC Hosp. Station
	D		30	Connect route to UNC Hosp. & Gateway Stations
	FG		40	Connect route to UNC Hosp. Station
	JN		40	Connect route to UNC Hosp. Station
	NU		40	Connect route to UNC Hosp. Station
	T		60	Connect route to UNC Hosp. & Gateway Stations
	U		25	Connect route to UNC Hosp. Station
	FB 2		60	Proposed new feeder route to Mason Farm
	FB 11		60	Proposed new feeder route to Gateway
Sunday	CM		70	Connect route to UNC Hosp. Station
	CW		70	Connect route to UNC Hosp. Station
	D		60	Connect route to UNC Hosp. & Gateway Stations
	FG		80	Connect route to UNC Hosp. Station
	JN		80	Connect route to UNC Hosp. Station
	NU		40	Connect route to UNC Hosp. Station
	U		25	Connect route to UNC Hosp. Station

6.4. Station Bus Connections

As noted in the prior sections, many existing bus routes will connect to LRT or Baseline bus stations with little or no changes to route alignments. Table 6.4 presents anticipated station bus route activity (bus routes and weekday service frequencies) that result from the supporting bus network that has been proposed for this project.

**Table 6.4 Supporting Bus Network Connections at Stations
(Baseline and Build)**

Station	Route Name	Service Freq. (min.)		Other Stations Served
		peak	off-peak	
Alston	DATA Route 2	30	30	Durham
	DATA Route 13	30	60	
	New DATA Feeder Bus 26	30	30	
	New DATA Feeder Bus 38	30	60	
	New DATA Feeder Bus 39	30	60	
Dillard	DATA Route 5	15	30	Durham, South Sq, MLK
Durham	Multiple DATA routes	n/a	n/a	
	Triangle Route 700	30	60	
	Triangle Route DRX	15	n/a	
	New Triangle Route PDX	30	n/a	
	New Triangle Route BDX	30	n/a	
Buchanan	DATA Route 11	30	30	Durham
Ninth St.	New DATA Feeder Bus 33	30	60	
	New DATA Feeder Bus 34	30	60	
Duke Med Ctr	DATA Route 6	15	30	LaSalle, Durham
	New DATA Route 25	30	60	
	New DATA Route 30	30	60	
	New Triangle Route BurDx	30	n/a	
	Triangle Route DRX	15	n/a	Durham
	Multiple DUKE Transit Routes	n/a	n/a	
LaSalle	DATA Route 6	15	30	Duke, Durham
South Sq	DATA Route 5	15	30	Durham, Dillard, MLK
	DATA Route 10	15	30	Durham, MLK, Patterson, Gateway
MLK	DATA Route 5	15	30	South Sq, Dillard, Durham
	DATA Route 10	15	30	Gateway, Patterson, South Sq., Durham
	New DATA Feeder Bus 17	30	60	Leigh Village
Patterson	DATA Route 10	30	60	Gateway, MLK, S. Square, Durham
Gateway	CHT Route D	10	30	UNC Hosp.
	CHT Route CL	30	n/a	UNC Hosp.
	CHT Route T	30	35	UNC Hosp.
	New CHT Feeder Bus 11	30	60	
	New CHT Feeder Bus 12	20	40	Leigh Village
	DATA Route 10	30	60	Durham, South Sq., MLK, Patterson
Leigh Village	New DATA Feeder Bus 14	20	40	
	New DATA Feeder Bus 15	30	60	
	New DATA Feeder Bus 17	30	60	MLK
	New CHT Feeder Bus 12	20	40	Gateway
	New Triangle Routes 500/550	15	30	
Meadowmont	CHT Route V	30	40	Friday Ctr., UNC Hosp.
Friday Center	CHT Route V	30	40	Medowmont, UNC Hosp.
Hamilton	CHT Route G	30	60	UNC Hosp.
Mason Farm	New CHT Feeder Bus 2	30	60	
UNC	Multiple CHT Routes	n/a	n/a	
	TT CRX	15	n/a	
	TT 420	20	60	
	TT 800	30	60	
	TT 805	30	60	

6.5. Baseline/Build Alternative Supporting Bus Service Requirements

Operating requirements were calculated for each service provider in the same manner that was used for calculating No-Build Alternative operating requirements. Route level operating statistics were calculated for each service provider in the Durham-Orange corridor. Weekday, Saturday, and Sunday route statistics were calculated based on proposed frequency and alignment changes, estimated route travel times, and distances. Appendices A through C present weekday, Saturday, and Sunday operating statistics for the Baseline and Build Alternatives for Triangle Transit, DATA and CHT. Estimates of revenue bus-hours and bus-miles are summarized below in Table 6.5.

Table 6.5 Estimates of Baseline/Build Alternatives Operating Statistics

(Additional Statistics Over Existing)

Service Provider	Day of Week	Add'l Bus-Hours	Add'l Bus-Miles
Triangle Transit	Weekday	85	1,899
	Saturday	39	1,267
	<u>Sunday</u>	<u>35</u>	<u>948</u>
	Annual	25,700	605,100
DATA	Weekday	306	3,425
	Saturday	84	963
	<u>Sunday</u>	<u>0</u>	<u>49</u>
	Annual	82,300	926,300
CHT	Weekday	66	207
	Saturday	64	633
	<u>Sunday</u>	<u>30</u>	<u>379</u>
	Annual	21,500	106,600

APPENDIX A – TRIANGLE TRANSIT OPERATING STATISTICS

Alternative	Day of Week	Daily		Daily Rev. Miles	Annual Rev. Hours	Change from Existing	Annual Rev. Miles	Change from Existing
		Pk. Buses	Rev. Hours					
Existing	Weekday	61	438.3	7,085	111,754	n/a	1,806,701	n/a
	Saturday	8	97.0	1,537	5,044	n/a	79,919	n/a
	Sunday	0	0.0	0	0	n/a	0	n/a
					116,798	n/a	1,886,619	n/a
No-Build	Weekday	87	632.5	11,124	161,288	49,534	2,836,518	1,029,818
	Saturday	16	198.5	3,699	10,322	5,278	192,369	112,450
	Sunday	6	69.0	1,293	4,002	4,002	74,971	74,971
					175,612	58,814	3,103,858	1,217,238
Baseline & Build	Weekday	77	523.5	8,984	133,493	21,739	2,290,920	484,220
	Saturday	11	135.5	2,804	7,046	2,002	145,787	65,868
	Sunday	3	34.5	948	2,001	2,001	54,955	54,955
					142,540	25,742	2,491,662	605,043

Note: "Existing" statistics represent spreadsheet-calculated estimates based on existing published schedules and do not match with NTD totals. Existing statistics calculated only for the purpose of determining the incremental change in peak buses, bus-hours, and bus-miles for each project alternative

Existing Service
Weekday Bus Routes

Route #	Route Name	Span of Service	Service Frequency					Peak Period Cycle Time			One-Way Distance (Miles)	Average Weekday			Bus Requirements			
			AM Pk	Midday	PM Pk	Eve.	Daily Trips	Time (Min.)	Layover Time	Cycle Time		In-Serv. Hours	Rev. Hrs.	Rev. Miles	AM Pk	Midday	PM Pk	Evening
100	Raleigh-Airport-RTC	6:05 am-11:15 pm	30	60	30	60	46	50.0	20	120	15.3	36.8	46.0	703.8	4.00	2.00	4.00	2.00
102	Garner-Raleigh	Peak Periods Only - One Way	60	n/a	60	n/a	6	55.0	5	60	9.5	5.5	6.0	56.7	1.00	0.00	1.00	0.00
105	Raleigh-RTC	Peak Periods Only	30	n/a	30	n/a	28	37.0	16	90	13.6	17.3	21.0	380.8	3.00	0.00	3.00	0.00
201	North Raleigh-RTC	Peak Periods Only - One Way	30	n/a	30	n/a	7	53.0	7	60	16.2	6.2	7.0	113.4	2.00	0.00	2.00	0.00
301	Raleigh-Cary-RTC	Peak Periods Only	30	n/a	30	n/a	24	70.0	10	150	22.3	28.0	30.0	535.2	5.00	0.00	5.00	0.00
303	Cary-Raleigh	Midday Only, 2-way	n/a	60	n/a	n/a	12	n/a	n/a	n/a	9.3	5.0	6.0	111.6	0.00	1.00	0.00	0.00
305	Lake Pine-Cary-Raleigh	Peak Periods Only	60	n/a	60	n/a	14	50.0	20	120	14.3	11.7	14.0	200.2	2.00	0.00	2.00	0.00
311	Apex-RTC	Peak Periods Only	30	n/a	30	n/a	24	50.0	20	120	17.9	20.0	24.0	428.4	4.00	0.00	4.00	0.00
400	Durham-New Hope-Chapel Hill	6:00 am-10:00 pm	30	60	30	60	46	55.0	10	120	14.2	42.2	46.0	653.2	4.00	2.00	4.00	2.00
405	Durham-Chapel Hill	Peak Periods Only	30	n/a	30	n/a	28	45.0	30	120	12.6	21.0	28.0	352.8	4.00	0.00	4.00	0.00
420	Hillsborough-Chapel Hill	Peak Periods Only	30	n/a	30	n/a	20	45.0	30	120	13.9	15.0	20.0	278.0	4.00	0.00	4.00	0.00
700	Durham-RTC	6:00 am-10:00 pm	30	60	30	60	46	25.0	10	60	10.5	19.2	23.0	483.0	2.00	1.00	2.00	1.00
800	Chapel Hill-Southpoint Mall-RTC	6:00 am-10:00 pm	30	60	30	60	46	45.0	30	120	14.1	35.5	46.0	648.6	4.00	2.00	4.00	2.00
805	Chapel Hill-Woodcroft-RTC UNC Hosp-Woodcroft	6:00 am-7:00 pm 6:00 am-7:00 pm	30 n/a	n/a 60	30 n/a	n/a n/a	28 6	50.0 n/s	20 n/s	120 n/s	14.8 6.8	23.3 2.5	28.0 3.0	414.4 40.8	4.00 0.00	0.00 1.00	4.00 0.00	0.00 0.00
CRX	Chapel Hill-Raleigh Express	Peak Periods Only	30	n/a	30	n/a	24	55.0	10	120	25.8	22.0	24.0	619.2	4.00	0.00	4.00	0.00
DRX	Durham-Raleigh Express	Peak Periods Only	30	n/a	30	n/a	20	65.0	5	135	24.4	21.7	22.5	488.0	4.50	0.00	4.50	0.00
KRX	Knightdale-Raleigh Express	Peak Periods Only	60	n/a	60	n/a	9	36.0	18	90	9.6	5.4	6.8	86.4	1.50	0.00	1.50	0.00
WRX	Wake Forest-Raleigh Express	Peak Periods Only	60	n/a	60	n/a	9	55.0	10	120	8.8	8.3	9.0	79.2	2.00	0.00	2.00	0.00
ZWX	Zebulon/Wendell-Raleigh Express	Peak Periods Only	60	n/a	60	n/a	8	50.0	20	120	16.8	6.7	8.0	134.4	2.00	0.00	2.00	0.00
42	Shuttle	Peak Periods Only - One Way	30	n/a	30	n/a	10	25.0	5	30	4.7	4.2	5.0	47.0	1.00	0.00	1.00	0.00
46	Shuttle	Peak Periods Only - One Way	30	n/a	30	n/a	10	25.0	5	30	8.8	4.2	5.0	88.0	1.00	0.00	1.00	0.00
47	Shuttle	Peak Periods Only - One Way	30	n/a	30	n/a	10	25.0	5	30	6.3	4.2	5.0	63.0	1.00	0.00	1.00	0.00
49	Shuttle	Peak Periods Only - One Way	30	n/a	30	n/a	10	25.0	5	30	7.9	4.2	5.0	79.0	1.00	0.00	1.00	0.00
TOTALS							491					370	438	7,085	61.0	9.0	61.0	7.0

No-Build Alternative
Weekday Bus Routes

Route #	Route Name	Span of Service	Service Frequency					Peak Period Cycle Time			One-Way Distance (Miles)	Average Weekday			Bus Requirements			
			AM Pk	Midday	PM Pk	Eve.	Daily Trips	Time (Min.)	Layover Time	Cycle Time		In-Serv. Hours	Rev. Hrs.	Rev. Miles	AM Pk	Midday	PM Pk	Evening
500/550	Raleigh-Airport-RTC-Chapel Hill	6:05 am-11:15 pm	15	30	15	60	86	65.0	20	150	31.5	93.2	109.0	2709.0	10.00	5.00	10.00	3.00
102	Garner-Raleigh	Peak Periods Only - One Way	30	n/a	30	n/a	14	55.0	10	120	9.5	12.8	14.0	133.0	4.00	0.00	4.00	0.00
201	North Raleigh-RTC	Peak Periods Only - One Way	30	n/a	30	n/a	8	53.0	14	120	16.2	7.1	8.0	129.6	4.00	0.00	4.00	0.00
301	Raleigh-Cary-RTC	Peak Periods Only	30	n/a	30	n/a	24	70.0	10	150	22.3	28.0	30.0	535.2	5.00	0.00	5.00	0.00
303	Cary-Raleigh	Midday Only, 2-way	n/a	60	n/a	n/a	12	n/a	n/a	n/a	9.3	5.0	6.0	111.6	0.00	1.00	0.00	0.00
305	Lake Pine-Cary-Raleigh	Peak Periods Only	30	n/a	30	n/a	28	50.0	20	120	14.3	23.3	28.0	400.4	4.00	0.00	4.00	0.00
311	Apex-RTC	6:00 a.m.-6:00 pm	30	60	30	n/a	36	50.0	20	120	17.9	30.0	36.0	642.6	4.00	2.00	4.00	0.00
400	Durham-New Hope-Chapel Hill	6:00 am-10:00 pm	30	30	30	60	58	55.0	10	120	14.2	53.2	58.0	823.6	4.00	4.00	4.00	2.00
405	Durham-Chapel Hill	Peak Periods Only	30	n/a	30	n/a	28	45.0	30	120	12.6	21.0	28.0	352.8	4.00	0.00	4.00	0.00
420	Hillsborough-Chapel Hill	6:00 am-7:00 pm	20	60	20	n/a	50	45.0	30	120	13.9	37.5	50.0	695.0	6.00	2.00	6.00	0.00
700	Durham-RTC	6:00 am-10:00 pm	30	60	30	60	46	25.0	10	60	10.5	19.2	23.0	483.0	2.00	1.00	2.00	1.00
800	Chapel Hill-Southpoint Mall-RTC	6:00 am-10:00 pm	30	60	30	60	46	45.0	30	120	14.1	35.5	46.0	648.6	4.00	2.00	4.00	2.00
805	Chapel Hill-Woodcroft-RTC UNC Hosp-Woodcroft	6:00 am-7:00 pm 6:00 am-7:00 pm	30 n/a	n/a 60	30 n/a	n/a n/a	24 12	50.0 n/s	20 n/s	120 n/s	14.8 6.8	20.0 5.0	24.0 6.0	355.2 81.6	4.00 0.00	0.00 1.00	4.00 0.00	0.00 0.00
CRX	Chapel Hill-Raleigh Express	Peak Periods Only	30	n/a	30	n/a	24	55.0	10	120	25.8	22.0	24.0	619.2	4.00	0.00	4.00	0.00
DRX	Durham-Raleigh Express	Peak Periods Only	15	n/a	15	n/a	40	65.0	5	135	24.4	43.3	45.0	976.0	9.00	0.00	9.00	0.00
KRX	Knightdale-Raleigh Express	Peak Periods Only	30	n/a	30	n/a	18	36.0	18	90	9.6	10.8	13.5	172.8	3.00	0.00	3.00	0.00
WRX	Wake Forest-Raleigh Express	Peak Periods Only	60	n/a	60	n/a	9	55.0	10	120	8.8	8.3	9.0	79.2	2.00	0.00	2.00	0.00
ZWX	Zebulon/Wendell-Raleigh Express	Peak Periods Only	60	n/a	60	n/a	8	50.0	20	120	16.8	6.7	8.0	134.4	2.00	0.00	2.00	0.00
W Exp	Burlington/Duke	Peak Periods Only - One Way	30	n/a	30	n/a	12	65.0	25	90	22.5	13.0	18.0	270.0	3.00	0.00	3.00	0.00
N Exp	Person County/Durham	Peak Periods Only - One Way	30	n/a	30	n/a	12	50.0	10	60	16.7	10.0	12.0	200.4	2.00	0.00	2.00	0.00
NE Exp	Buttner/Durham	Peak Periods Only - One Way	30	n/a	30	n/a	12	43.0	17	60	18.2	8.6	12.0	218.4	2.00	0.00	2.00	0.00
42	Shuttle	Peak Periods Only - One Way	30	n/a	30	n/a	10	25.0	5	30	4.7	4.2	5.0	47.0	1.00	0.00	1.00	0.00
46	Shuttle	Peak Periods Only - One Way	30	n/a	30	n/a	10	25.0	5	30	8.8	4.2	5.0	88.0	1.00	0.00	1.00	0.00
47	Shuttle	Peak Periods Only - One Way	30	n/a	30	n/a	10	25.0	5	30	6.3	4.2	5.0	63.0	1.00	0.00	1.00	0.00
48	Shuttle	Peak Periods Only - One Way	30	n/a	30	n/a	10	25.0	5	30	7.5	4.2	5.0	75.0	1.00	0.00	1.00	0.00
49	Shuttle	Peak Periods Only - One Way	30	n/a	30	n/a	10	25.0	5	30	7.9	4.2	5.0	79.0	1.00	0.00	1.00	0.00
TOTALS							657					534	633	11,124	87.0	18.0	87.0	8.0

Baseline & Build Alternatives

Weekday Bus Routes

Route #	Route Name	Span of Service	Service Frequency					Peak Period Cycle Time			One-Way Distance (Miles)	Average Weekday			Bus Requirements			
			AM Pk	Midday	PM Pk	Eve.	Daily Trips	Time (Min.)	Layover Time	Cycle Time		In-Serv. Hours	Rev. Hrs.	Rev. Miles	AM Pk	Midday	PM Pk	Evening
500/550	Raleigh-Airport-RTC-Chapel Hill	6:05 am-11:15 pm	15	30	15	60	86	53.0	14	120	27.5	76.0	86.0	2365.0	8.00	4.00	8.00	2.00
102	Garner-Raleigh	Peak Periods Only - One Way	30	n/a	30	n/a	14	55.0	10	120	9.5	12.8	14.0	133.0	4.00	0.00	4.00	0.00
201	North Raleigh-RTC	Peak Periods Only - One Way	30	n/a	30	n/a	8	53.0	14	120	16.2	7.1	8.0	129.6	4.00	0.00	4.00	0.00
301	Raleigh-Cary-RTC	Peak Periods Only	30	n/a	30	n/a	24	70.0	10	150	22.3	28.0	30.0	535.2	5.00	0.00	5.00	0.00
303	Cary-Raleigh	Midday Only, 2-way	n/a	60	n/a	n/a	12	n/a	n/a	n/a	9.3	5.0	6.0	111.6	0.00	1.00	0.00	0.00
305	Lake Pine-Cary-Raleigh	Peak Periods Only	30	n/a	30	n/a	28	50.0	20	120	14.3	23.3	28.0	400.4	4.00	0.00	4.00	0.00
311	Apex-RTC	6:00 am-6:00 pm	30	60	30	n/a	36	50.0	20	120	17.9	30.0	36.0	642.6	4.00	2.00	4.00	0.00
420	Hillsborough-Chapel Hill	6:00 am-7:00 pm	20	60	20	n/a	50	45.0	30	120	13.9	37.5	50.0	695.0	6.00	2.00	6.00	0.00
700	Durham-RTC	6:00 am-10:00 pm	30	60	30	60	46	25.0	10	60	10.5	19.2	23.0	483.0	2.00	1.00	2.00	1.00
800	Chapel Hill-Southpoint Mall-RTC	6:00 am-10:00 pm	30	60	30	60	46	45.0	30	120	14.1	35.5	46.0	648.6	4.00	2.00	4.00	2.00
805	Chapel Hill-Woodcroft-RTC	6:00 am-7:00 pm	30	n/a	30	n/a	24	50.0	20	120	14.8	20.0	24.0	355.2	4.00	0.00	4.00	0.00
	UNC Hosp-Woodcroft	6:00 am-7:00 pm	n/a	60	n/a	n/a	12	n/s	n/s	n/s	6.8	5.0	6.0	81.6	0.00	1.00	0.00	0.00
CRX	Chapel Hill-Raleigh Express	Peaks Only, 2-way	30	n/a	30	n/a	24	55.0	10	120	25.8	22.0	24.0	0.0	4.00	0.00	4.00	0.00
DRX	Durham-Raleigh Express	Peaks Only, 2-way	15	n/a	15	n/a	40	65.0	5	135	24.4	43.3	45.0	976.0	9.00	0.00	9.00	0.00
KRX	Knightdale-Raleigh Express	Peak Periods Only	30	n/a	30	n/a	18	36.0	18	90	9.6	10.8	13.5	172.8	3.00	0.00	3.00	0.00
WRX	Wake Forest-Raleigh Express	Peak Periods Only	60	n/a	60	n/a	9	55.0	10	120	8.8	8.3	9.0	79.2	2.00	0.00	2.00	0.00
ZWX	Zebulon/Wendell-Raleigh Express	Peak Periods Only	60	n/a	60	n/a	8	50.0	20	120	16.8	6.7	8.0	134.4	2.00	0.00	2.00	0.00
W Exp	Burlington/Duke	Peak Periods Only	30	n/a	30	n/a	12	65.0	25	90	22.5	13.0	18.0	270.0	3.00	0.00	3.00	0.00
N Exp	Person County/Durham	Peak Periods Only	30	n/a	30	n/a	12	50.0	10	60	16.7	10.0	12.0	200.4	2.00	0.00	2.00	0.00
NE Exp	Buttner/Durham	Peak Periods Only - One Way	30	n/a	30	n/a	12	43.0	17	60	18.2	8.6	12.0	218.4	2.00	0.00	2.00	0.00
42	Shuttle	Peak Periods Only - One Way	30	n/a	30	n/a	10	25.0	5	30	4.7	4.2	5.0	47.0	1.00	0.00	1.00	0.00
46	Shuttle	Peak Periods Only - One Way	30	n/a	30	n/a	10	25.0	5	30	8.8	4.2	5.0	88.0	1.00	0.00	1.00	0.00
47	Shuttle	Peak Periods Only - One Way	30	n/a	30	n/a	10	25.0	5	30	6.3	4.2	5.0	63.0	1.00	0.00	1.00	0.00
48	Shuttle	Peak Periods Only - One Way	30	n/a	30	n/a	10	25.0	5	30	7.5	4.2	5.0	75.0	1.00	0.00	1.00	0.00
49	Shuttle	Peak Periods Only - One Way	30	n/a	30	n/a	10	25.0	5	30	7.9	4.2	5.0	79.0	1.00	0.00	1.00	0.00
TOTALS							571					443	524	8,984	77.0	13.0	77.0	5.0

Existing Service

Saturday Bus Routes

Route #	Route Name	Span of Service	Serv. Freq.				Base Period			Average Saturday			Bus Requirements	
			AM	Mid/PM	Eve.	Daily Trips	Time (Min.)	Layover Time	Cycle Time	In-Serv. Hours	Rev. Hrs.	Rev. Miles	Midday	Eve.
100	Raleigh-Airport-RTC	6:30 am-6:30 pm	60	60	n/a	25	45.0	30	120	18.8	25.0	382.5	2.0	0.0
303	Cary-Raleigh	7:00 am-6:30 pm	60	60	n/a	24	25.0	10	60	10.0	12.0	223.2	1.0	0.0
400	Durham-New Hope-Chapel Hill	7:00 am-6:00 pm	60	60	n/a	24	55.0	10	120	22.0	24.0	340.8	2.0	0.0
700	Durham-RTC	7:00 am-6:00 pm	60	60	n/a	24	31.0	28	90	12.4	18.0	252.0	1.5	0.0
800	Chapel Hill-Southpoint Mall-RTC	7:00 am-6:00 pm	60	60	n/a	24	45.0	0	90	18.0	18.0	338.4	1.5	0.0
						121				81.2	97.0	1,536.9	8.0	0.0

No-Build Alternative

Saturday Bus Routes

Route #	Route Name	Span of Service	Serv. Freq.				Base Period			Average Saturday			Bus Requirements	
			AM	Mid/PM	Eve.	Daily Trips	Time (Min.)	Layover Time	Cycle Time	In-Serv. Hours	Rev. Hrs.	Rev. Miles	Midday	Eve.
500/550	Raleigh-Airport-RTC-Chapel Hill	6:30 am-11:00 pm	60	30	60	50	65.0	20	150	54.2	64.0	1575.0	5.0	3.0
303	Cary-Raleigh	7:00 am-6:30 pm	60	60	n/a	24	25.0	10	60	10.0	12.0	223.2	1.0	0.0
400	Durham-New Hope-Chapel Hill	7:00 am-10:00 pm	60	30	60	49	55.0	10	120	44.9	49.0	695.8	4.0	2.0
700	Durham-RTC	7:00 am-10:00 pm	60	30	60	49	31.0	28	90	25.2	35.3	514.5	3.0	1.0
800	Chapel Hill-Southpoint Mall-RTC	7:00 am-10:00 pm	60	30	60	49	45.0	0	90	36.8	38.3	690.9	3.0	2.0
						221				171.1	198.5	3,699.4	16.0	8.0

Baseline & Build Alternatives

Saturday Bus Routes

Route #	Route Name	Span of Service	Serv. Freq.				Base Period			Average Saturday			Bus Requirements	
			AM	Mid/PM	Eve.	Daily Trips	Time (Min.)	Layover Time	Cycle Time	In-Serv. Hours	Rev. Hrs.	Rev. Miles	Midday	Eve.
500/550	Raleigh-Airport-RTC-Chapel Hill	6:30 am-11:00 pm	60	30	60	50	53.0	14	120	44.2	50.0	1375.0	4.0	2.0
303	Cary-Raleigh	7:00 am-6:30 pm	60	60	n/a	24	25.0	10	60	10.0	12.0	223.2	1.0	0.0
700	Durham-RTC	7:00 am-10:00 pm	60	30	60	49	31.0	28	90	25.2	35.3	514.5	3.0	1.0
800	Chapel Hill-Southpoint Mall-RTC	7:00 am-10:00 pm	60	30	60	49	45.0	0	90	36.8	38.3	690.9	3.0	2.0
						172				116.1	135.5	2,803.6	11.0	5.0

No-Build Alternative

Sunday Bus Routes

Route #	Route Name	Span of Service	Serv. Freq.				Base Period			One-Way Distance (Miles)	Average Saturday			Bus Requirements	
			AM	Mid/PM	Eve.	Daily Trips	Time (Min.)	Layover Time	Cycle Time		In-Serv. Hours	Rev. Hrs.	Rev. Miles	Midday	Eve.
500/550	Raleigh-Airport-RTC-Chapel Hill	8:30 am-8:00 pm	n/a	60	n/a	23	65.0	50.0	180	31.5	24.9	34.5	724.5	3.0	0.0
400	Durham-New Hope-Chapel Hill	8:30 am-8:00 pm	n/a	60	n/a	23	55.0	10.0	120	14.2	21.1	23.0	326.6	2.0	0.0
700	Durham-RTC	8:30 am-8:00 pm	n/a	60	n/a	23	30.0	0.0	60	10.5	11.5	11.5	241.5	1.0	0.0
						69					57.5	69.0	1,292.6	6.0	0.0

Baseline & Build Alternatives

Sunday Bus Routes

Route #	Route Name	Span of Service	Serv. Freq.				Base Period			One-Way Distance (Miles)	Average Saturday			Bus Requirements	
			AM	Mid/PM	Eve.	Daily Trips	Time (Min.)	Layover Time	Cycle Time		In-Serv. Hours	Rev. Hrs.	Rev. Miles	Midday	Eve.
500/550	Raleigh-Airport-RTC-Chapel Hill	8:30 am-8:00 pm	n/a	60	n/a	23	53.0	14.0	120	27.5	20.3	23.0	632.5	2.0	0.0
700	Durham-RTC	8:30 am-8:00 pm	n/a	60	n/a	30	30.0	0.0	60	10.5	11.5	11.5	315.0	1.0	0.0
						53					31.8	34.5	947.5	3.0	0.0

APPENDIX B – DATA OPERATING STATISTICS

Alternative	Day of Week	Daily Pk. Buses	Daily Rev. Hrs.	Daily Rev. Miles	Annual Rev. Hours	Change from Existing	Annual Rev. Miles	Change from Existing
Existing	Weekday	39	594	7,849	151,470	n/a	2,001,572	n/a
	Saturday	36	568	7,364	29,510	n/a	382,907	n/a
	Sunday	17	221	3,141	12,818	n/a	182,166	n/a
					193,798	n/a	2,566,645	n/a
No-Build	Weekday	60	777.0	10,079	198,135	46,665	2,570,222	568,650
	Saturday	38	613.0	7,966	31,876	2,366	414,227	31,320
	Sunday	20	255.5	3,507	14,819	2,001	203,377	21,211
					244,830	51,032	3,187,825	621,180
Baseline & Build	Weekday	74	899.5	11,274	229,373	77,903	2,874,743	873,171
	Saturday	42	651.5	8,327	33,878	4,368	432,983	50,076
	Sunday	17	221.0	3,190	12,818	0	185,032	2,865
					276,069	82,271	3,492,757	926,112

Note: "Existing" statistics represent spreadsheet-calculated estimates based on existing published schedules and do not match with NTD totals. Existing statistics calculated only for the purpose of determining the incremental change in peak buses, bus-hours and bus-miles for each project alternative.

Existing Service
Weekday Bus Routes

Route #	Route Name	Span of Service	Service Frequency				Daily Trips	Peak Period Cycle Time			One-Way Distance (Miles)	Average Weekday			Bus Requirements			
			AM Pk	Midday	PM Pk	Eve.		Time (Min.)	Layover Time	Cycle Time		In-Serv. Hours	Rev. Hrs.	Rev. Miles	AM Pk	Midday	PM Pk	Evening
BCC	Bull City Connector	6:23 am-12:00 am	15	15	15	20	128	27.5	5	60	5.3	58.7	64.0	678.4	4.00	4.00	4.00	3.00
1	Northgate Mall & North Pointe via Broad	5:30 am-12:30 am	60	60	60	60	32	30.0	15	75	5.7	16.0	19.1	182.4	1.25	1.25	1.25	1.00
	Northgate Mall & North Pointe via Guess		60	60	60	60	32	25.0	25	75	5.7	13.3	19.1	182.4	1.25	1.25	1.25	1.00
2	East Durham & Highway 70	5:28 am-12:28 am	30	30	30	60	64	27.5	20	75	7.1	29.3	38.8	454.4	2.50	2.50	2.50	1.00
3	Holloway Street & The Village	5:25 am-12:25 pm	30	30	30	60	64	27.5	20	75	5.6	29.3	38.8	358.4	2.50	2.50	2.50	1.00
4	Durham Regional Hospital & N Roxboro Road	5:30 am-12:30 am	30	30	30	60	64	27.5	5	60	4.9	29.3	32.0	313.6	2.00	2.00	2.00	1.00
5	Fayetteville Street & South Square	5:35 am-12:27 am	30	30	30	60	64	40.0	10	90	9.6	39.8	45.5	614.4	3.00	3.00	3.00	1.00
6	Duke University & VA Hospital via Cameron	5:35 am-12:30 am	60	60	60	60	32	27.5	5	60	7.7	13.7	16.0	246.4	1.00	1.00	1.00	1.00
	Duke University & VA Hospital via Forest Apts		60	60	60	60	32	27.5	5	60	7.7	13.7	16.0	246.4	1.00	1.00	1.00	1.00
7	Fayetteville Road & Southpoint Mall	5:29 am-12:25 am	30	30	30	60	63	57.5	5	120	13.2	60.4	63.0	831.6	4.00	4.00	4.00	2.00
8	McDougald Terrace & Durham Tech	5:29 am-12:20 am	30	30	30	60	64	25.0	10	60	4.5	26.7	32.0	288.0	2.00	2.00	2.00	1.00
9	Dearborn Drive & Durham Regional Hospital	5:20 am-12:30 am	30	30	30	60	64	40.0	10	90	7.8	40.6	45.5	499.2	3.00	3.00	3.00	1.00
10	Woodcroft & New Hope Commons	5:17 am-12:37 am	30	30	30	60	64	30.0	15	75	11.6	31.6	38.8	742.4	2.50	2.50	2.50	1.00
11	Duke University & Hillsborough Road	5:25 am-12:25 am	30	30	30	60	64	27.5	5	60	6.5	29.3	32.0	416.0	2.00	2.00	2.00	1.00
12	Highway 55 & Highway 54	5:28 am-12:28 am	60	60	30	60	44	27.5	5	60	10.4	20.2	22.0	457.6	1.00	1.00	2.00	1.00
13	Durham Tech & The Village	5:30 am-12:30 am	60	60	60	60	38	27.5	5	60	8.2	17.4	19.0	311.6	1.00	1.00	1.00	1.00
15	Brier Creek	6:15 am-10:15 am	60	n/a	60	60	18	30.0	0	60	13.7	9.0	9.0	246.6	1.00	0.00	1.00	1.00
16	Southern High School & The Village	5:30 am-12:30 am	60	60	60	60	38	27.5	5	60	6.7	17.4	19.0	254.6	1.00	1.00	1.00	1.00
16B	Neal Middle School & Southern High School	Peak periods only	60	n/a	60	n/a	12	27.5	5	60	8.9	5.5	6.0	106.8	1.00	0.00	1.00	0.00
17	Snow Hill Road & Horton Road	5:52 am-12:27 am	60	60	60	60	37	27.5	5	60	11.3	17.0	18.5	418.1	1.00	1.00	1.00	1.00
TOTALS							1018					518	594	7,849	38.0	36.0	39.0	22.0

No-Build Alternative
Weekday Bus Routes

Route #	Route Name	Span of Service	Service Frequency				Daily Trips	Peak Period Cycle Time			One-Way Distance (Miles)	Average Weekday			Bus Requirements			
			AM Pk	Midday	PM Pk	Eve.		Time (Min.)	Layover Time	Cycle Time		In-Serv. Hours	Rev. Hrs.	Rev. Miles	AM Pk	Midday	PM Pk	Evening
BCC	Bull City Connector	6:23 am-12:00 am	15	15	15	20	128	27.5	5	60	5.3	58.7	64.0	678.4	4.00	4.00	4.00	3.00
1	Northgate Mall & North Pointe via Broad	5:30 am-12:30 am	30	60	30	60	45	30.0	15	75	5.7	22.5	27.3	256.5	2.50	1.25	2.50	1.00
	Northgate Mall & North Pointe via Guess		30	60	30	60	45	25.0	25	75	5.7	18.8	27.3	256.5	2.50	1.25	2.50	1.00
2	East Durham & Highway 70	5:28 am-12:28 am	30	30	30	60	64	27.5	5	60	7.1	29.3	32.0	454.4	2.00	2.00	2.00	1.00
3	Holloway Street & The Village	5:25 am-12:25 pm	15	30	15	60	94	27.5	20	75	5.6	43.1	57.5	526.4	5.00	2.50	5.00	1.00
4	Durham Regional Hospital & N Roxboro Road	5:30 am-12:30 am	30	30	30	60	64	27.5	5	60	4.9	29.3	32.0	313.6	2.00	2.00	2.00	1.00
5	Fayetteville Street & South Square	5:35 am-12:27 am	15	30	15	60	94	40.0	10	90	9.6	59.8	68.0	902.4	6.00	3.00	6.00	1.00
6	Duke University & VA Hospital via Cameron	5:35 am-12:30 am	30	60	30	60	45	27.5	5	60	7.7	19.7	22.5	346.5	2.00	1.00	2.00	1.00
	Duke University & VA Hospital via Forest Apts		30	60	30	60	45	27.5	5	60	7.7	19.7	22.5	346.5	2.00	1.00	2.00	1.00
7	Fayetteville Road & Southpoint Mall	5:29 am-12:25 am	30	30	30	60	63	57.5	5	120	13.2	60.4	63.0	831.6	4.00	4.00	4.00	2.00
8	McDougald Terrace & Durham Tech	5:29 am-12:20 am	15	30	15	60	94	25.0	10	60	4.5	39.2	47.0	423.0	4.00	2.00	4.00	1.00
9	Dearborn Drive & Durham Regional Hospital	5:20 am-12:30 am	30	30	30	60	64	40.0	10	90	7.8	40.6	45.5	499.2	3.00	3.00	3.00	1.00
10	Woodcroft & New Hope Commons	5:17 am-12:37 am	15	30	15	60	94	30.0	15	75	11.6	46.6	57.5	1090.4	5.00	2.50	5.00	1.00
11	Duke University & Hillsborough Road	5:25 am-12:25 am	30	30	30	60	64	27.5	5	60	6.5	29.3	32.0	416.0	2.00	2.00	2.00	1.00
12	Highway 55 & Highway 54	5:28 am-12:28 am	30	60	30	60	52	27.5	5	60	10.4	23.8	26.0	540.8	2.00	1.00	2.00	1.00
13	Durham Tech & The Village	5:30 am-12:30 am	60	60	30	60	54	27.5	5	60	8.2	24.8	27.0	442.8	2.00	1.00	2.00	1.00
15	Brier Creek	6:15 am-10:15 am	30	n/a	60	60	18	30.0	0	60	13.7	9.0	9.0	246.6	1.00	0.00	1.00	1.00
16	Southern High School & The Village	5:30 am-12:30 am	30	60	30	60	54	27.5	5	60	6.7	24.8	27.0	361.8	2.00	1.00	2.00	1.00
16B	Neal Middle School & Southern High School	Peak periods only	60	n/a	60	n/a	12	27.5	5	60	8.9	5.5	6.0	106.8	1.00	0.00	1.00	0.00
17	Snow Hill Road & Horton Road	5:52 am-12:27 am	60	60	60	60	37	27.5	5	60	11.3	17.0	18.5	418.1	1.00	1.00	1.00	1.00
25	Durham Regional-Duke Med. Ctr.	6:00 am - 12:00 am	30	60	30	60	54	22.5	15	60	4.5	20.3	27.0	243.0	2.00	1.00	2.00	1.00
30	Duke Hospital	6:00 am - 12:00 am	30	60	30	60	54	35.0	20	90	7.0	30.8	38.5	378.0	3.00	1.50	3.00	1.00
TOTALS							1338					673	777	10,079	60.0	38.0	60.0	24.0

Baseline and Build Alternatives
Weekday Bus Routes

Route #	Route Name	Span of Service	Service Frequency					Peak Period Cycle Time			One-Way	Average Weekday			Bus Requirements			
			AM Pk	Midday	PM Pk	Eve.	Daily Trips	Time (Min.)	Layover Time	Cycle Time	Distance (Miles)	In-Serv. Hours	Rev. Hrs.	Rev. Miles	AM Pk	Midday	PM Pk	Evening
1	Northgate Mall & North Pointe via Broad Northgate Mall & North Pointe via Guess	5:30 am-12:30 am	30	60	30	60	45	30.0	15	75	5.7	22.5	27.3	256.5	2.50	1.25	2.50	1.00
2	East Durham & Highway 70	5:28 am-12:28 am	30	30	30	60	64	30.0	15	75	7.7	31.6	38.8	492.8	2.50	2.50	2.50	1.00
3	Holloway Street & The Village	5:25 am-12:25 pm	15	30	15	60	94	27.5	20	75	5.6	43.1	57.5	526.4	5.00	2.50	5.00	1.00
4	Durham Regional Hospital & N Roxboro Road	5:30 am-12:30 am	30	30	30	60	64	27.5	20	75	4.9	29.3	38.8	313.6	2.50	2.50	2.50	1.00
5	Fayetteville Street & South Square	5:35 am-12:27 am	15	30	15	60	94	40.0	10	90	9.6	59.8	68.0	902.4	6.00	3.00	6.00	1.00
6	Duke University & VA Hospital via Cameron Duke University & VA Hospital via Forest Apts	5:35 am-12:30 am	30	60	30	60	45	27.5	5	60	7.7	19.7	22.5	346.5	2.00	1.00	2.00	1.00
7	Fayetteville Road & Southpoint Mall	5:29 am-12:25 am	30	30	30	60	63	57.5	5	120	13.2	60.4	63.0	831.6	4.00	4.00	4.00	2.00
8	McDougald Terrace & Durham Tech	5:29 am-12:20 am	15	30	15	60	94	25.0	10	60	4.5	39.2	47.0	423.0	4.00	2.00	4.00	1.00
9	Dearborn Drive & Durham Regional Hospital	5:20 am-12:30 am	30	30	30	60	64	40.0	10	90	7.8	40.6	45.5	499.2	3.00	3.00	3.00	1.00
10	Woodcroft & New Hope Commons	5:17 am-12:37 am	15	30	15	60	94	35.0	5	75	12.6	54.0	57.5	1184.4	5.00	2.50	5.00	1.00
11	Duke University & Hillsborough Road	5:25 am-12:25 am	30	30	30	60	64	27.5	5	60	6.5	29.3	32.0	416.0	2.00	2.00	2.00	1.00
12	Highway 55 & Highway 54	5:28 am-12:28 am	30	60	30	60	52	27.5	5	60	10.4	23.8	26.0	540.8	2.00	1.00	2.00	1.00
13	Durham Tech & The Village	5:30 am-12:30 am	30	60	30	60	54	27.5	5	60	8.5	24.8	27.0	459.0	2.00	1.00	2.00	1.00
15	Brier Creek	6:15 am-10:15 am	60	n/a	60	60	18	30.0	0	60	13.7	9.0	9.0	246.6	1.00	0.00	1.00	1.00
16	Southern High School & The Village	5:30 am-12:30 am	30	60	30	60	54	27.5	5	60	6.7	24.8	27.0	361.8	2.00	1.00	2.00	1.00
16B	Neal Middle School & Southern High School	Peak periods only	60	n/a	60	n/a	12	27.5	5	60	8.9	5.5	6.0	106.8	1.00	0.00	1.00	0.00
17	Snow Hill Road & Horton Road	5:52 am-12:27 am	60	60	60	60	37	27.5	5	60	11.3	17.0	18.5	418.1	1.00	1.00	1.00	1.00
25	Durham Regional-Duke Med. Cetr.	6:00 am - 12:00 am	30	60	30	60	54	22.5	15	60	4.5	20.3	27.0	243.0	2.00	1.00	2.00	1.00
30	Duke Hospital	6:00 am - 12:00 am	30	60	30	60	54	35.0	20	90	7.0	30.8	38.5	378.0	3.00	1.50	3.00	1.00
FB 14	Southpoint	6:00 am-7:00 pm	20	40	20	n/a	60	21.0	18	60	5.2	20.7	27.0	312.0	3.00	1.00	3.00	0.00
FB 15	Parkwood	6:00 am-7:00 pm	30	60	30	n/a	40	23.0	14	60	5.7	15.3	20.0	228.0	2.00	1.00	2.00	0.00
FB 17	Garrett Road	6:00 am-7:00 pm	30	60	30	n/a	40	24.0	12	60	5.2	16.0	20.0	208.0	2.00	1.00	2.00	0.00
FB 26	NCCU-Keene	6:00 am-7:00 pm	30	30	30	n/a	26	28.0	2	30	6.0	12.1	13.0	156.0	1.00	1.00	1.00	0.00
FB 33	Broad Street-Durham Regional	6:00 am-7:00 pm	30	60	30	n/a	40	16.0	28	60	3.5	10.7	20.0	140.0	2.00	1.00	2.00	0.00
FB 34	Broad Street-Guess Road	6:00 am-7:00 pm	30	60	30	n/a	40	22.0	16	60	4.8	14.7	20.0	192.0	2.00	1.00	2.00	0.00
FB 38	Holloway Street-Clayton Road	6:00 am-7:00 pm	30	60	30	n/a	40	36.0	18	90	7.7	24.0	33.0	308.0	3.00	2.00	3.00	0.00
FB 39	Alston Avenue-East Greer St.	6:00 am-7:00 pm	30	60	30	n/a	40	21.0	18	60	4.5	14.0	20.0	180.0	2.00	1.00	2.00	0.00
TOTALS							1536					751	900	11,274	74.0	44.0	74.0	21.0

Existing Service
Saturday Bus Routes

Route #	Route Name	Span of Service	Serv. Freq.				Base Period			One-Way	Average Saturday			Bus Requirements	
			AM	Mid/PM	Eve.	Daily Trips	Time (Min.)	Layover Time	Cycle Time	Distance (Miles)	In-Serv. Hours	Rev. Hrs.	Rev. Miles	Midday	Eve.
BCC	Bull City Connector	6:30 am - 12:00 am	20	20	20	105	25.0	10	60	5.3	43.8	52.5	556.5	3.0	3.0
1	Northgate Mall & North Pointe via Broad	6:00 am - 12:00 am	60	60	60	32	30.0	0	60	5.7	16.0	16.0	182.4	1.0	1.0
	Northgate Mall & North Pointe via Guess	6:00 am - 12:00 am	60	60	60	32	25.0	10	60	5.7	13.3	16.0	182.4	1.0	1.0
2	East Durham & Highway 70	6:00 am - 12:00 am	30	30	60	64	27.5	20	75	7.1	29.3	38.8	454.4	2.5	1.0
3	Holloway Street & The Village	6:00 am - 12:00 am	30	30	60	64	27.5	20	75	5.6	29.3	38.8	358.4	2.5	1.0
4	Durham Regional Hospital & N Roxboro Road	6:00 am - 12:00 am	30	30	60	64	27.5	20	75	4.9	29.3	38.8	313.6	2.5	1.0
5	Fayetteville Street & South Square	6:00 am - 12:00 am	30	30	60	64	40.0	10	90	9.6	39.8	45.5	614.4	3.0	1.0
6	Duke University & VA Hospital via Cameron	6:00 am - 12:00 am	60	60	60	32	25.0	10	60	7.7	13.2	16.0	246.4	1.0	1.0
	Duke University & VA Hospital via Forest Apts	6:00 am - 12:00 am	60	60	60	32	25.0	10	60	7.7	13.2	16.0	246.4	1.0	1.0
7	Fayetteville Road & Southpoint Mall	6:00 am - 12:00 am	30	30	60	63	57.5	5	120	13.2	60.4	63.0	831.6	4.0	2.0
8	McDougald Terrace & Durham Tech	6:00 am - 12:00 am	30	30	60	64	25.0	10	60	4.5	26.7	32.0	288.0	2.0	1.0
9	Dearborn Drive & Durham Regional Hospital	6:00 am - 12:00 am	30	30	60	64	40.0	10	90	7.8	40.6	45.5	499.2	3.0	1.0
10	Woodcroft & New Hope Commons	6:00 am - 12:00 am	30	30	60	64	30.0	15	75	11.6	31.6	38.8	742.4	2.5	1.0
11	Duke University & Hillsborough Road	6:00 am - 12:00 am	30	30	60	64	27.5	5	60	6.5	29.3	32.0	416.0	2.0	1.0
12	Highway 55 & Highway 54	6:00 am - 12:00 am	60	30	60	43	27.5	5	60	10.4	19.7	21.5	447.2	2.0	1.0
13	Durham Tech & The Village	6:00 am - 12:00 am	60	60	60	38	27.5	5	60	8.2	17.4	19.0	311.6	1.0	1.0
16	Southern High School & The Village	6:00 am - 12:00 am	60	60	60	38	27.5	5	60	6.7	17.4	19.0	254.6	1.0	1.0
17	Snow Hill Road & Horton Road	6:00 am - 12:00 am	60	60	60	37	27.5	5	60	11.3	17.0	18.5	418.1	1.0	1.0
						964					487	568	7,364	36.0	21.0

No-Build Alternative
Saturday Bus Routes

Route #	Route Name	Span of Service	Serv. Freq.				Base Period			One-Way	Average Saturday			Bus Requirements	
			AM	Mid/PM	Eve.	Daily Trips	Time (Min.)	Layover Time	Cycle Time	Distance (Miles)	In-Serv. Hours	Rev. Hrs.	Rev. Miles	Midday	Eve.
BCC	Bull City Connector	6:23 am-12:00 am	20	20	20	105	25.0	10	60	5.3	43.8	52.5	556.5	3.0	3.0
1	Northgate Mall & North Pointe via Broad	5:30 am-12:30 am	60	60	60	32	30.0	0	60	5.7	16.0	16.0	182.4	1.0	1.0
	Northgate Mall & North Pointe via Guess		60	60	60	32	25.0	10	60	5.7	13.3	16.0	182.4	1.0	1.0
2	East Durham & Highway 70	5:28 am-12:28 am	30	30	60	64	27.5	20	75	7.1	29.3	38.8	454.4	2.5	1.0
3	Holloway Street & The Village	5:25 am-12:25 pm	30	30	60	64	27.5	20	75	5.6	29.3	38.8	358.4	2.5	1.0
4	Durham Regional Hospital & N Roxboro Road	5:30 am-12:30 am	30	30	60	64	27.5	20	75	4.9	29.3	38.8	313.6	2.5	1.0
5	Fayetteville Street & South Square	5:35 am-12:27 am	30	30	60	64	40.0	10	90	9.6	39.8	45.5	614.4	3.0	1.0
6	Duke University & VA Hospital via Cameron	5:35 am-12:30 am	60	60	60	32	25.0	10	60	7.7	13.2	16.0	246.4	1.0	1.0
	Duke University & VA Hospital via Forest Apts		60	60	60	32	25.0	10	60	7.7	13.2	16.0	246.4	1.0	1.0
7	Fayetteville Road & Southpoint Mall	5:29 am-12:25 am	30	30	60	63	57.5	5	120	13.2	60.4	63.0	831.6	4.0	2.0
8	McDougald Terrace & Durham Tech	5:29 am-12:30 am	30	30	60	64	25.0	10	60	4.5	26.7	32.0	288.0	2.0	1.0
9	Dearborn Drive & Durham Regional Hospital	5:20 am-12:30 am	30	30	60	64	40.0	10	90	7.8	40.6	45.5	499.2	3.0	1.0
10	Woodcroft & New Hope Commons	5:17 am-12:37 am	30	30	60	64	30.0	15	75	11.6	31.6	38.8	742.4	2.5	1.0
11	Duke University & Hillsborough Road	5:25 am-12:25 am	30	30	60	64	27.5	5	60	6.5	29.3	32.0	416.0	2.0	1.0
12	Highway 55 & Highway 54	5:28 am-12:28 am	30	30	60	60	27.5	5	60	10.4	27.5	30.0	624.0	2.0	1.0
13	Durham Tech & The Village	5:30 am-12:30 am	60	60	60	38	27.5	5	60	8.2	17.4	19.0	311.6	1.0	1.0
16	Southern High School & The Village	5:30 am-12:30 am	60	60	60	38	27.5	5	60	6.7	17.4	19.0	254.6	1.0	1.0
17	Snow Hill Road & Horton Road	5:52 am-12:27 am	60	60	60	37	27.5	5	60	11.3	17.0	18.5	418.1	1.0	1.0
25	Durham Regional-Duke Med. Ctr.	6:00 am - 12:00 am	60	60	60	37	22.5	15	60	4.5	13.9	18.5	166.5	1.0	1.0
30	Duke Hospital	6:00 am - 12:00 am	60	60	60	37	30.0	0	60	7.0	18.5	18.5	259.0	1.0	1.0
						950					527	613	7,966	38.0	23.0

Baseline and Build Alternatives

Saturday Bus Routes

Route #	Route Name	Span of Service	Serv. Freq.				Base Period			One-Way Distance (Miles)	Average Saturday			Bus Requirements	
			AM	Mid/PM	Eve.	Daily Trips	Time (Min.)	Layover Time	Cycle Time		In-Serv. Hours	Rev. Hrs.	Rev. Miles	Midday	Eve.
1	Northgate Mall & North Pointe via Broad	5:30 am-12:30 am	60	60	60	32	30.0	0	60	5.7	16.0	16.0	182.4	1.0	1.0
	Northgate Mall & North Pointe via Guess		60	60	60	32	25.0	10	60	5.7	13.3	16.0	182.4	1.0	1.0
2	East Durham & Highway 70	5:28 am-12:28 am	30	30	60	64	30.0	15	75	7.7	31.6	38.8	492.8	2.5	1.0
3	Holloway Street & The Village	5:25 am-12:25 pm	30	30	60	64	27.5	20	75	5.6	29.3	38.8	358.4	2.5	1.0
4	Durham Regional Hospital & N Roxboro Road	5:30 am-12:30 am	30	30	60	64	27.5	20	75	4.9	29.3	38.8	313.6	2.5	1.0
5	Fayetteville Street & South Square	5:35 am-12:27 am	30	30	60	64	40.0	10	90	9.6	39.8	45.5	614.4	3.0	1.0
6	Duke University & VA Hospital via Cameron	5:35 am-12:30 am	60	60	60	32	25.0	10	60	7.7	13.2	16.0	246.4	1.0	1.0
	Duke University & VA Hospital via Forest Apts		60	60	60	32	25.0	10	60	7.7	13.2	16.0	246.4	1.0	1.0
7	Fayetteville Road & Southpoint Mall	5:29 am-12:25 am	30	30	60	63	57.5	5	120	13.2	60.4	63.0	831.6	4.0	2.0
8	McDougald Terrace & Durham Tech	5:29 am-12:20 am	30	30	60	64	25.0	10	60	4.5	26.7	32.0	288.0	2.0	1.0
9	Dearborn Drive & Durham Regional Hospital	5:20 am-12:30 am	30	30	60	64	40.0	10	90	7.8	40.6	45.5	499.2	3.0	1.0
10	Woodcroft & New Hope Commons	5:17 am-12:37 am	30	30	60	64	35.0	5	75	12.6	36.5	38.8	806.4	2.5	1.0
11	Duke University & Hillsborough Road	5:25 am-12:25 am	30	30	60	64	27.5	5	60	6.5	29.3	32.0	416.0	2.0	1.0
12	Highway 55 & Highway 54	5:28 am-12:28 am	30	30	60	60	27.5	5	60	10.4	27.5	30.0	624.0	2.0	1.0
13	Durham Tech & The Village	5:30 am-12:30 am	60	60	60	38	27.5	5	60	8.5	17.4	19.0	323.0	1.0	1.0
16	Southern High School & The Village	5:30 am-12:30 am	60	60	60	38	27.5	5	60	6.7	17.4	19.0	254.6	1.0	1.0
17	Snow Hill Road & Horton Road	5:52 am-12:27 am	60	60	60	37	27.5	5	60	11.3	17.0	18.5	418.1	1.0	1.0
25	Durham Regional-Duke Med. Cetr.	6:00 am - 12:00 am	60	60	60	37	22.5	15	60	4.5	13.9	18.5	166.5	1.0	1.0
30	Duke Hospital	6:00 am - 12:00 am	60	60	60	37	30.0	0	60	7.0	18.5	18.5	259.0	1.0	1.0
FB 14	Southpoint	6:00 am-7:00 pm	60	60	n/a	26	20.0	20.0	60	5.2	8.7	13.0	135.2	1.0	0.0
FB 17	Garrett Road	6:00 am-7:00 pm	60	60	n/a	26	24.0	12.0	60	5.2	10.4	13.0	135.2	1.0	0.0
FB 33	Broad Street-Durham Regional	6:00 am-7:00 pm	60	60	n/a	26	16.0	28.0	60	3.5	6.9	13.0	91.0	1.0	0.0
FB 34	Broad Street-Guess Road	6:00 am-7:00 pm	60	60	n/a	26	22.0	16.0	60	4.8	9.5	13.0	124.8	1.0	0.0
FB 38	Holloway Street-Clayton Road	6:00 am-7:00 pm	60	60	n/a	26	36.0	48.0	120	7.7	15.6	26.0	200.2	2.0	0.0
FB 39	Alston Avenue-East Greer St.	6:00 am-7:00 pm	60	60	n/a	26	21.0	18.0	60	4.5	9.1	13.0	117.0	1.0	0.0
						1106					551	652	8,327	42.0	20.0

Existing Service
Sunday Bus Routes

Route #	Route Name	Span of Service	Serv. Freq.			Daily Trips	Base Period			One-Way Distance (Miles)	Average Saturday			Bus Requirements	
			AM	Mid/PM	Eve.		Time (Min.)	Layover Time	Cycle Time		In-Serv. Hours	Rev. Hrs.	Rev. Miles	Midday	Eve.
1	Northgate Mall & North Pointe via Broad	6:30 am-7:30 pm	60	60	n/a	26	30.0	0	60	5.7	13.0	13.0	148.2	1.0	0.0
2	East Durham & Highway 70	6:28 am-7:28 pm	60	60	n/a	26	27.5	5	60	7.1	11.9	13.0	184.6	1.0	0.0
3	Holloway Street & The Village	6:25 am-7:25 pm	60	60	n/a	26	27.5	5	60	5.6	11.9	13.0	145.6	1.0	0.0
4	Durham Regional Hospital & N Roxboro Road	6:30 am-7:30 pm	60	60	n/a	26	27.5	5	60	4.9	11.9	13.0	127.4	1.0	0.0
5	Fayetteville Street & South Square	5:27 am-7:27 pm	60	60	n/a	26	40.0	10	90	9.6	17.3	19.5	249.6	1.5	0.0
6	Duke University & VA Hospital via Cameron	6:30 am-7:30 pm	60	60	n/a	26	25.0	10	60	7.7	10.8	13.0	200.2	1.0	0.0
7	Fayetteville Road & Southpoint Mall	6:00 am-8:00 pm	60	60	n/a	26	57.5	5	120	13.2	24.9	26.0	343.2	2.0	0.0
8	McDougald Terrace & Durham Tech	6:25 am-7:20 pm	60	60	n/a	26	25.0	10	60	4.5	10.8	13.0	117.0	1.0	0.0
9	Dearborn Drive & Durham Regional Hospital	6:30 am-7:30 pm	60	60	n/a	26	40.0	10	90	7.8	17.3	19.5	202.8	1.5	0.0
10	Woodcroft & New Hope Commons	6:31 am-7:31 pm	60	60	n/a	26	30.0	0	60	11.6	13.0	13.0	301.6	1.0	0.0
11	Duke University & Hillsborough Road	6:25 am-7:25 pm	60	60	n/a	26	27.5	5	60	6.5	11.9	13.0	169.0	1.0	0.0
12	Highway 55 & Highway 54	6:28 am-7:28 pm	60	60	n/a	26	27.5	5	60	10.4	11.9	13.0	270.4	1.0	0.0
13	Durham Tech & The Village	6:30 am-7:30 pm	60	60	n/a	26	27.5	5	60	8.2	11.9	13.0	213.2	1.0	0.0
16	Southern High School & The Village	6:30 am-7:30 pm	60	60	n/a	26	27.5	5	60	6.7	11.9	13.0	174.2	1.0	0.0
17	Snow Hill Road & Horton Road	6:32 am-7:27 pm	60	60	n/a	26	27.5	5	60	11.3	11.9	13.0	293.8	1.0	0.0
						390					203	221	3,141	17.0	0.0

No-Build Alternative
Sunday Bus Routes

Route #	Route Name	Span of Service	Serv. Freq.			Daily Trips	Base Period			One-Way Distance (Miles)	Average Saturday			Bus Requirements	
			AM	Mid/PM	Eve.		Time (Min.)	Layover Time	Cycle Time		In-Serv. Hours	Rev. Hrs.	Rev. Miles	Midday	Eve.
BCC	Bull City Connector	8:00 am-7:30 pm	20	20	n/a	69	25.0	10	60	5.3	28.8	34.5	365.7	3.0	0.0
1	Northgate Mall & North Pointe via Broad	6:30 am-7:30 pm	60	60	n/a	26	30.0	0	60	5.7	13.0	13.0	148.2	1.0	0.0
2	East Durham & Highway 70	6:28 am-7:28 pm	60	60	n/a	26	27.5	5	60	7.1	11.9	13.0	184.6	1.0	0.0
3	Holloway Street & The Village	6:25 am-7:25 pm	60	60	n/a	26	27.5	5	60	5.6	11.9	13.0	145.6	1.0	0.0
4	Durham Regional Hospital & N Roxboro Road	6:30 am-7:30 pm	60	60	n/a	26	27.5	5	60	4.9	11.9	13.0	127.4	1.0	0.0
5	Fayetteville Street & South Square	5:27 am-7:27 pm	60	60	n/a	26	40.0	10	90	9.6	17.3	19.5	249.6	1.5	0.0
6	Duke University & VA Hospital via Cameron	6:30 am-7:30 pm	60	60	n/a	26	25.0	10	60	7.7	10.8	13.0	200.2	1.0	0.0
7	Fayetteville Road & Southpoint Mall	6:00 am-8:00 pm	60	60	n/a	26	57.5	5	120	13.2	24.9	26.0	343.2	2.0	0.0
8	McDougald Terrace & Durham Tech	6:25 am-7:20 pm	60	60	n/a	26	25.0	10	60	4.5	10.8	13.0	117.0	1.0	0.0
9	Dearborn Drive & Durham Regional Hospital	6:30 am-7:30 pm	60	60	n/a	26	40.0	10	90	7.8	17.3	19.5	202.8	1.5	0.0
10	Woodcroft & New Hope Commons	6:31 am-7:31 pm	60	60	n/a	26	30.0	0	60	11.6	13.0	13.0	301.6	1.0	0.0
11	Duke University & Hillsborough Road	6:25 am-7:25 pm	60	60	n/a	26	27.5	5	60	6.5	11.9	13.0	169.0	1.0	0.0
12	Highway 55 & Highway 54	6:28 am-7:28 pm	60	60	n/a	26	27.5	5	60	10.4	11.9	13.0	270.4	1.0	0.0
13	Durham Tech & The Village	6:30 am-7:30 pm	60	60	n/a	26	27.5	5	60	8.2	11.9	13.0	213.2	1.0	0.0
16	Southern High School & The Village	6:30 am-7:30 pm	60	60	n/a	26	27.5	5	60	6.7	11.9	13.0	174.2	1.0	0.0
17	Snow Hill Road & Horton Road	6:32 am-7:27 pm	60	60	n/a	26	27.5	5	60	11.3	11.9	13.0	293.8	1.0	0.0
						390					231	256	3,507	20.0	0.0

Baseline and Build Alternative
Sunday Bus Routes

Route #	Route Name	Span of Service	Serv. Freq.				Base Period			One-Way	Average Saturday			Bus Requirements	
			AM	Mid/PM	Eve.	Daily Trips	Time (Min.)	Layover Time	Cycle Time	Distance (Miles)	In-Serv. Hours	Rev. Hrs.	Rev. Miles	Midday	Eve.
1	Northgate Mall & North Pointe via Broad	6:30 am-7:30 pm	60	60	n/a	26	30.0	0	60	5.7	13.0	13.0	148.2	1.0	0.0
2	East Durham & Highway 70	6:28 am-7:28 pm	60	60	n/a	26	30.0	0	60	7.7	13.0	13.0	200.2	1.0	0.0
3	Holloway Street & The Village	6:25 am-7:25 pm	60	60	n/a	26	27.5	5	60	5.6	11.9	13.0	145.6	1.0	0.0
4	Durham Regional Hospital & N Roxboro Road	6:30 am-7:30 pm	60	60	n/a	26	27.5	5	60	4.9	11.9	13.0	127.4	1.0	0.0
5	Fayetteville Street & South Square	5:27 am-7:27 pm	60	60	n/a	26	40.0	10	90	9.6	17.3	19.5	249.6	1.5	0.0
6	Duke University & VA Hospital via Cameron	6:30 am-7:30 pm	60	60	n/a	26	25.0	10	60	7.7	10.8	13.0	200.2	1.0	0.0
7	Fayetteville Road & Southpoint Mall	6:00 am-8:00 pm	60	60	n/a	26	57.5	5	120	13.2	24.9	26.0	343.2	2.0	0.0
8	McDougald Terrace & Durham Tech	6:25 am-7:20 pm	60	60	n/a	26	25.0	10	60	4.5	10.8	13.0	117.0	1.0	0.0
9	Dearborn Drive & Durham Regional Hospital	6:30 am-7:30 pm	60	60	n/a	26	40.0	10	90	7.8	17.3	19.5	202.8	1.5	0.0
10	Woodcroft & New Hope Commons	6:31 am-7:31 pm	60	60	n/a	26	30.0	0	60	12.6	13.0	13.0	327.6	1.0	0.0
11	Duke University & Hillsborough Road	6:25 am-7:25 pm	60	60	n/a	26	27.5	5	60	6.5	11.9	13.0	169.0	1.0	0.0
12	Highway 55 & Highway 54	6:28 am-7:28 pm	60	60	n/a	26	27.5	5	60	10.4	11.9	13.0	270.4	1.0	0.0
13	Durham Tech & The Village	6:30 am-7:30 pm	60	60	n/a	26	27.5	5	60	8.5	11.9	13.0	221.0	1.0	0.0
16	Southern High School & The Village	6:30 am-7:30 pm	60	60	n/a	26	27.5	5	60	6.7	11.9	13.0	174.2	1.0	0.0
17	Snow Hill Road & Horton Road	6:32 am-7:27 pm	60	60	n/a	26	27.5	5	60	11.3	11.9	13.0	293.8	1.0	0.0
						390					204	221	3,190	17.0	0.0

APPENDIX C – CHAPEL HILL TRANSIT OPERATING STATISTICS

Summary of Service Statistics

Alternative	Day of Week	Daily Pk. Buses	Daily Rev. Hrs.	Daily Rev. Miles	Annual Rev. Hours	Change from Existing	Annual Rev. Miles	Change from Existing
Existing	Weekday	65	598	7,109	149,479	n/a	1,777,233	n/a
	Saturday	7	59	689	3,046	n/a	35,805	n/a
	Sunday	2	19	193	1,129	n/a	11,206	n/a
					153,654	n/a	1,824,243	n/a
No-Build	Weekday	71	667.3	7,500	166,823	17,344	1,874,995	97,763
	Saturday	10	93.8	1,093	4,875	1,829	56,815	21,011
	Sunday	6	49.3	565	2,861	1,733	32,776	21,570
					174,559	20,905	1,964,586	140,343
Baseline & Build	Weekday	68	664.0	7,316	165,990	16,510	1,828,963	51,730
	Saturday	13	122.8	1,322	6,383	3,337	68,744	32,939
	Sunday	6	49.3	572	2,861	1,733	33,182	21,976
					175,234	21,580	1,930,888	106,646

Note: "Existing" statistics represent spreadsheet-calculated estimates based on existing published schedules and do not match with NTD totals. Existing statistics calculated only for the purpose of determining the incremental change in peak buses, bus-hours and bus-miles for each project alternative.

Existing Service

Weekday Bus Routes

Route #	Route Name	Span of Service	Service Frequency					Peak Period Cycle Time			One-Way Distance (Miles)	Average Weekday			Bus Requirements			
			AM Pk	Midday	PM Pk	Eve.	Daily Trips	Time (Min.)	Layover Time	Cycle Time		In-Serv. Hours	Rev. Hrs.	Rev. Miles	AM Pk	Midday	PM Pk	Evening
A	MLK Jr. Blvd./Northside	6:26 am-7:09 pm	30	60	30	n/a	44	35.0	20	90	7.8	25.7	33.0	343.2	3.00	1.50	3.00	0.00
CCX	Chatham County Express	6:00 am-7:58 pm	15	40	15	n/a	66	19.0	7	45	5.5	20.9	24.0	363.0	3.00	1.00	3.00	0.00
CL	Colony Lake/Sage Road/UNC Hosp.	Peaks Only	60	n/a	60	n/a	12	35.0	20	90	6.0	7.0	9.0	71.4	1.50	0.00	1.50	0.00
CM	Carrboro/Merritt Mill Rd/Family Medicine	6:10 am-9:30 pm	50	50	50	60	37	20.0	10	50	5.1	12.3	15.9	188.7	1.00	1.00	1.00	1.00
CPX	Carrboro Plaza Express	Peaks Only	15	n/a	15	n/a	48	12.0	6	30	4.6	9.6	12.0	218.4	2.00	0.00	2.00	0.00
CW	Carrboro/Weaver Street	7:20 am-9:19 pm	30	60	30	60	40	24.0	12	60	5.8	16.0	20.0	230.0	2.00	1.00	2.00	1.00
D	Cullbreth Rd/Franklin St/Eastowne	6:27 am-9:49 pm	20	45	20	60	62	39.0	2	80	8.2	39.4	41.5	510.0	4.00	2.00	4.00	1.00
DX	UNC/Old Durham/Old Sterling/Sage Rd. Express	Peaks Only	50	n/a	50	n/a	10	24.0	2	50	8.4	4.0	4.2	84.0	1.00	0.00	1.00	0.00
F	Colony Woods/Franklin St/McDougle School	6:55 am-8:40 pm	25	60	50	60	39	50.0	0	100	8.8	32.5	35.2	341.3	4.00	2.00	2.00	2.00
FCX	Friday Center Express	5:15 am-8:22 pm	5	30	10	n/a	132	13.0	4	30	3.3	28.6	33.0	435.6	6.00	1.00	3.00	0.00
G	Booker Crk/UNC Hosp./Glen Lennox	6:23 am-8:40 pm	50	50	50	50	34	47.0	6	100	11.0	26.6	28.3	372.3	2.00	2.00	2.00	2.00
HS	High School/Airport Dr. at MLK/Downtown	Peaks Only	60	n/a	60	n/a	12	25.0	10	60	6.1	5.0	6.0	73.2	1.00	0.00	1.00	0.00
HU	UNC Hosp./54 P&R/Hedrick Bldg.	5:20 am-10:43 pm	15	40	15	40	81	18.0	9	45	4.8	24.3	29.0	388.8	3.00	1.00	3.00	1.00
J	Carboro/Downtown Chapel Hill/Jones Ferry Rd.	6:25 am-11:56 pm	15	20	15	60	100	30.0	15	75	5.9	49.3	63.0	585.0	5.00	4.00	5.00	1.00
JFX	Jones Ferry Rd. Express	Peaks Only	15	n/a	15	n/a	56	12.0	6	30	3.5	11.2	14.0	196.0	2.00	0.00	2.00	0.00
N	Estes Park, UNC Hosp., Family Medicine	6:25 am-7:20 pm	30	60	30	n/a	38	25.0	10	60	4.8	15.8	19.0	182.4	2.00	1.00	2.00	0.00
NS	Eubanks Road/Southern Village	5:40 am-10:38 pm	10	45	10	60	92	32.0	6	70	7.9	48.3	52.9	726.8	7.00	1.50	7.00	1.00
NU	RR Lot/UNC Hospitals	7:05 am-10:40 pm	20	40	20	40	66	16.0	8	40	4.0	17.6	22.0	260.7	2.00	1.00	2.00	1.00
PX	Pittsboro to UNC Hospitals	Peaks Only	60	n/a	60	n/a	12	55.0	10	120	15.6	11.0	12.0	186.6	2.00	0.00	2.00	0.00
S	UNC Campus/NC 54 East P&R	6:20 am-7:38 pm	10	35	10	n/a	93	16.0	3	35	3.6	24.8	27.1	335.7	3.50	1.00	3.50	0.00
T	MLK Jr. Blvd./UNC Hospitals	6:50 am-6:45 pm	30	35	30	n/a	45	29.0	2	60	9.5	21.8	24.3	427.5	2.00	2.00	2.00	0.00
U	Campus Shuttle-UNC/Downtown	7:00 am-7:54 pm	15	15	15	n/a	52	22.0	8	30	3.6	19.1	26.0	187.2	2.00	2.00	2.00	0.00
RU	Campus Shuttle-UNC/Downtown	7:00 am-7:54 pm	15	15	15	n/a	52	22.0	8	30	3.4	19.1	26.0	176.8	2.00	2.00	2.00	0.00
V	Southern Village/Meadowmont	6:23 am-8:06 pm	35	80	35	n/a	34	33.0	4	70	6.6	18.7	20.6	224.4	2.00	1.00	1.00	0.00
TOTALS							1257					509	598	7,109	65.0	28.0	59.0	11.0

No-Build Alternative

Weekday Bus Routes

Route #	Route Name	Span of Service	Service Frequency					Peak Period Cycle Time			One-Way Distance (Miles)	Average Weekday			Bus Requirements			
			AM Pk	Midday	PM Pk	Eve.	Daily Trips	Time (Min.)	Layover Time	Cycle Time		In-Serv. Hours	Rev. Hrs.	Rev. Miles	AM Pk	Midday	PM Pk	Evening
A	MLK Jr. Blvd./Northside	6:26 am-7:09 pm	30	30	30	n/a	48	35.0	20	90	7.8	28.0	36.0	374.4	3.00	3.00	3.00	0.00
CCX	Chatham County Express	6:00 am-7:58 pm	15	40	15	n/a	66	19.0	7	45	5.5	20.9	24.0	363.0	3.00	1.00	3.00	0.00
CL	Colony Lake/Sage Road/UNC Hosp.	Peaks Only	30	n/a	30	n/a	24	35.0	20	90	6.0	14.0	18.0	142.8	3.00	0.00	3.00	0.00
CM	Carrboro/Merritt Mill Rd/Family Medicine	6:10 am-9:30 pm	50	50	50	60	37	20.0	10	50	5.1	12.3	15.9	188.7	1.00	1.00	1.00	1.00
CPX	Carrboro Plaza Express	Peaks Only	15	n/a	15	n/a	48	12.0	6	30	4.6	9.6	12.0	218.4	2.00	0.00	2.00	0.00
CW	Carrboro/Weaver Street	7:20 am-9:19 pm	30	60	30	60	40	24.0	12	60	5.8	16.0	20.0	230.0	2.00	1.00	2.00	1.00
D	Cullbreth Rd/Franklin St/Eastowne	6:27 am-9:49 pm	15	30	15	60	82	42.0	6	90	8.2	55.2	60.0	674.5	6.00	3.00	6.00	1.00
F	Colony Woods/Franklin St/McDougle School	6:55 am-8:40 pm	30	60	30	60	40	50.0	20	120	8.8	33.3	40.0	350.0	4.00	2.00	4.00	2.00
FCX	Friday Center Express	5:15 am-8:22 pm	5	30	10	n/a	132	13.0	4	30	3.3	28.6	33.0	435.6	6.00	1.00	3.00	0.00
G	Booker Crk/UNC Hosp./Glen Lennox	6:23 am-8:40 pm	30	60	30	60	38	47.0	26	120	11.0	29.8	38.0	416.1	4.00	2.00	4.00	2.00
HS	High School/Airport Dr. at MLK/Downtown	Peaks Only	60	n/a	60	n/a	12	25.0	10	60	6.1	5.0	6.0	73.2	1.00	0.00	1.00	0.00
HU	UNC Hosp./54 P&R/Hedrick Bldg.	5:20 am-10:43 pm	15	30	15	40	87	18.0	9	45	4.8	26.1	35.0	417.6	3.00	2.00	3.00	1.00
J	Carboro/Downtown Chapel Hill/Jones Ferry Rd.	6:25 am-11:56 pm	15	20	15	60	100	30.0	15	75	5.9	49.3	63.0	585.0	5.00	4.00	5.00	1.00
JFX	Jones Ferry Rd. Express	Peaks Only	15	n/a	15	n/a	56	12.0	6	30	3.5	11.2	14.0	196.0	2.00	0.00	2.00	0.00
N	Estes Park, UNC Hosp., Family Medicine	6:25 am-7:20 pm	30	60	30	n/a	38	25.0	10	60	4.8	15.8	19.0	182.4	2.00	1.00	2.00	0.00
NS	Eubanks Road/Southern Village	5:40 am-10:38 pm	10	30	10	60	98	32.0	6	70	7.9	51.5	60.0	774.2	7.00	3.00	7.00	1.00
NU	RR Lot/UNC Hospitals	7:05 am-10:40 pm	20	40	20	40	66	16.0	8	40	4.0	17.6	22.0	260.7	2.00	1.00	2.00	1.00
PX	Pittsboro to UNC Hospitals	Peaks Only	60	n/a	60	n/a	12	55.0	10	120	15.6	11.0	12.0	186.6	2.00	0.00	2.00	0.00
S	UNC Campus/NC 54 East P&R	6:20 am-7:38 pm	10	35	10	n/a	93	16.0	8	40	3.6	24.8	30.1	335.7	4.00	1.00	4.00	0.00
T	MLK Jr. Blvd./UNC Hospitals	6:50 am-6:45 pm	30	35	30	n/a	45	29.0	2	60	9.5	21.8	24.3	427.5	2.00	2.00	2.00	0.00
U	Campus Shuttle-UNC/Downtown	7:00 am-7:54 pm	15	15	15	n/a	52	22.0	8	30	3.6	19.1	26.0	187.2	2.00	2.00	2.00	0.00
RU	Campus Shuttle-UNC/Downtown	7:00 am-7:54 pm	15	15	15	n/a	52	22.0	8	30	3.4	19.1	26.0	176.8	2.00	2.00	2.00	0.00
V	Southern Village/Meadowmont	6:23 am-8:06 pm	30	40	30	n/a	46	33.0	24	90	6.6	25.3	33.0	303.6	3.00	2.00	3.00	0.00
TOTALS							1312					545	667	7,500	71.0	34.0	68.0	11.0

Baseline & Build Alternatives

Weekday Bus Routes

Route #	Route Name	Span of Service	Service Frequency					Peak Period Cycle Time			One-Way Distance (Miles)	Average Weekday			Bus Requirements			
			AM Pk	Midday	PM Pk	Eve.	Daily Trips	Time (Min.)	Layover Time	Cycle Time		In-Serv. Hours	Rev. Hrs.	Rev. Miles	AM Pk	Midday	PM Pk	Evening
A	MLK Jr. Blvd./Northside	6:26 am-7:09 pm	30	30	30	n/a	48	35.0	20	90	7.8	28.0	36.0	374.4	3.00	3.00	3.00	0.00
CCX	Chatham County Express	6:00 am-7:58 pm	15	40	15	n/a	66	19.0	7	45	6.0	20.9	24.0	396.0	3.00	1.00	3.00	0.00
CL	Colony Lake/Sage Road/UNC Hosp.	Peaks Only	30	n/a	30	n/a	24	40.0	10	90	6.5	16.0	18.0	154.8	3.00	0.00	3.00	0.00
CM	Carrboro/Merritt Mill Rd/Family Medicine	6:10 am-9:30 pm	50	50	50	60	37	20.0	10	50	5.1	12.3	15.9	188.7	1.00	1.00	1.00	1.00
CPX	Carrboro Plaza Express	Peaks Only	15	n/a	15	n/a	48	12.0	6	30	4.6	9.6	12.0	218.4	2.00	0.00	2.00	0.00
CW	Carrboro/Weaver Street	7:20 am-9:19 pm	30	60	30	60	40	24.0	12	60	5.8	16.0	20.0	230.0	2.00	1.00	2.00	1.00
D	Cullbreth Rd./Franklin St./Eastowne	6:27 am-9:49 pm	10	30	10	60	110	39.0	12	90	8.7	72.3	82.7	959.8	9.00	3.33	9.00	1.00
F	Colony Woods/Franklin St./McDougle School	6:55 am-8:40 pm	30	60	30	60	40	50.0	20	120	8.8	33.3	40.0	350.0	4.00	2.00	4.00	2.00
G	Booker Crk/UNC Hosp./Glen Lennox	6:23 am-8:40 pm	30	60	30	60	38	47.0	26	120	11.0	29.8	38.0	416.1	4.00	2.00	4.00	2.00
HS	High School/Airport Dr. at MLK/Downtown	Peaks Only	60	n/a	60	n/a	12	25.0	10	60	6.1	5.0	6.0	73.2	1.00	0.00	1.00	0.00
J	Carboro/Downtown Chapel Hill/Jones Ferry Rd.	6:25 am-11:56 pm	15	20	15	60	100	30.0	15	75	5.9	49.3	63.0	585.0	5.00	4.00	5.00	1.00
JFX	Jones Ferry Rd. Express	Peaks Only	15	n/a	15	n/a	56	12.0	6	30	3.5	11.2	14.0	196.0	2.00	0.00	2.00	0.00
N	Estes Park, UNC Hosp., Family Medicine	6:25 am-7:20 pm	30	60	30	n/a	38	25.0	10	60	4.8	15.8	19.0	182.4	2.00	1.00	2.00	0.00
NS	Eubanks Road/Southern Village	5:40 am-10:38 pm	10	30	10	60	98	32.0	6	70	7.9	51.5	60.0	774.2	7.00	3.00	7.00	1.00
NU	RR Lot/UNC Hospitals	7:05 am-10:40 pm	20	40	20	40	66	16.0	8	40	4.0	17.6	22.0	260.7	2.00	1.00	2.00	1.00
PX	Pittsboro to UNC Hospitals	Peaks Only	60	n/a	60	n/a	12	55.0	10	120	15.6	11.0	12.0	186.6	2.00	0.00	2.00	0.00
T	MLK Jr. Blvd./UNC Hospitals	6:50 am-6:45 pm	30	35	30	n/a	45	41.0	8	90	12.0	30.8	36.4	540.0	3.00	3.00	3.00	0.00
U	Campus Shuttle-UNC/Downtown	7:00 am-7:54 pm	15	15	15	n/a	52	22.0	8	30	3.6	19.1	26.0	187.2	2.00	2.00	2.00	0.00
RU	Campus Shuttle-UNC/Downtown	7:00 am-7:54 pm	15	15	15	n/a	52	22.0	8	30	3.4	19.1	26.0	176.8	2.00	2.00	2.00	0.00
V	Southern Village/Meadowmont	6:23 am-8:06 pm	30	40	30	n/a	46	33.0	24	90	6.6	25.3	33.0	303.6	3.00	2.00	3.00	0.00
FB 2	Jones Ferry	6:00 am-9:00 pm	30	60	30	60	40	17.0	26	60	3.4	11.3	20.0	136.0	2.00	1.00	2.00	1.00
FB 11	Whitfield-Mt. Moriah	6:00 am-9:00 pm	30	60	30	60	40	27.0	6	60	5.4	18.0	20.0	216.0	2.00	1.00	2.00	1.00
FB 12	Gateway-Leigh Village Shuttle	6:00 am-7:00 pm	20	40	20	n/a	60	14.0	12	40	3.5	14.0	20.0	210.0	2.00	1.00	2.00	0.00
TOTALS							1168					537	664	7,316	68.0	34.3	68.0	12.0

Existing Service

Saturday Bus Routes

Route #	Route Name	Span of Service	Serv. Freq.				Base Period			One-Way Distance (Miles)	Average Saturday			Bus Requirements	
			AM	Mid/PM	Eve.	Daily Trips	Time (Min.)	Layover Time	Cycle Time		In-Serv. Hours	Rev. Hrs.	Rev. Miles	Midday	Eve.
CM	Carrboro/Merritt Mill Rd/Family Medicine	9:20 am-5:15 pm	n/a	70	n/a	12	10.0	10	30	4.1	2.0	3.0	49.2	0.4	0.0
CW	Carrboro/Weaver Street	8:30 am-4:38 pm	n/a	70	n/a	12	18.0	4	40	5.1	3.6	4.0	61.2	0.6	0.0
D	Cullbreth Rd/Franklin St/Eastowne	9:05 am-5:05 pm	n/a	60	n/a	14	27.0	6	60	5.9	6.3	7.0	81.9	1.0	0.0
FG	Colony Woods/Franklin St./UNC Hosp.	8:50 am-4:55 pm	n/a	80	n/a	12	35.0	10	80	8.0	7.0	8.0	95.4	1.0	0.0
JN	Carboro/Downtown Chapel Hill/UNC Hosp.	9:45 am-7:03 pm	n/a	75	n/a	13	33.0	9	75	6.4	7.2	8.1	82.6	1.0	0.0
NU	RR Lot/UNC Hospitals	11:30 am-11:17 pm	n/a	45	45	33	16.0	13	45	4.0	8.8	12.4	132.0	1.0	1.0
T	MLK Jr. Blvd./UNC Hospitals	8:15 am-6:13 pm	n/a	60	n/a	18	25.0	10	60	7.0	7.5	9.0	125.1	1.0	0.0
U	Campus Shuttle-UNC/Downtown	10:38 am-7:08 pm	n/a	25	n/a	17	18.0	7	25	3.6	5.1	7.1	61.2	1.0	0.0
						131					47	59	689	7.0	1.0

No-Build Alternative

Saturday Bus Routes

Route #	Route Name	Span of Service	Serv. Freq.				Base Period			One-Way Distance (Miles)	Average Saturday			Bus Requirements	
			AM	Mid/PM	Eve.	Daily Trips	Time (Min.)	Layover Time	Cycle Time		In-Serv. Hours	Rev. Hrs.	Rev. Miles	Midday	Eve.
CM	Carrboro/Merritt Mill Rd/Family Medicine	9:20 am-7:15 pm	n/a	70	70	16	10.0	10	30	4.1	2.7	4.0	65.6	0.4	0.4
CW	Carrboro/Weaver Street	8:30 am-6:38 pm	n/a	70	70	16	18.0	4	40	5.1	4.8	5.3	81.6	0.6	0.6
D	Cullbreth Rd/Franklin St/Eastowne	9:05 am-7:05 pm	n/a	30	60	32	27.0	6	60	5.9	14.4	16.0	187.2	2.0	1.0
FG	Colony Woods/Franklin St./UNC Hosp.	8:50 am-6:55 pm	n/a	40	80	27	35.0	10	80	8.0	15.8	18.0	214.7	2.0	1.0
JN	Carboro/Downtown Chapel Hill/UNC Hosp.	9:45 am-9:03 pm	n/a	40	80	27	33.0	14	80	6.4	14.9	18.0	171.5	2.0	1.0
NU	RR Lot/UNC Hospitals	11:30 am-11:17 pm	n/a	40	45	35	16.0	8	40	4.0	9.3	12.3	140.0	1.0	1.0
T	MLK Jr. Blvd./UNC Hospitals	8:15 am-8:13 pm	n/a	60	60	22	25.0	10	60	7.0	9.2	11.0	152.9	1.0	1.0
U	Campus Shuttle-UNC/Downtown	10:38 am-9:08 pm	n/a	25	25	22	18.0	7	25	3.6	6.6	9.2	79.2	1.0	1.0
						197					78	94	1,093	10.0	7.0

Baseline & Build Alternatives

Saturday Bus Routes

Route #	Route Name	Span of Service	Serv. Freq.				Base Period			One-Way Distance (Miles)	Average Saturday			Bus Requirements	
			AM	Mid/PM	Eve.	Daily Trips	Time (Min.)	Layover Time	Cycle Time		In-Serv. Hours	Rev. Hrs.	Rev. Miles	Midday	Eve.
CM	Carrboro/Merritt Mill Rd/Family Medicine	9:20 am-7:15 pm	n/a	70	70	16	10.0	10	30	4.1	2.7	4.0	65.6	0.4	0.4
CW	Carrboro/Weaver Street	8:30 am-6:38 pm	n/a	70	70	16	18.0	4	40	5.1	4.8	5.3	81.6	0.6	0.6
D	Cullbreth Rd/Franklin St/Eastowne	9:05 am-7:05 pm	n/a	30	60	32	27.0	6	60	6.4	14.4	16.0	203.2	2.0	1.0
FG	Colony Woods/Franklin St./UNC Hosp.	8:50 am-6:55 pm	n/a	40	80	27	35.0	10	80	8.0	15.8	18.0	214.7	2.0	1.0
JN	Carboro/Downtown Chapel Hill/UNC Hosp.	9:45 am-9:03 pm	n/a	40	80	27	33.0	14	80	6.4	14.9	18.0	171.5	2.0	1.0
NU	RR Lot/UNC Hospitals	11:30 am-11:17 pm	n/a	40	45	35	16.0	8	40	4.0	9.3	12.3	140.0	1.0	1.0
T	MLK Jr. Blvd./UNC Hospitals	8:15 am-8:13 pm	n/a	60	60	22	37.0	46	120	9.5	13.6	22.0	207.9	2.0	2.0
U	Campus Shuttle-UNC/Downtown	10:38 am-9:08 pm	n/a	25	25	22	18.0	7	25	3.6	6.6	9.2	79.2	1.0	1.0
FB 2	Jones Ferry	9:00 am-7:00 pm	n/a	60	60	18	17.0	26	60	3.4	5.1	9.0	61.2	1.0	1.0
FB 11	Whitfield-Mt. Moriah	9:00 am-7:00 pm	n/a	60	60	18	27.0	6	60	5.4	8.1	9.0	97.2	1.0	1.0
						233					95	123	1,322	13.0	10.0

Existing Service

Sunday Bus Routes

Route #	Route Name	Span of Service	Serv. Freq.				Base Period			One-Way	Average Sunday			Bus Requirements	
			AM	Mid/PM	Eve.	Daily Trips	Time (Min.)	Layover Time	Cycle Time	Distance (Miles)	In-Serv. Hours	Rev. Hrs.	Rev. Miles	Midday	Eve.
NU	RR Lot/UNC Hospitals	11:30 am-11:17 pm	n/a	45	45	33	16.0	13	45	4.0	8.8	12.4	132.0	1.0	1.0
U	Campus Shuttle-UNC/Downtown	10:38 am-7:08 pm	n/a	25	n/a	17	18.0	7	25	3.6	5.1	7.1	61.2	1.0	0.0
						50					14	19	193	2.0	1.0

No-Build Alternative

Sunday Bus Routes

Route #	Route Name	Span of Service	Serv. Freq.				Base Period			One-Way	Average Sunday			Bus Requirements	
			AM	Mid/PM	Eve.	Daily Trips	Time (Min.)	Layover Time	Cycle Time	Distance (Miles)	In-Serv. Hours	Rev. Hrs.	Rev. Miles	Midday	Eve.
CM	Carrboro/Merritt Mill Rd/Family Medicine	9:20 am-5:15 pm	n/a	70	n/a	12	10.0	10	30	4.1	2.0	3.0	49.2	0.4	0.0
CW	Carrboro/Weaver Street	8:30 am-4:38 pm	n/a	70	n/a	12	18.0	4	40	5.1	3.6	4.0	61.2	0.6	0.0
D	Cullbreth Rd/Franklin St/Eastowne	9:05 am-5:05 pm	n/a	60	n/a	14	27.0	6	60	5.9	6.3	7.0	81.9	1.0	0.0
FG	Colony Woods/Franklin St./UNC Hosp.	8:50 am-4:55 pm	n/a	80	n/a	12	35.0	10	80	8.0	7.0	8.0	95.4	1.0	0.0
JN	Carboro/Downtown Chapel Hill/UNC Hosp.	9:45 am-7:03 pm	n/a	80	n/a	12	33.0	14	80	6.4	6.6	8.0	76.2	1.0	0.0
NU	RR Lot/UNC Hospitals	11:30 am-11:17 pm	n/a	40	45	35	16.0	8	40	4.0	9.3	12.3	140.0	1.0	1.0
U	Campus Shuttle-UNC/Downtown	10:38 am-7:08 pm	n/a	25	n/a	17	18.0	7	25	3.6	5.1	7.1	61.2	1.0	0.0
						114					40	49	565	6.0	1.0

Baseline & Build Alternatives

Sunday Bus Routes

Route #	Route Name	Span of Service	Serv. Freq.				Base Period			One-Way	Average Sunday			Bus Requirements	
			AM	Mid/PM	Eve.	Daily Trips	Time (Min.)	Layover Time	Cycle Time	Distance (Miles)	In-Serv. Hours	Rev. Hrs.	Rev. Miles	Midday	Eve.
CM	Carrboro/Merritt Mill Rd/Family Medicine	9:20 am-5:15 pm	n/a	70	n/a	12	10.0	10	30	4.1	2.0	3.0	49.2	0.4	0.0
CW	Carrboro/Weaver Street	8:30 am-4:38 pm	n/a	70	n/a	12	18.0	4	40	5.1	3.6	4.0	61.2	0.6	0.0
D	Cullbreth Rd/Franklin St/Eastowne	9:05 am-5:05 pm	n/a	60	n/a	14	27.0	6	60	6.4	6.3	7.0	88.9	1.0	0.0
FG	Colony Woods/Franklin St./UNC Hosp.	8:50 am-4:55 pm	n/a	80	n/a	12	35.0	10	80	8.0	7.0	8.0	95.4	1.0	0.0
JN	Carboro/Downtown Chapel Hill/UNC Hosp.	9:45 am-7:03 pm	n/a	80	n/a	12	33.0	14	80	6.4	6.6	8.0	76.2	1.0	0.0
NU	RR Lot/UNC Hospitals	11:30 am-11:17 pm	n/a	40	45	35	16.0	8	40	4.0	9.3	12.3	140.0	1.0	1.0
U	Campus Shuttle-UNC/Downtown	10:38 am-7:08 pm	n/a	25	n/a	17	18.0	7	25	3.6	5.1	7.1	61.2	1.0	0.0
						114					40	49	572	6.0	1.0