

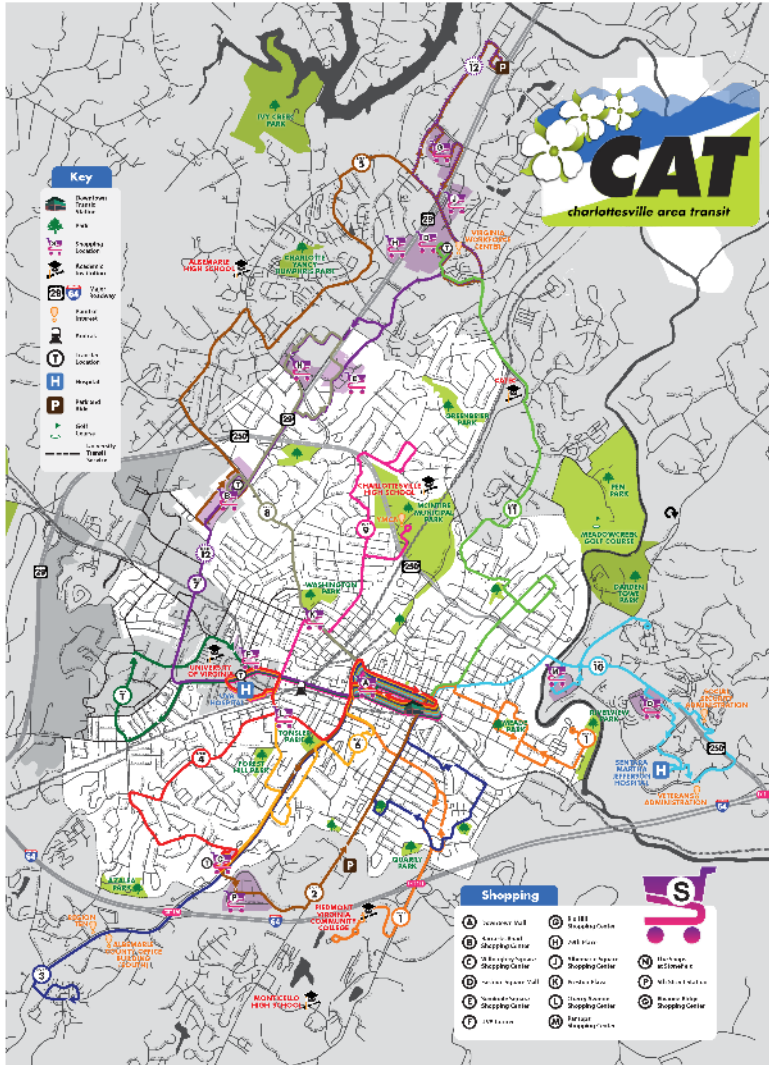


FY 22 Service Proposals

CHARLOTTESVILLE AREA TRANSIT

MAY 2021

Existing CAT Network



Pre-COVID

- 13 routes (including Free Trolley)
- Service span generally 6 am to 12 midnight
- Limited Sunday service (4 routes)
- Accessibility (within 1/4 mile of weekday service):
 - 62,500 population
 - 19,700 minority population
 - 4,500 low-income households
 - 2,850 no-vehicle households

COVID

- No change in service coverage
- Evening service ends by 9 pm
- Reduced frequency on select routes
- Sunday service eliminated

Historical Trends



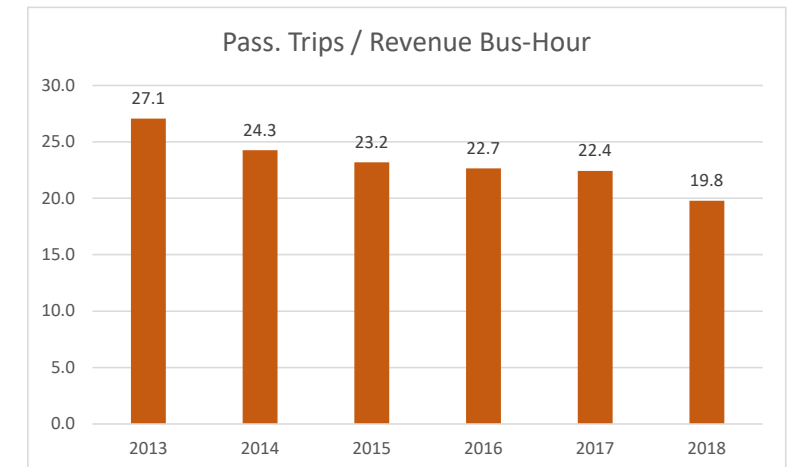
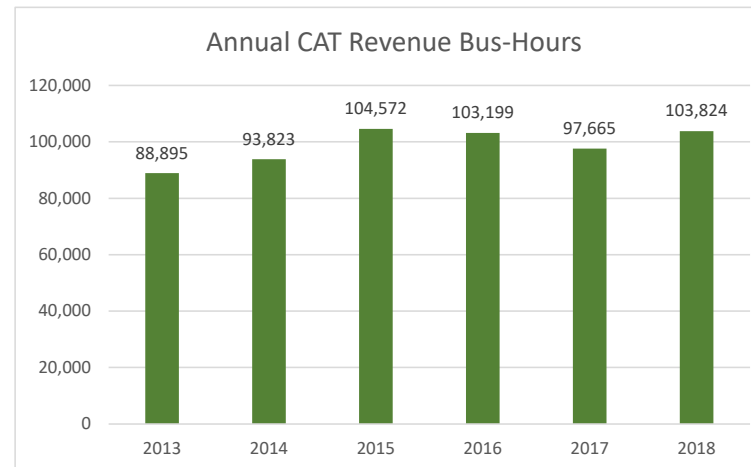
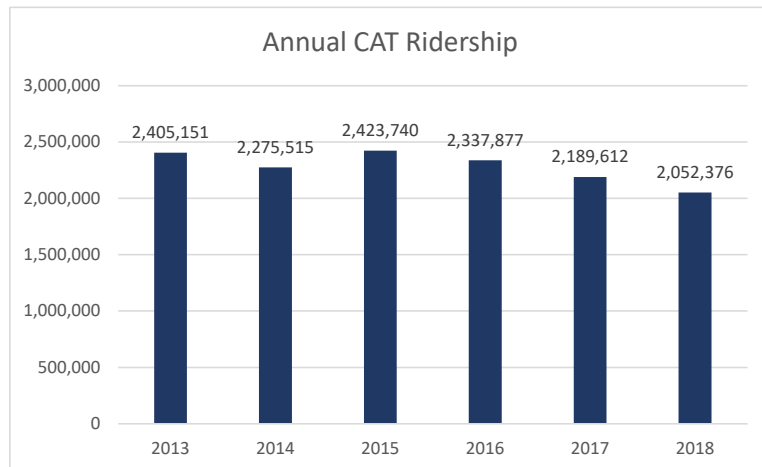
Characteristic	2013	2014	2015	2016	2017	2018
Ann. Ridership	2,405,151	2,275,515	2,423,740	2,337,877	2,189,612	2,052,376
Ann. Rev. Hours	88,895	93,823	104,572	103,199	97,665	103,824
Ann. O&M Cost	\$6,614,851	\$7,125,489	\$7,188,657	\$6,998,446	\$7,421,700	\$7,915,506
Riders/Rev. Hr.	27.1	24.3	23.2	22.7	22.4	19.8
Cost/Rev. Hr.	\$74.41	\$75.95	\$68.74	\$67.82	\$75.99	\$76.24

Source: National Transit Database Reports

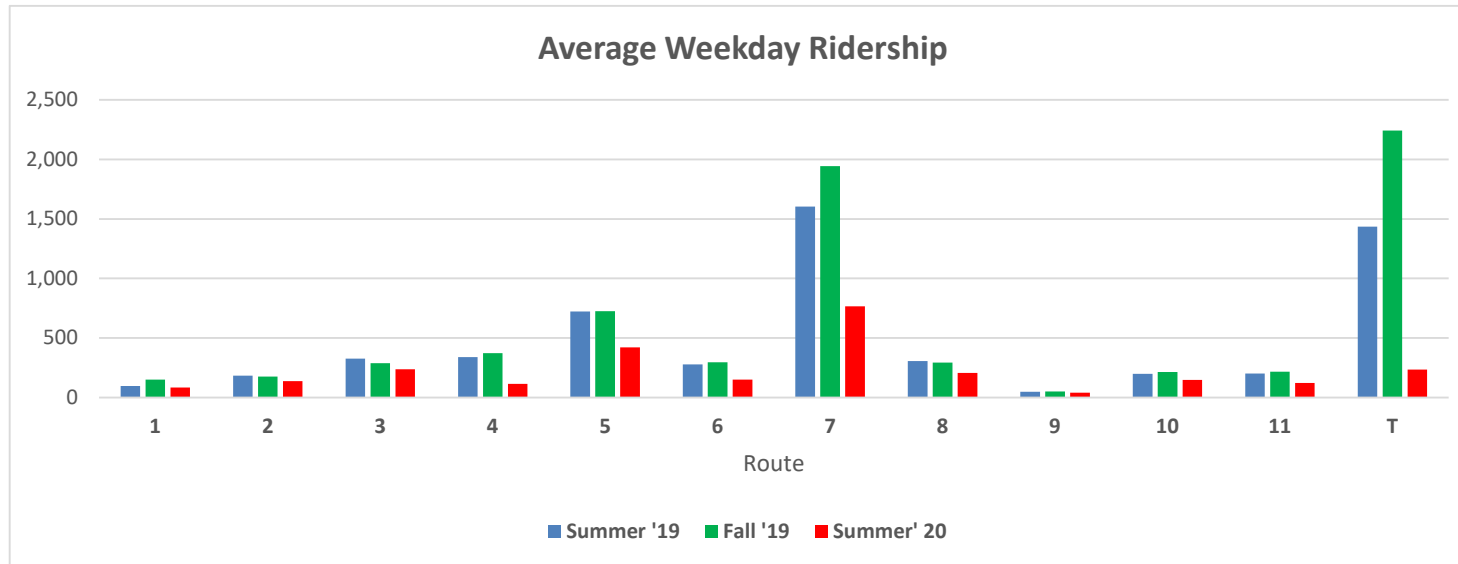
Historical Trends



- Annual Ridership has been on a downward trajectory (*-15% over 5 years*)
- Annual bus-hours have averaged over 100,000 since 2015 (*+17% over 5 years*)
- Result has been declining service productivity (*-27% over 5 years*)



Recent Route Trends: Weekday



- Summer 2019 Ridership = **5,734**
- Fall 2019 System Ridership = **6,966**
- Summer 2020 Ridership = **2,650**

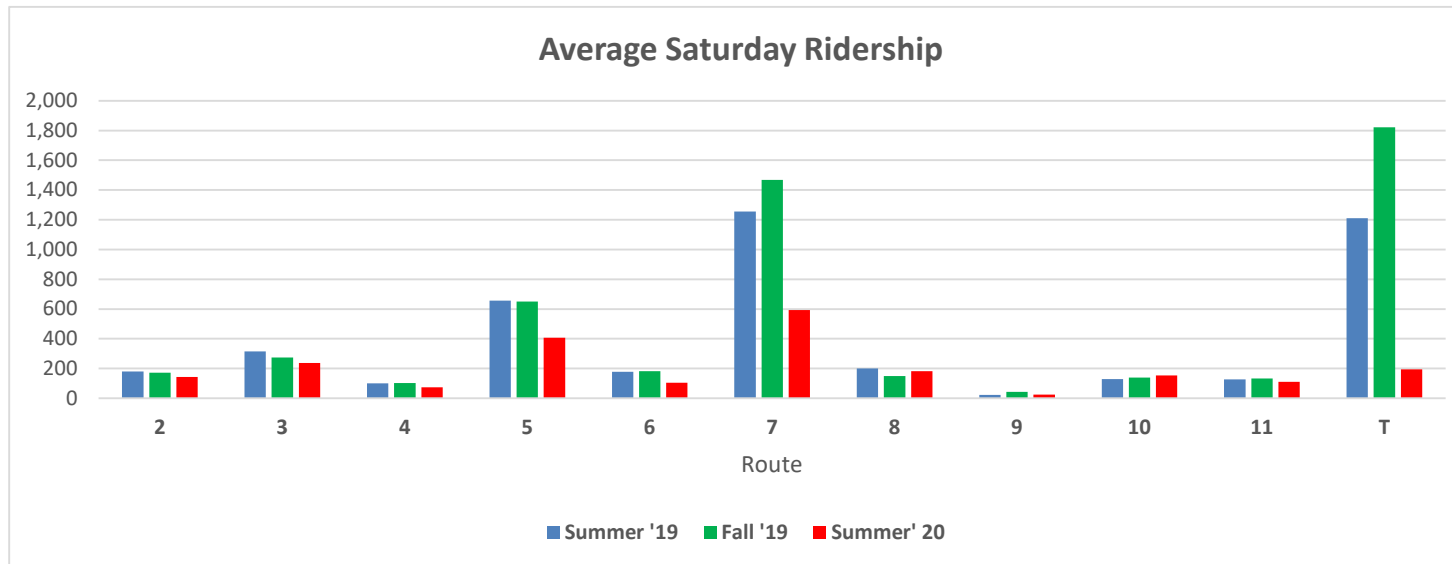
- In 2019, Routes 5, 7 and the Free Trolley consists of **65-70% of weekday** system ridership
- Fall 2019 weekday ridership **21% higher** than Summer 2019, with over 90% of the increased ridership on Route 7 and the Free Trolley
- Summer 2020 weekday ridership is **54% lower** than Summer 2019
- Weekday service hours have been **reduced by 29%** in response to ridership loss
- **75%** of the weekday ridership loss is on Routes 5, 7 and the Free Trolley

Summer 2019 period ridership: 7/22-8/24

Fall 2020 period ridership: 9/29-11/2

Summer 2020 period ridership: 7/20-8/25

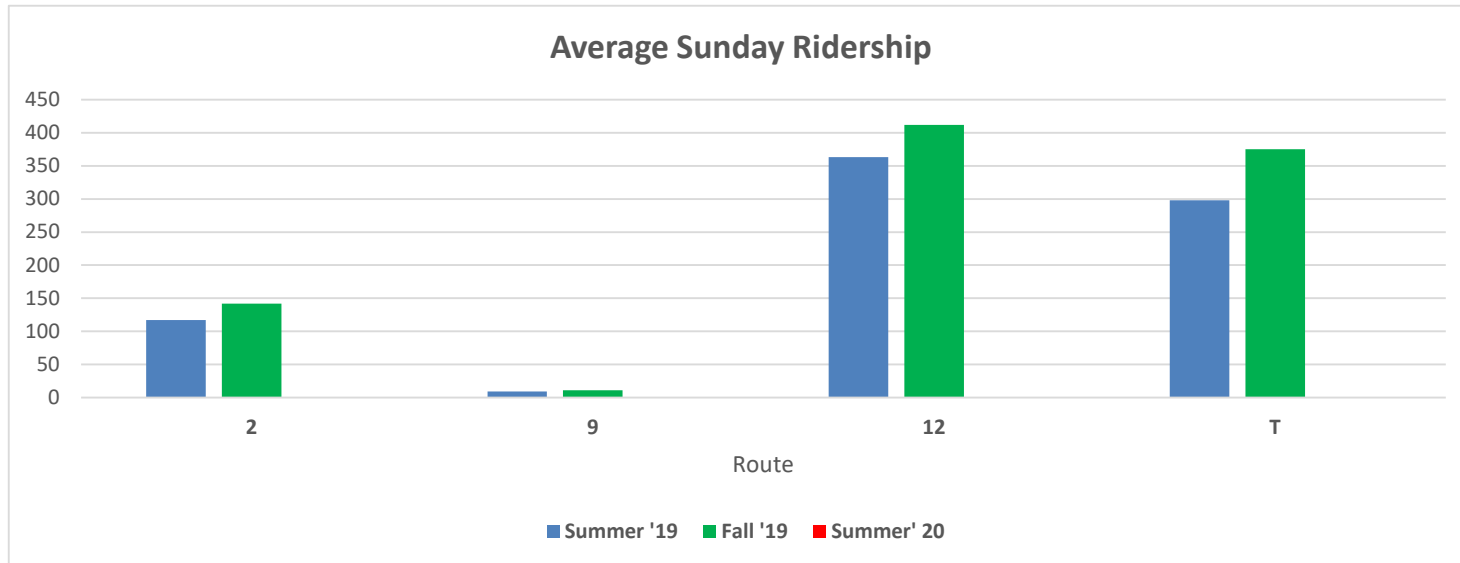
Recent Route Trends: Saturday



- Summer 2019 Ridership = **3,122**
- Fall 2019 System Ridership = **3,939**
- Summer 2020 Ridership = **1,195**

- In 2019, total Saturday ridership was approx. **75% of weekday** ridership
- Routes 5, 7 and the Free Trolley consists of **70-75% of Saturday** system ridership
- Fall 2019 Saturday ridership was **17% higher** than Summer 2019
- Summer 2020 weekday ridership is **49% lower** than Summer 2019
- Saturday service levels have been **reduced by 25%** in response to ridership loss
- **90%** of the Saturday ridership loss is on Routes 5, 7 and the Free Trolley

Recent Route Trends: Sunday



- In 2019, total Sunday ridership was **13-14% of weekday** ridership
- Fall 2019 Sunday ridership was **19% higher** than Summer 2019
- In response to COVID, there is currently no Sunday service

- Summer 2019 Ridership = **787**
- Fall 2019 System Ridership = **940**
- Summer 2020 Ridership = **0**

Primary Service Objectives



- Provide service on South 1st Street South (Route 6)
- Provide service to The Center on Rio Road (Route 11)
- Restore Sunday service to pre-Pandemic levels or better
- Provide consistent 30-minute or better weekday service (all-day) on/along:
 - US 29 corridor (Routes 5 & 7)
 - Avon Street (Route 2)
 - 5th Street (Route 3)
 - Richmond Road (Route 10)
- No route to have frequencies worse than 60 minutes
- Improve Trolley service levels back to 15 minutes

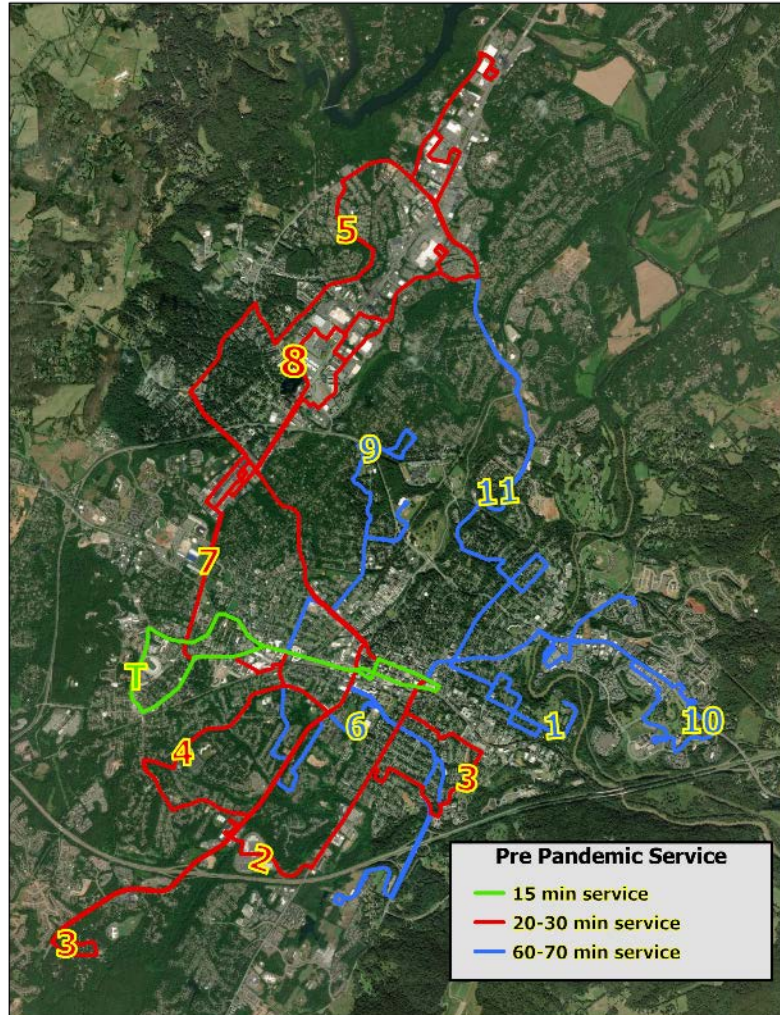
Proposed Systemwide Changes



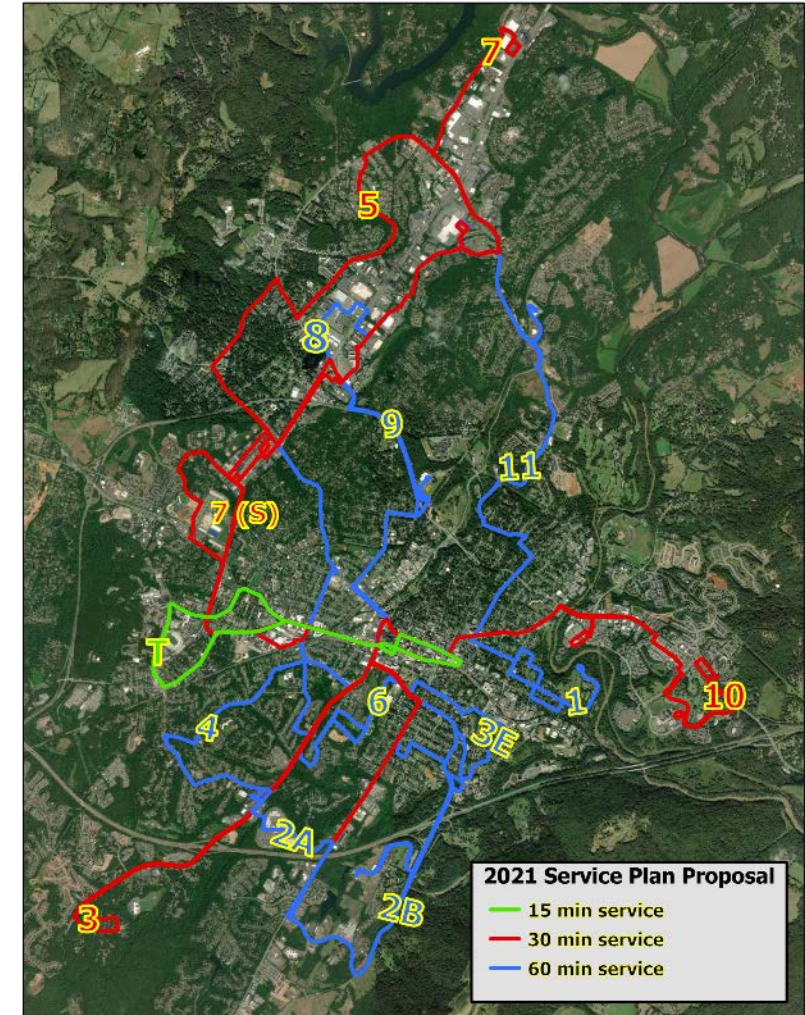
- Downtown staging location modified during reconstruction of Belmont (9th Street) Bridge
 - loop via High Street (EB) and Market Street (WB)
 - Bus staging between 6th Street and 8th Street
 - Routes from east return (outbound) to High Street via 7th Street
- Consistent Weekday and Saturday span of service:
 - 6:00 am to 11:00 pm for major routes
 - 6:30 am to 9:00 pm for all other routes
- Consistent Sunday span of service
 - 7:30 am to 9:00 pm for all routes operating on Sunday

Proposed Network: Peak Period

**Existing
Network Map**
Weekday Service
Frequencies



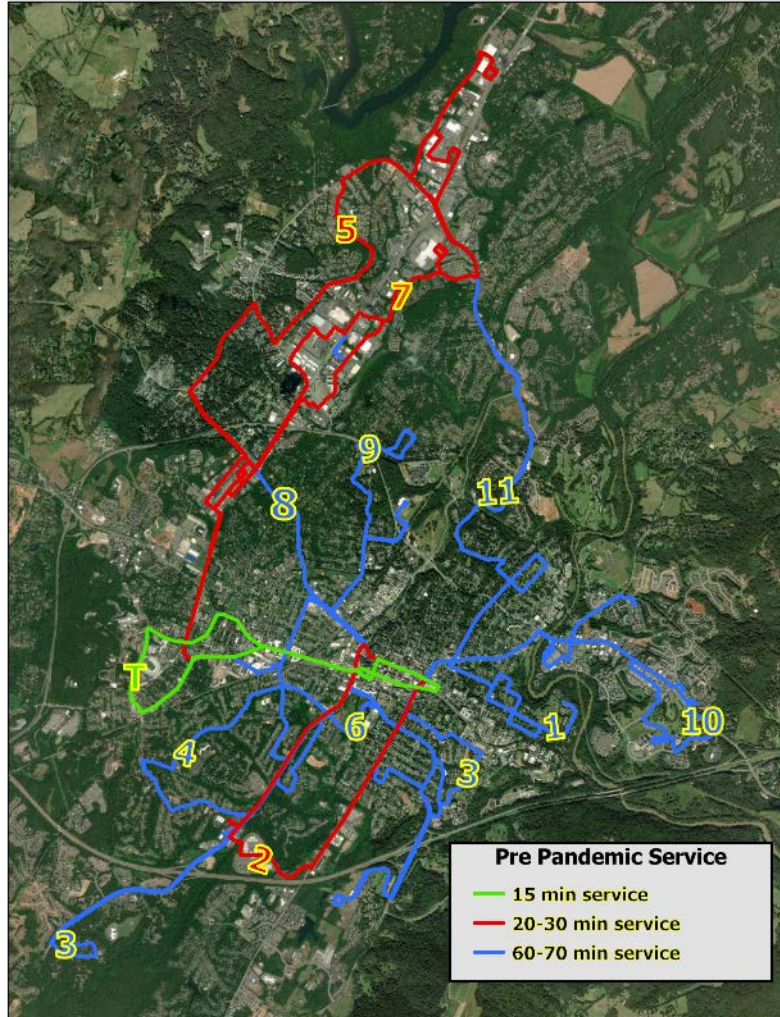
**FY22 Proposed
Network Map**
Weekday Service
Frequencies



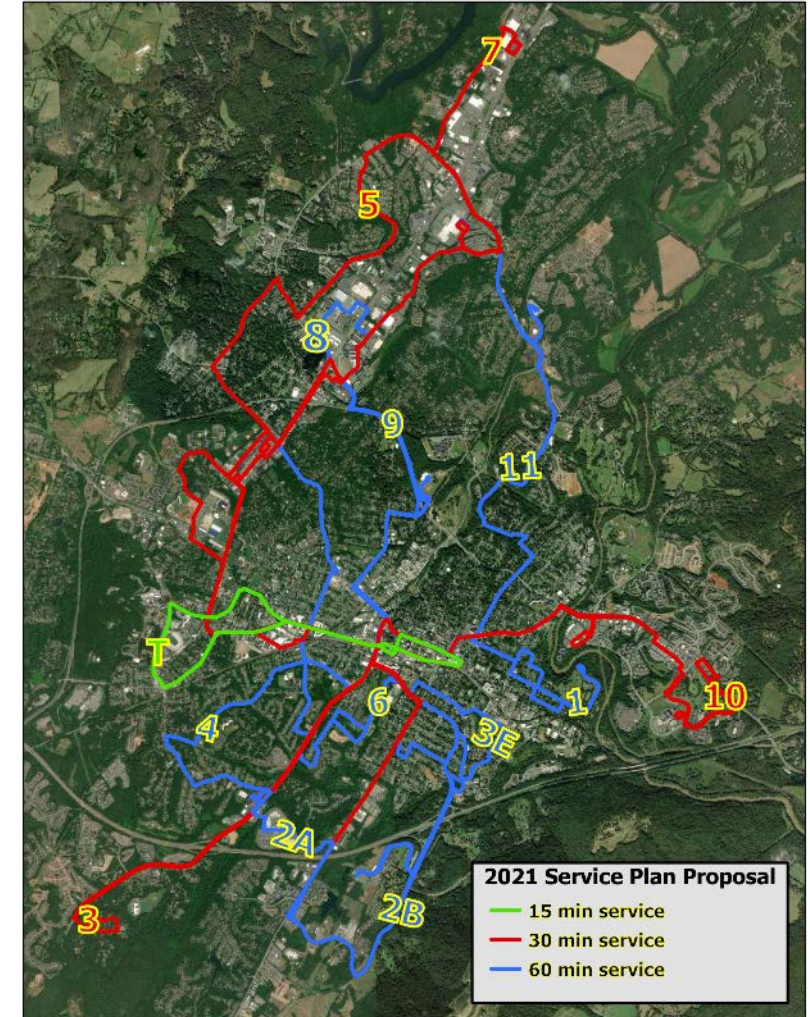
Proposed Network: Midday Period



**Existing
Network Map**
Weekday Service
Frequencies



**FY22 Proposed
Network Map**
Weekday Service
Frequencies



Specific Network Improvements



- ✓ Improved service between UVA campus/Hospital and US 29 corridor (Routes 5 and 7)
- ✓ New crosstown service from south Charlottesville to US 29 corridor (Route 8)
- ✓ Proposed routes operating at 30-minute or better all-day weekday service (Routes 2, 3, 5, 7, 10, Trolley)
- ✓ Additional weekend service coverage (Routes 1, 3, 10)
- ✓ New coverage in county along Mill Creek Drive and to Monticello High School (Route 2B)
- ✓ New coverage in city with Route 5 extension to UVA Hospital and 1st Street South

Revenue Hours & Costs



Route	Route Name	Proposal	Percentage	County Hours	Cost	Percentage	City Hours	Cost	Total Cost
1	PVCC & Woolen Mills	4,900	25%	1,225	\$98,012	75%	3,675	\$294,037	\$392,049
2A	Downtown-Fifth St. Station	6,300	35%	2,205	\$176,422	65%	4,095	\$327,641	\$504,063
2B	Downtown-PVCC	4,000	64%	2,560	\$204,826	36%	1,440	\$115,214	\$320,040
3	Downtown-Southwood	9,100	39%	3,549	\$283,955	61%	5,551	\$444,136	\$728,091
3E	Downtown-Belmont Park	3,700	0%	0	\$0	100%	3,700	\$296,037	\$296,037
4	Downtown-Cherry Ave & Harris Rd	6,100	0%	0	\$0	100%	6,100	\$488,061	\$488,061
5	UVA-Barracks Ctr.-Fashion Sq. Mall	20,800	66%	13,728	\$1,098,377	34%	7,072	\$565,831	\$1,664,208
6	Downtown-Ridge Street	3,500	0%	0	\$0	100%	3,500	\$280,035	\$280,035
7	Emmet Street /Seminole Trail to Walmart	25,000	42%	10,500	\$840,105	58%	14,500	\$1,160,145	\$2,000,250
7S	Route 7 Suppl. Peak Service	2,300	0%	0	\$0	100%	2,300	\$184,023	\$184,023
8	Prospect Ave-Barracks Road	4,600	9%	414	\$33,124	91%	4,186	\$334,922	\$368,046
9	Downtown - Fashion Sq.	5,800	18%	1,044	\$83,530	82%	4,756	\$380,528	\$464,058
10	Pantops	9,100	72%	6,552	\$524,226	28%	2,548	\$203,865	\$728,091
11	Downtown-Locust Avenue & Rio Road	4,600	63%	2,898	\$231,869	37%	1,702	\$136,177	\$368,046
T	Free Trolley	17,000	0%	0	\$0	100%	17,000	\$1,360,170	\$1,360,170
TOTALS		126,800	35%	44,675	\$3,574,447	65%	82,125	\$6,570,000	\$10,145,268

Transit Network Accessibility

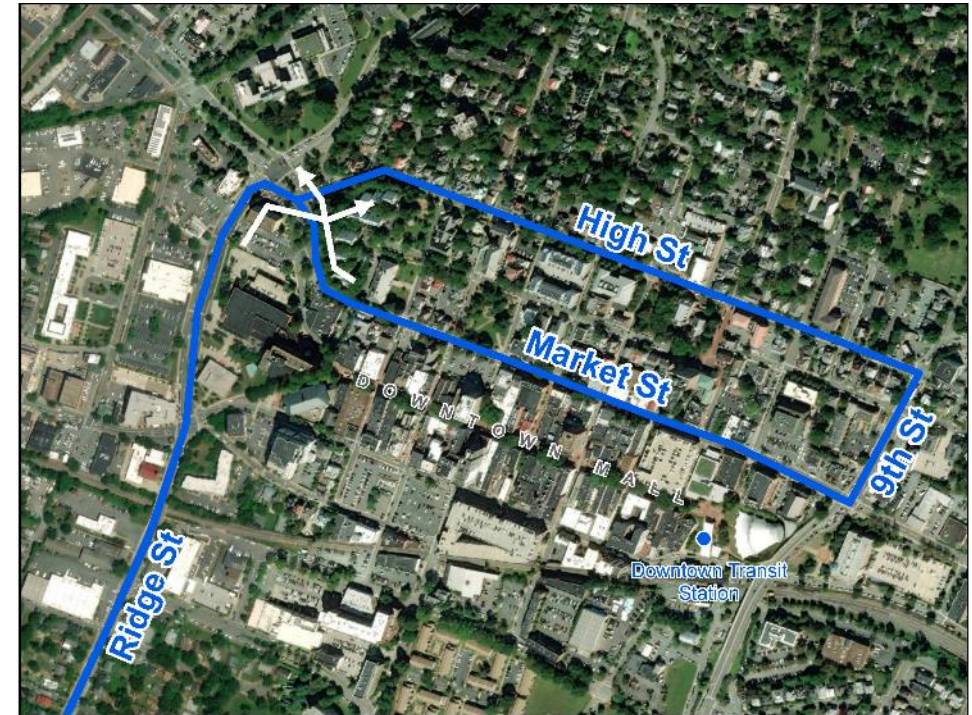


- **30-minute or better weekday service**
 - Overall population accessibility = +20.1%
 - Minority population accessibility = +16.4%
 - Low-income population accessibility = +15.2%
- **Population accessibility improvements:**
 - Weekdays = +1.7%
 - Saturdays = +5.0%
 - Sundays = +10.4%
- **Job accessibility improvements**
 - Weekdays = +1.7%
 - Saturdays = +3.7%
 - Sundays = No significant change

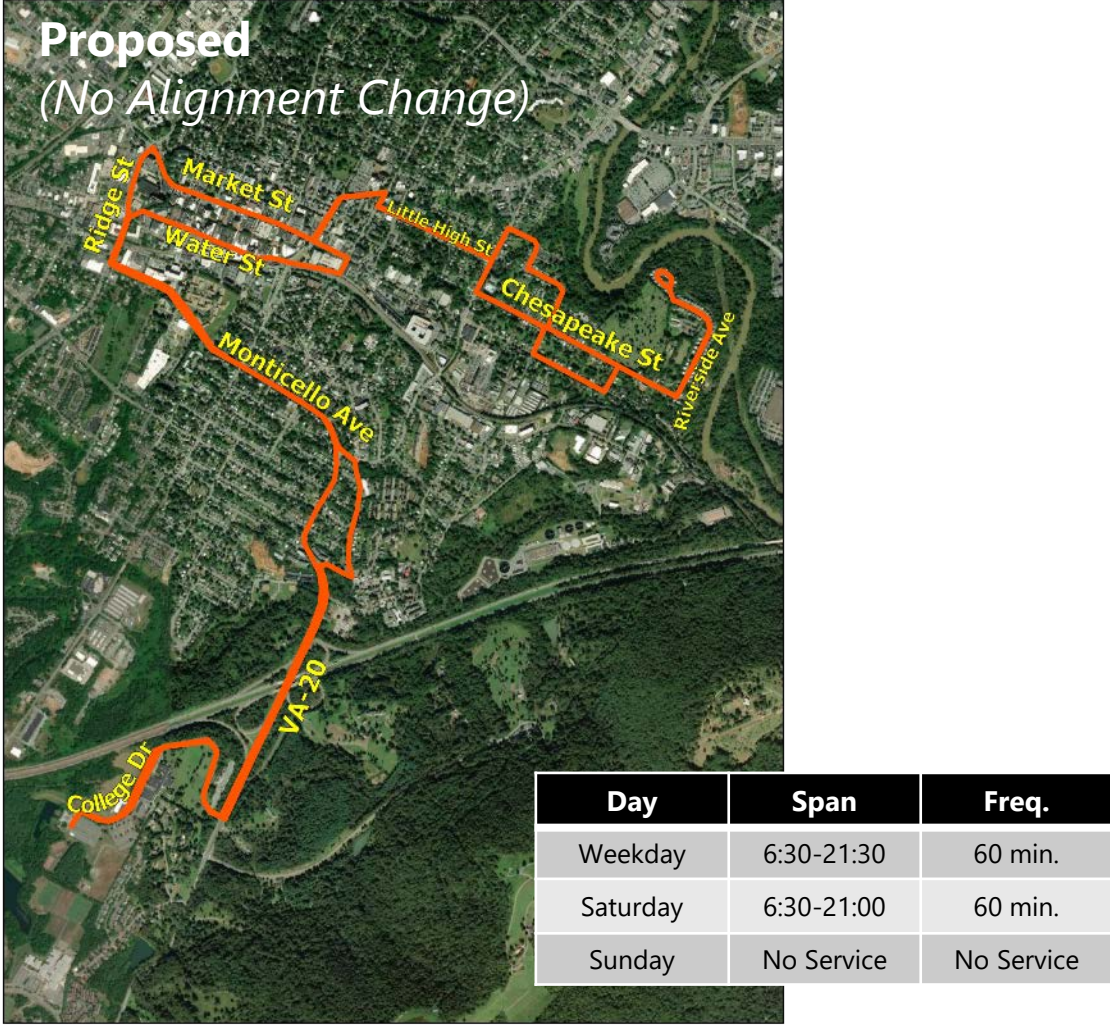
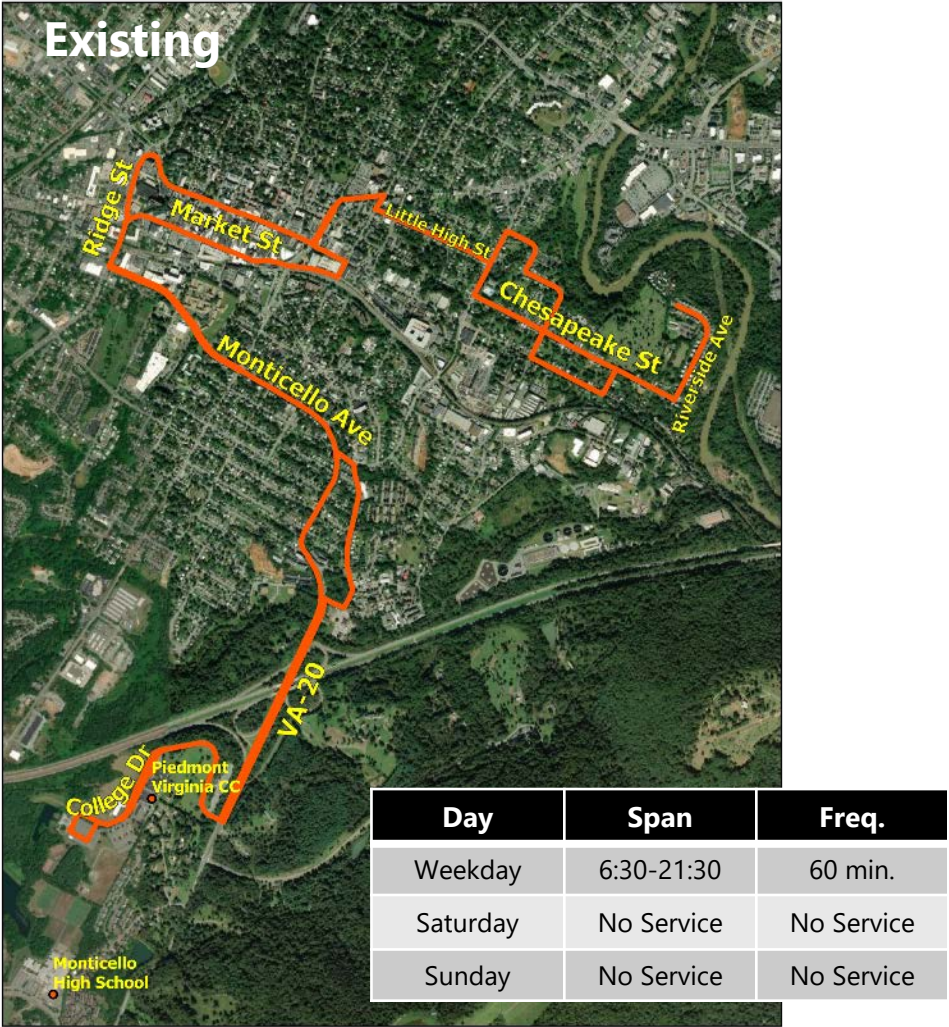
Temporary Downtown Routing



- Temporary need to modify routing during portion of FY 22 while Ninth Street Bridge is reconstructed
- Buses will travel east on High Street, west on Market Street
- Bus staging on Market Street between 6th and 8th Streets



Route 1



Route 1



Proposed Service Modifications

- No change to alignment (besides downtown for bridge reconstruction)
- Weekday frequencies remain at 60-minutes
- Add Saturday service at 60-minute frequencies
- No Sunday service

Revenue Hours

	Existing*	Proposed
Ann. Hours	4,100	4,900
City/County %	75/25	75/25

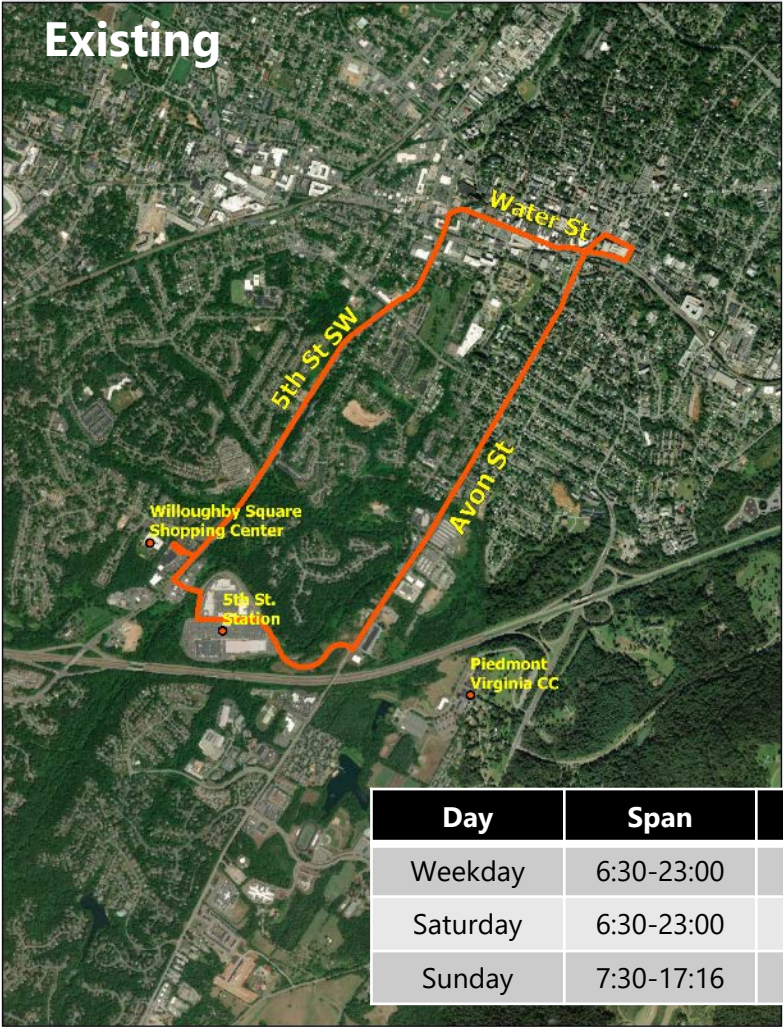
Accessibility Metrics

Metric	Weekday Access	
	Existing*	Proposed
General Pop.	9,800	9,800
Minority Pop.	2,400	2,400
Low Income Pop.	800	800
Jobs	15,500	15,500

* Pre-pandemic

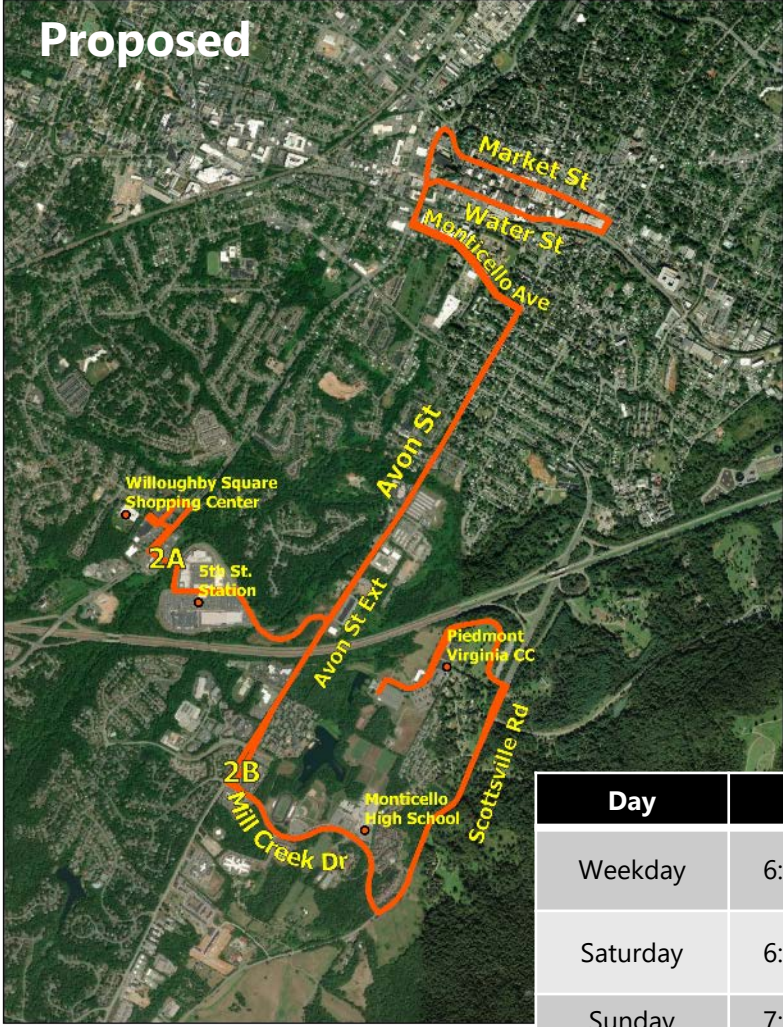
Existing Ridership: Weekday=149

Routes 2A and 2B



Day	Span	Freq.
Weekday	6:30-23:00	30 min.*
Saturday	6:30-23:00	30 min.*
Sunday	7:30-17:16	30 min.*

* One Direction Service



Day	Span	Freq.
Weekday	6:00-23:00	2A/2B: 60 min. each
Saturday	6:00-23:00	2A/2B: 60 min. each
Sunday	7:30-21:00	2A: 60 min.

Routes 2A and 2B



Proposed Service Modifications

- Route 2 modified to operate bi-directional on Avon Street
- Two patterns:
 - 2A operates to/from Willoughby Square at 60-minute frequencies, seven days a week
 - 2B operates to/from PVCC at 60-min from 6 am to 7 pm, weekdays and Saturdays
- Combined weekday frequency on common trunk = 30 minutes
- Westbound stop needed at 5th Street Station

Existing Ridership: Weekday=176, Saturday=171, Sunday=142

Revenue Hours

	Existing*	Proposed
Ann. Hours	5,700	9,600
City/County %	70/30	55/45

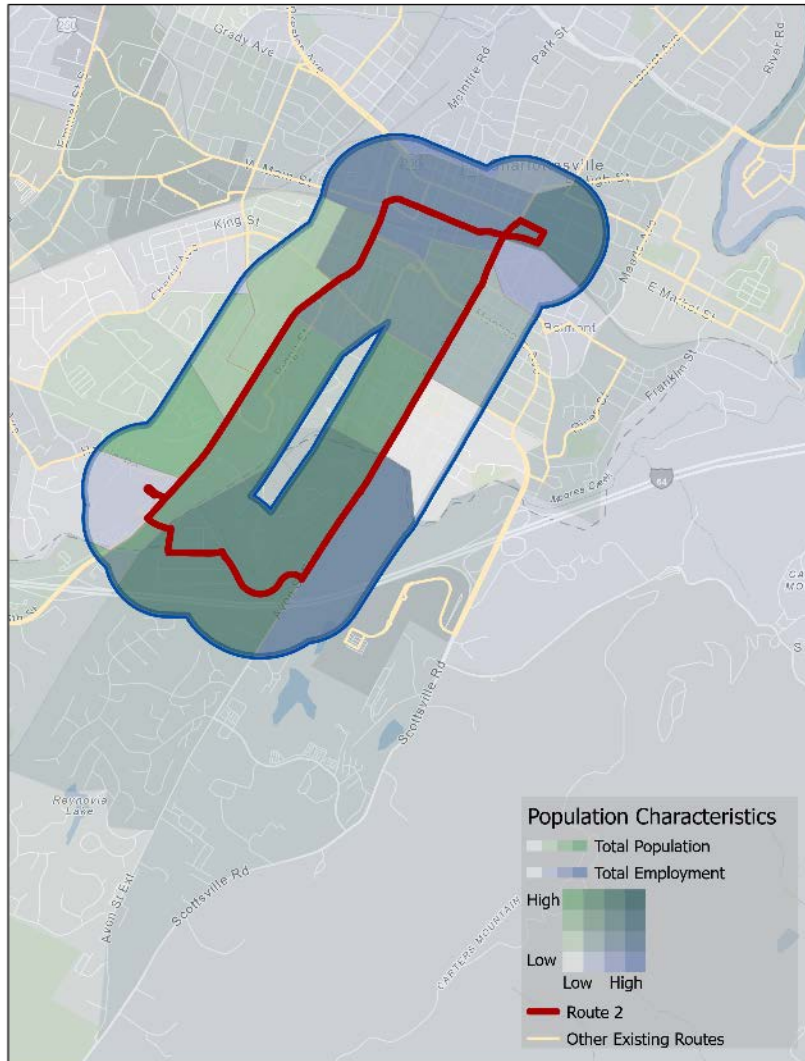
Accessibility Metrics

Metric	Weekday Access	
	Existing*	Proposed
General Pop.	11,400	9,600
Minority Pop.	4,300	2,600
Low Income Pop.	900	700
Jobs	11,400	13,500

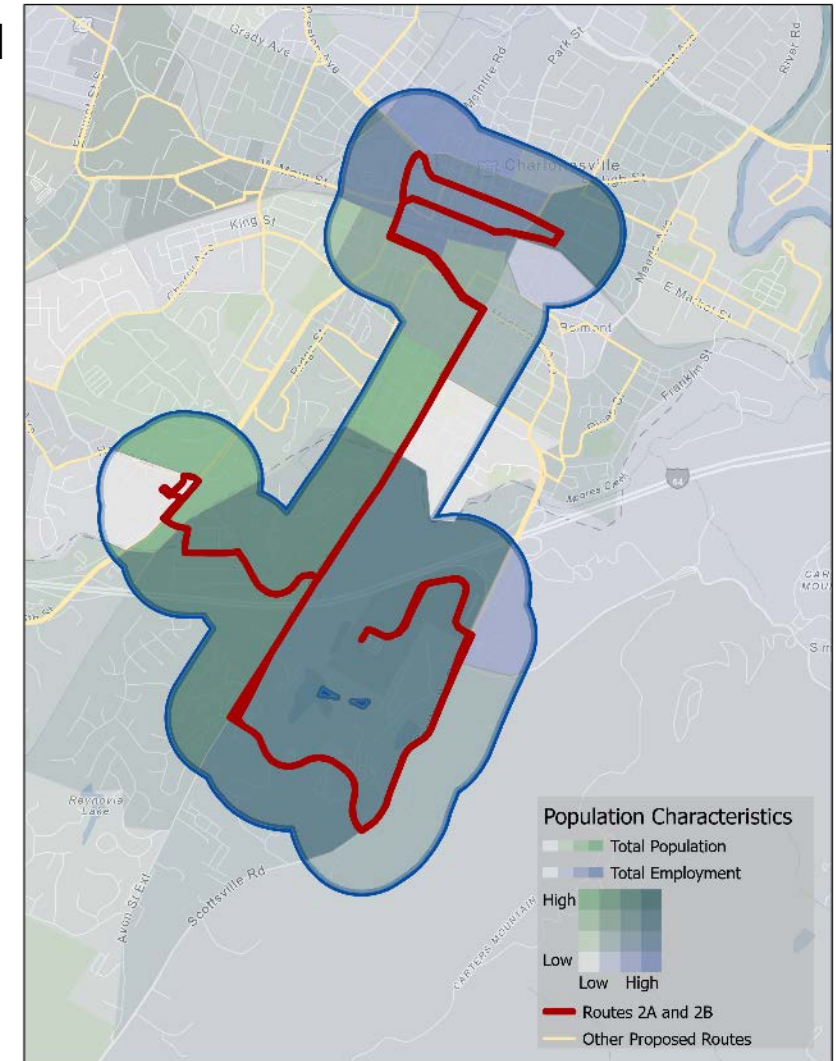
* Pre-pandemic

Routes 2A and 2B Pop. & Empl. Accessibility

Existing



Proposed

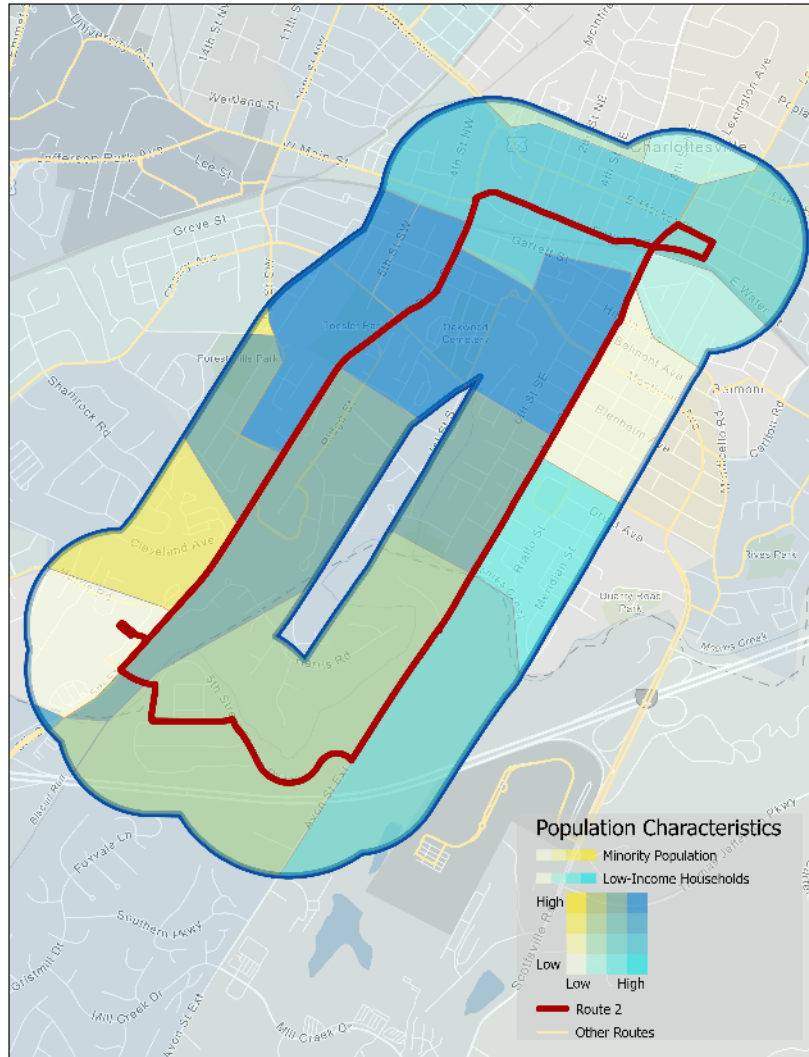


Routes 2A and 2B

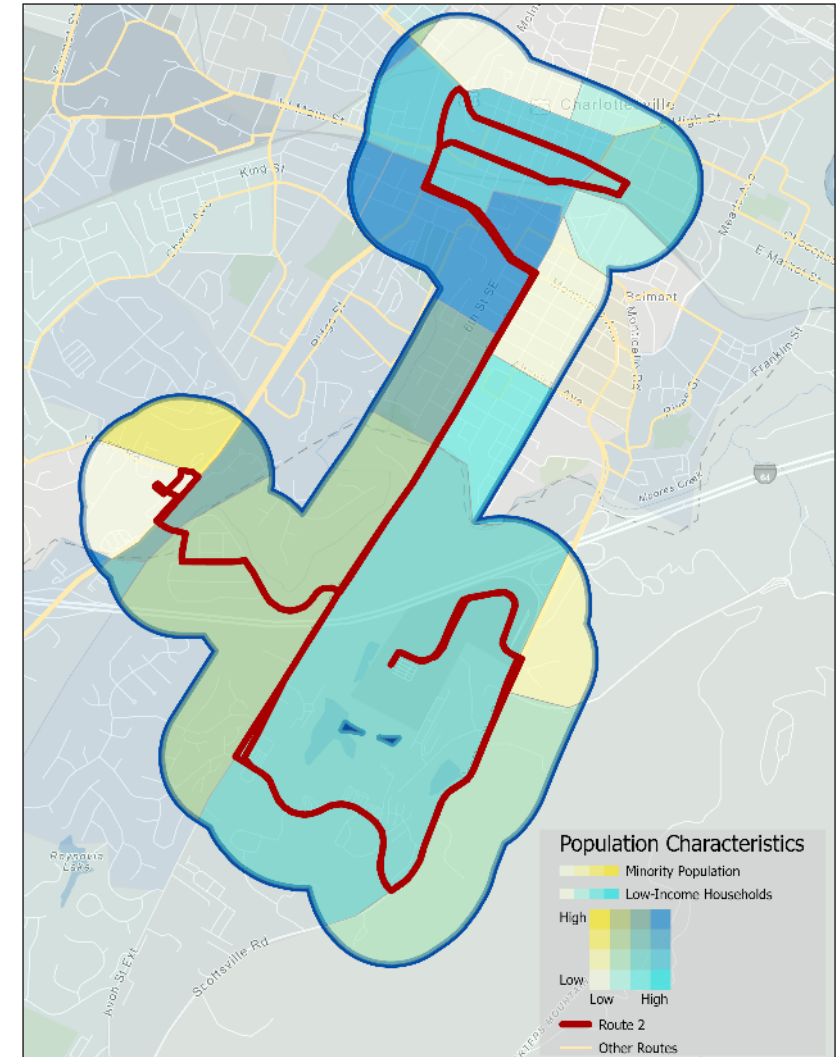
Minority & Low-Income Pop. Accessibility



Existing



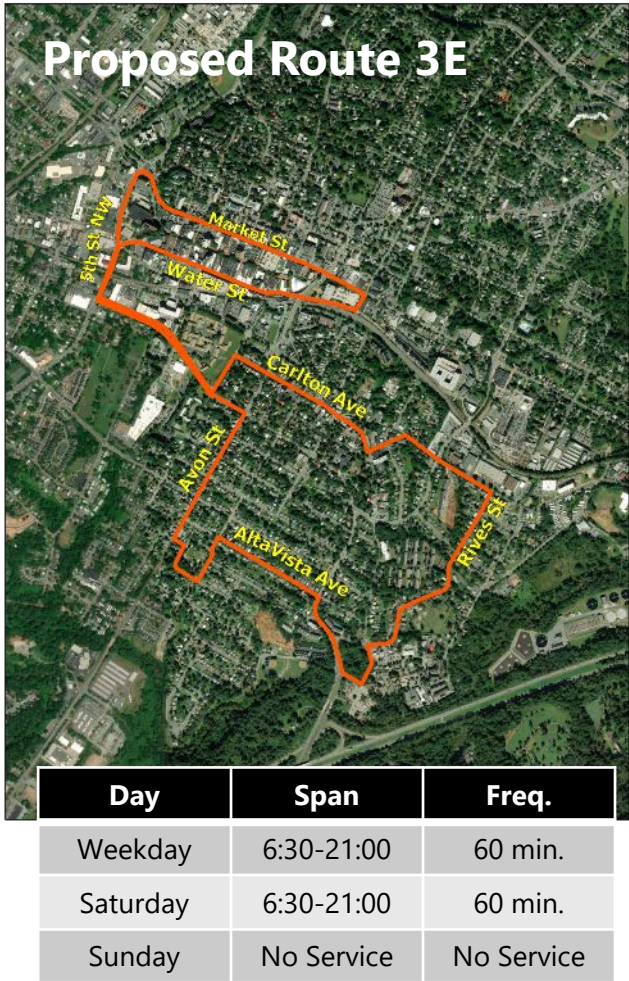
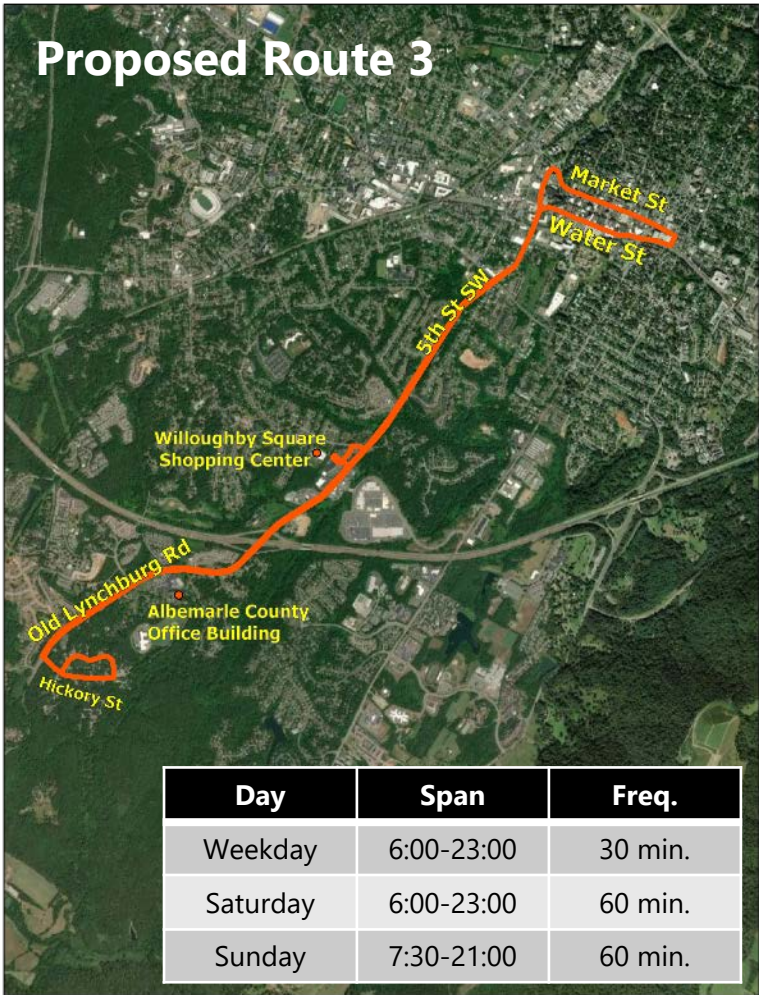
Proposed



Routes 3 and 3E



EXISTING



Routes 3 and 3E



Proposed Service Modifications

- Route 3 modified to begin/end downtown.
- Frequencies are improved to 30-minutes weekdays until 6 pm.
- Weekday evening, Saturday and Sunday frequencies are 60-minute frequencies (Route 3 currently does not operate on Sundays)
- Route 3E (Belmont Park segment) broken into separate route operating at 60-minute frequencies weekdays and Saturdays.
- Route 3 is interlined with Route 10
- Route 3E is interlined with Route 9
- May want to consider another Route # for 3E (e.g., 13)

Existing Ridership: Weekday=288, Saturday=273

Revenue Hours

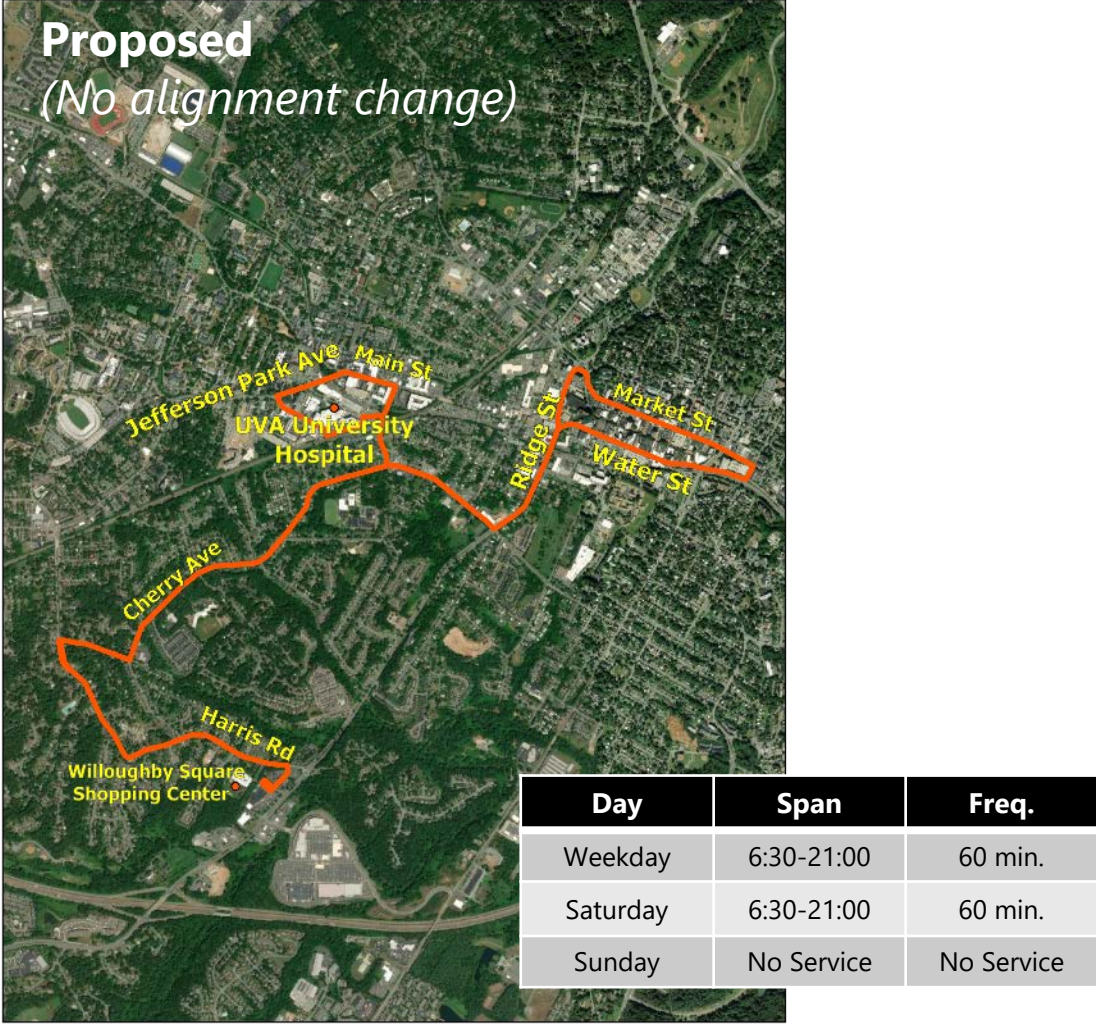
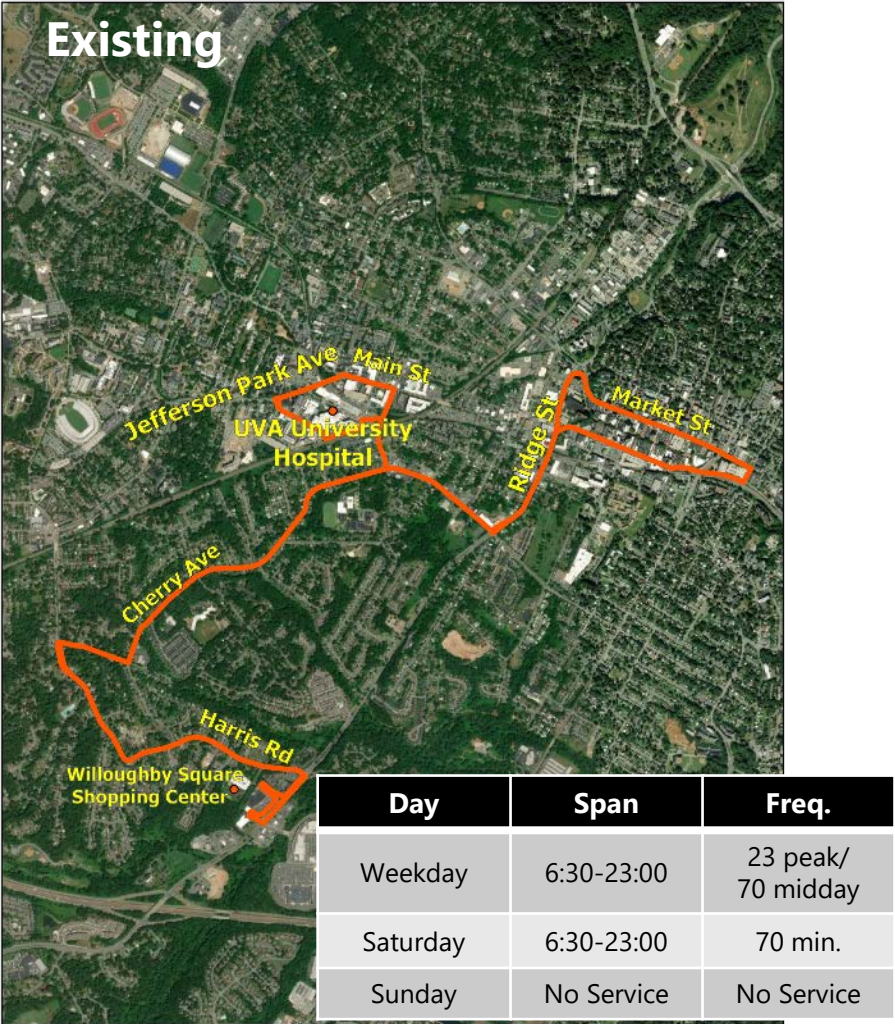
	Existing*	Proposed
Ann. Hours	7,000	3 = 9,100 3E = 3,700
City/County %	75/25	72/28

Accessibility Metrics

Metric	Weekday Access	
	Existing*	Proposed
General Pop.	16,700	16,700
Minority Pop.	5,600	5,600
Low Income Pop.	1,300	1,300
Jobs	14,700	14,700

* Pre-pandemic

Route 4



Route 4



Proposed Service Modifications

- Continue pandemic 60-minute service frequencies with existing alignment
- Span is 6:30 am to 9:00 pm, weekdays and Saturdays only
- Interline Route 4 with Route 6 at Willoughby Square to provide additional recovery time

Existing Ridership: Weekday=373, Saturday=102

Revenue Hours

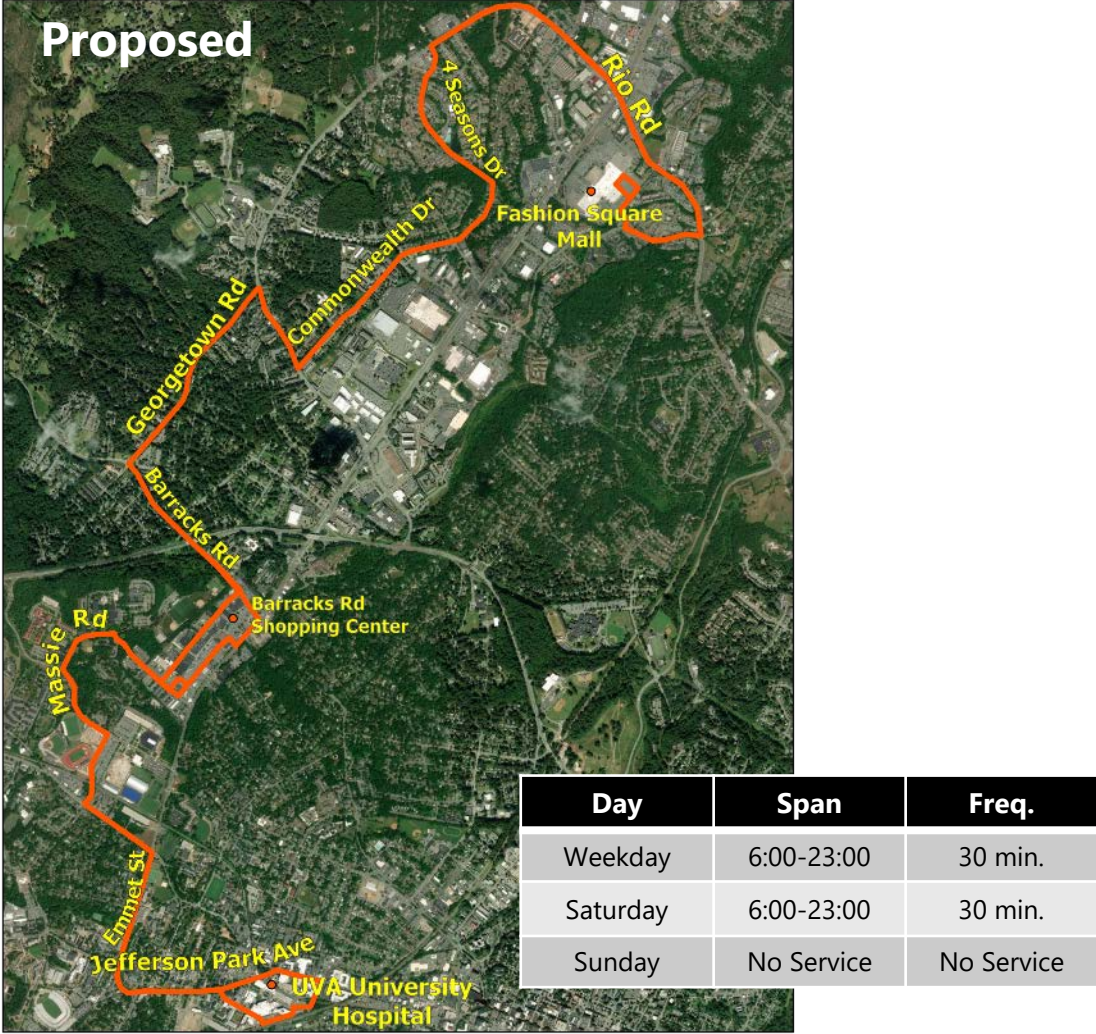
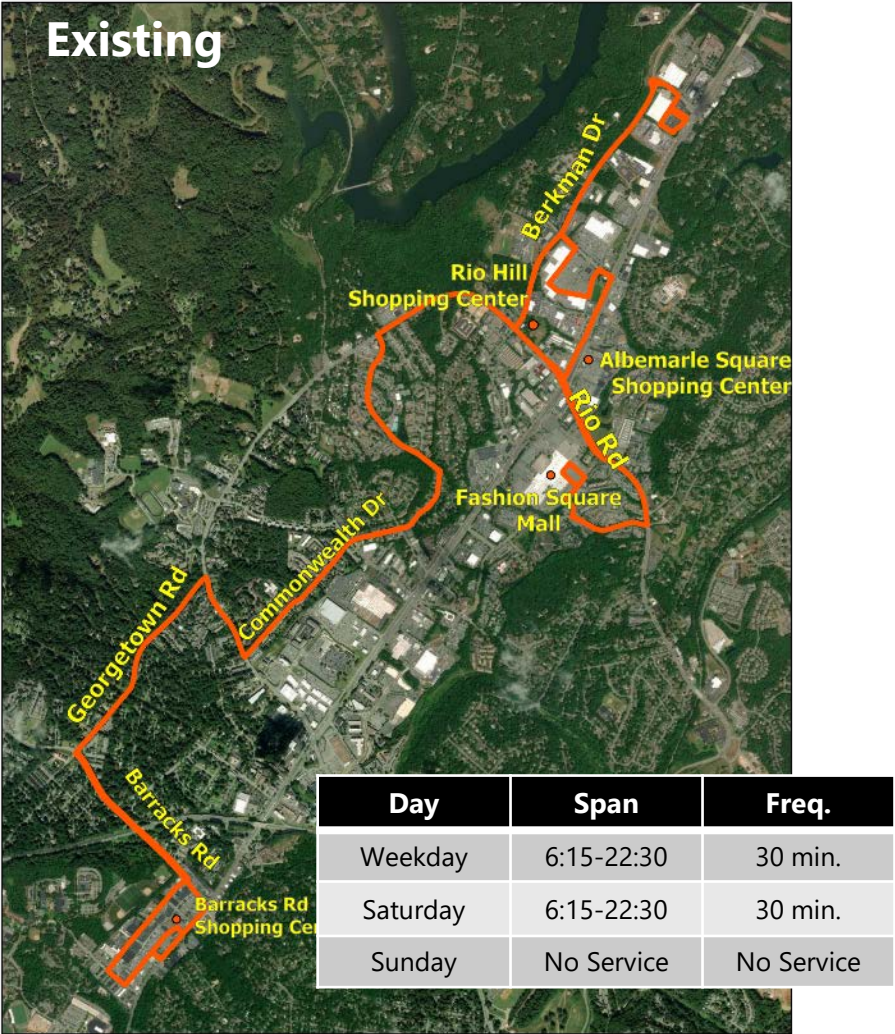
	Existing*	Proposed
Ann. Hours	8,600	6,100
City/County %	100/0	100/0

Accessibility Metrics

Metric	Weekday Access	
	Existing*	Proposed
General Pop.	15,400	15,400
Minority Pop.	5,900	5,900
Low Income Pop.	1,400	1,400
Jobs	18,300	18,300

* Pre-pandemic

Route 5



Route 5



Proposed Service Modifications

- Terminate north end of Route 5 at Fashion Square
- Extend south end of alignment to UVA Hospital
- Operate at 30-minute weekday frequencies
- Option: Instead of operating to/from Fashion Square, Route 5 could operate to Walmart with no change in service requirements or costs

Existing Ridership: Weekday=725, Saturday=502

Revenue Hours

	Existing*	Proposed
Ann. Hours	15,200	20,800
City/County %	8/92	34/66

Accessibility Metrics

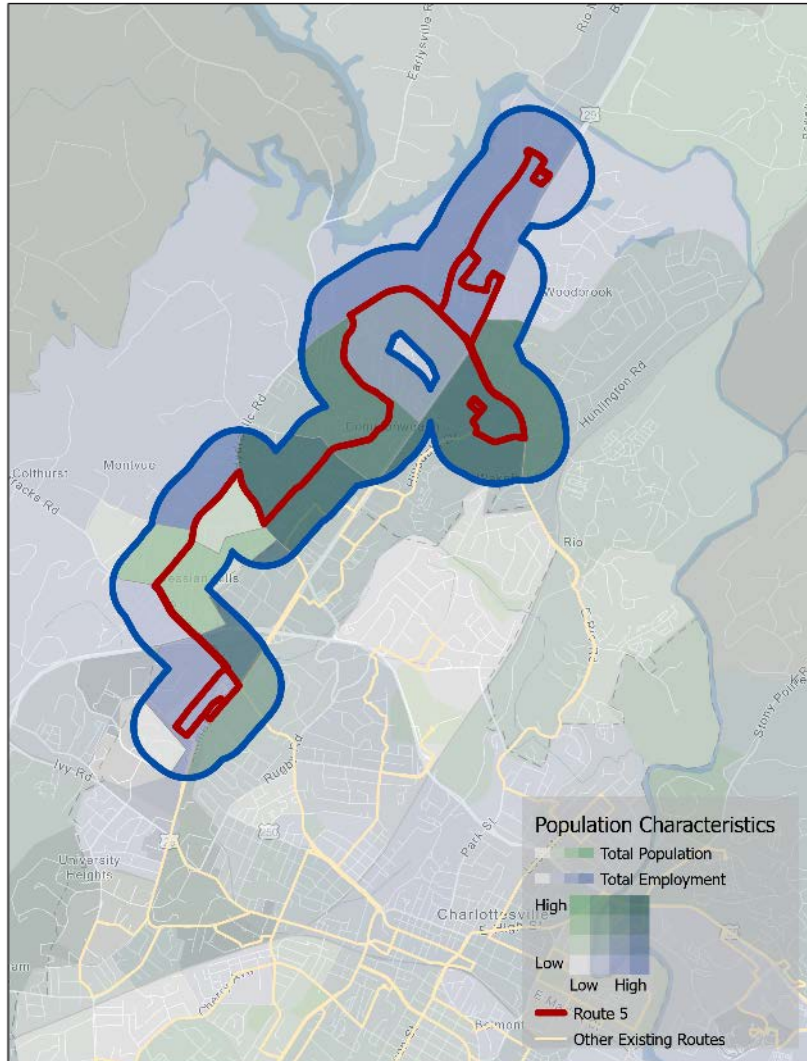
Metric	Weekday Access	
	Existing*	Proposed
General Pop.	12,100	21,200
Minority Pop.	4,100	7,500
Low Income Pop.	800	1,800
Jobs	18,000	27,500

* Pre-pandemic

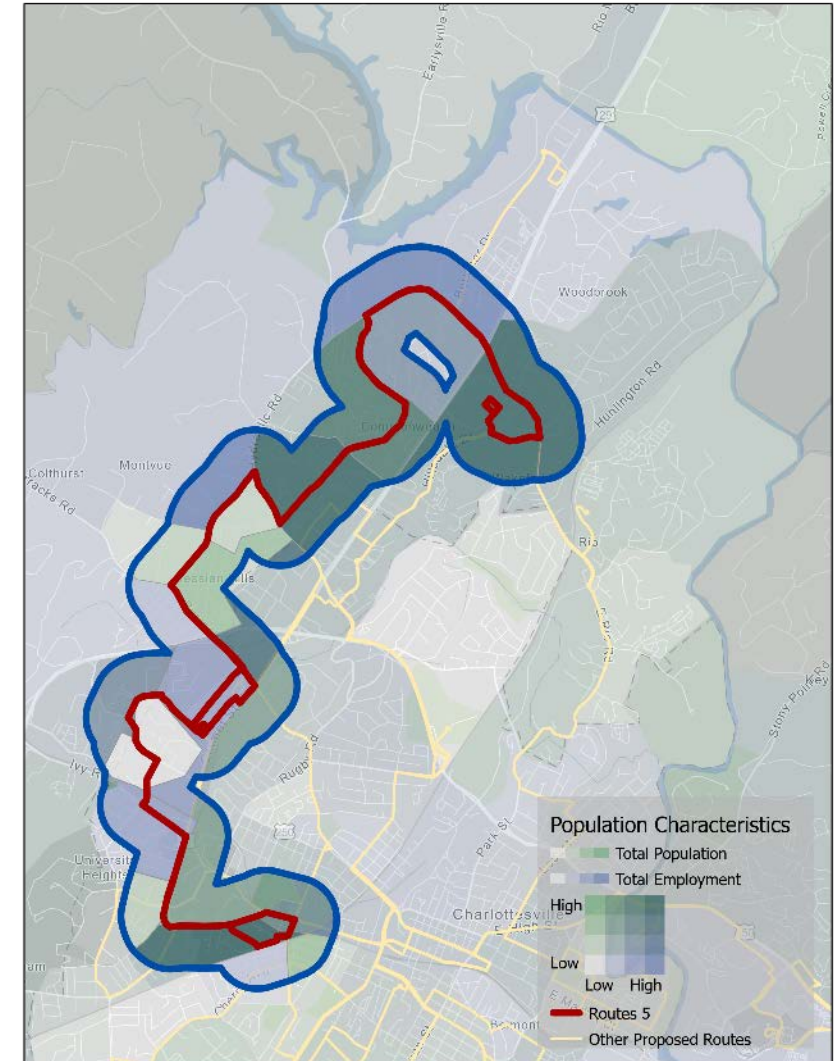
Route 5 Pop. & Empl. Accessibility



Existing



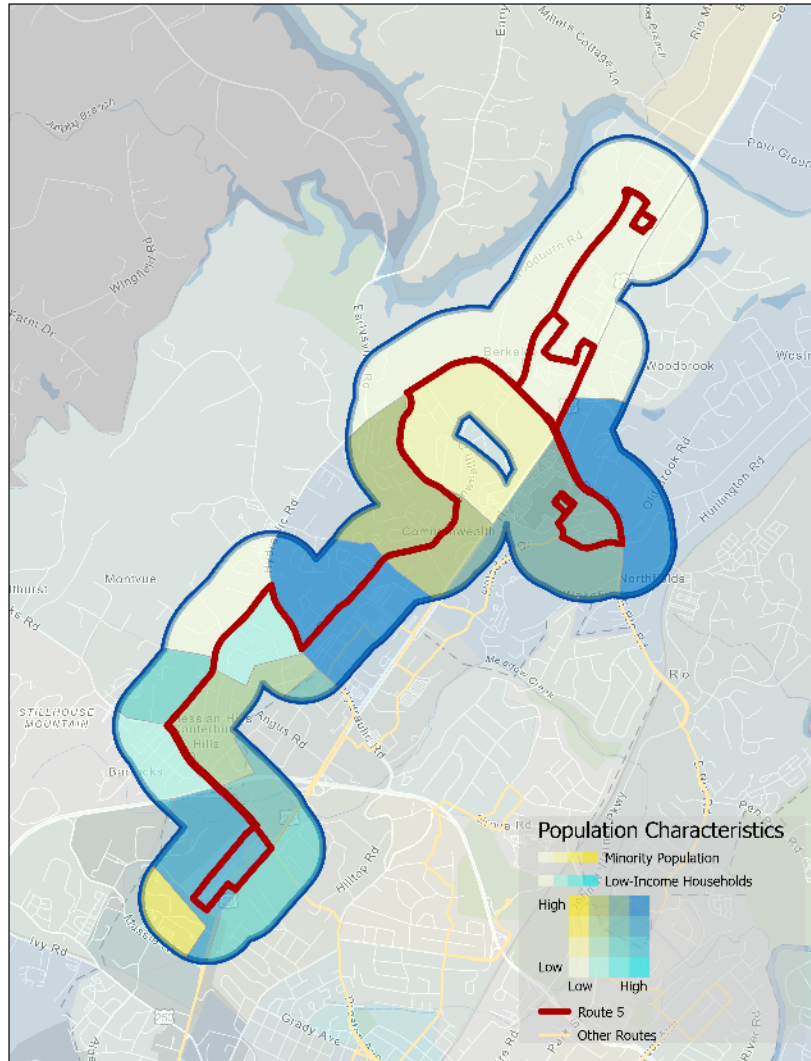
Proposed



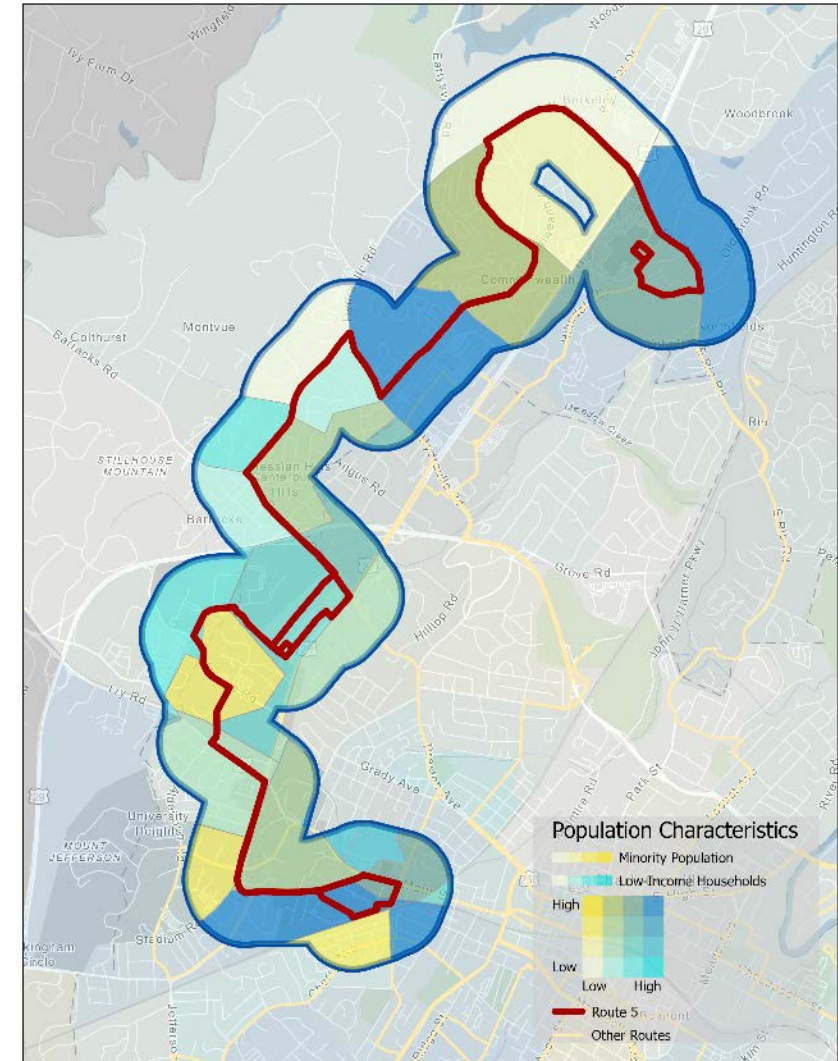
Route 5 Minority & Low-Income Pop. Accessibility



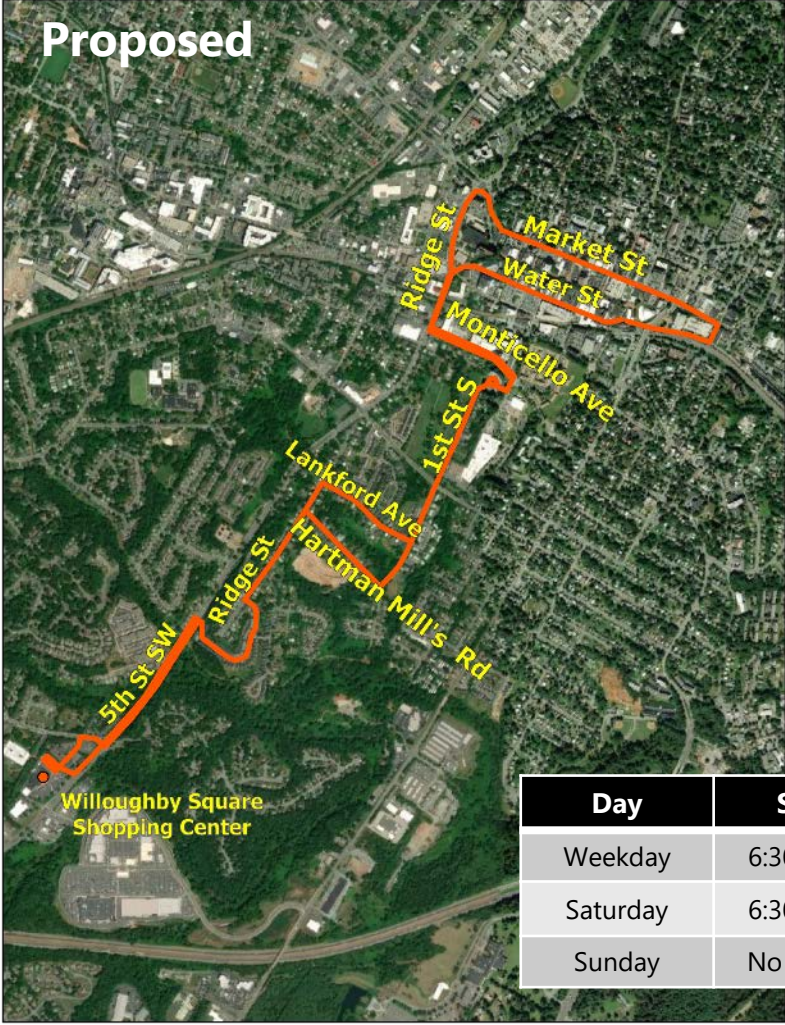
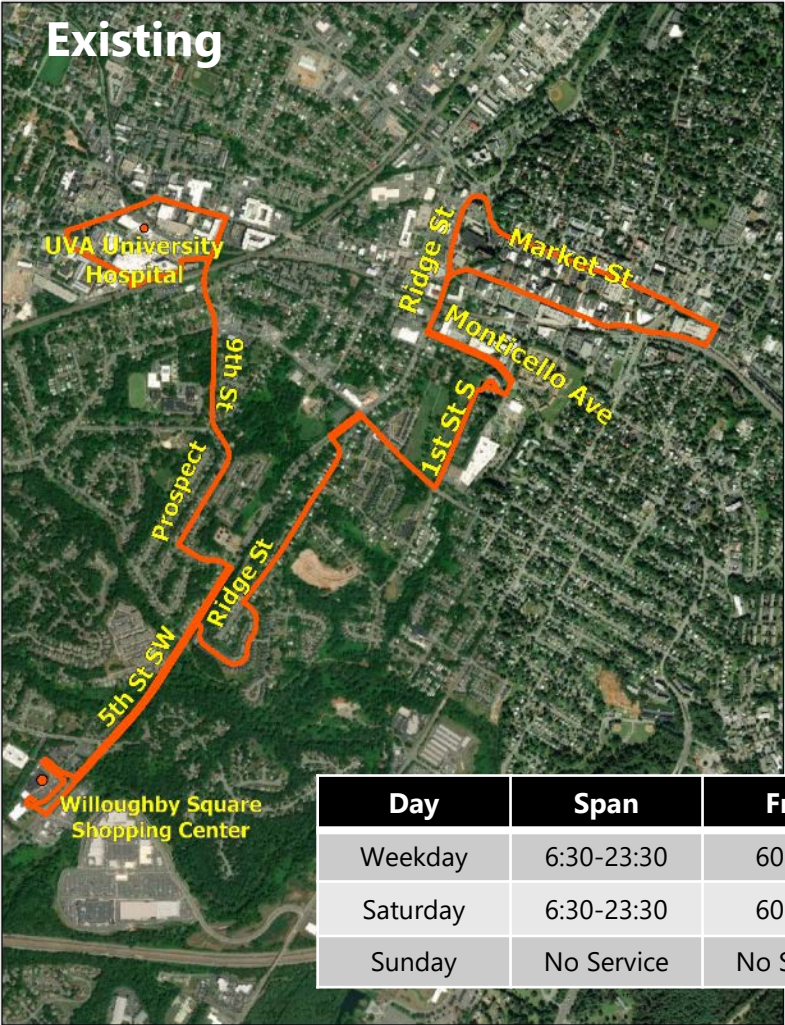
Existing



Proposed



Route 6



Route 6



Proposed Service Modifications

- Modify route alignment to use 1st Street South
- Eliminate Route 6 SB deviation to UVA Hospital – all trips operate direction to/from Willoughby Square Shopping Center
- Operate at 60-minute frequencies
- Interline with Route 4 at Willoughby Square

Existing Ridership: Weekday=296, Saturday=182

Revenue Hours

	Existing*	Proposed
Ann. Hours	5,500	3,500
City/County %	100/0	100/0

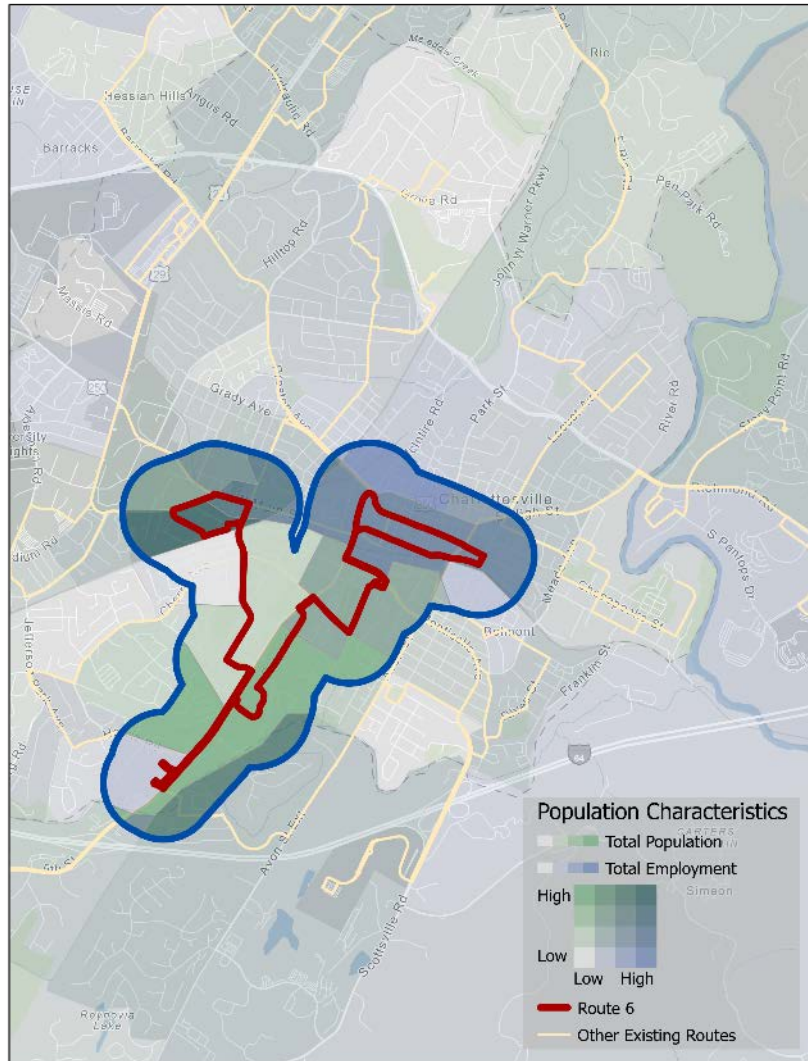
Accessibility Metrics

Metric	Weekday Access	
	Existing*	Proposed
General Pop.	14,900	9,100
Minority Pop.	6,300	3,700
Low Income Pop.	1,500	800
Jobs	18,000	12,300

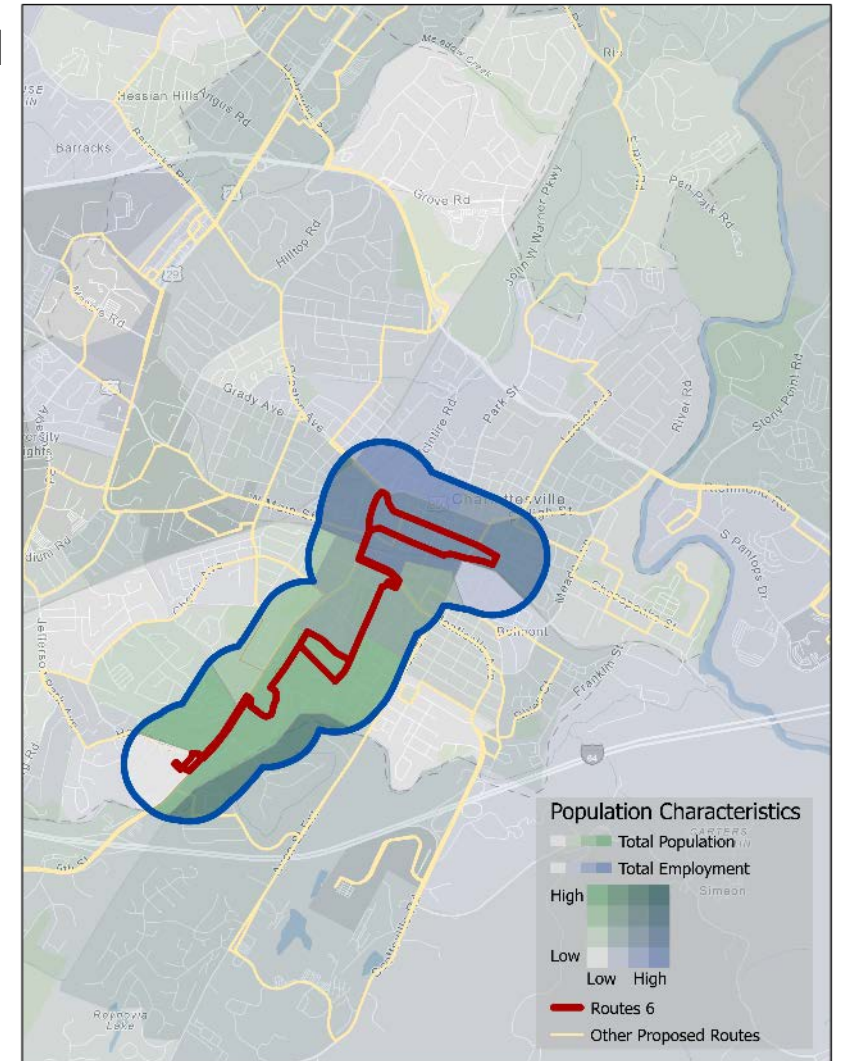
* *Pre-pandemic*

Route 6 Pop. & Empl. Accessibility

Existing



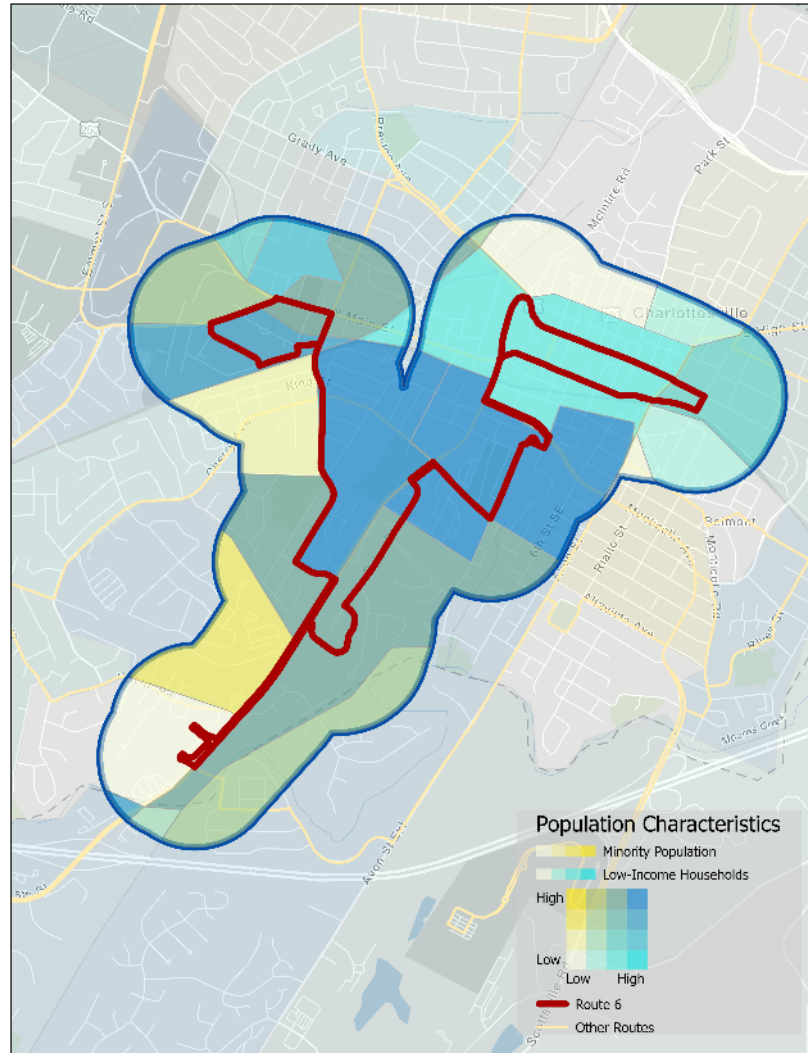
Proposed



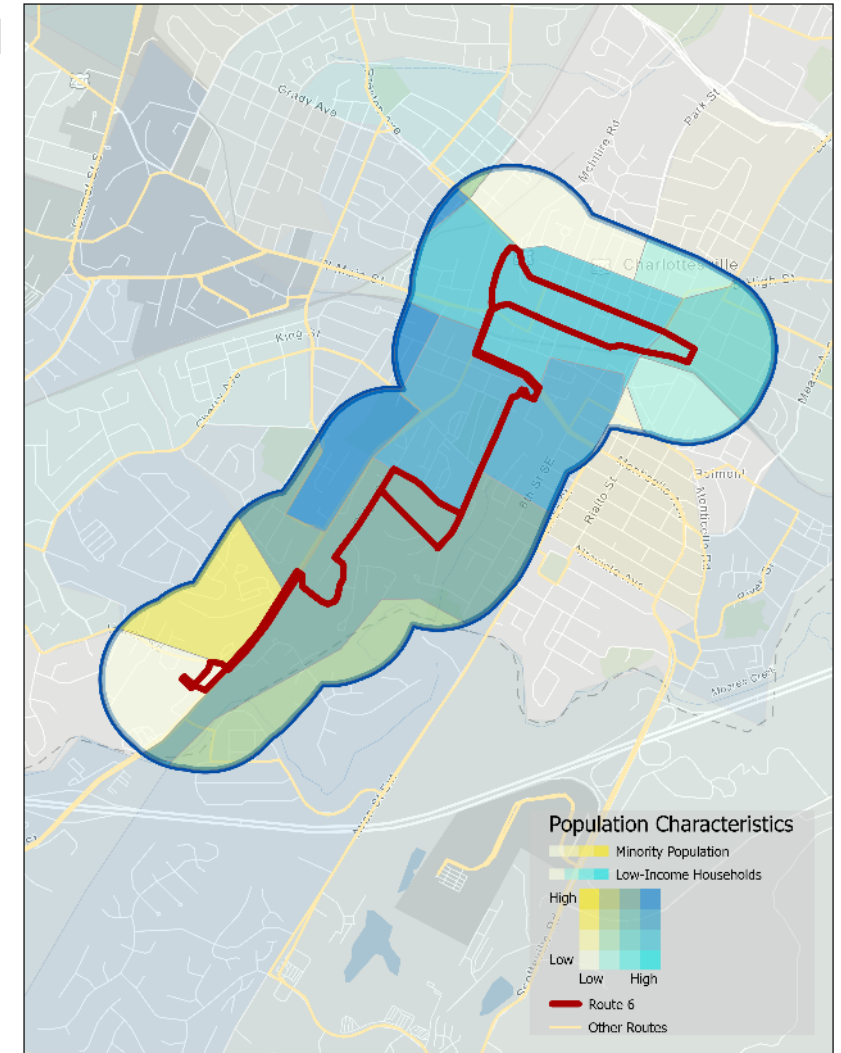
Route 6 Minority & Low-Income Pop. Accessibility



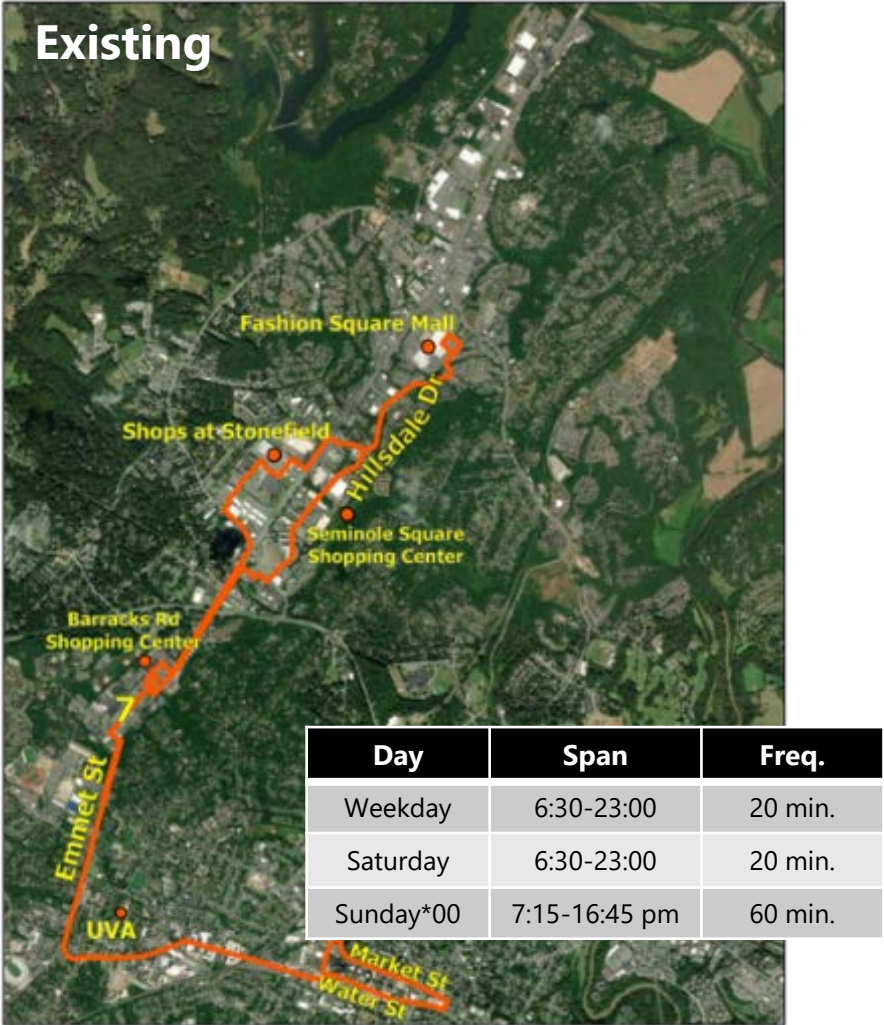
Existing



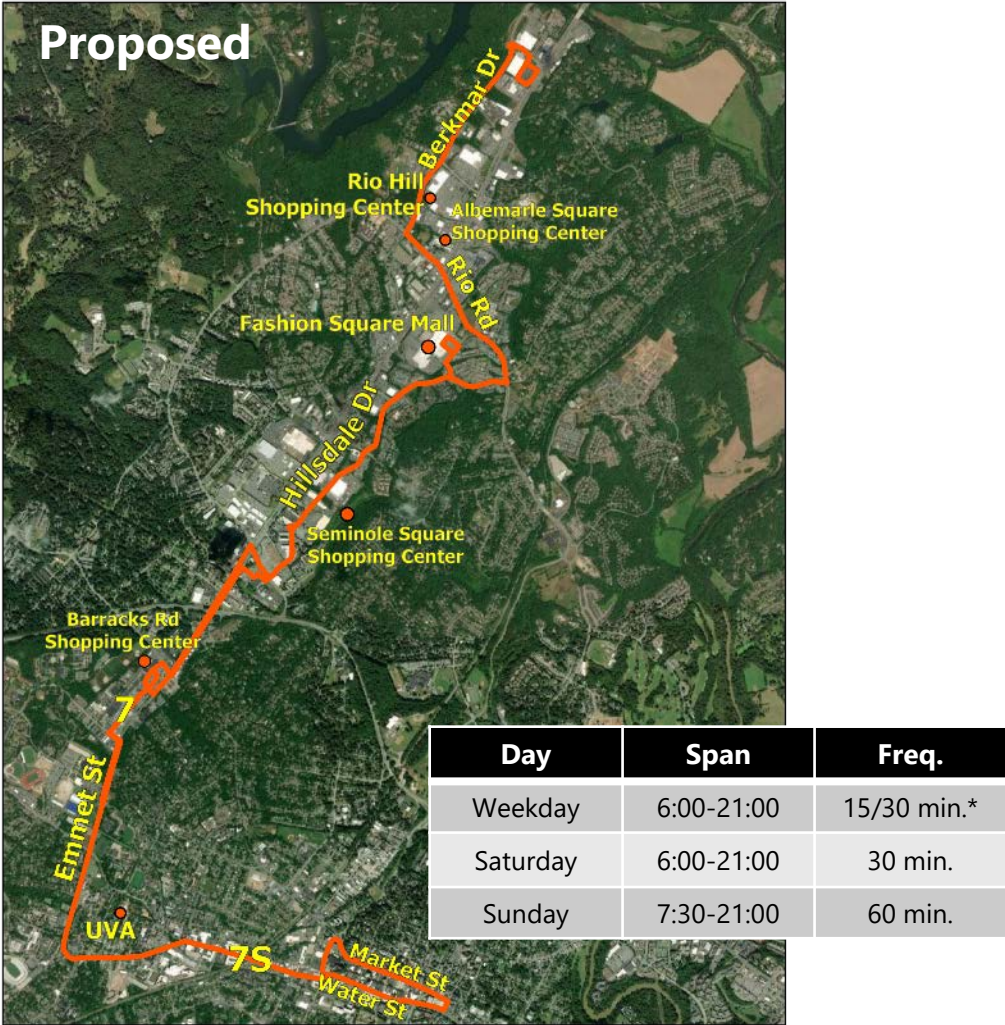
Proposed



Route 7



* - Route 12 provides Sunday service



* - 15-min. peak period service south of Barracks

Route 7



Proposed Service Modifications

- Extend Route 7 to Walmart and operate 7-days/week
- Operate at 30-minute frequencies on weekdays and Saturdays
- Provide supplemental weekday peak period service between downtown and Barracks Center, resulting in 15-minute peak period service along this segment
- Operate at 60-minute frequencies on Sundays
- With extension of Route 7, Route 12 no longer needs to operate on Sundays

Existing Ridership: Weekday=1,944, Saturday=1,468, Sunday (Route 12)=412

Revenue Hours

	Existing*	Proposed
Ann. Hours	Rte 7 =24,800 Rte 12 =1,100	27,300
City/County %	76/24	62/38

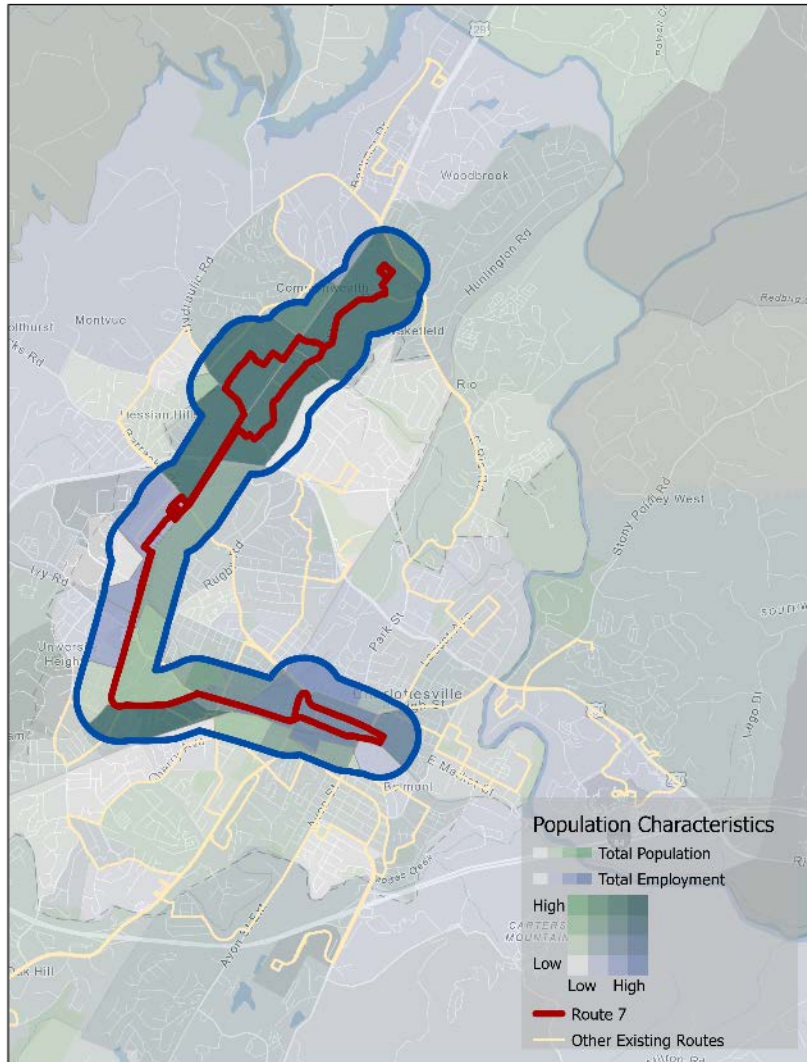
Accessibility Metrics

Metric	Weekday Access	
	Existing*	Proposed
General Pop.	19,500	18,700
Minority Pop.	6,600	7,600
Low Income Pop.	1,900	1,900
Jobs	36,800	32,600

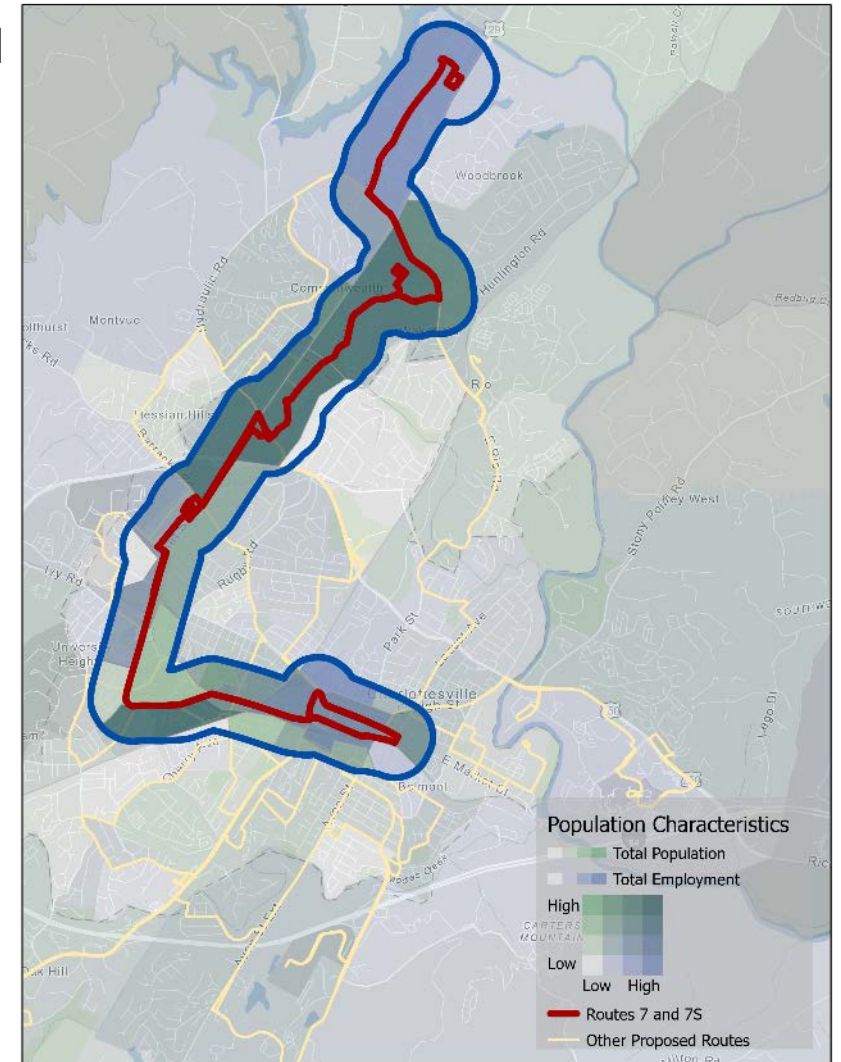
* Pre-pandemic

Route 7 Pop. & Empl. Accessibility

Existing



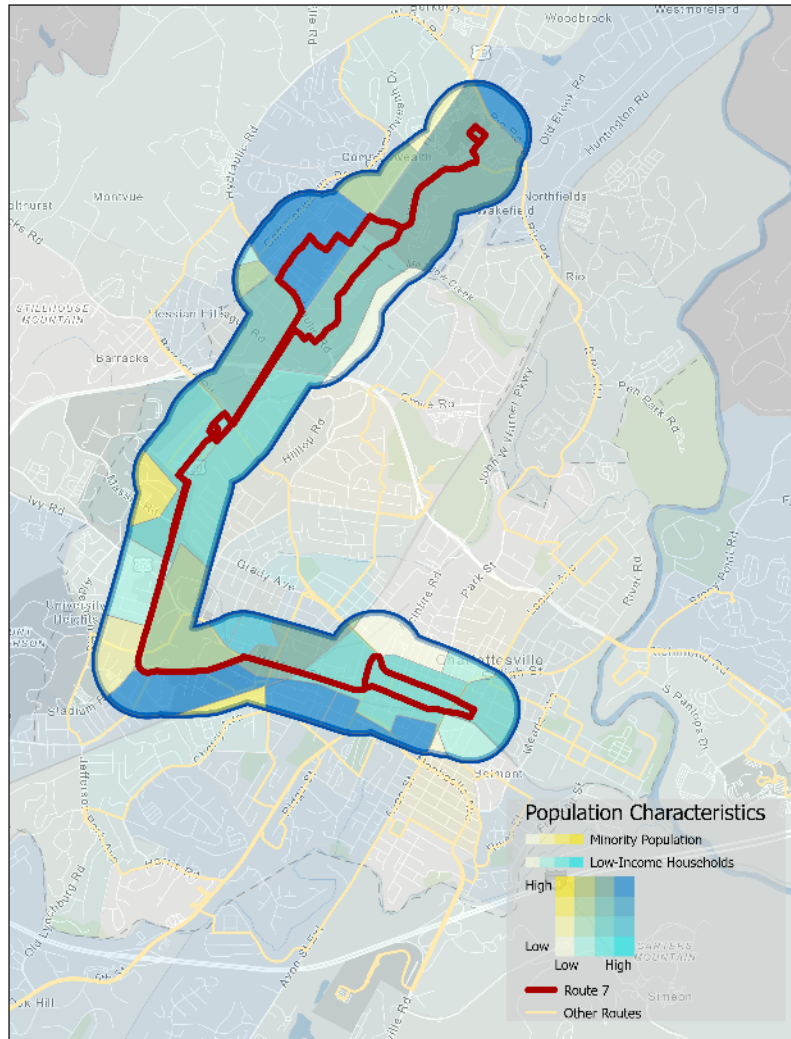
Proposed



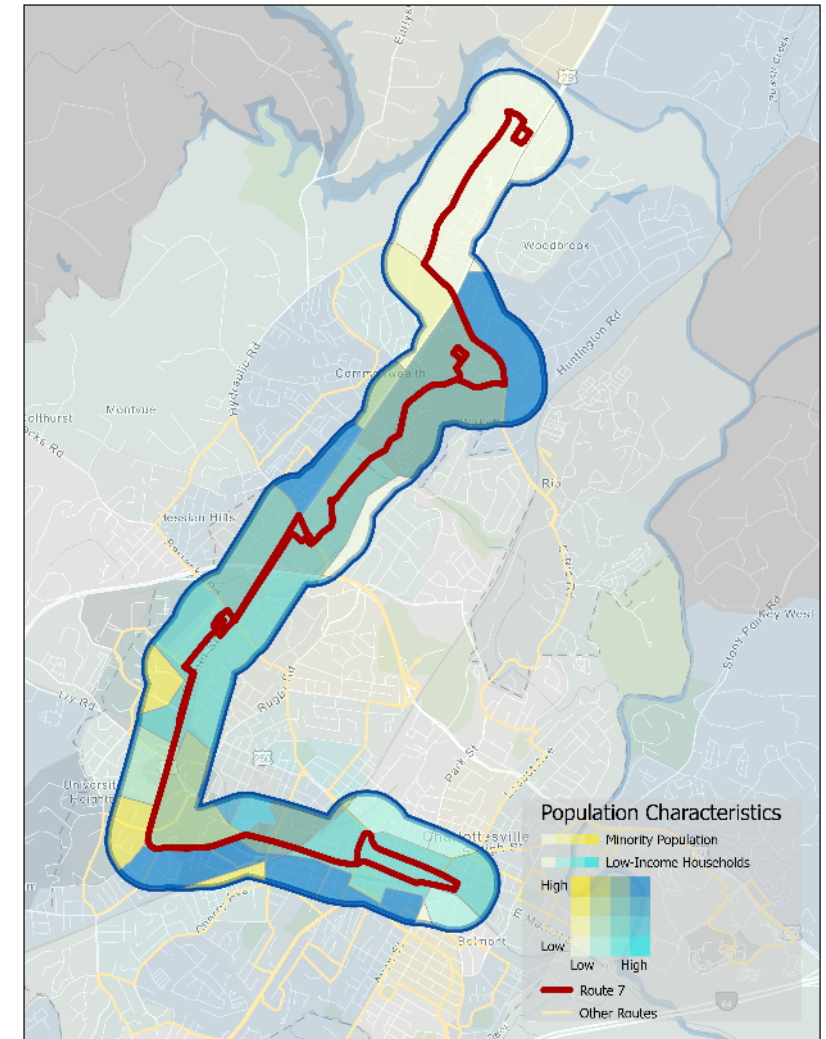
Route 7 Minority & Low-Income Pop. Accessibility



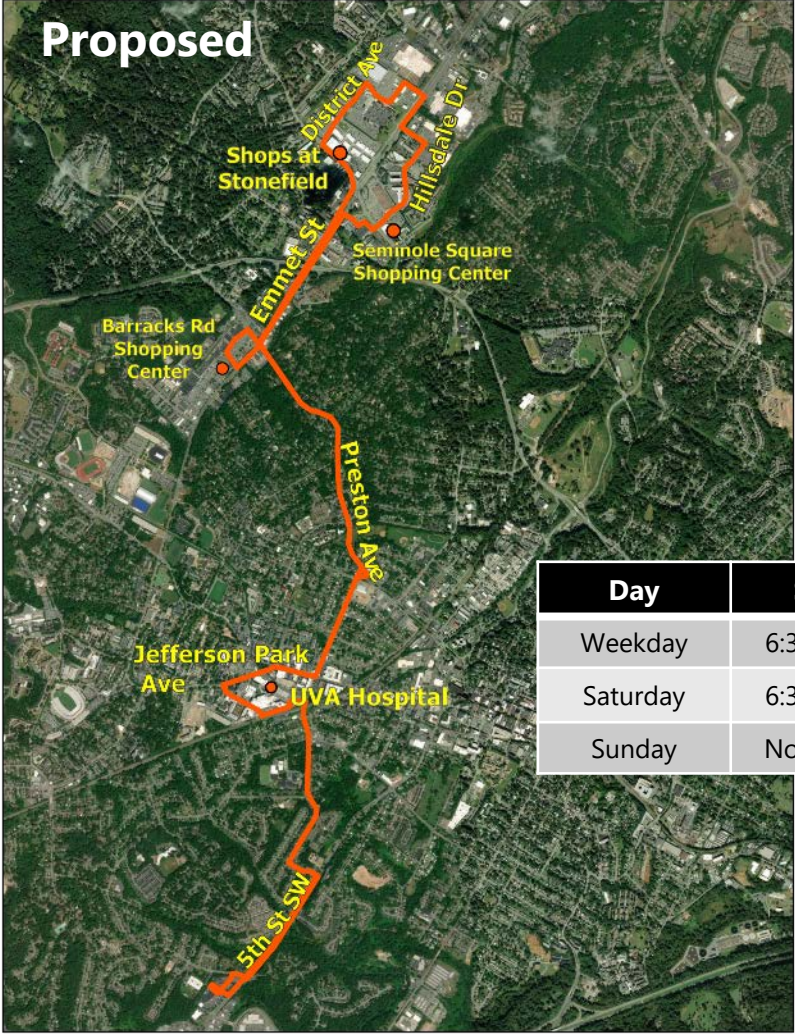
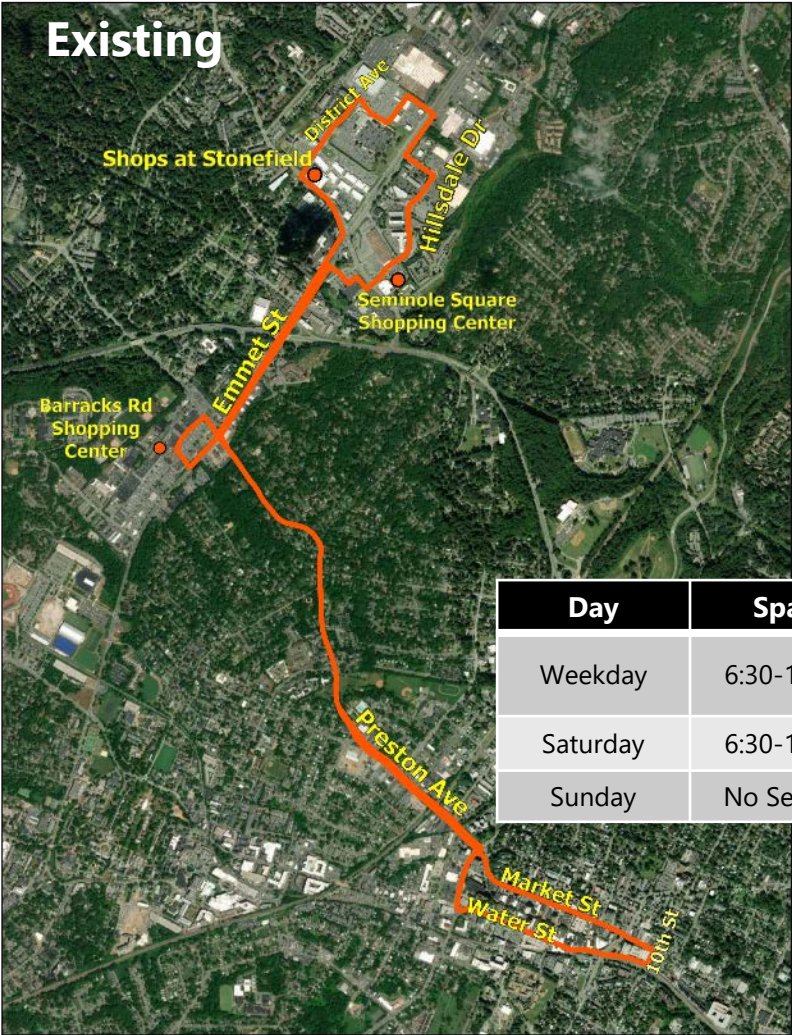
Existing



Proposed



Route 8



Route 8



Proposed Service Modifications

- Modify Route 8 to operate as a new crosstown route between Shops at Stonefield and Willoughby Square
- Route operates weekdays and Saturdays at 60-minute frequencies
- Option: Instead of operating to/from Willoughby Square, change alignment to go to/from downtown, and modify Route 9 to go to/from Willoughby Square

Existing Ridership: Weekday=293, Saturday=150

Revenue Hours

	Existing*	Proposed
Ann. Hours	5,400	4,600
City/County %	83/17	91/9

Accessibility Metrics

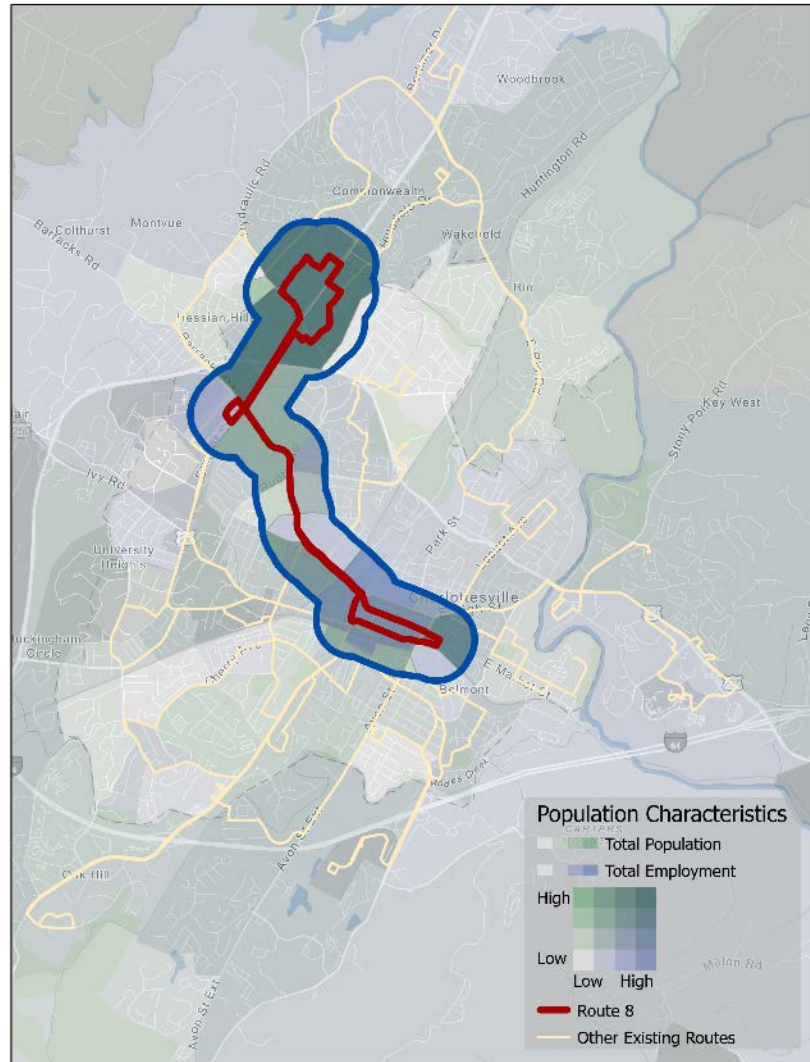
Metric	Weekday Access	
	Existing*	Proposed
General Pop.	12,000	18,700
Minority Pop.	3,900	7,600
Low Income Pop.	1,200	1,900
Jobs	26,000	20,300

* Pre-pandemic

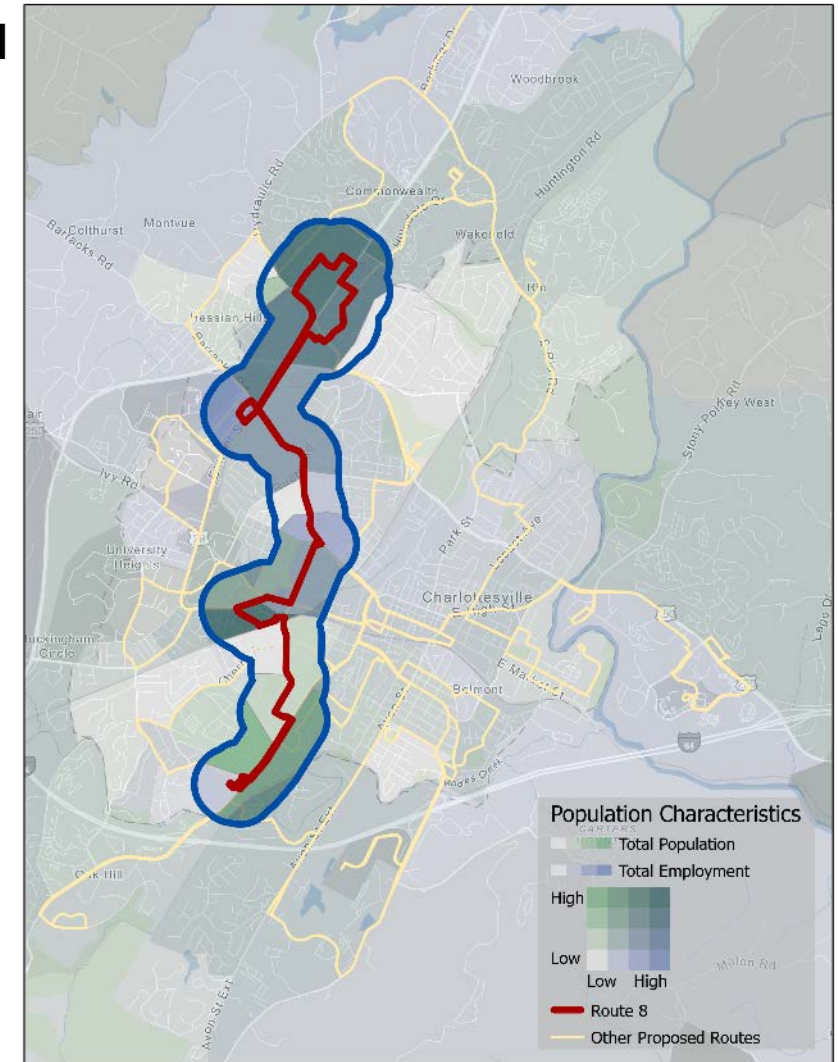
Route 8 Pop. & Empl. Accessibility



Existing



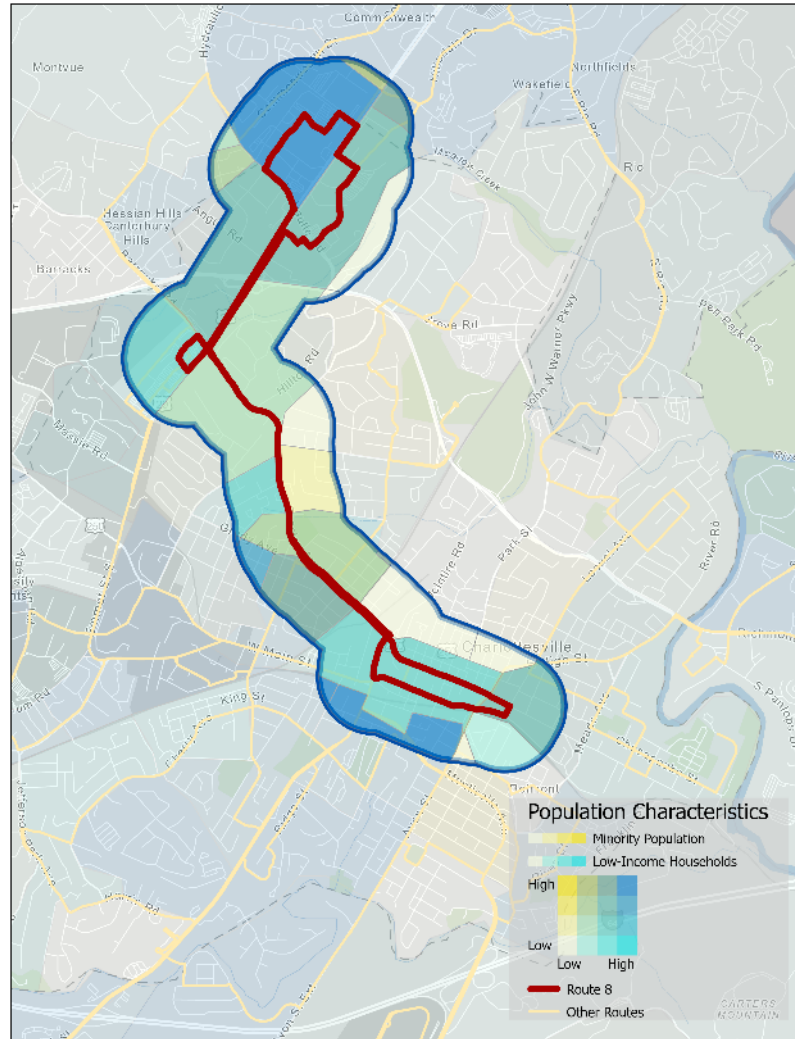
Proposed



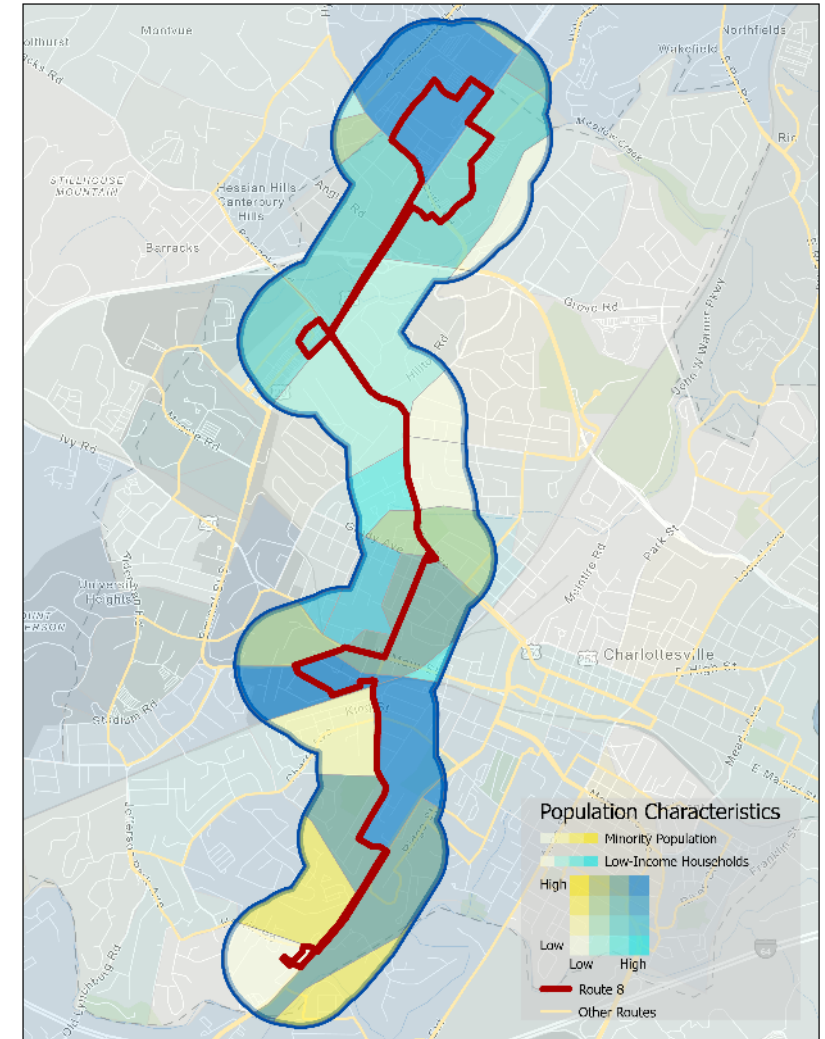
Route 8 Minority & Low-Income Pop. Accessibility



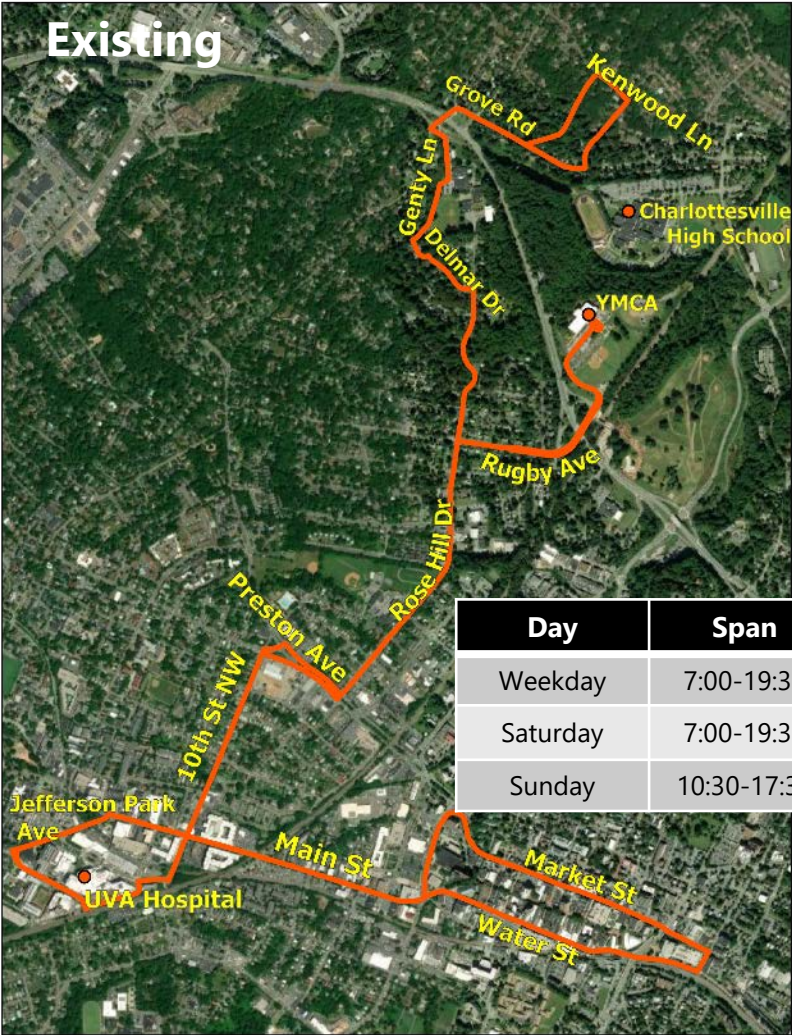
Existing



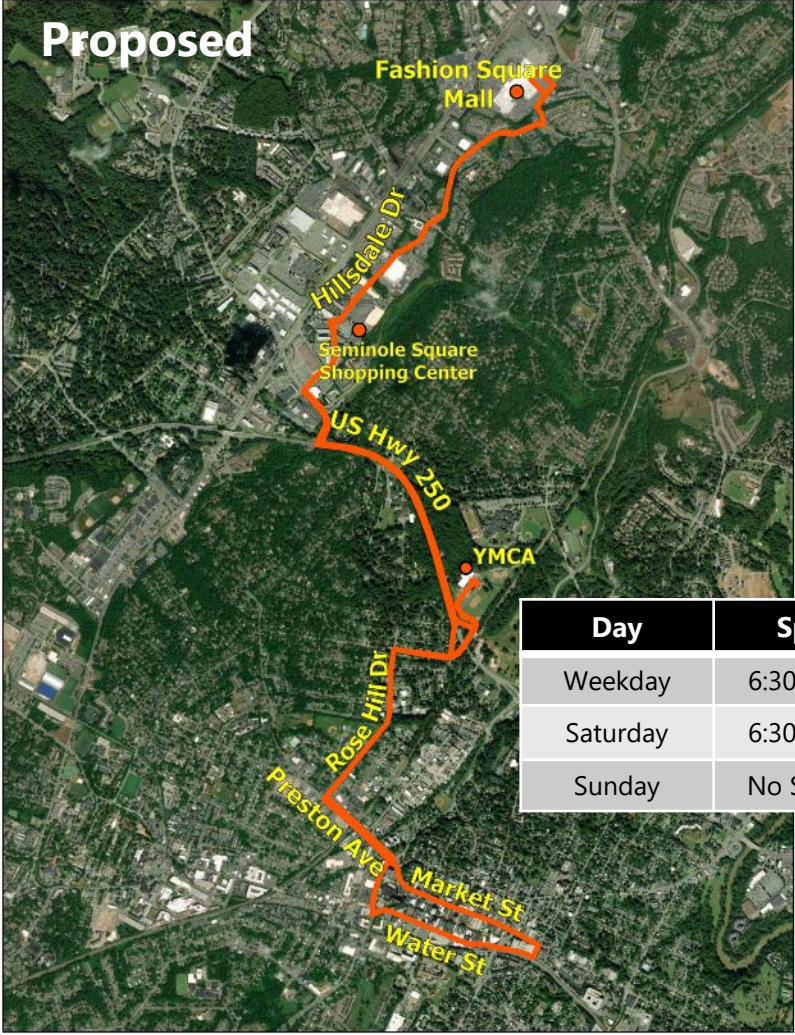
Proposed



Route 9



Day	Span	Freq.
Weekday	7:00-19:30	70 min.
Saturday	7:00-19:30	70 min.
Sunday	10:30-17:30	70 min.



Day	Span	Freq.
Weekday	6:30-21:00	60 min.
Saturday	6:30-21:00	60 min.
Sunday	No Service	No Service

Route 9



Proposed Service Modifications

- Eliminate Greenbrier & UVA Hospital service and modify route to serve Fashion Square Mall
- Route continues to deviate to YMCA, with pedestrian access to Charlottesville High School via pedestrian path from YMCA
- Operate at 60-minute frequencies, Monday-Saturday
- Option: instead of operating to Fashion Square Mall, Route 9 could operate to Shops at Stonefield with no change in service hours or costs. Route could also go to Willoughby Square instead of downtown, in conjunction with Route 8 alignment adjustment.

Existing Ridership: Weekday=50, Saturday=43, Sunday=11

Revenue Hours

	Existing*	Proposed
Ann. Hours	4,500	5,800
City/County %	100/0	82/18

Accessibility Metrics

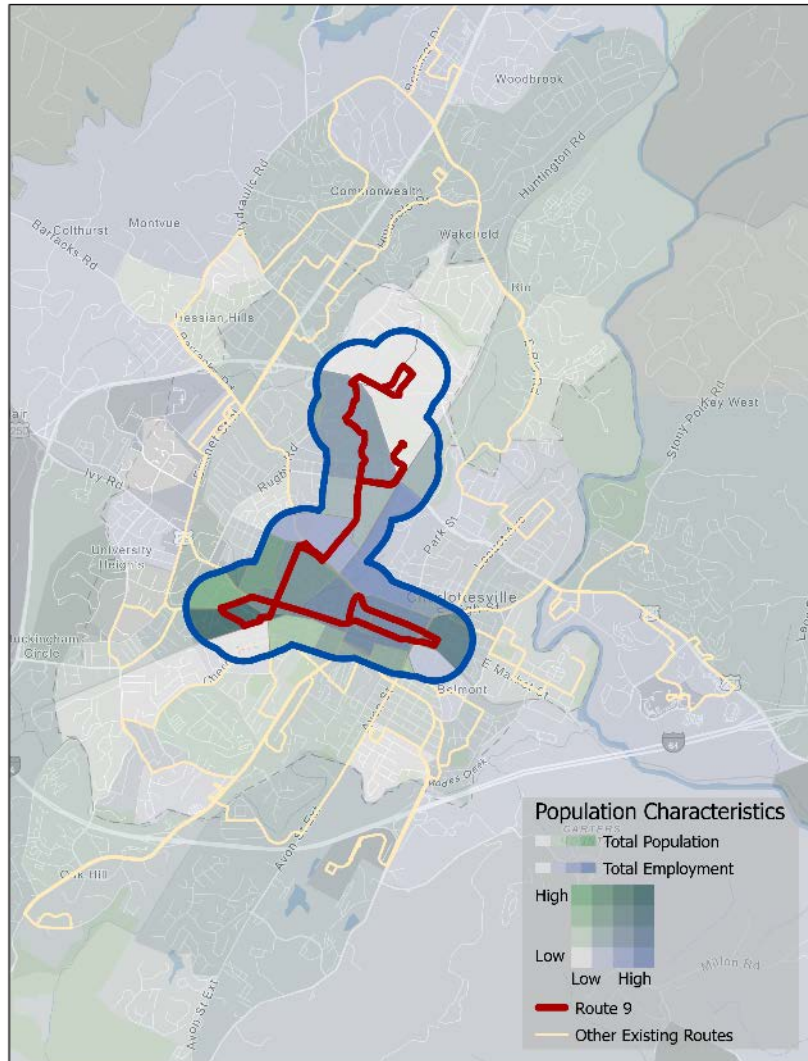
Metric	Weekday Access	
	Existing*	Proposed
General Pop.	13,300	10,800
Minority Pop.	4,300	3,200
Low Income Pop.	1,400	800
Jobs	21,100	21,500

* Pre-pandemic

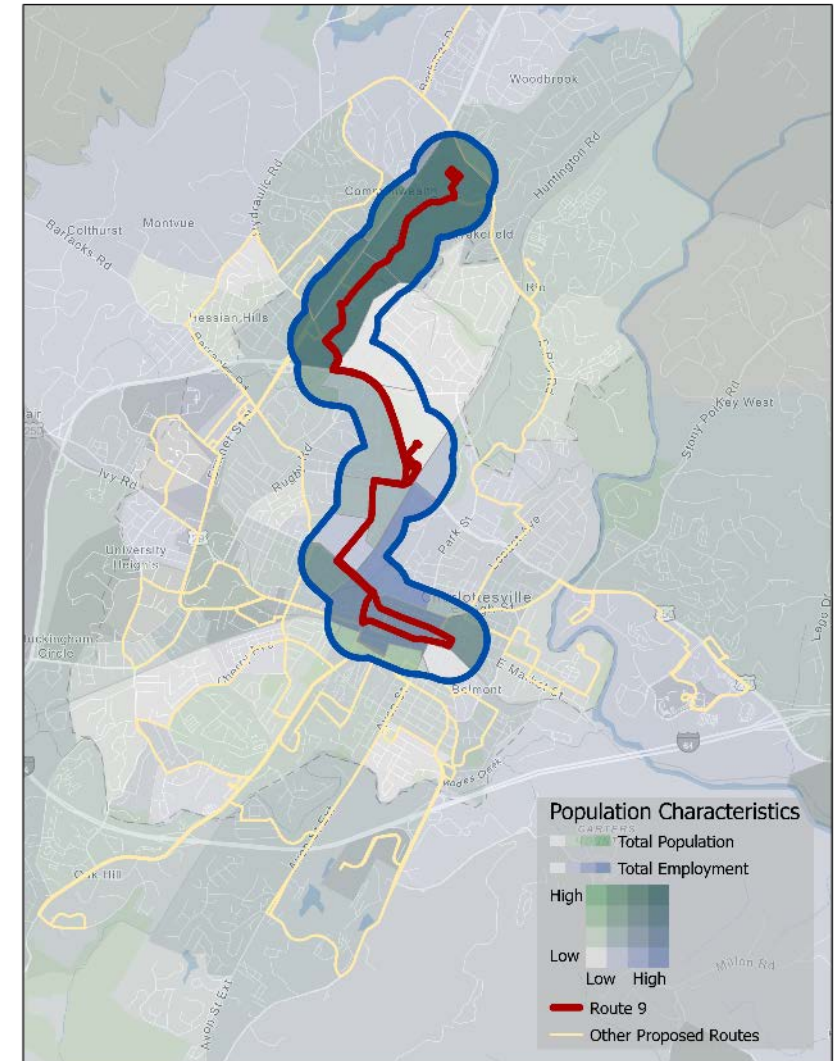
Route 9 Pop. & Empl. Accessibility



Existing



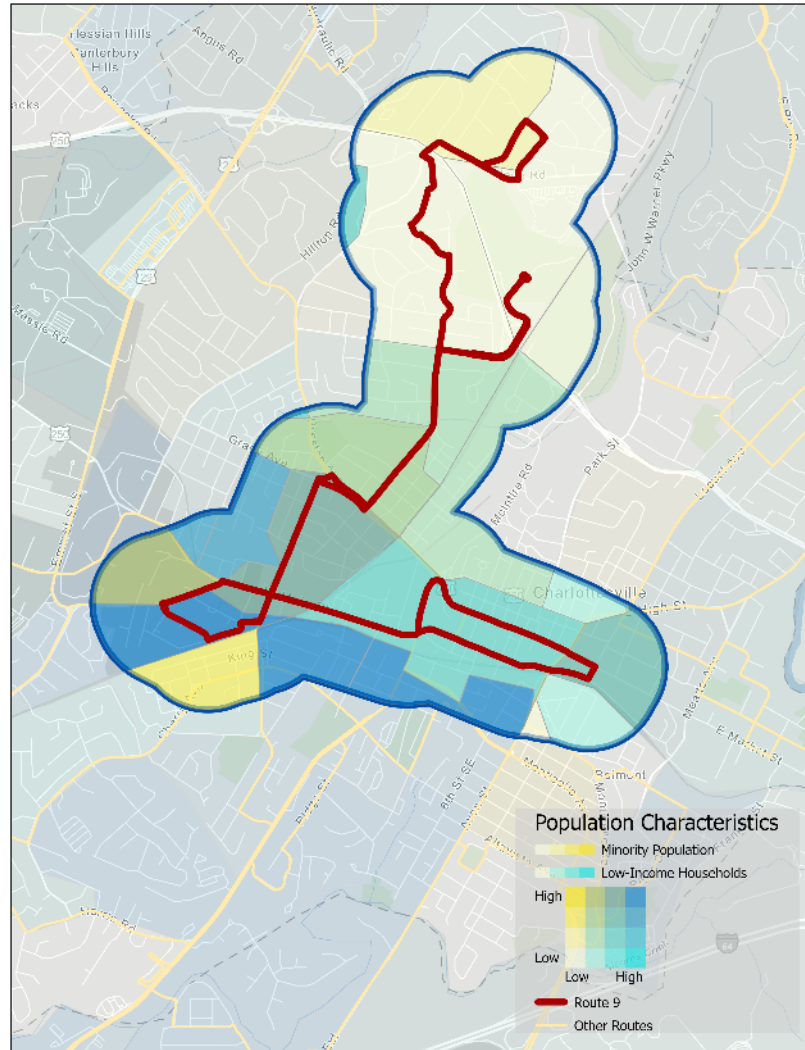
Proposed



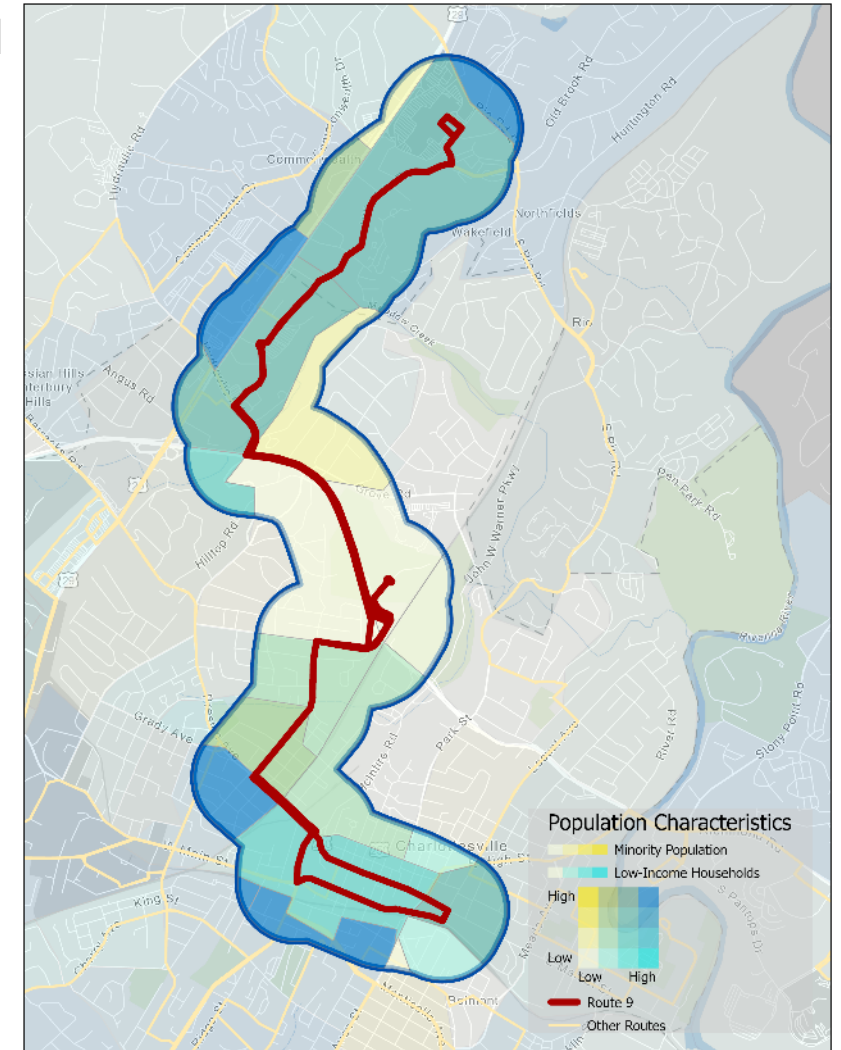
Route 9 Minority & Low-Income Pop. Accessibility



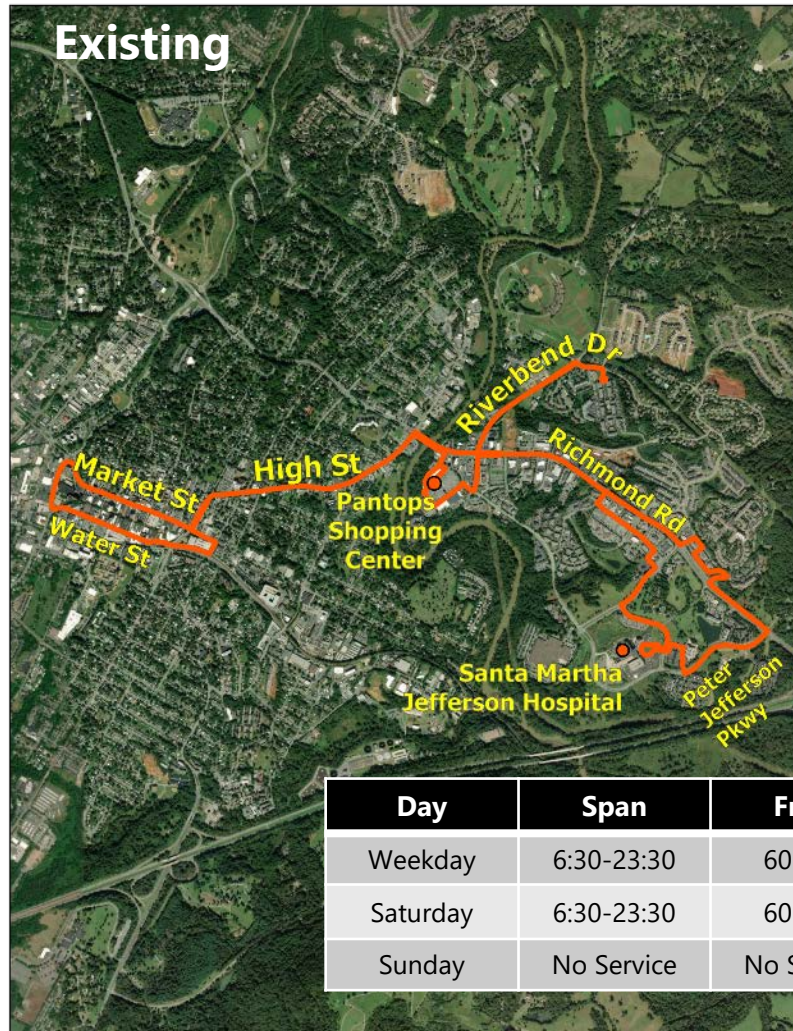
Existing



Proposed



Route 10



Route 10



Proposed Service Modifications

- Eliminate Stony Point segment and replace with Pantops service in both directions of travel (shopping center currently only served in the outbound direction)
- Modify east end of route to provide bi-directional service
- Improve weekday frequencies
- Weekday evening and Saturday frequencies remain at 60 minutes
- Add Sunday service at 60-minute frequencies
- Interline with Route 3 to provide additional recovery time

Existing Ridership: Weekday=214, Saturday=139

Revenue Hours

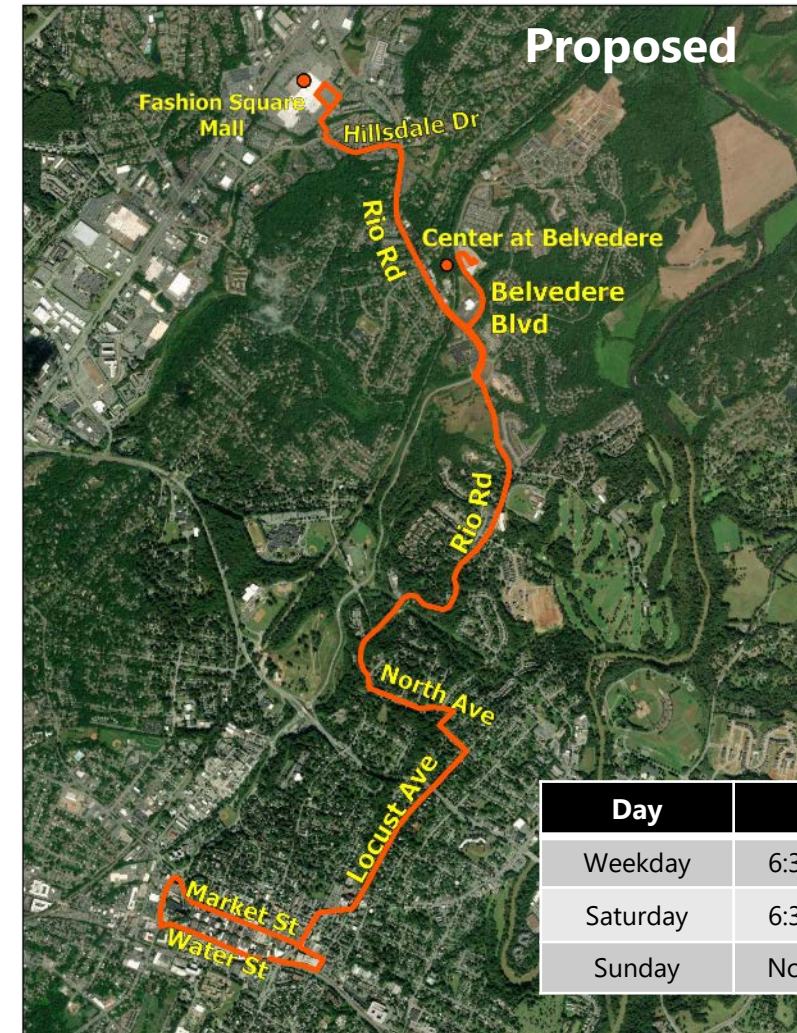
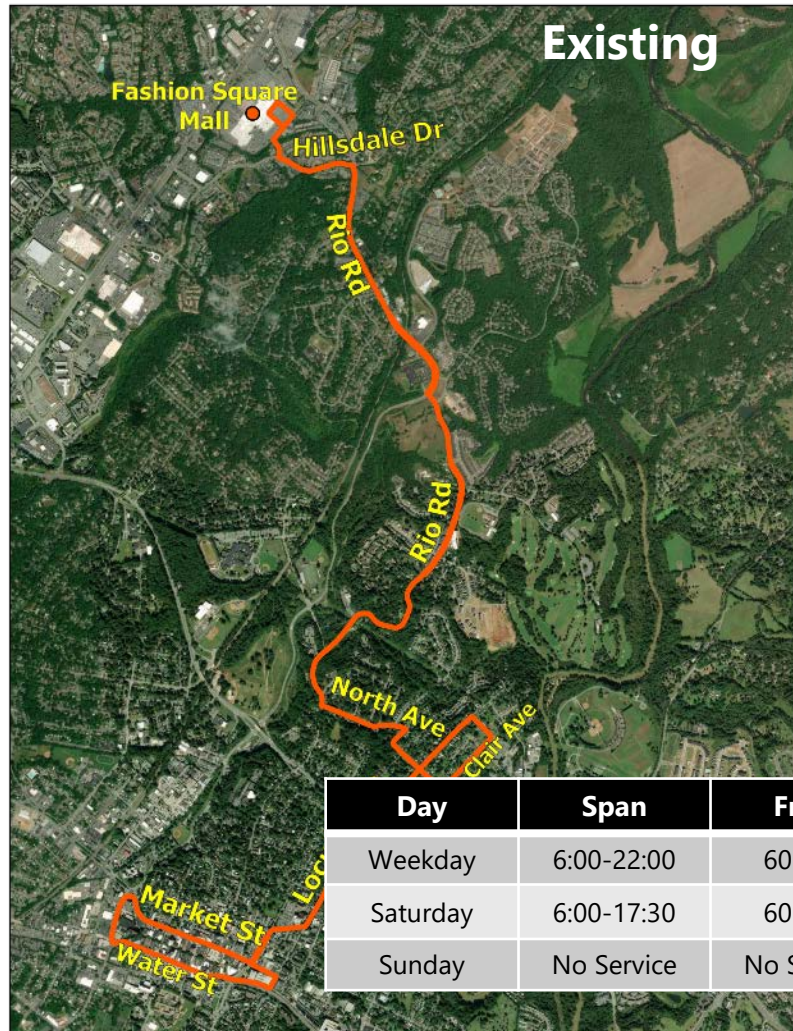
	Existing*	Proposed
Ann. Hours	5,200	9,100
City/County %	50/50	28/72

Accessibility Metrics

Metric	Weekday Access	
	Existing*	Proposed
General Pop.	5,700	5,500
Minority Pop.	1,300	1,200
Low Income Pop.	400	400
Jobs	16,700	16,700

* Pre-pandemic

Route 11



Route 11



Proposed Service Modifications

- Add service to the Center on Rio Road – northbound only (no signal at Rio Road and Belvedere Blvd.
- Eliminate Locust/Pear tree/St. Clair loop to provide time for new Rio Road service
- Continue to operate at 60-minute frequencies, weekdays and Saturdays

Existing Ridership: Weekday=215, Saturday=133

Revenue Hours

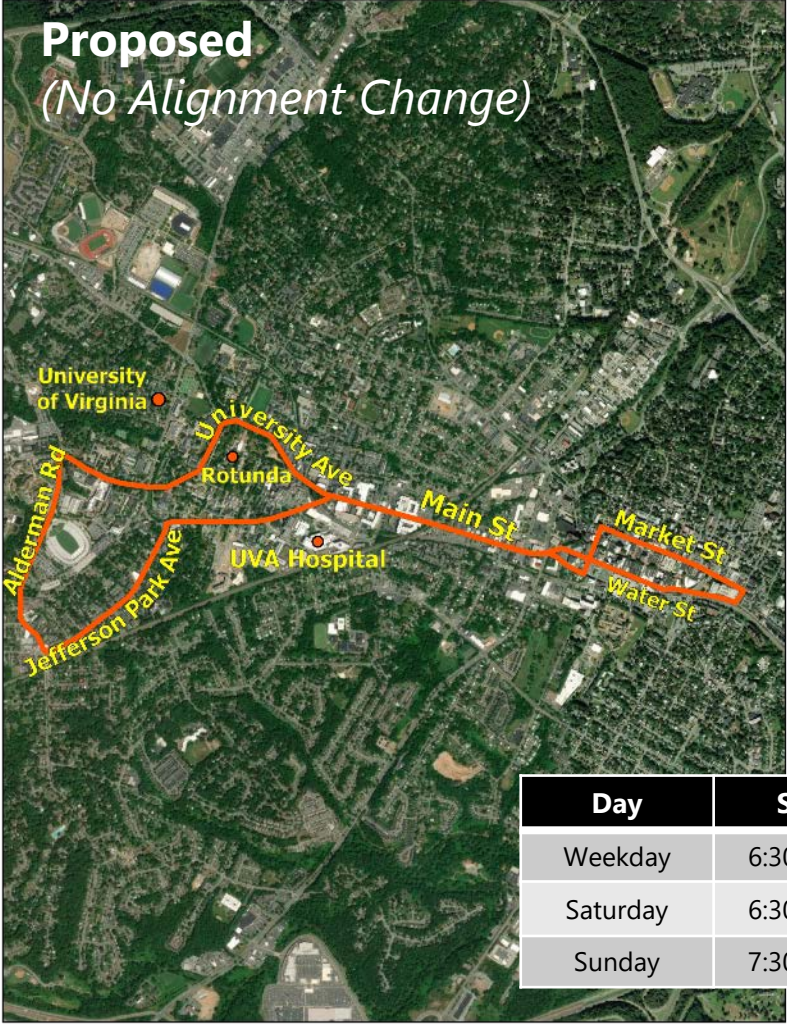
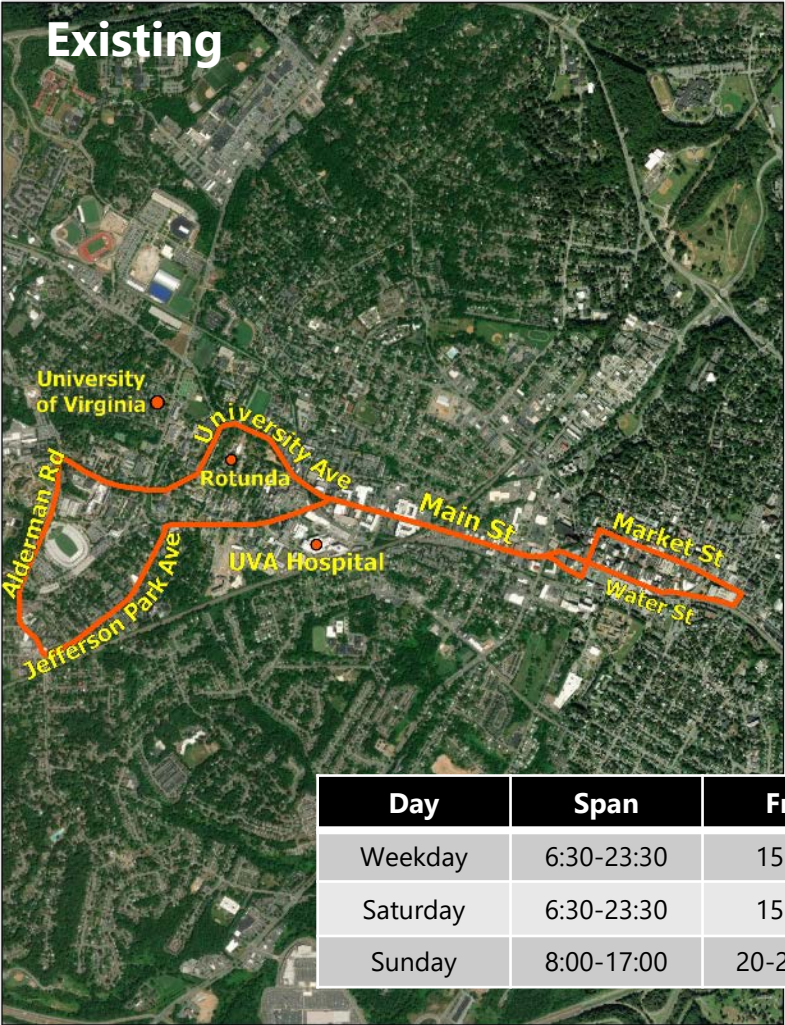
	Existing*	Proposed
Ann. Hours	4,400	4,600
City/County %	48/52	37/63

Accessibility Metrics

Metric	Weekday Access	
	Existing*	Proposed
General Pop.	9,700	9,600
Minority Pop.	2,000	2,000
Low Income Pop.	600	600
Jobs	15,500	15,400

* *Pre-pandemic*

Trolley



Proposed Service Modifications

- Return route alignment to McCormick Rd. in UVA campus
- Return weekday and Saturday service frequencies to 15 minutes
- Sunday service frequencies proposed at 30 minutes

Revenue Hours

	Existing*	Proposed
Ann. Hours	16,700	17,000
City/County %	100/0	100/0

Accessibility Metrics

Metric	Weekday Access	
	Existing*	Proposed
General Pop.	15,800	15,800
Minority Pop.	5,200	5,200
Low Income Pop.	1,600	1,600
Jobs	22,700	22,700

* Pre-pandemic

Existing Ridership: Weekday=2,243, Saturday=1,821, Sunday=375

Service Improvements Not Included



- **Route 6**
 - 30-minute weekday frequency (currently planned at 60-minutes)
- **Route 7**
 - 15-minute all-day weekday frequency along entire route (currently planned at 15-minutes to Barracks Road in peak periods only)
 - 30-minute Sunday frequency (currently planned at 60-minutes)
- **Route 8**
 - 30-minute weekday frequency (currently planned at 60-minutes)
- **Route 10**
 - 30-minute Saturday frequency (currently planned at 60-minutes)

Next Steps



- Authorization/Approval of Service Improvements by City & County
- Conduct Title VI analysis to determine if there are adverse service impacts to minority and low-income populations
- Obtain input from public meetings and incorporate into plan (2 to 3 meetings)
- Finalization of temporary/permanent downtown routing assumptions
- Bus stop location work for roads with new service
- Preparation of new schedules, blocking, run cuts