



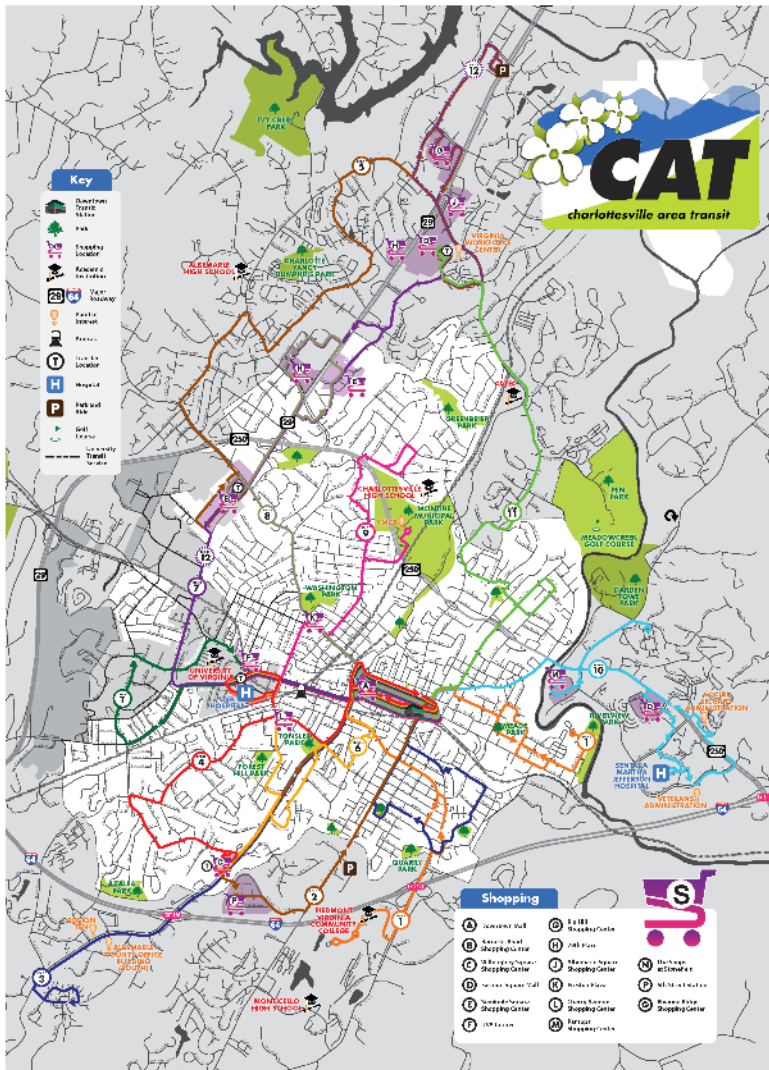
# FY 22 Service Proposals

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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



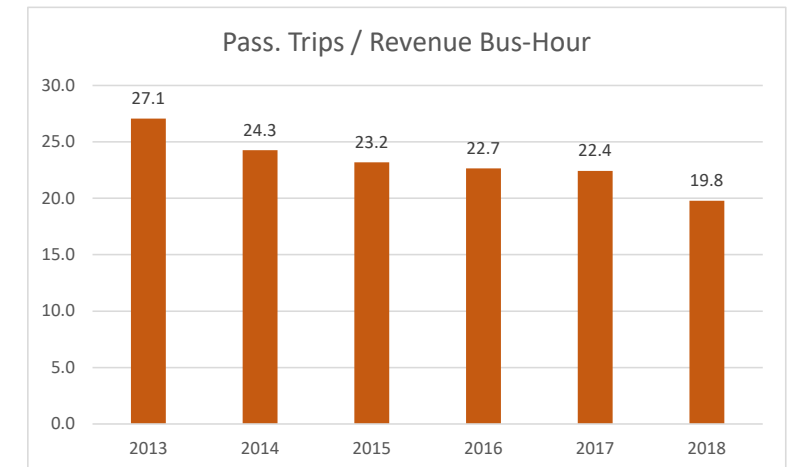
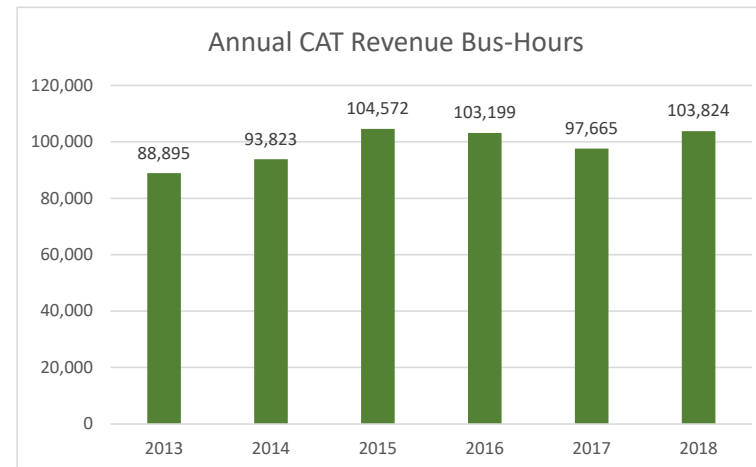
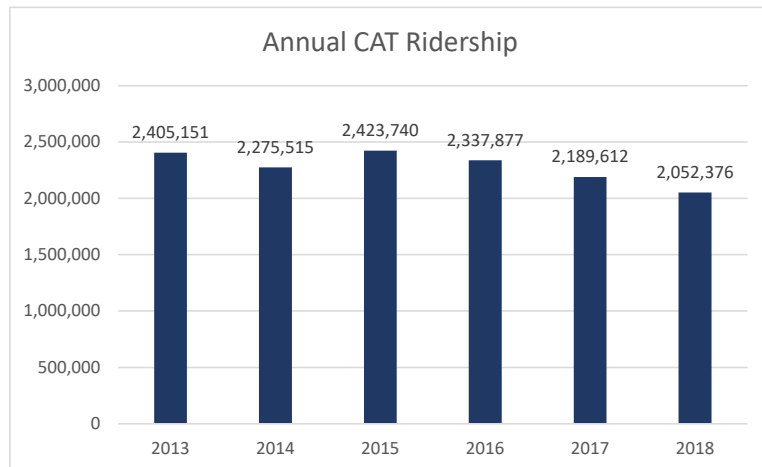
Characteristic	2013	2014	2015	2016	2017	2018
<b>Ann. Ridership</b>	2,405,151	2,275,515	2,423,740	2,337,877	2,189,612	2,052,376
<b>Ann. Rev. Hours</b>	88,895	93,823	104,572	103,199	97,665	103,824
<b>Ann. O&amp;M Cost</b>	\$6,614,851	\$7,125,489	\$7,188,657	\$6,998,446	\$7,421,700	\$7,915,506
<b>Riders/Rev.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

Source: National Transit Database Reports

# Historical Trends

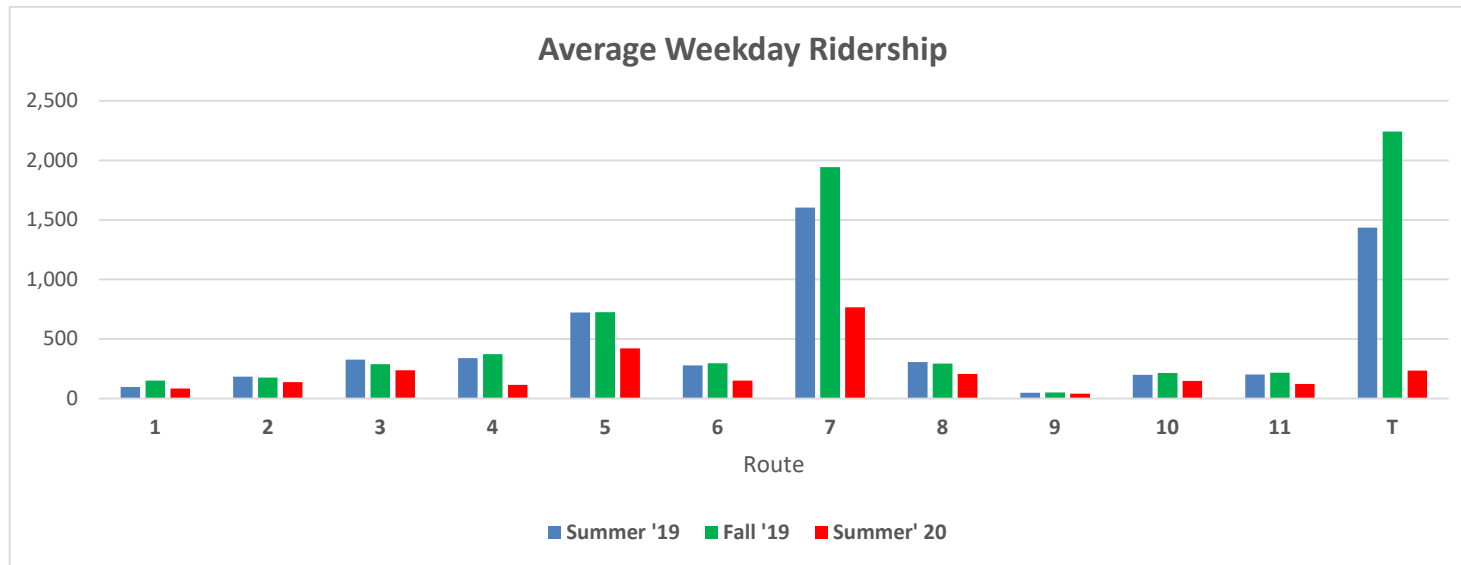


- Annual Ridership has been on a downward trajectory (-15% over 5 years)
- Annual bus-hours have averaged over 100,000 since 2015 (+17% over 5 years)
- Result has been declining service productivity (-27% over 5 years)





# Recent Route Trends: Weekday

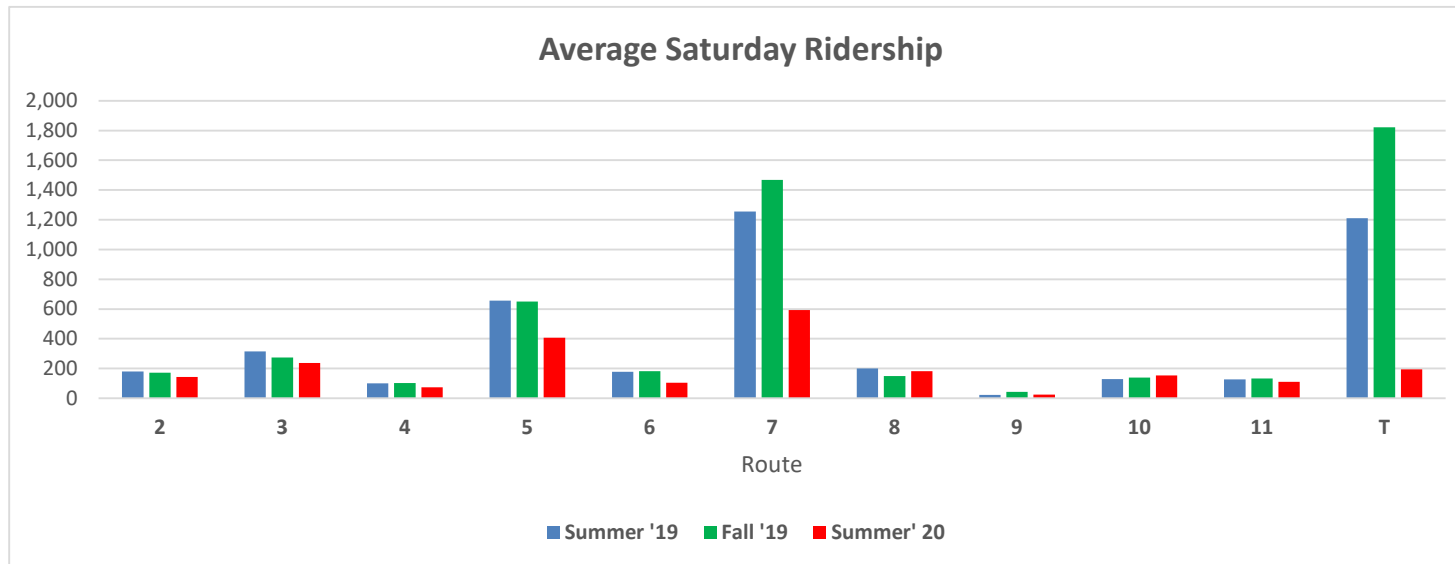


- Summer 2019 Ridership = **5,734**
- Fall 2019 System Ridership = **6,966**
- Summer 2020 Ridership = **2,650**

- 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

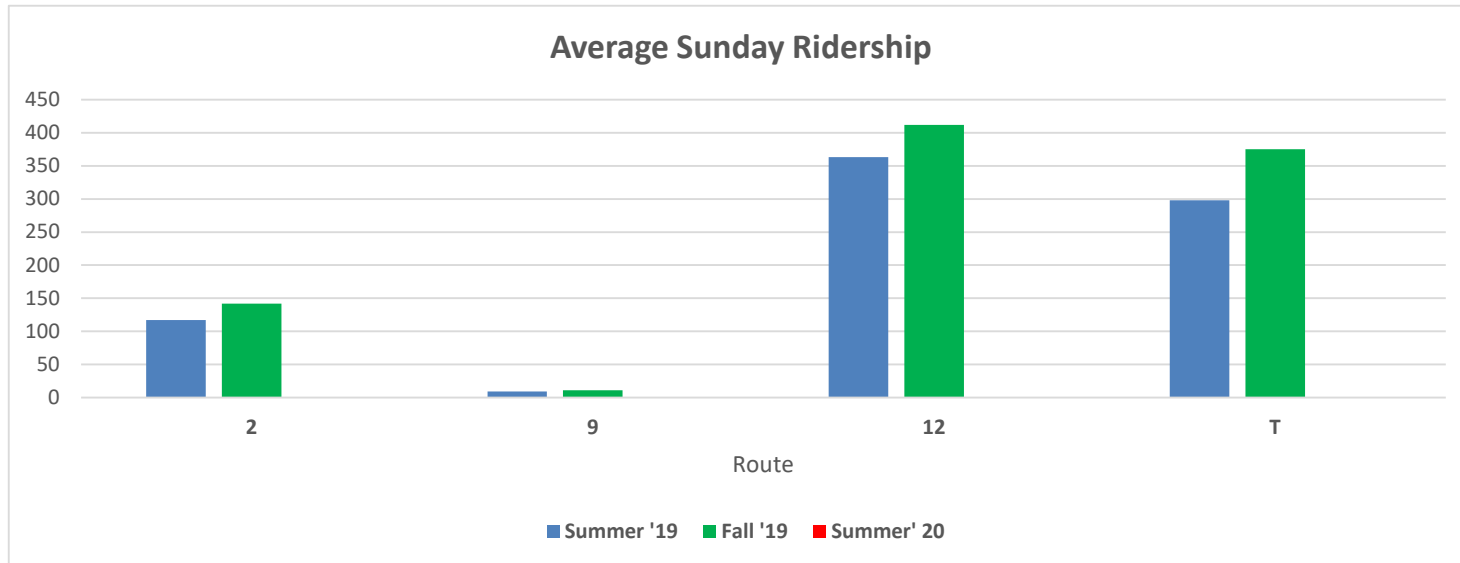
# Recent Route Trends: Saturday



- 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 1<sup>st</sup> 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)
  - 5<sup>th</sup> 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



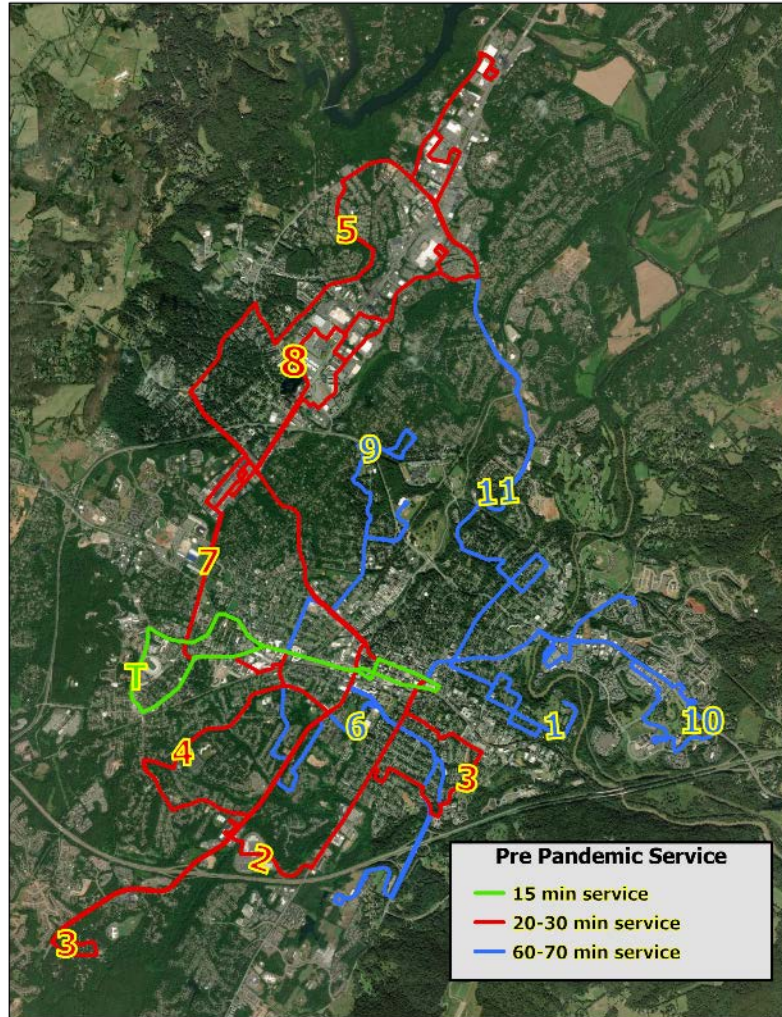
- Downtown staging location modified during reconstruction of Belmont (9<sup>th</sup> Street) Bridge
  - loop via High Street (EB) and Market Street (WB)
  - Bus staging between 6<sup>th</sup> Street and 8<sup>th</sup> Street
  - Routes from east return (outbound) to High Street via 7<sup>th</sup> Street
- 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



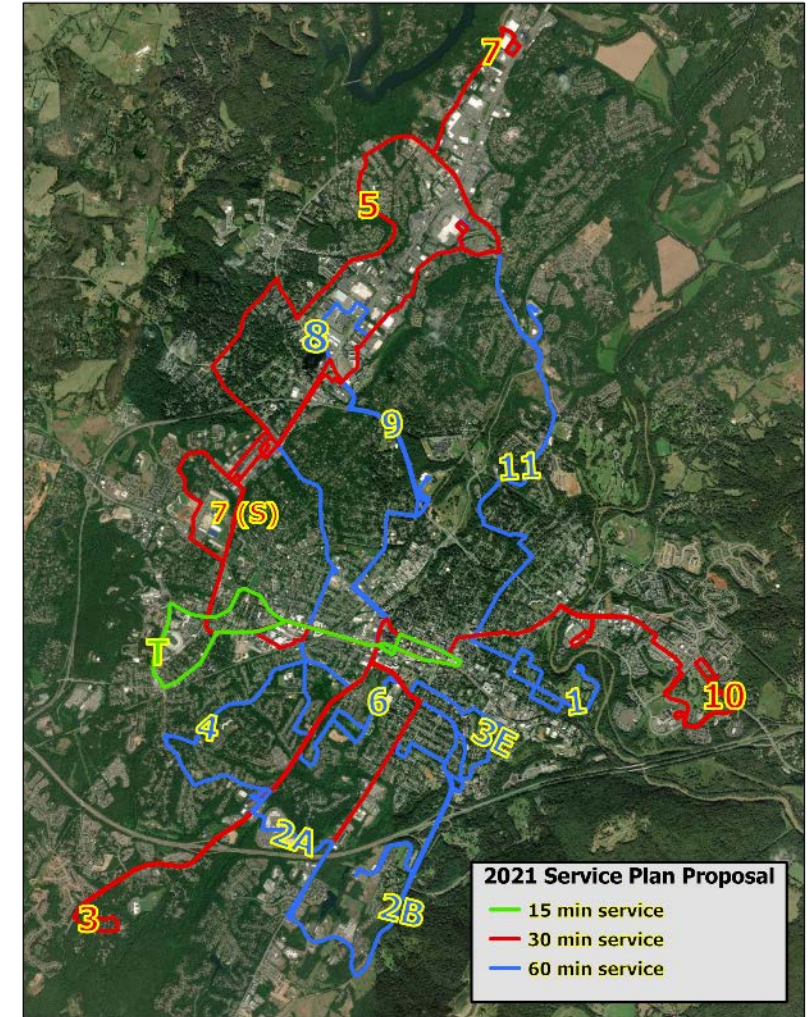
# Proposed Network: Peak Period



**Existing Network Map**  
Weekday Service Frequencies



**FY22 Proposed Network Map**  
Weekday Service Frequencies

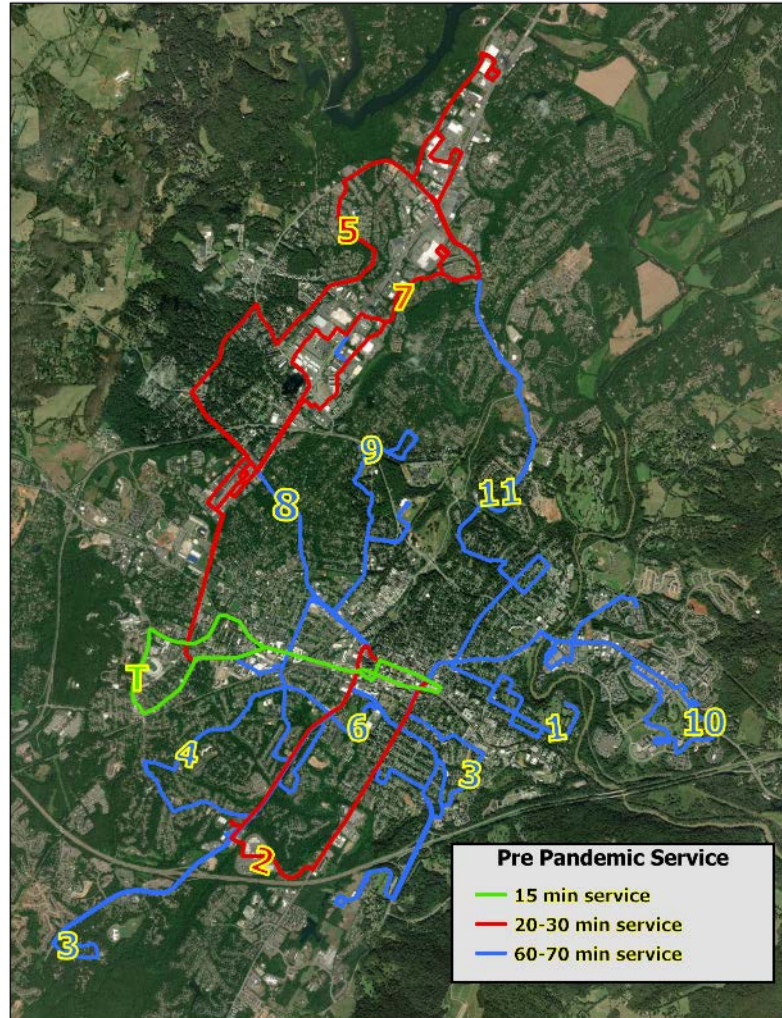




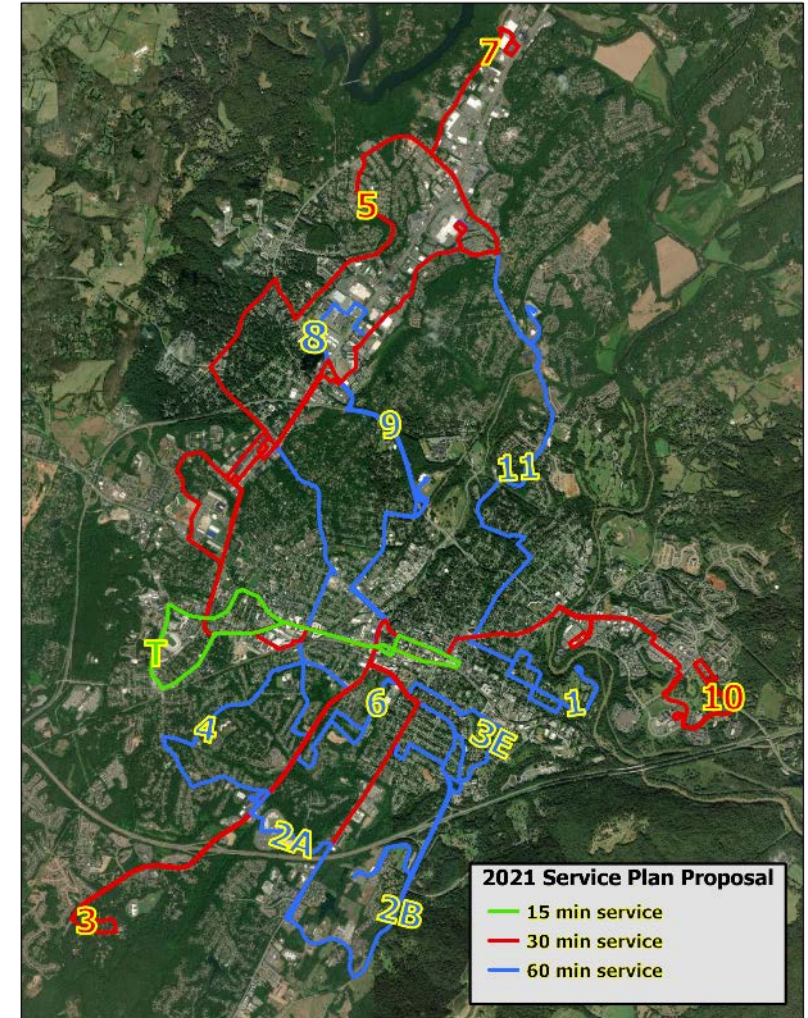
# Proposed Network: Midday Period



**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 1<sup>st</sup> 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
<b>TOTALS</b>		<b>126,800</b>	<b>35%</b>	<b>44,675</b>	<b>\$3,574,447</b>	<b>65%</b>	<b>82,125</b>	<b>\$6,570,000</b>	<b>\$10,145,268</b>

# Transit Network Accessibility

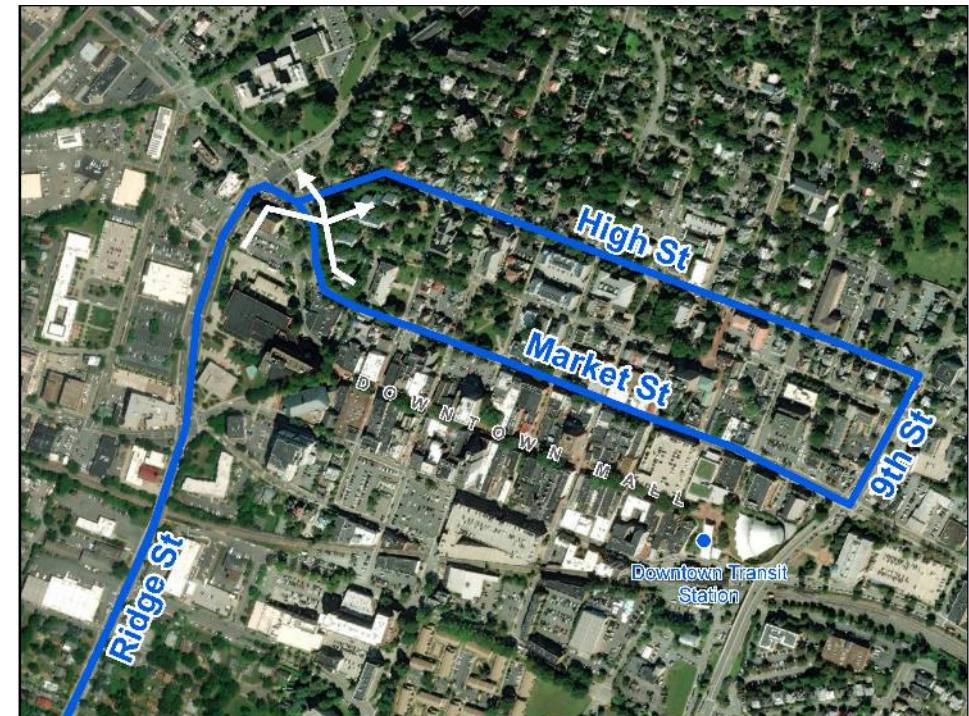


- **30-minute or better weekday service**
  - Overall population accessibility = +20.1%
  - Minority population accessibility = +16.4%
  - Low-income population accessibility = +15.2%
- **Population accessibility improvements:**
  - Weekdays = +1.7%
  - Saturdays = +5.0%
  - Sundays = +10.4%
- **Job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

# Temporary Downtown Routing

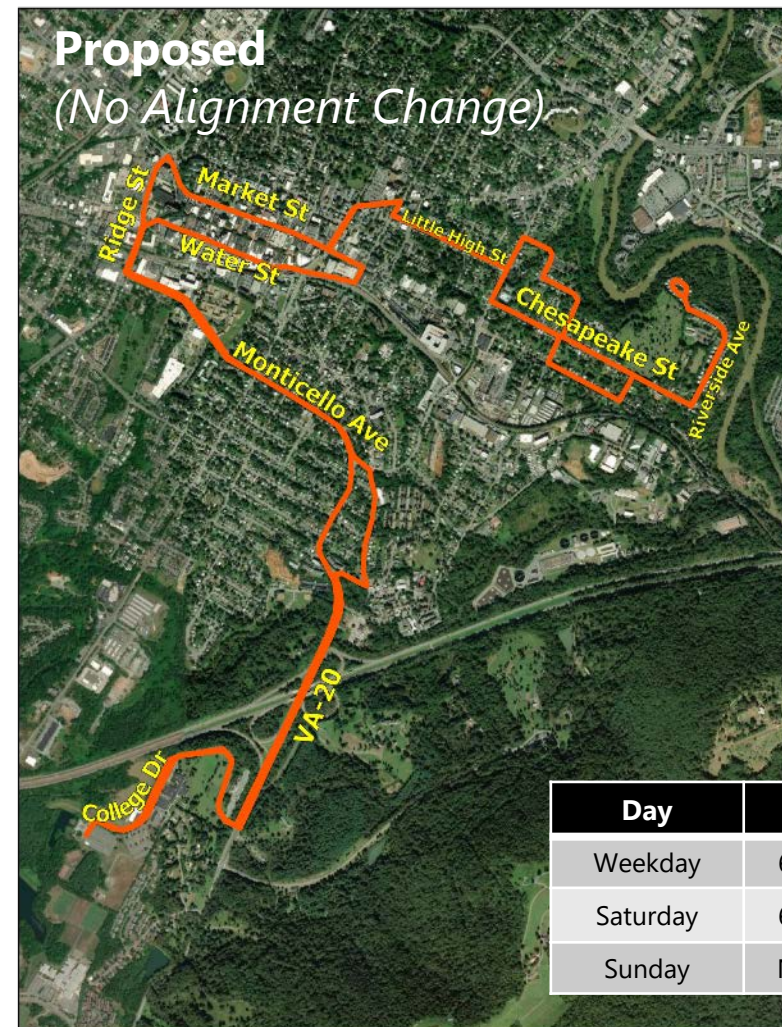
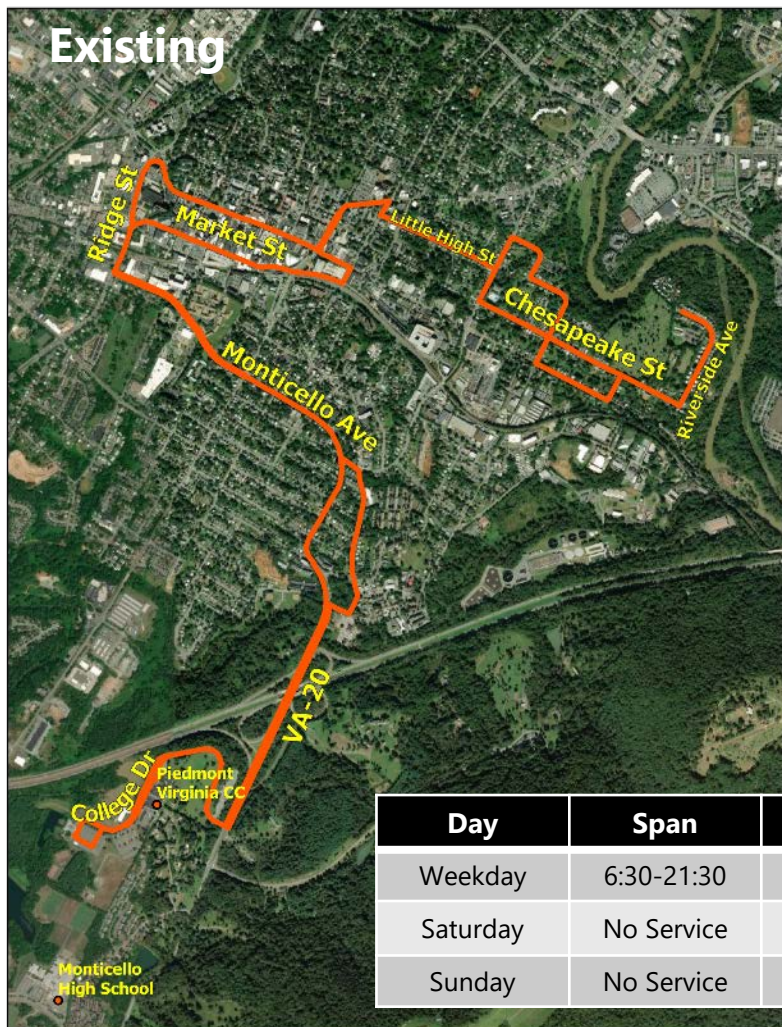


- Temporary need to modify routing during portion of FY 22 while Ninth Street Bridge is reconstructed
- Buses will travel east on High Street, west on Market Street
- Bus staging on Market Street between 6<sup>th</sup> and 8<sup>th</sup> Streets





# 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

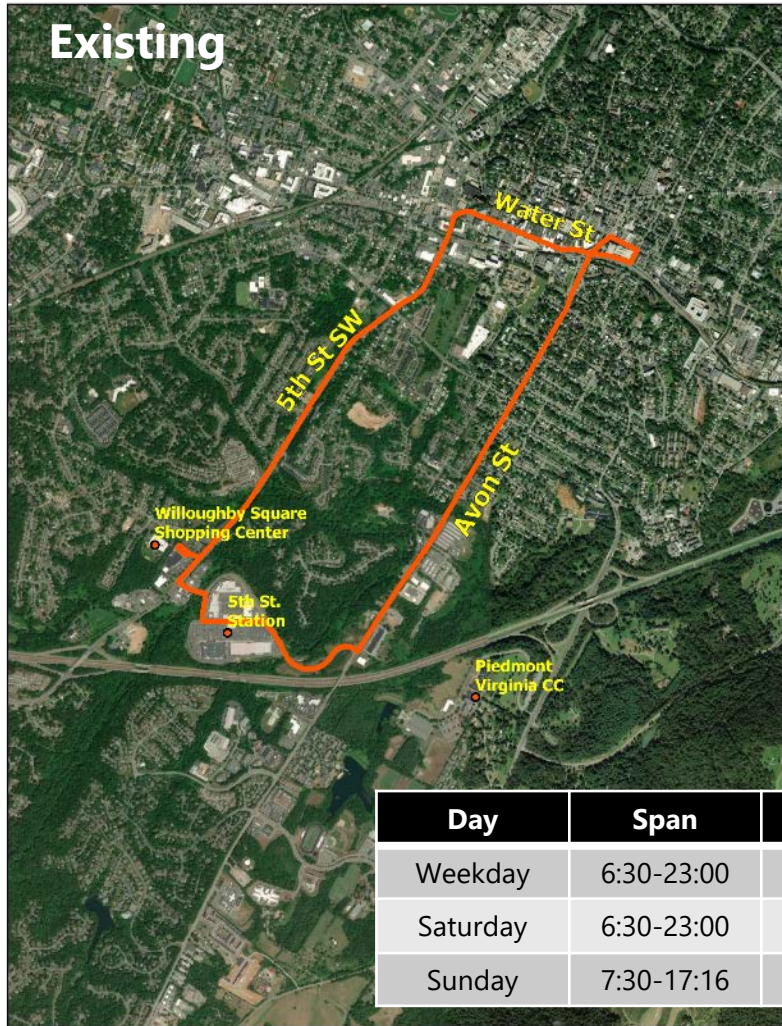
Metric	Weekday Access	
	Existing*	Proposed
General Pop.	9,800	9,800
Minority Pop.	2,400	2,400
Low Income Pop.	800	800
Jobs	15,500	15,500

\* Pre-pandemic

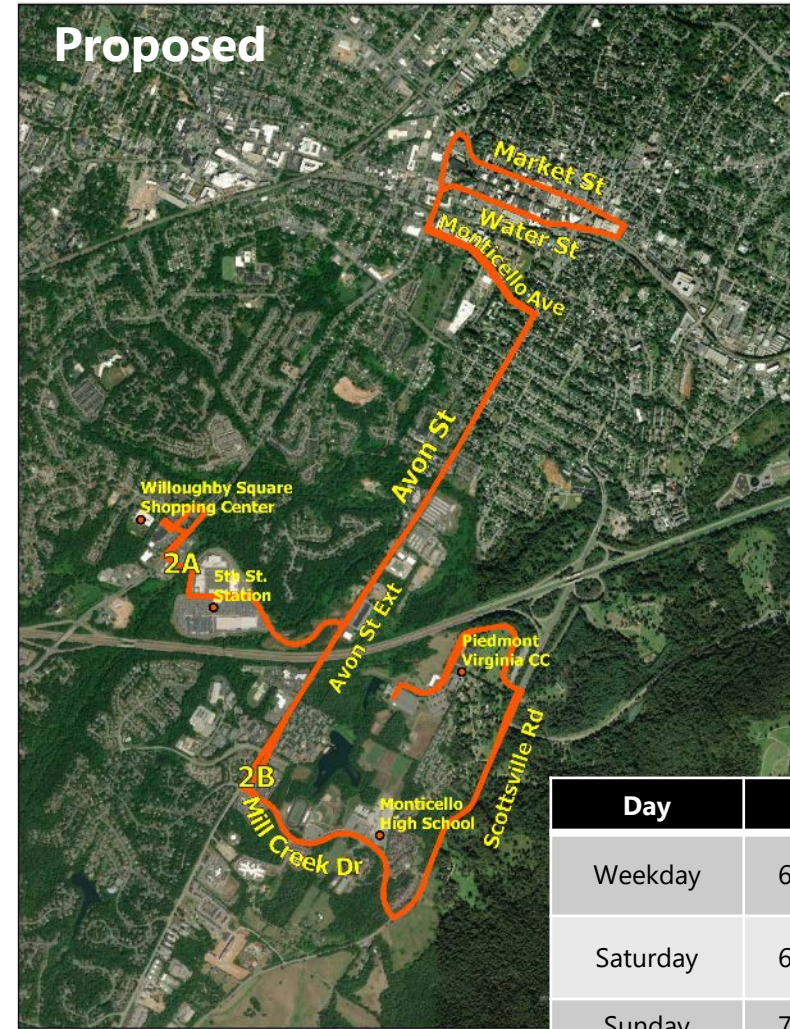
Existing Ridership: Weekday=149



# Routes 2A and 2B



\* One Direction Service



# 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 5<sup>th</sup> 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

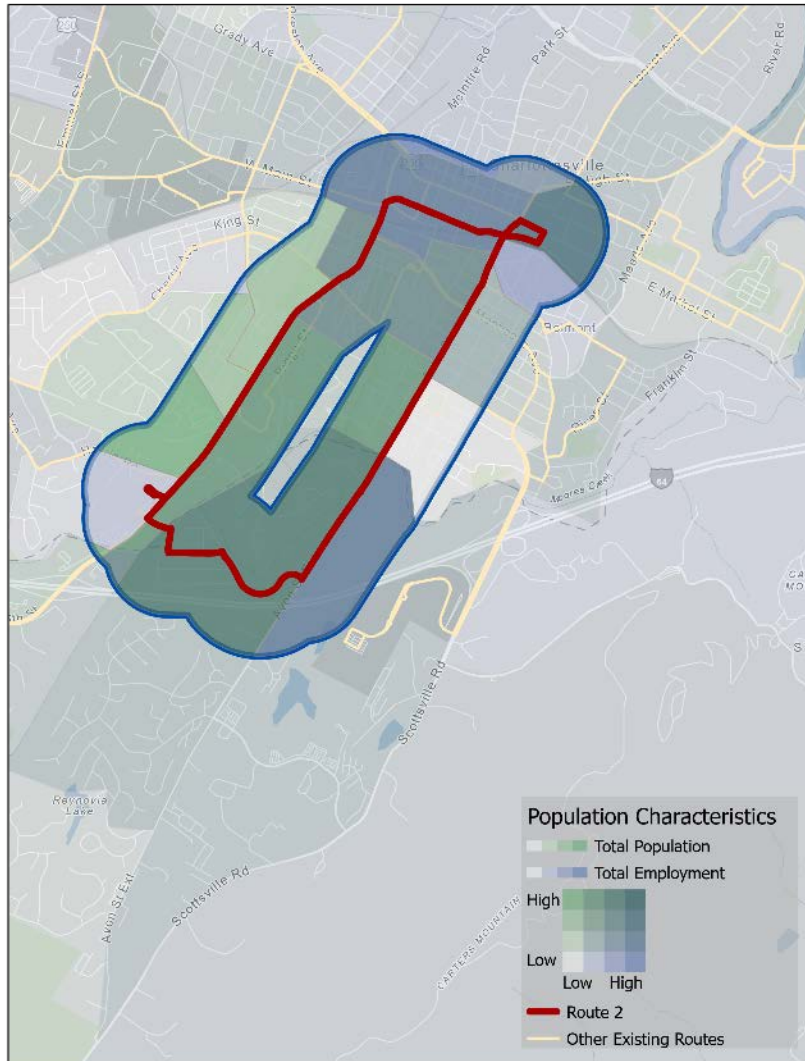
\* Pre-pandemic



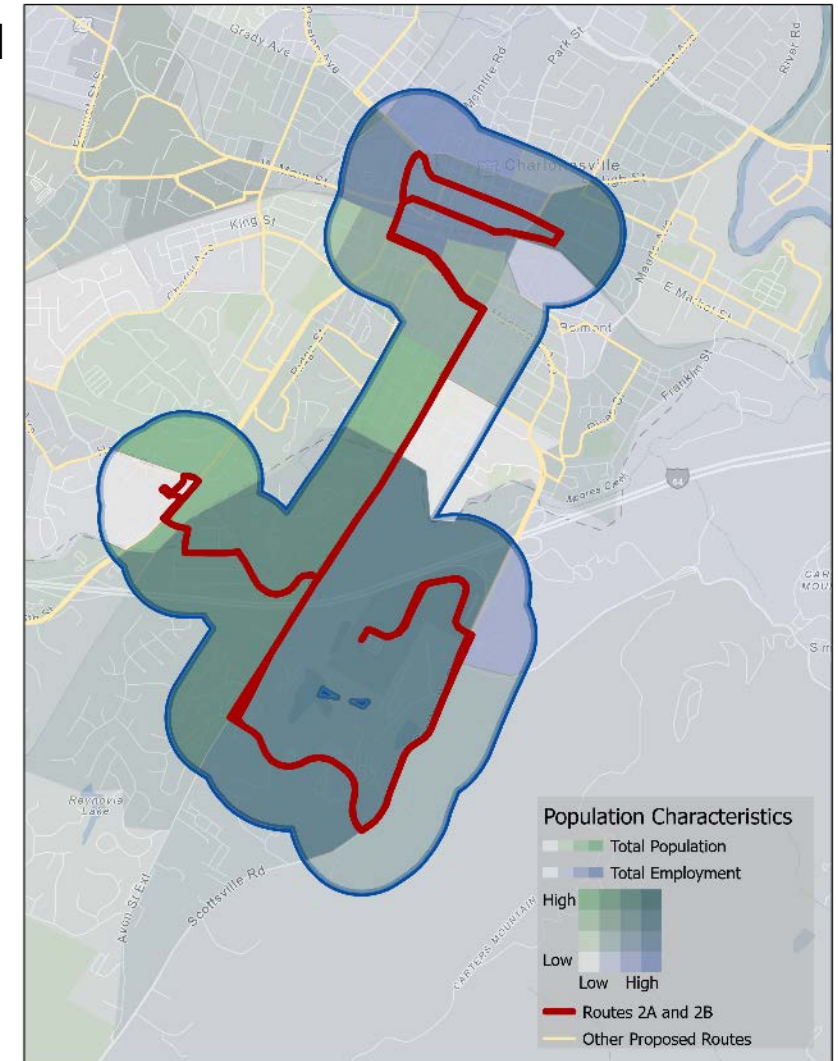
# Routes 2A and 2B Pop. & Empl. Accessibility



Existing



Proposed

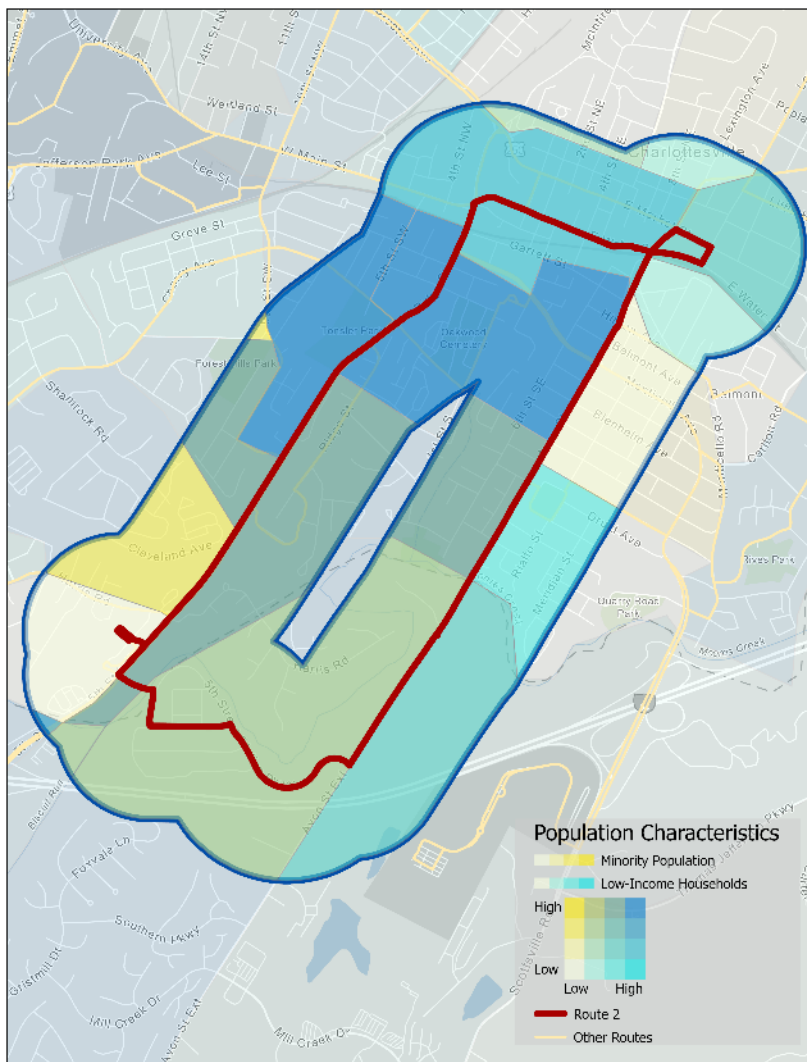




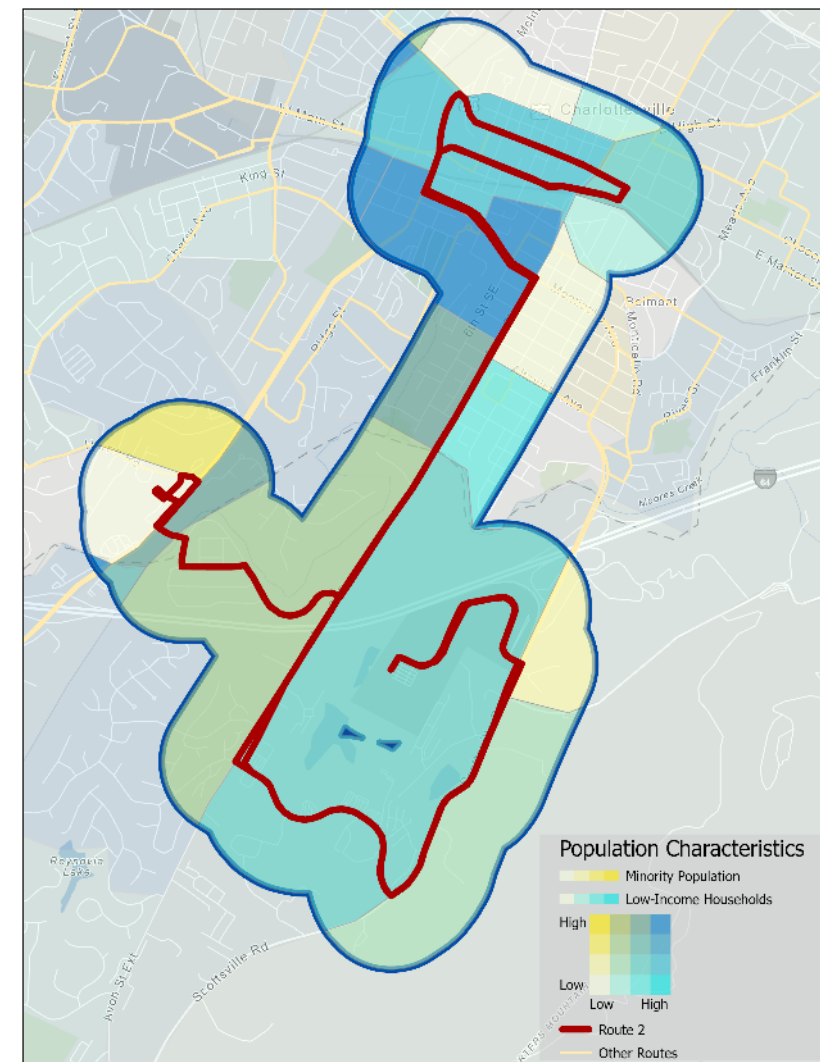
# Routes 2A and 2B Minority & Low-Income Pop. Accessibility



Existing



Proposed

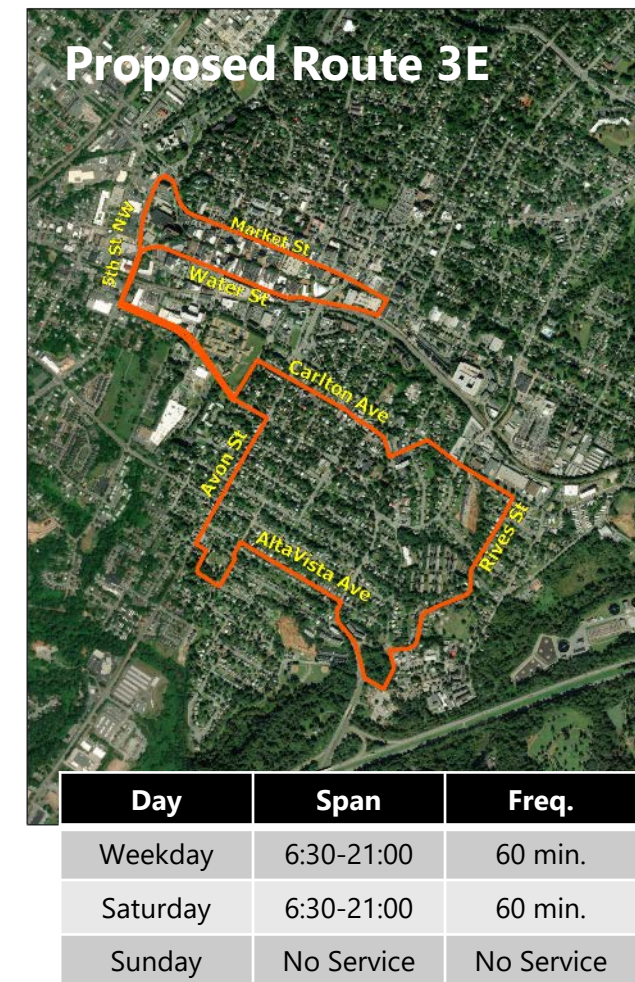
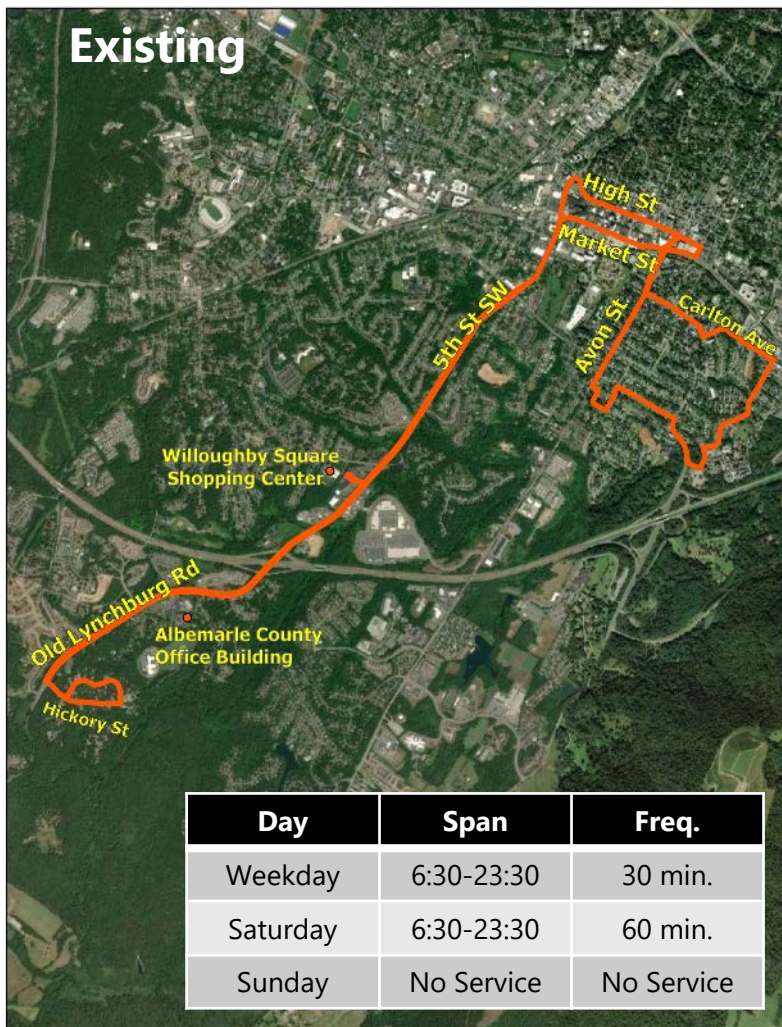




# Routes 3 and 3E



## 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

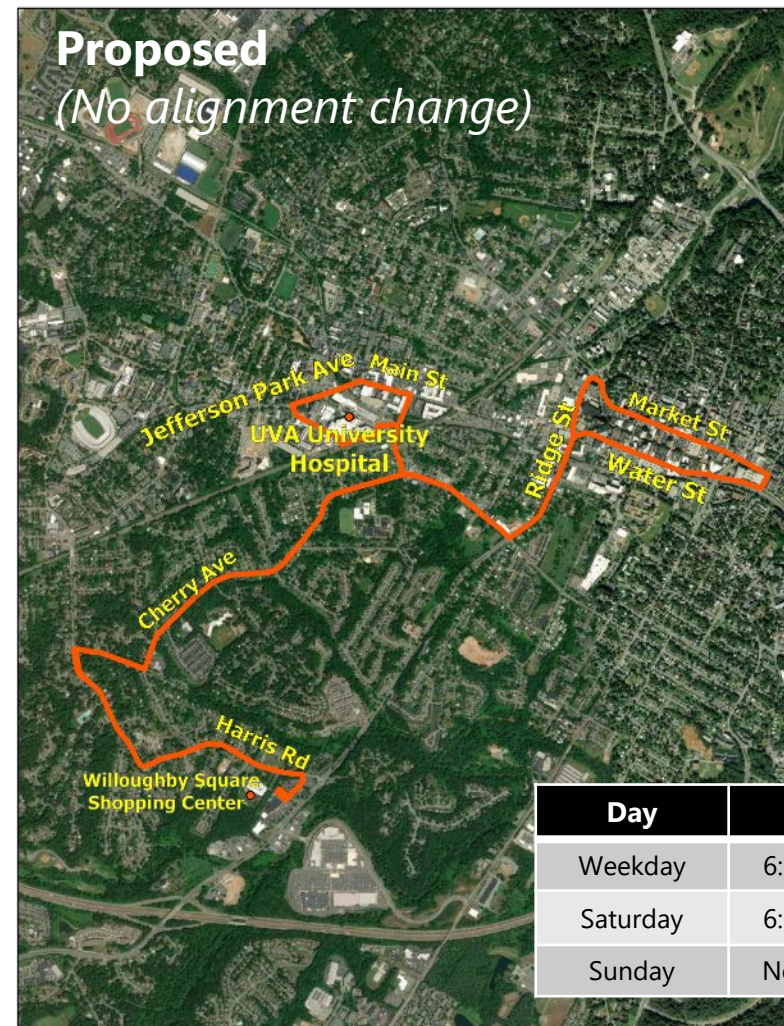
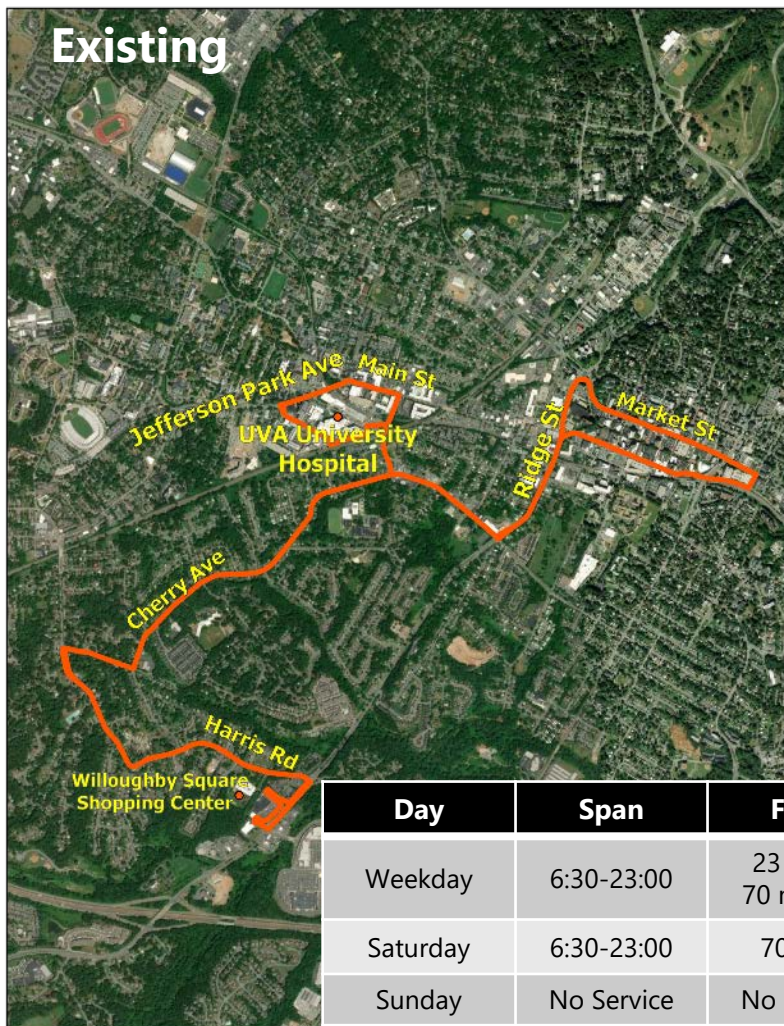
## Accessibility Metrics

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

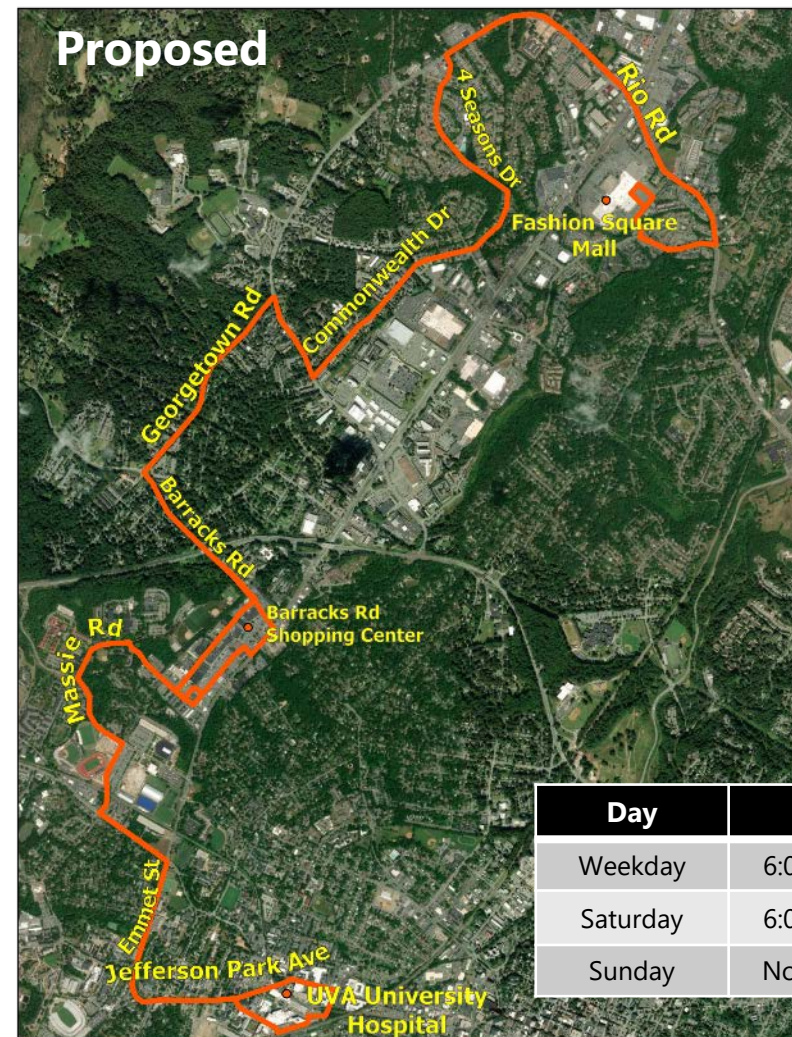
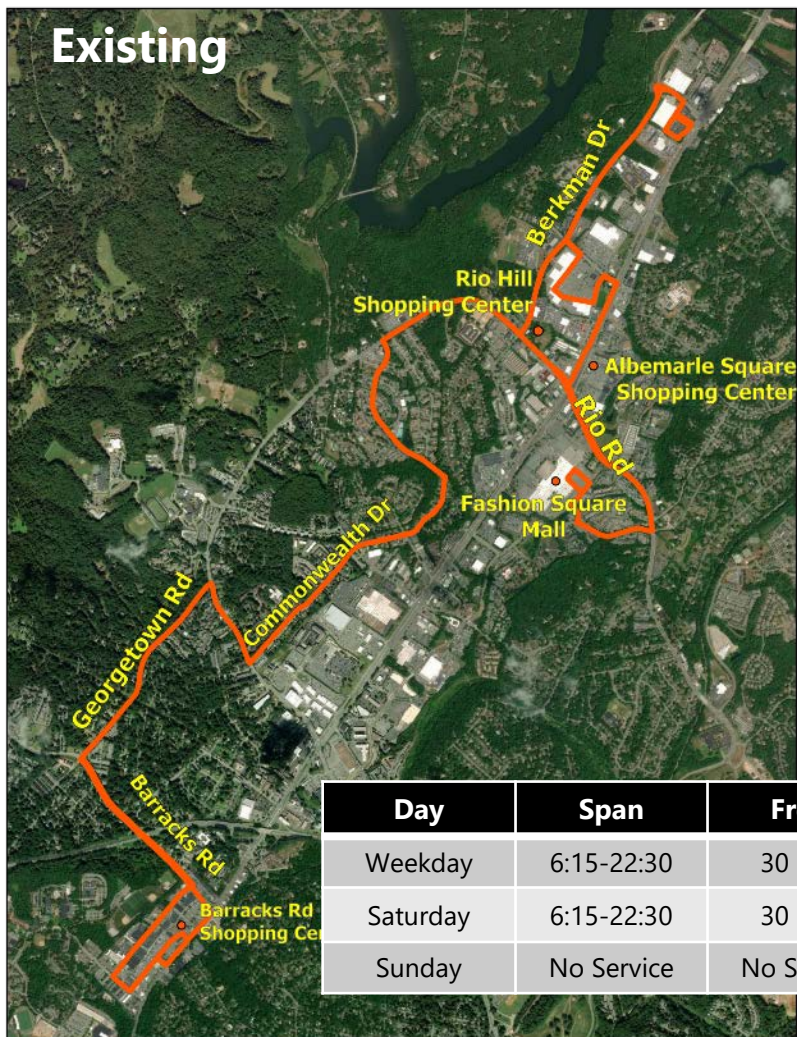
## Accessibility Metrics

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

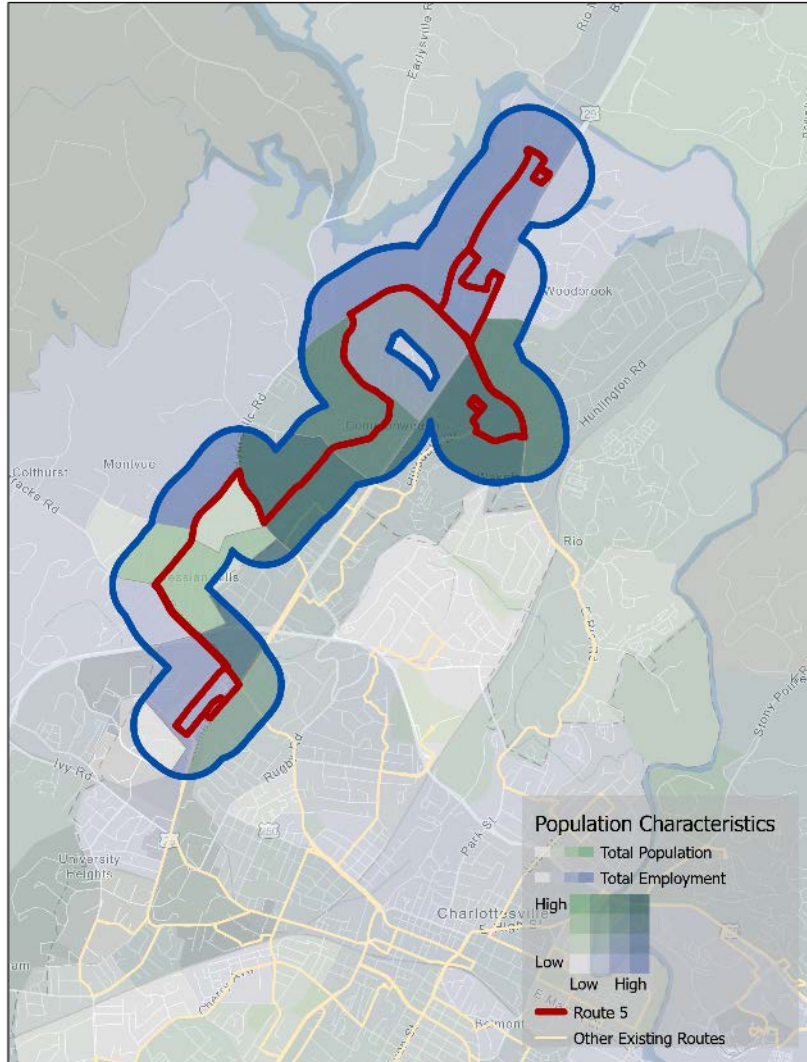
\* Pre-pandemic



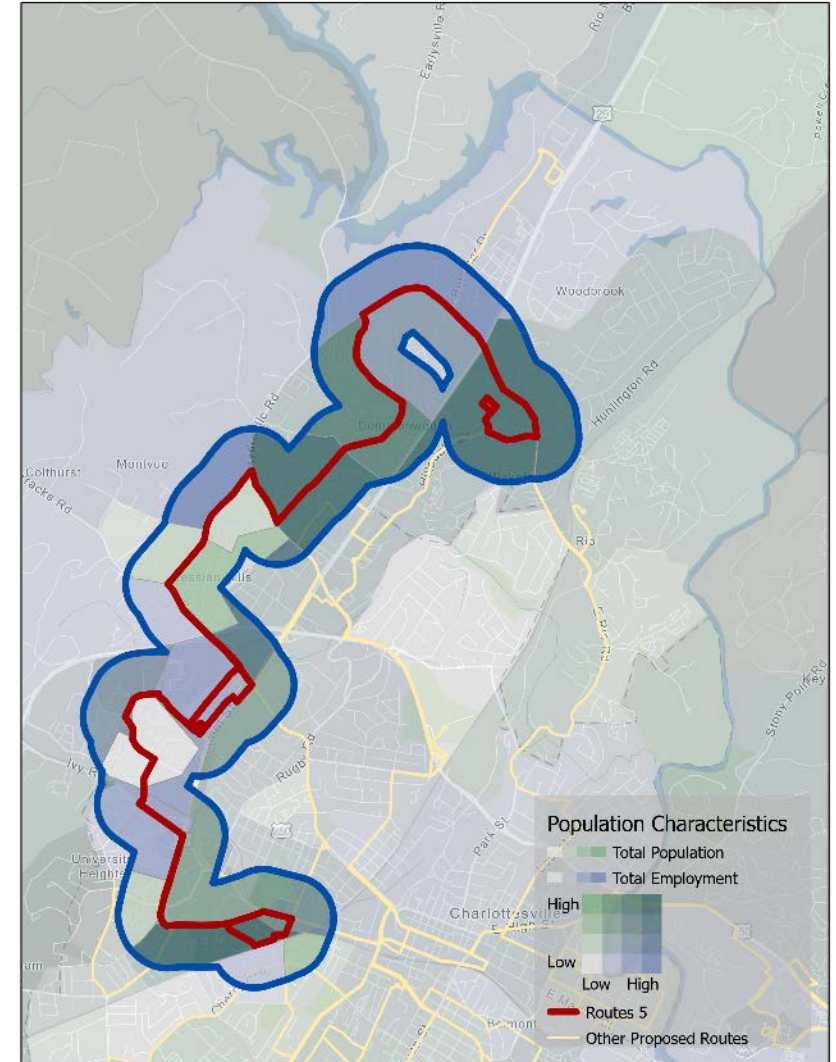
# Route 5 Pop. & Empl. Accessibility



Existing



Proposed

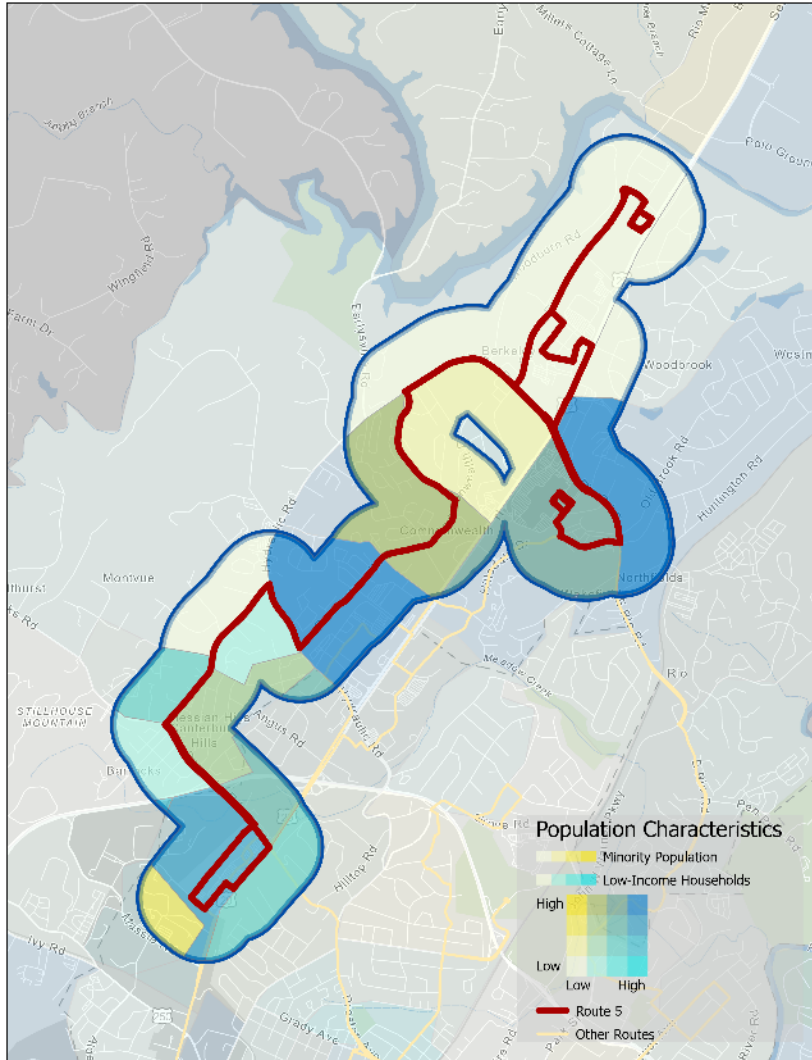




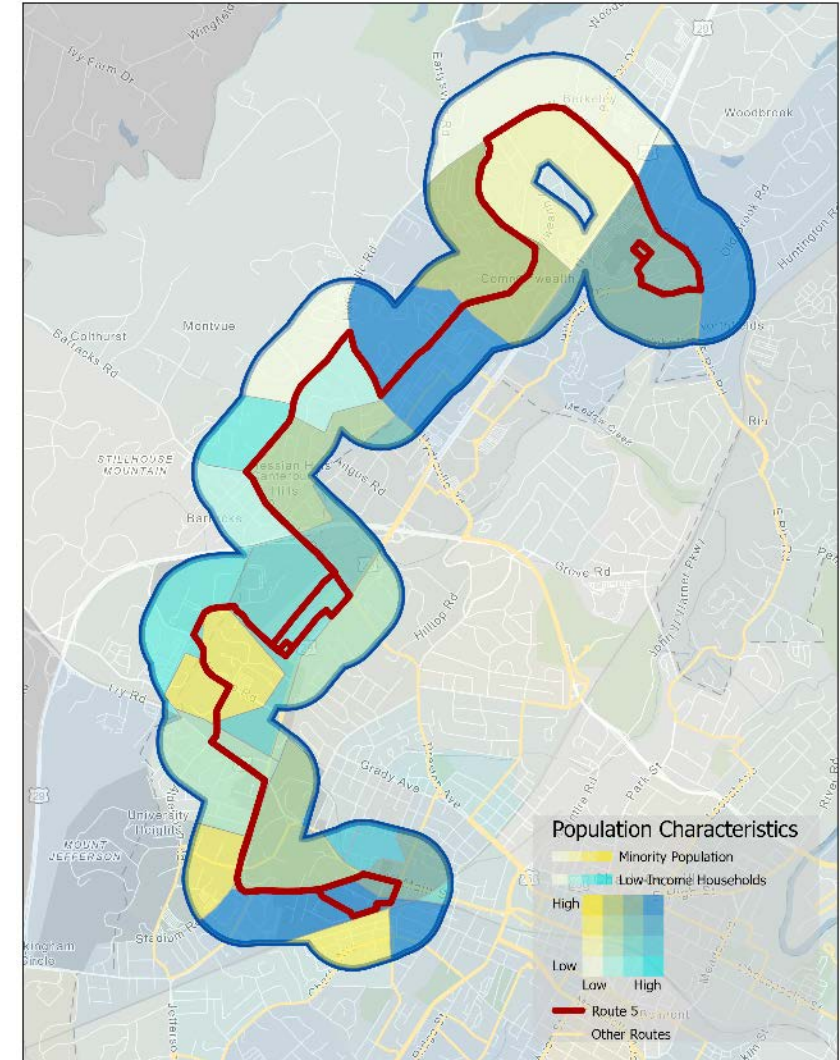
# Route 5 Minority & Low-Income Pop. Accessibility



Existing

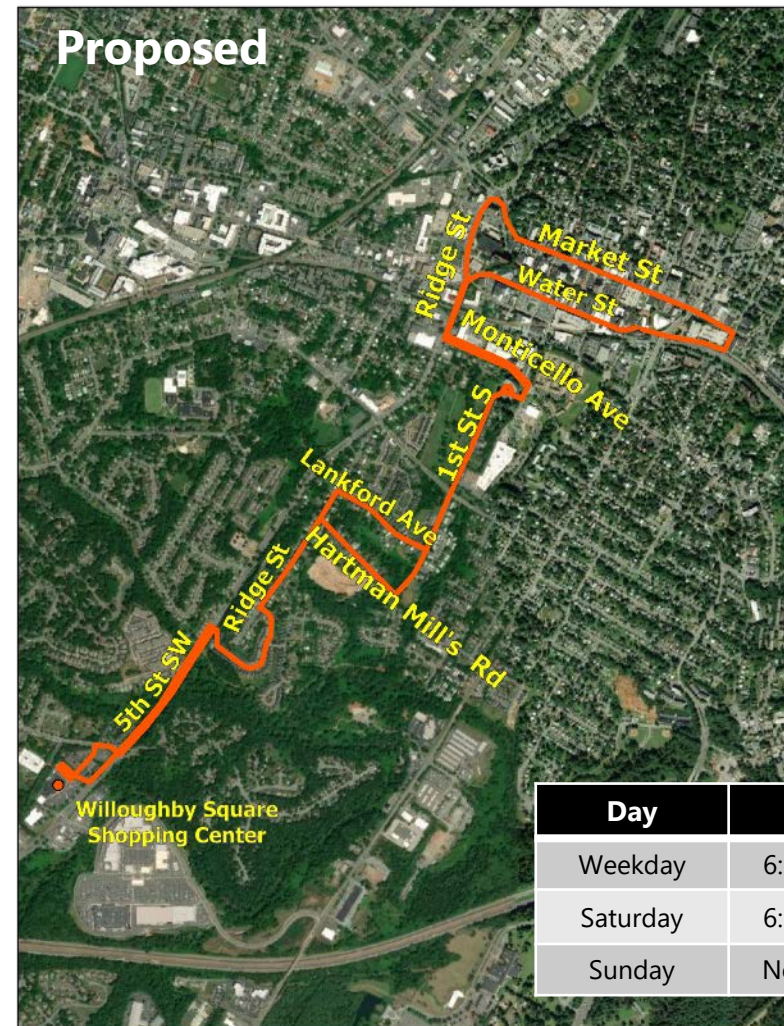
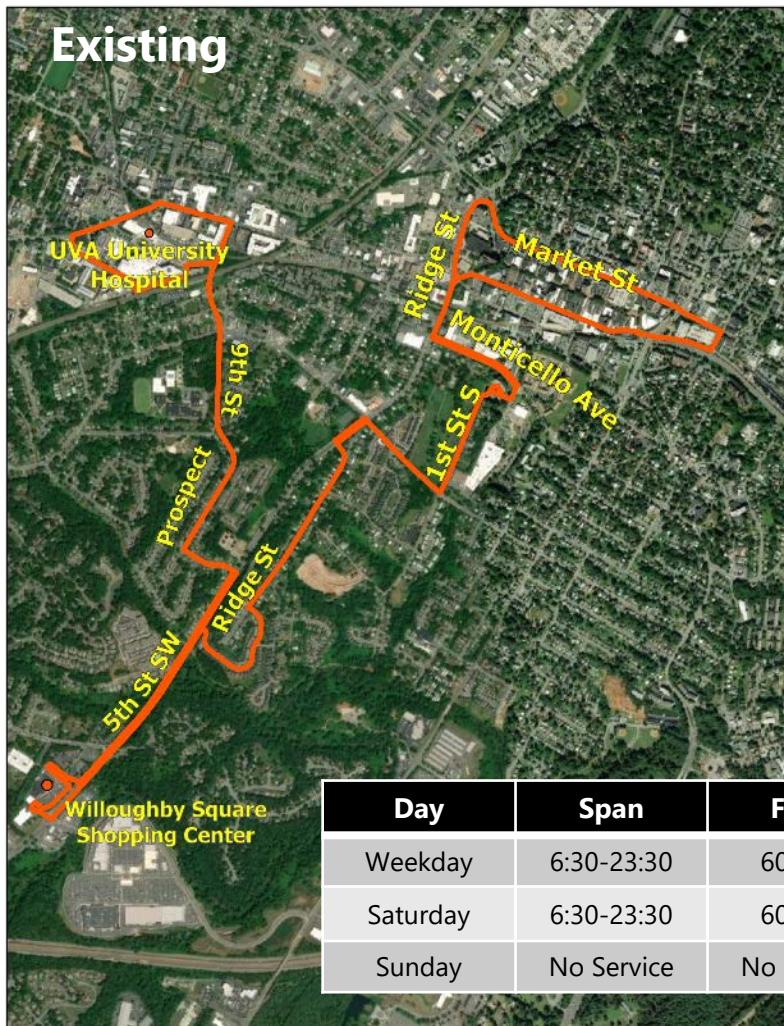


Proposed





# Route 6



# Route 6



## Proposed Service Modifications

- Modify route alignment to use 1<sup>st</sup> 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

## 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

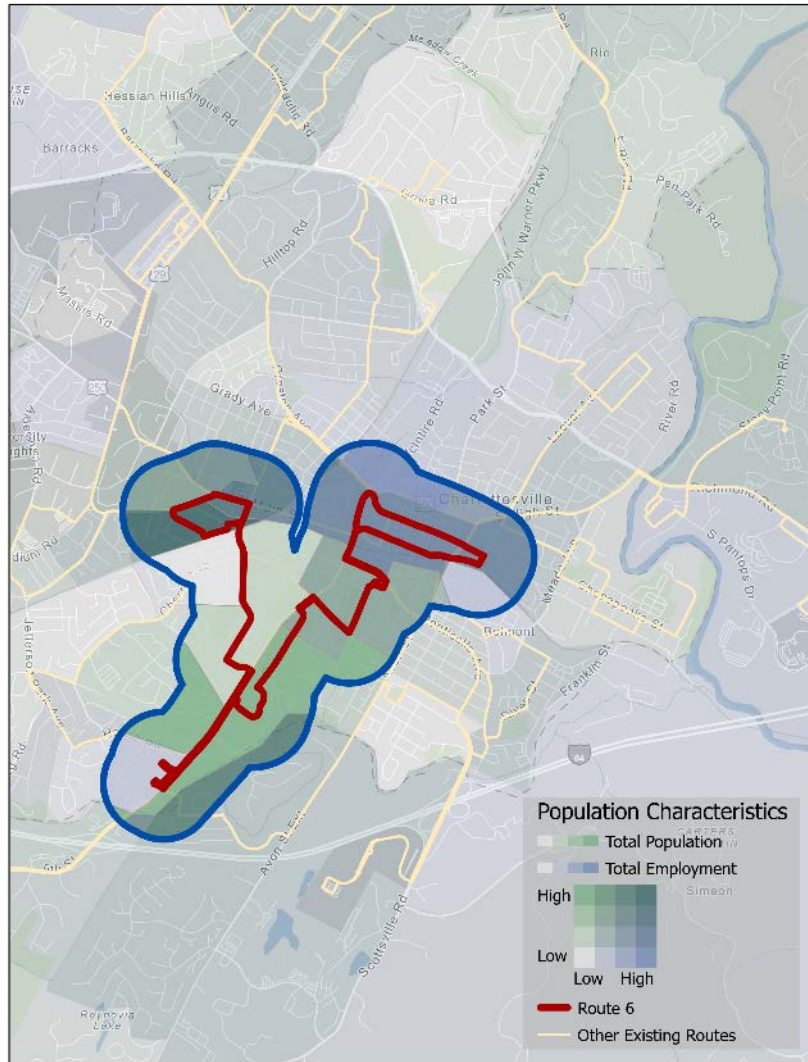
Existing Ridership: Weekday=296, Saturday=182



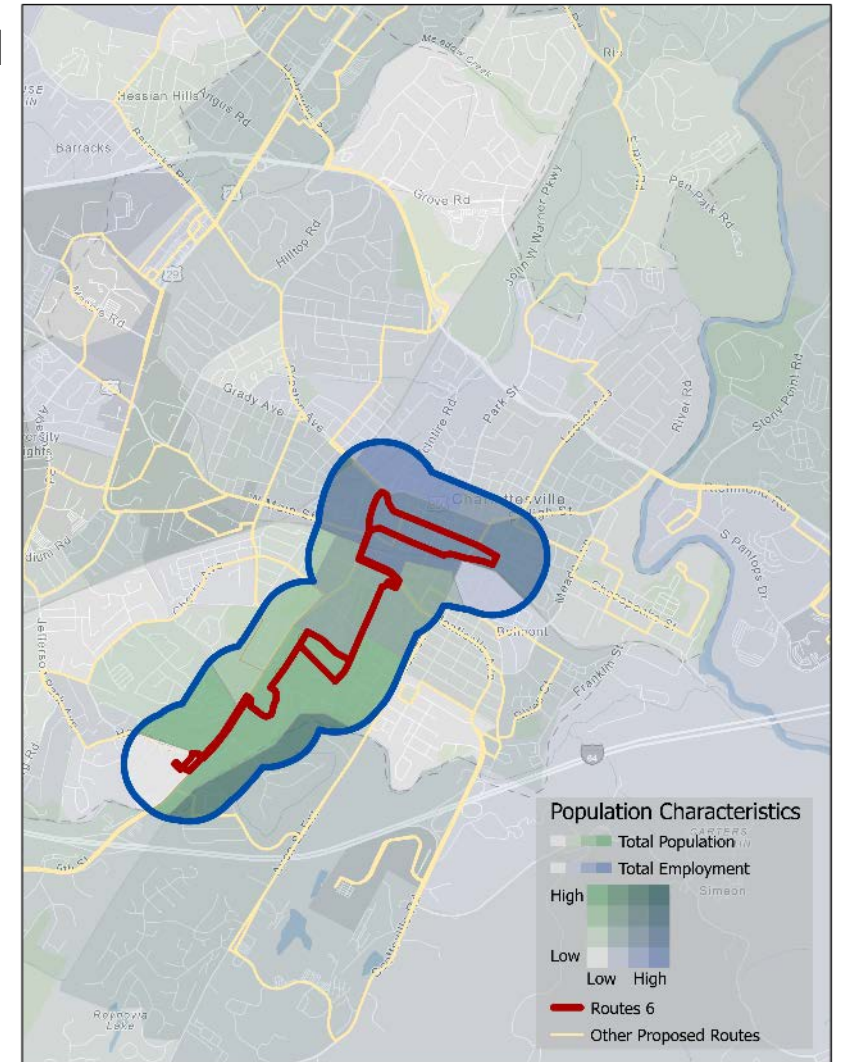
# Route 6 Pop. & Empl. Accessibility



Existing



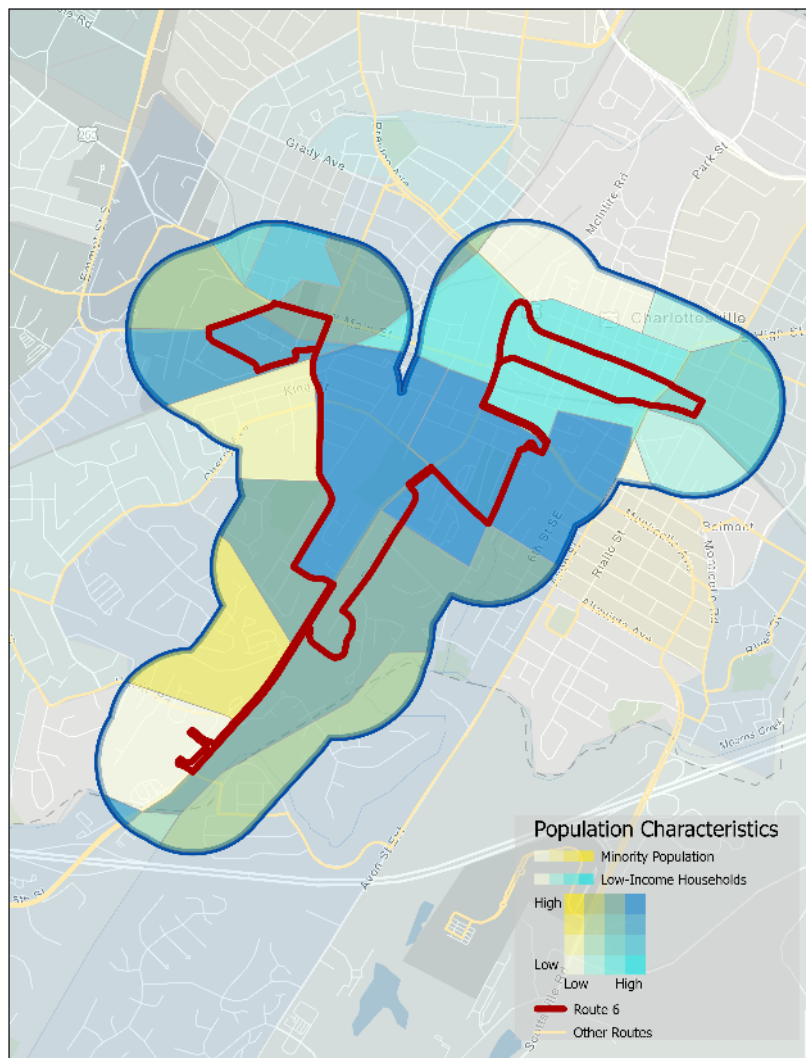
Proposed



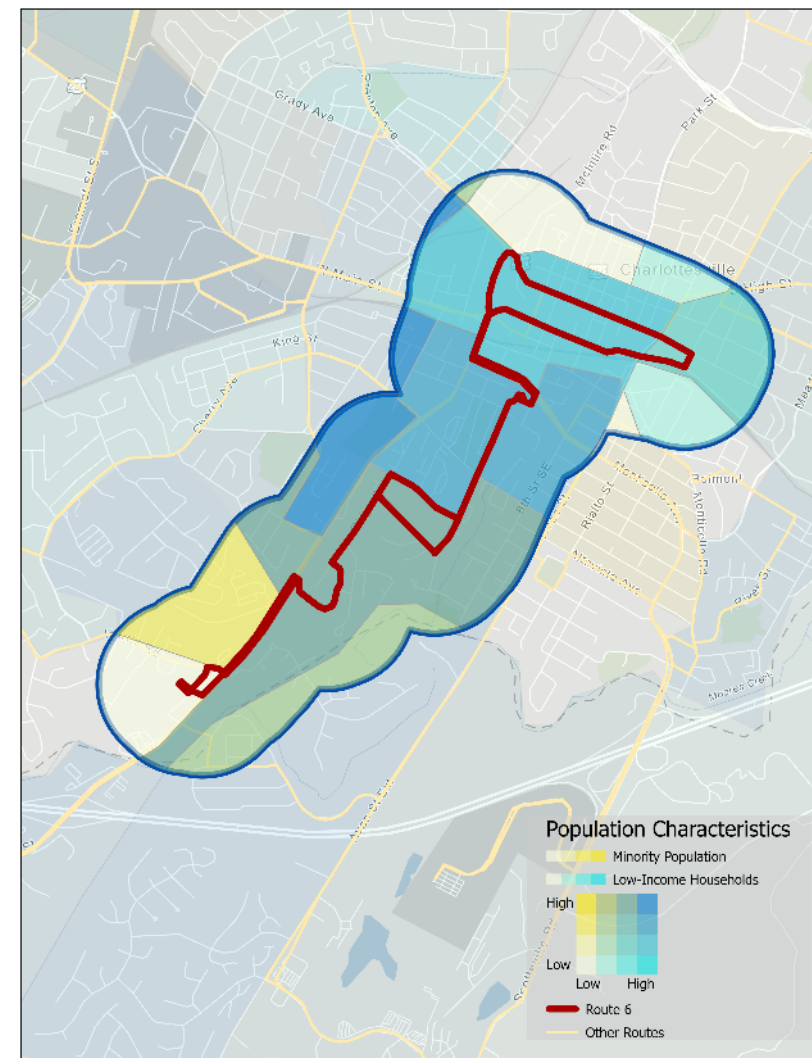
# Route 6 Minority & Low-Income Pop. Accessibility



Existing

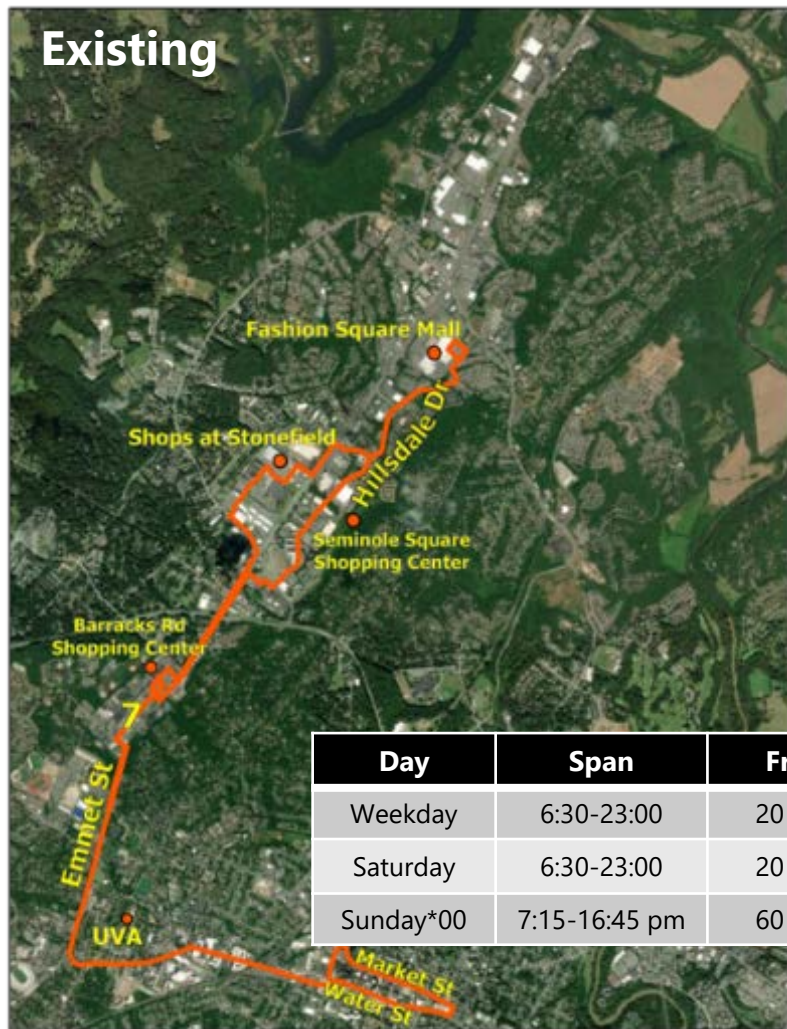


Proposed

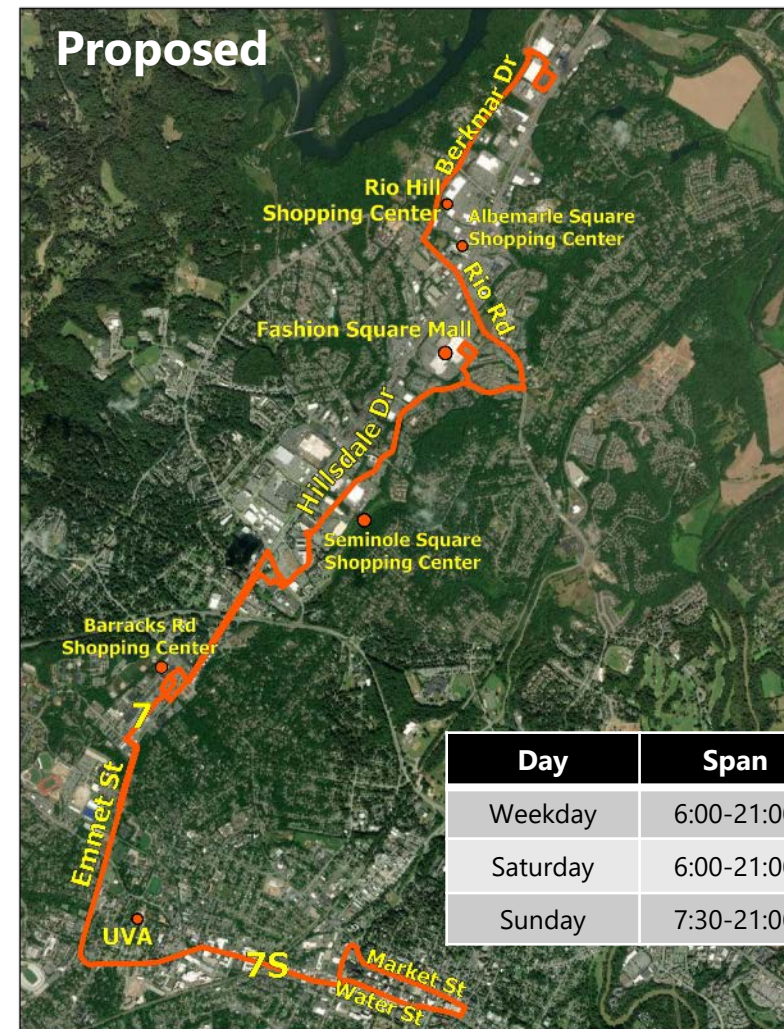




# Route 7



\* - 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

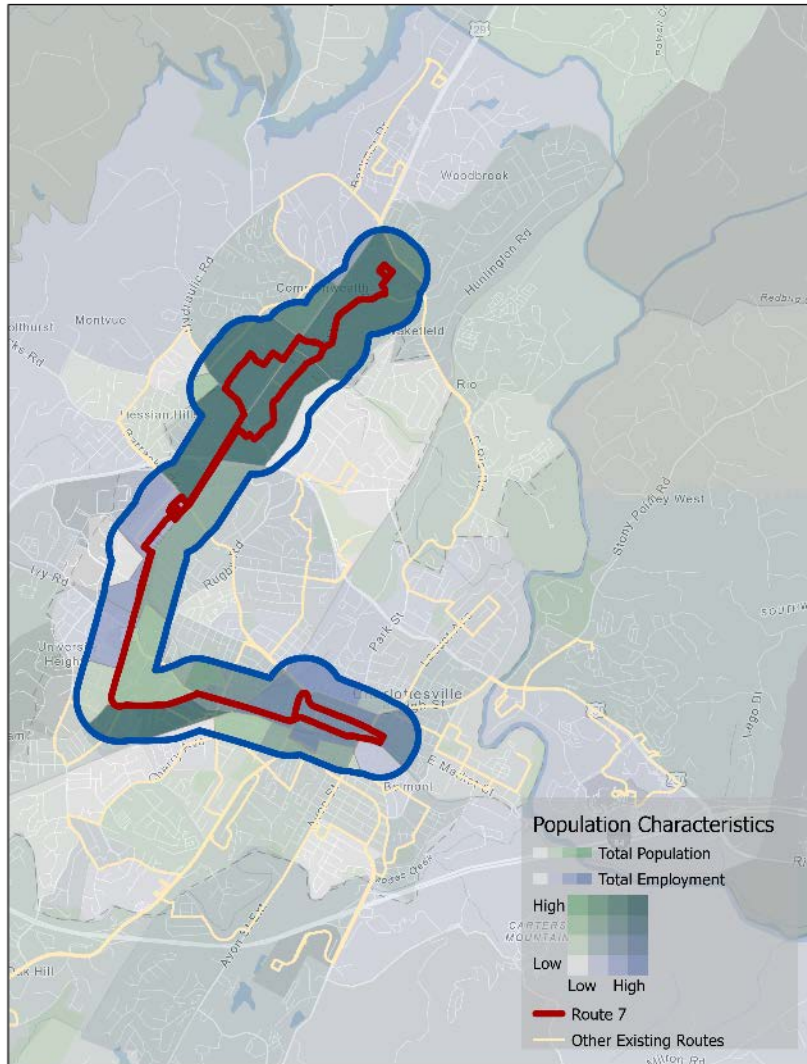
\* Pre-pandemic



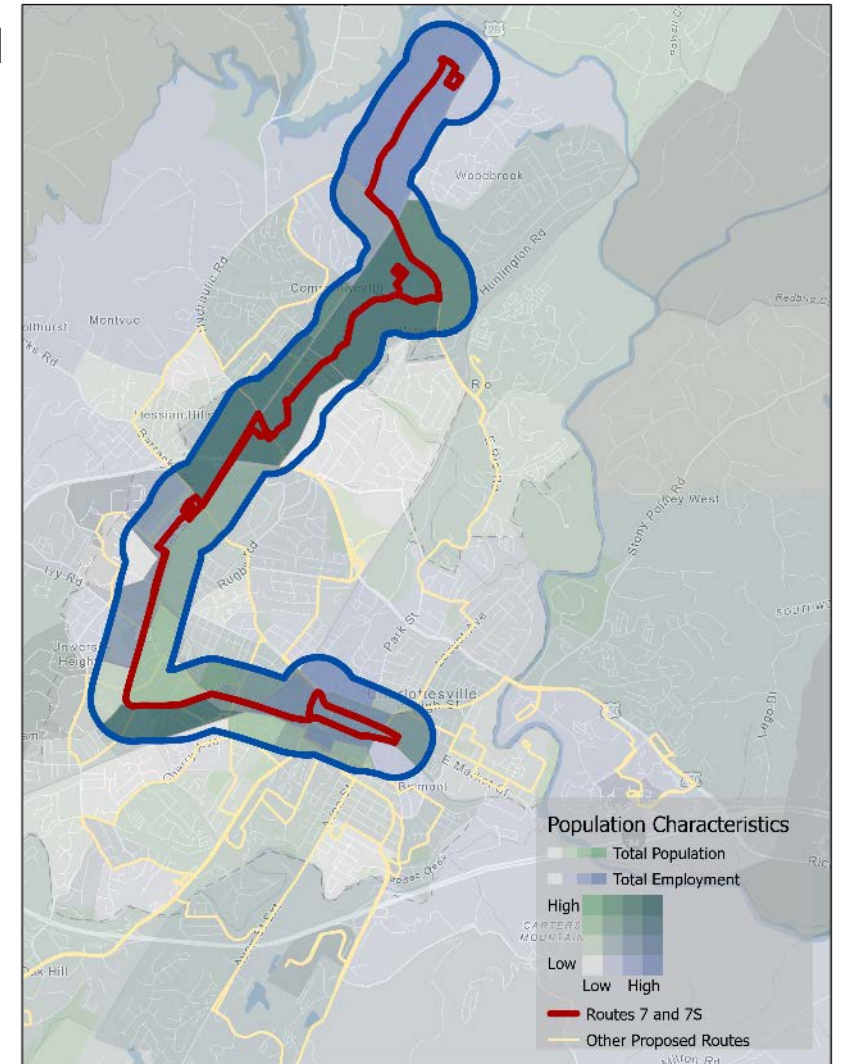
# Route 7 Pop. & Empl. Accessibility



Existing



Proposed

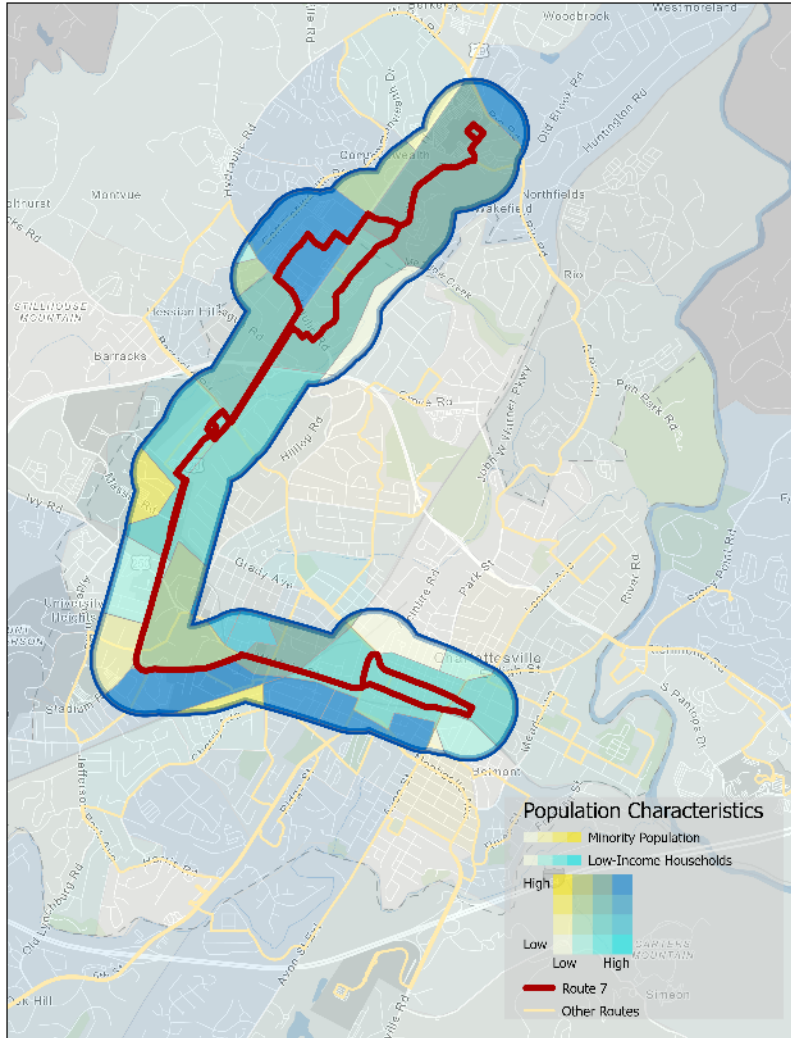




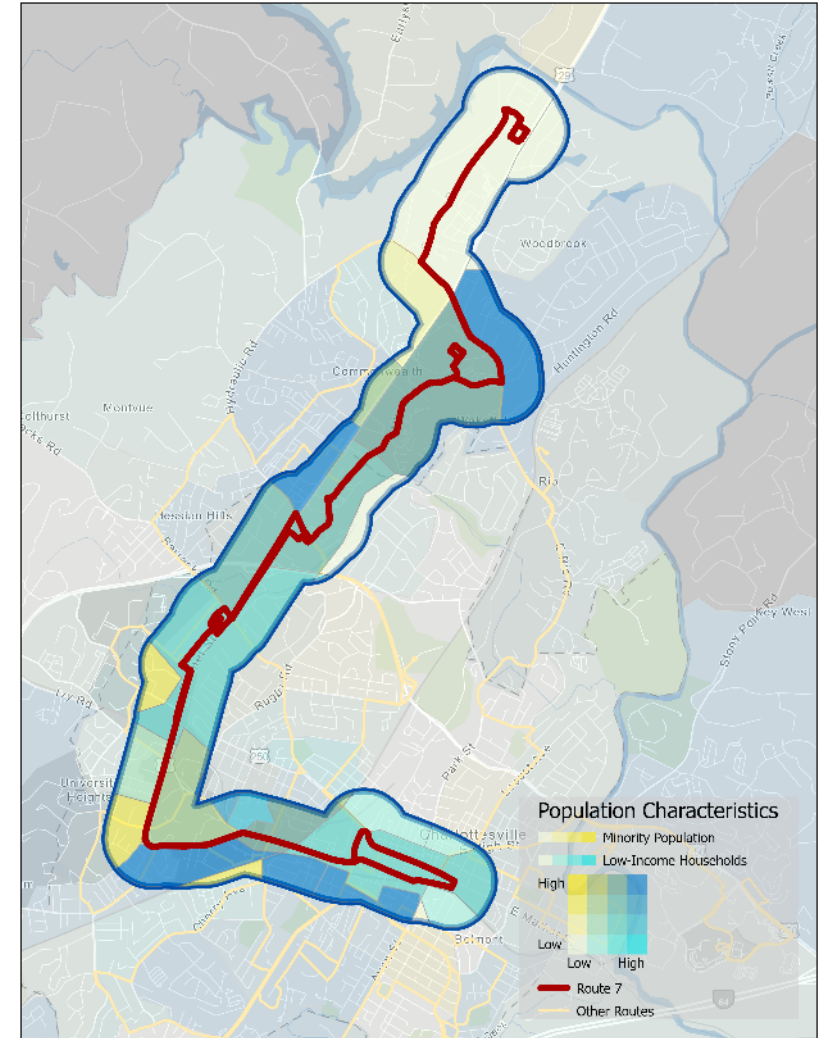
# Route 7 Minority & Low-Income Pop. Accessibility



Existing

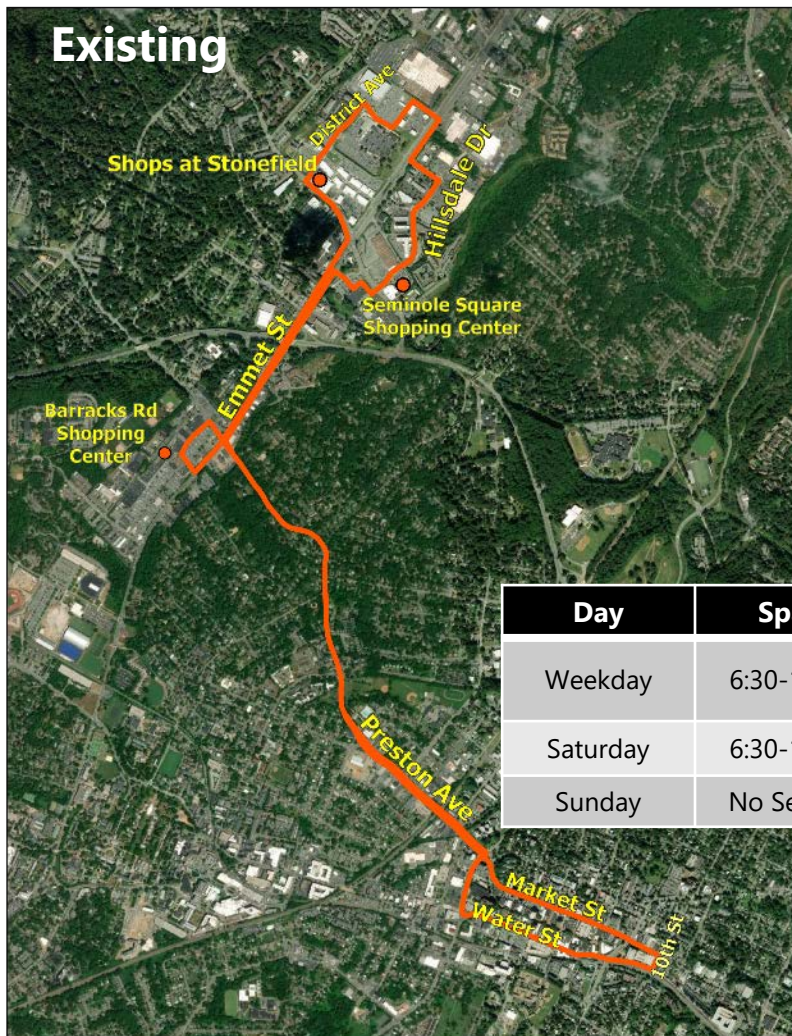


Proposed

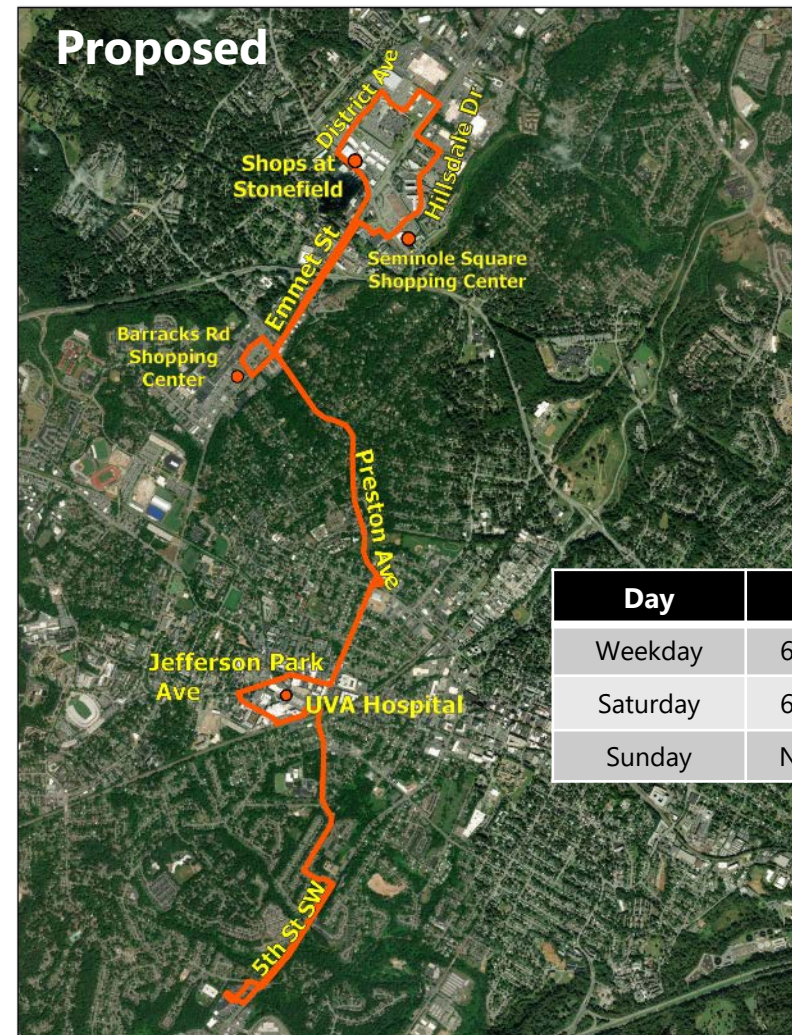




# Route 8



Day	Span	Freq.
Weekday	6:30-18:30	30 peak/60 midday
Saturday	6:30-17:30	60 min.
Sunday	No Service	No Service



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

# 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

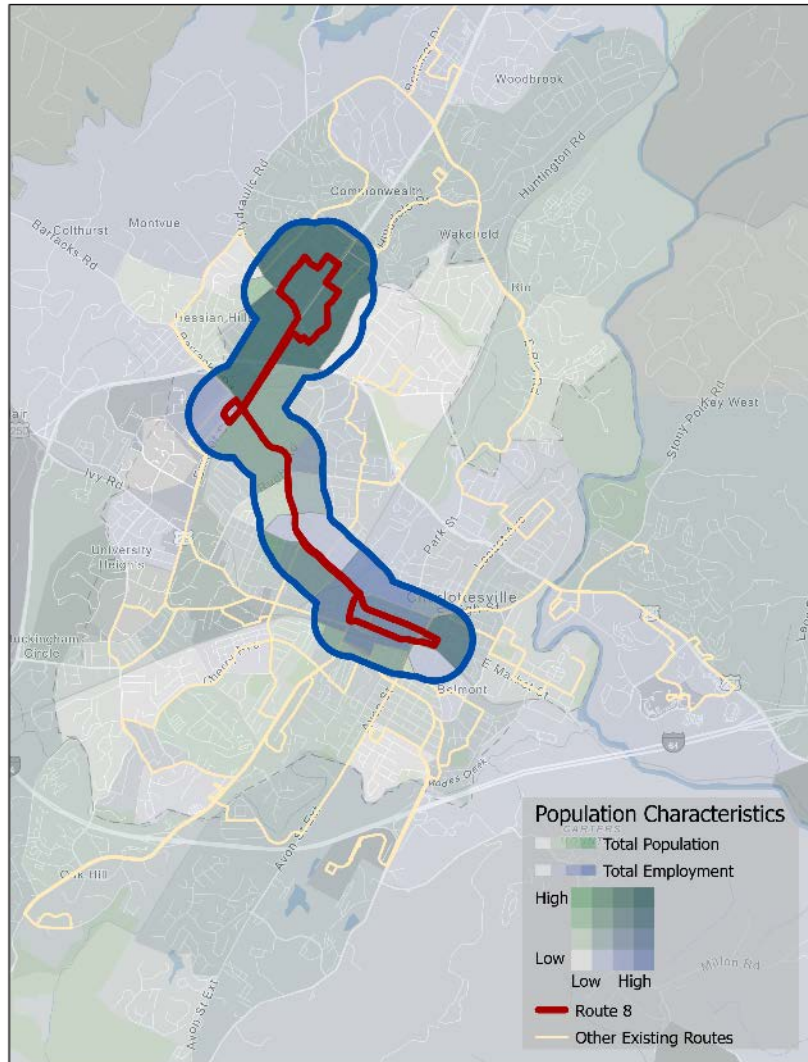
\* Pre-pandemic



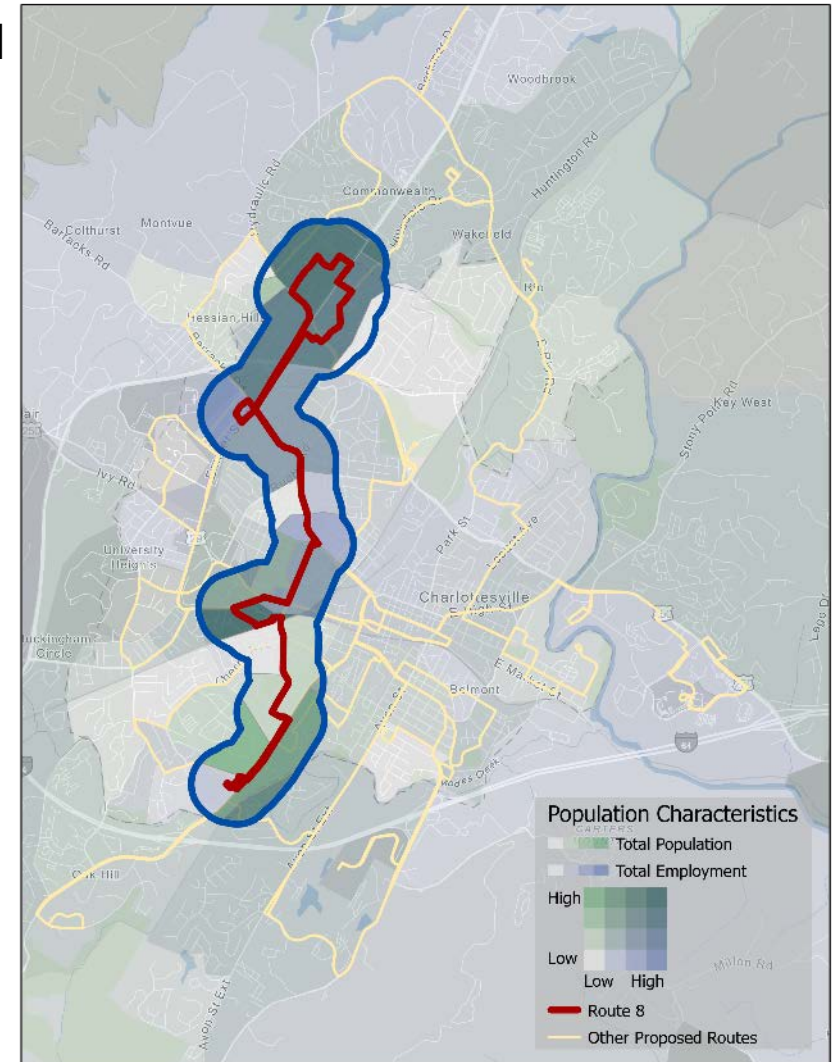
# Route 8 Pop. & Empl. Accessibility



Existing



Proposed

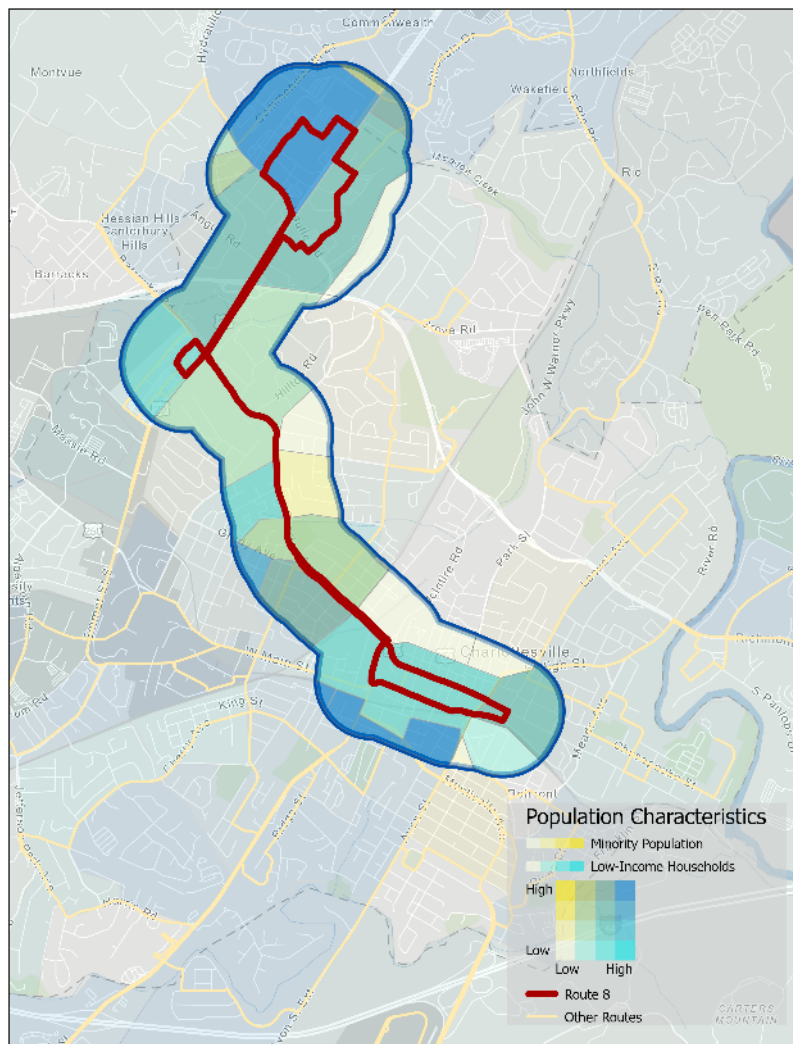




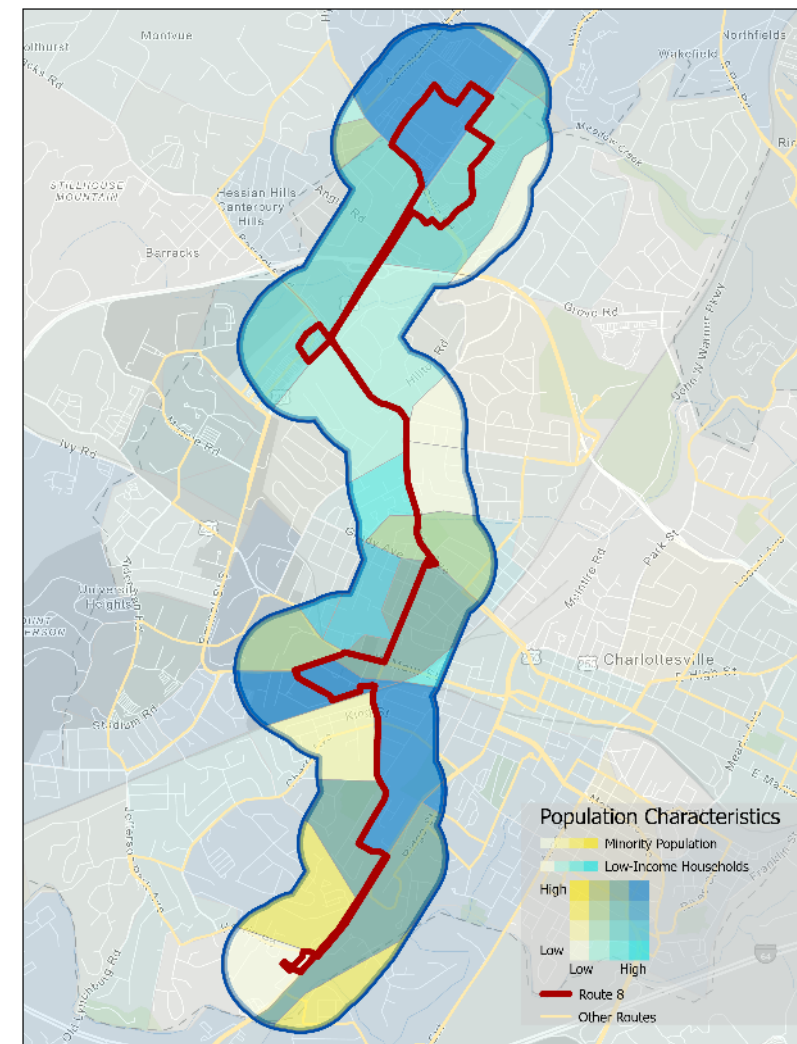
# Route 8 Minority & Low-Income Pop. Accessibility



Existing

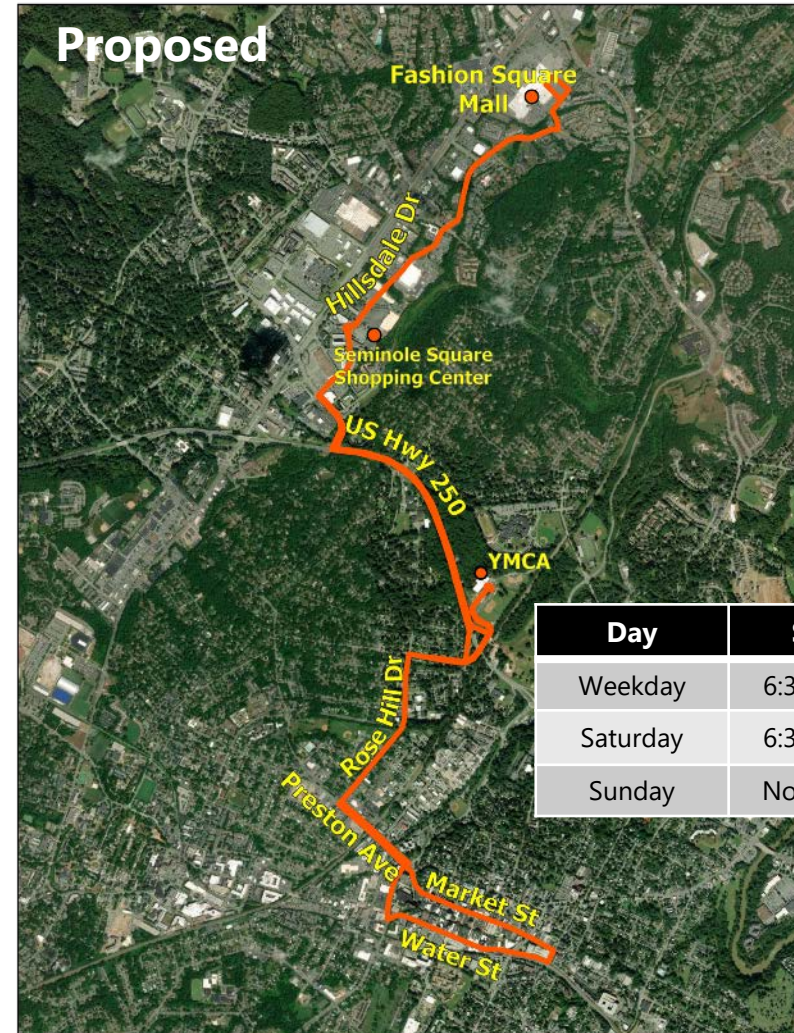
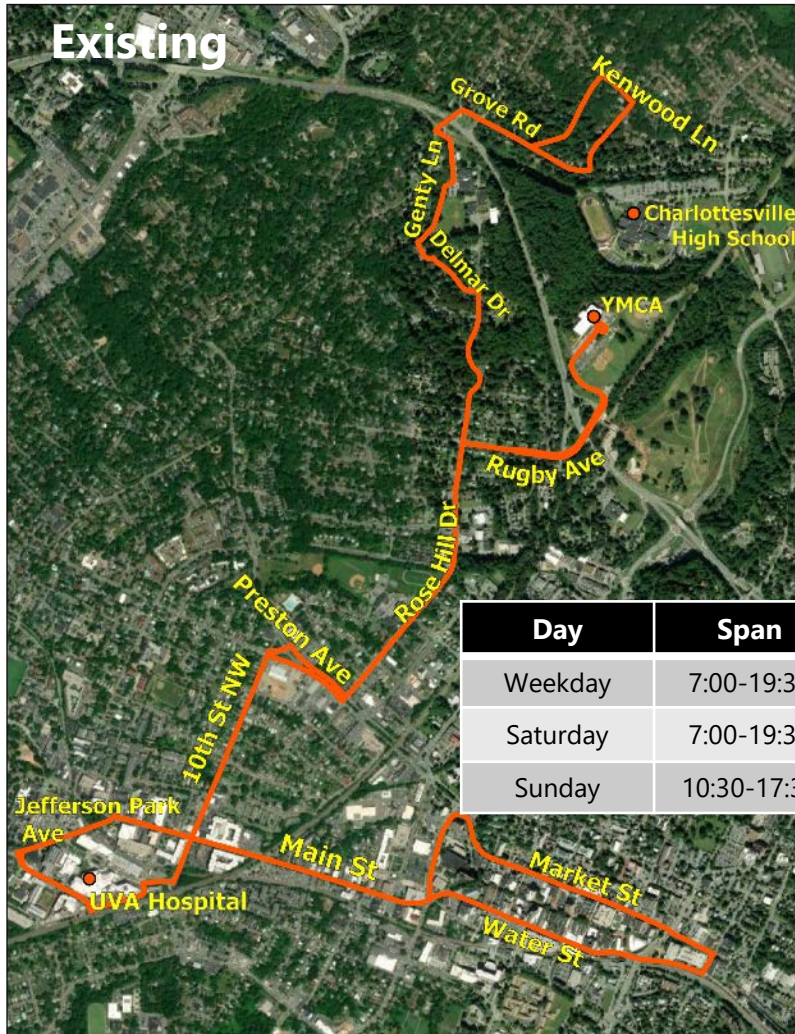


Proposed





# Route 9



# 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

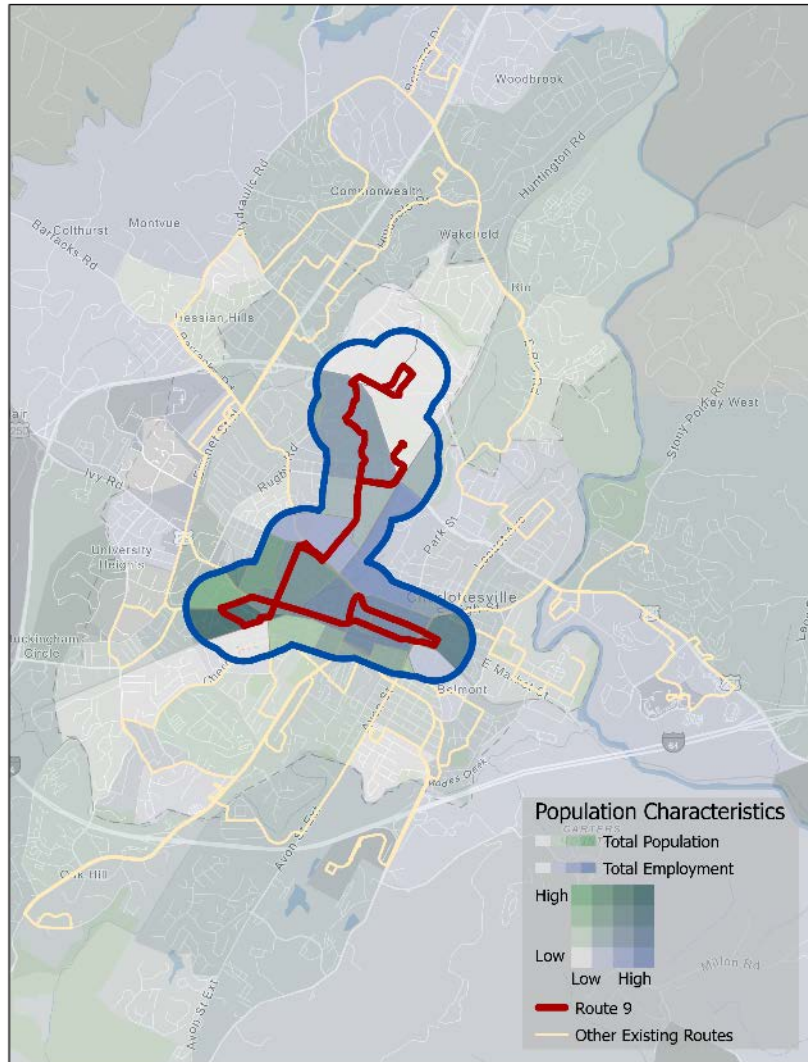
\* Pre-pandemic



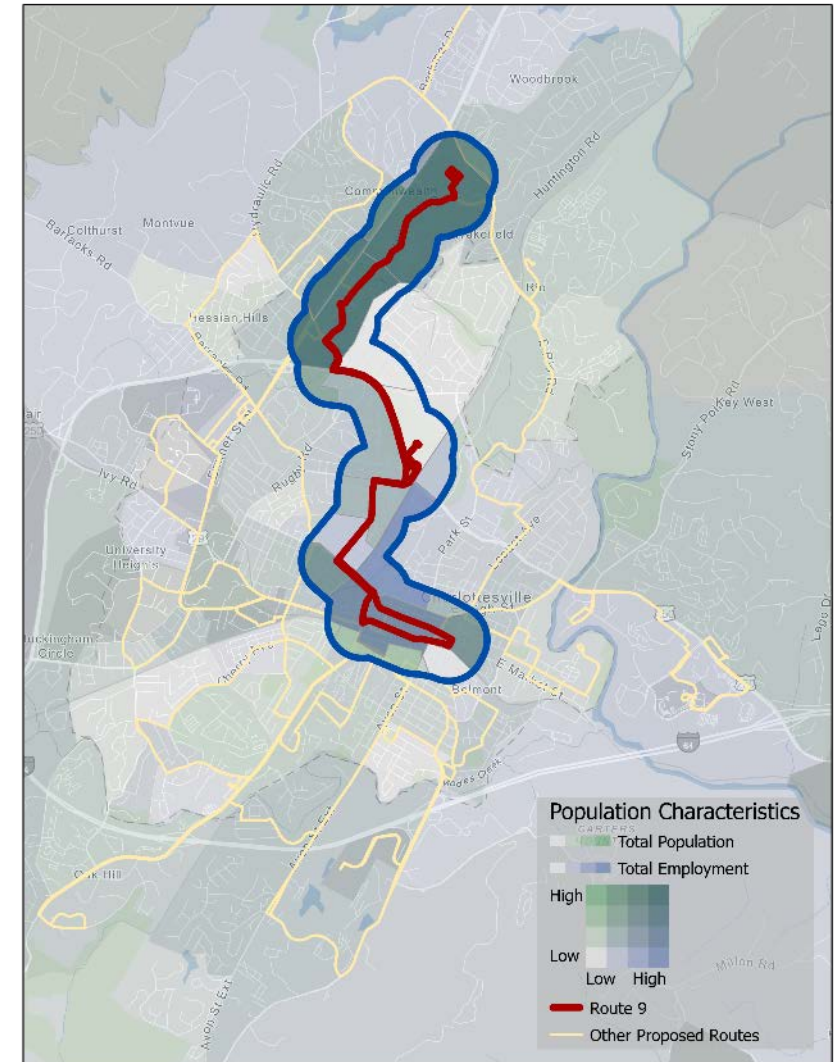
# Route 9 Pop. & Empl. Accessibility



Existing



Proposed

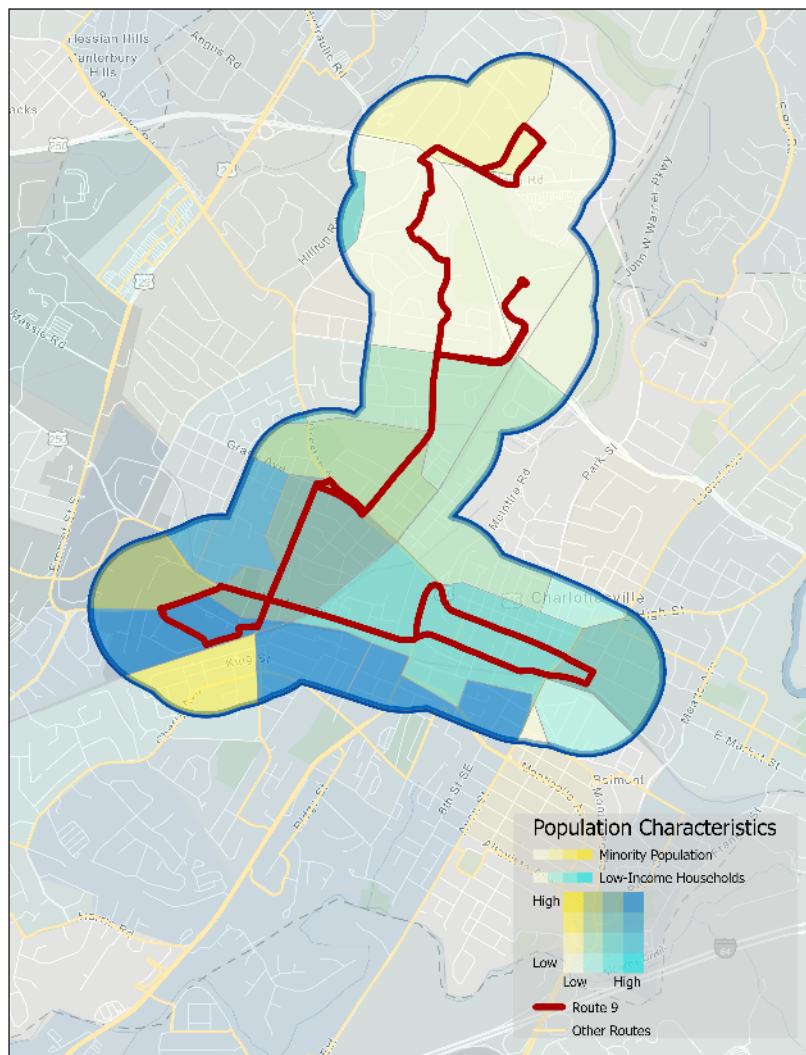




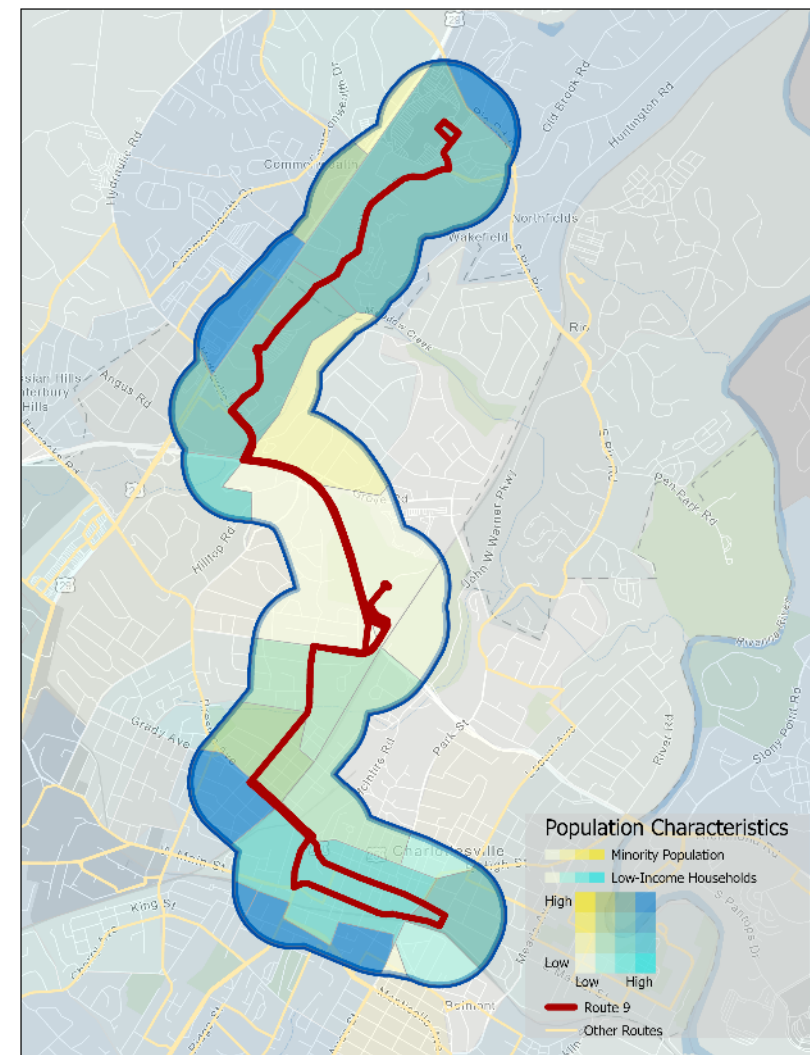
# Route 9 Minority & Low-Income Pop. Accessibility



Existing

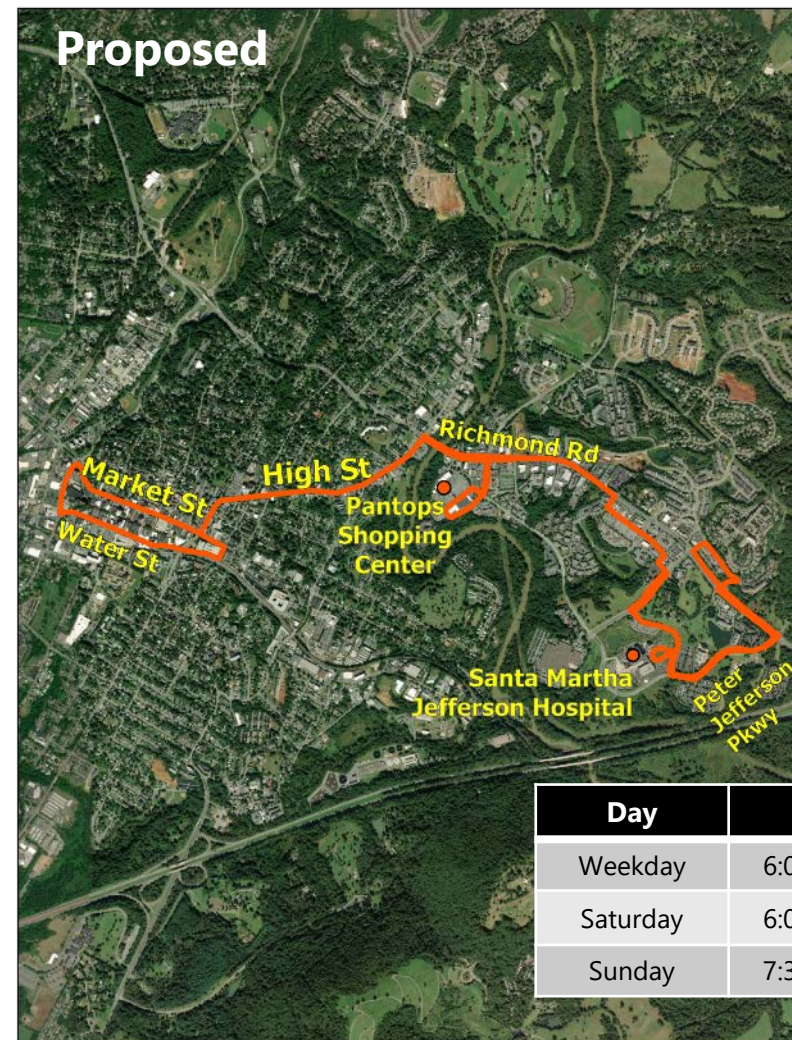
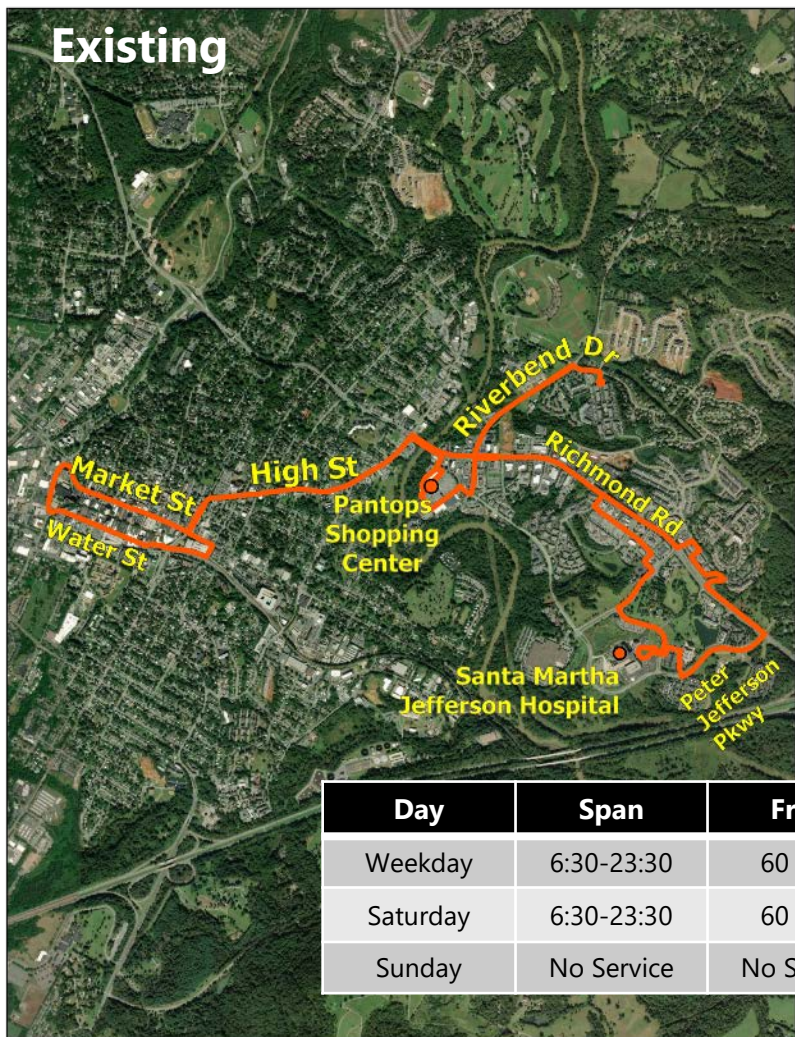


Proposed





# 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

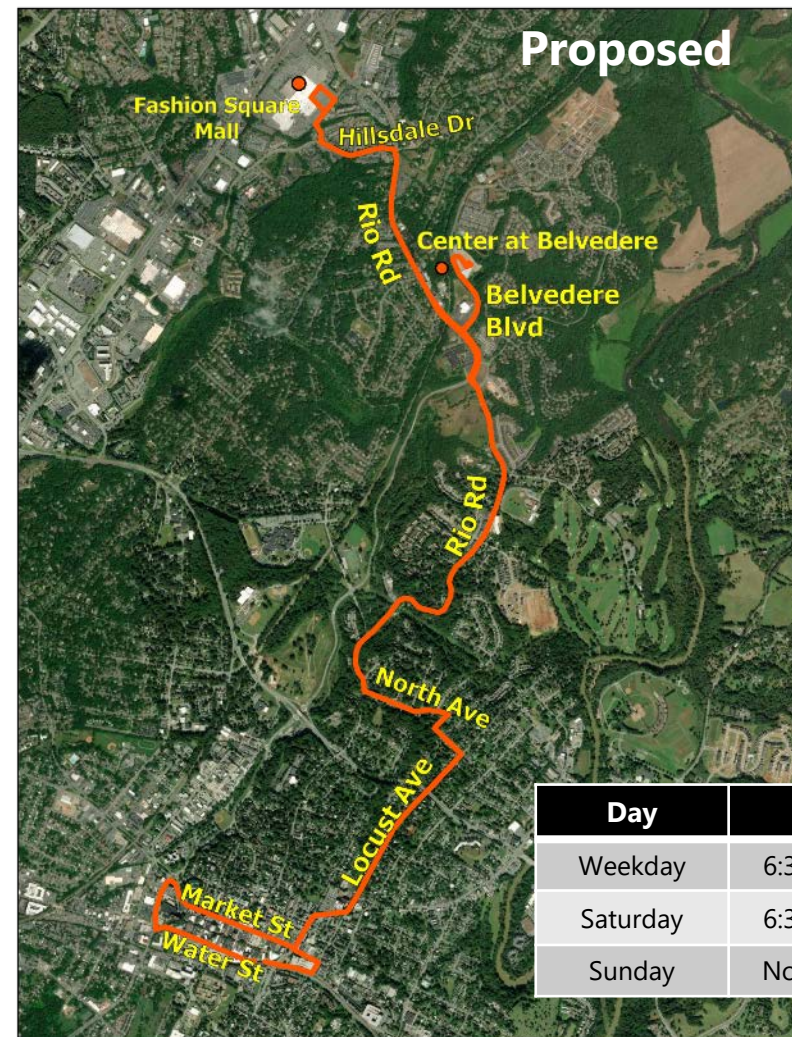
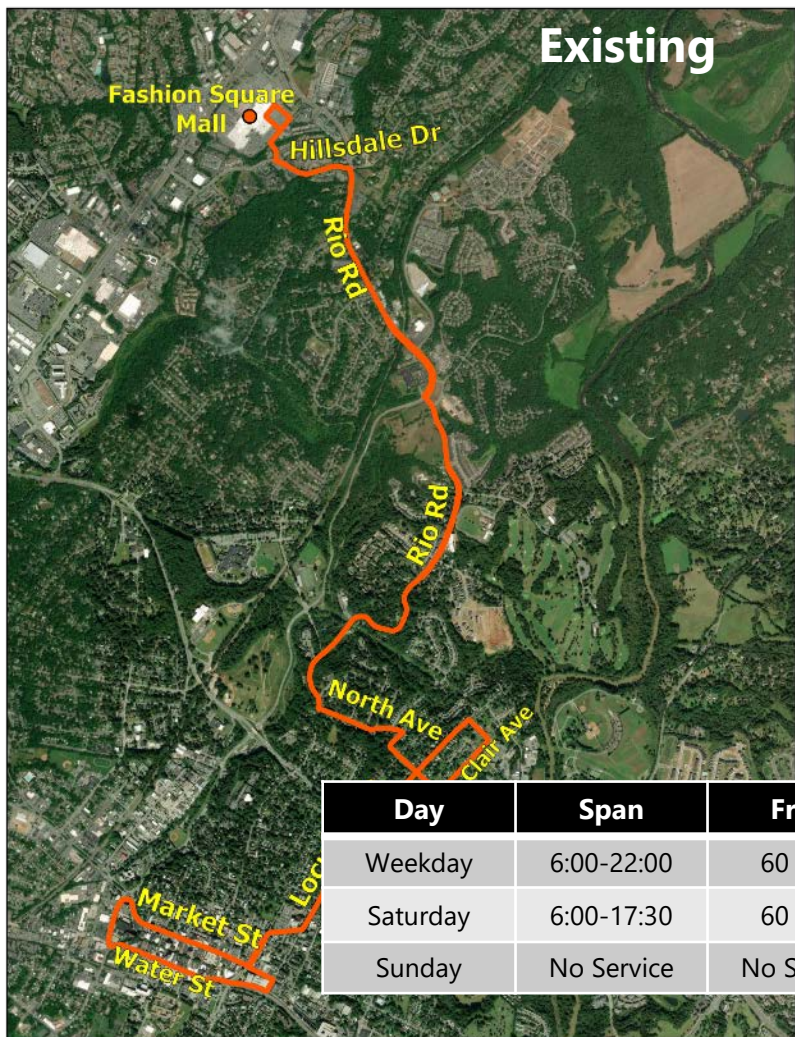
## Accessibility Metrics

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/Pearl/St. Clair loop to provide time for new Rio Road service
- Continue to operate at 60-minute frequencies, weekdays and Saturdays

## Revenue Hours

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

## Accessibility Metrics

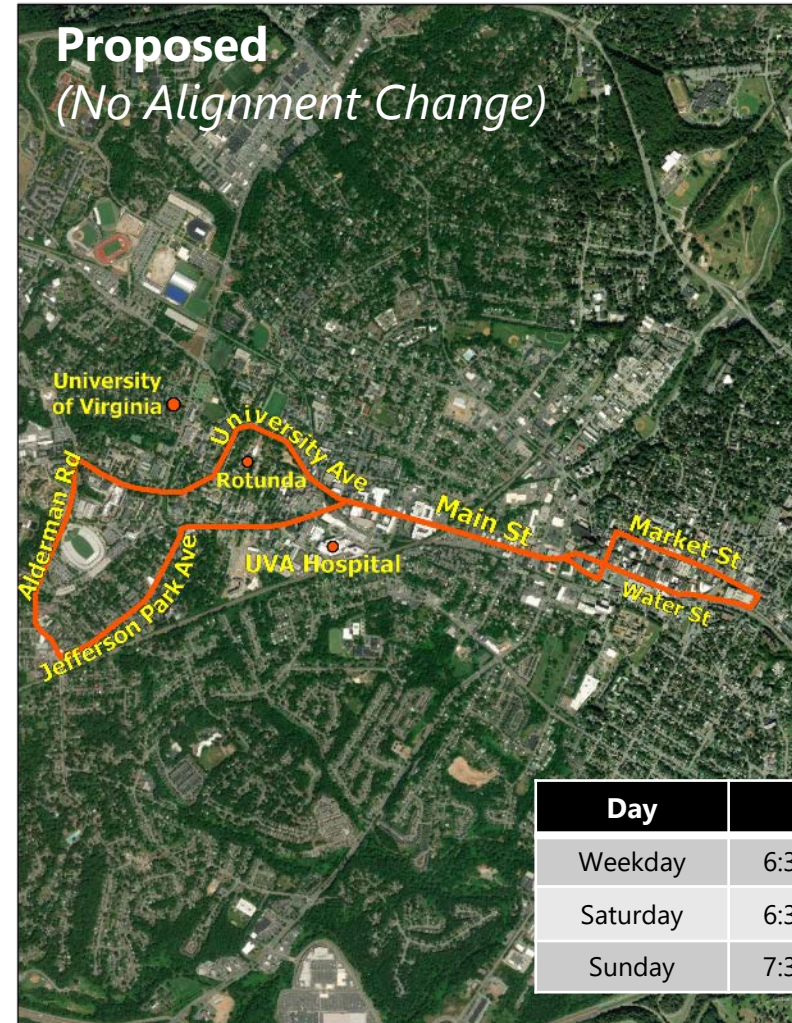
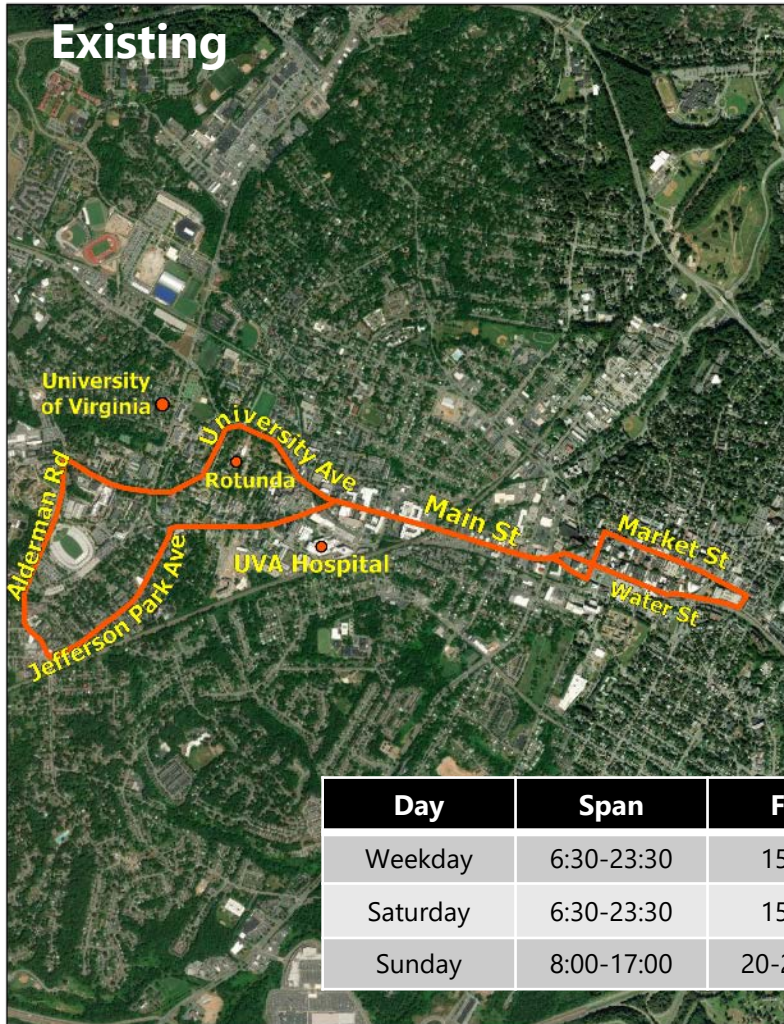
Metric	Weekday Access	
	Existing*	Proposed
General Pop.	9,700	9,600
Minority Pop.	2,000	2,000
Low Income Pop.	600	600
Jobs	15,500	15,400

\* Pre-pandemic

Existing Ridership: Weekday=215, Saturday=133



# 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