



Regional Transit Service Prioritization and Implementation Feasibility Study

Service Prioritization Tool Preliminary Results

CARTA Board Meeting

May 28, 2026

PROJECT OVERVIEW

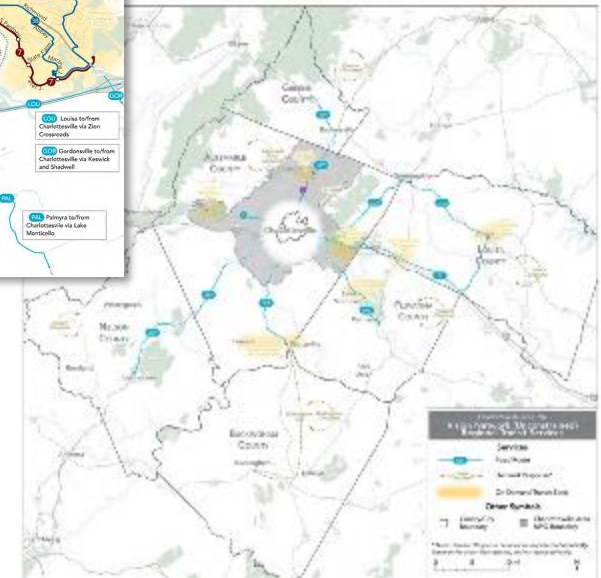
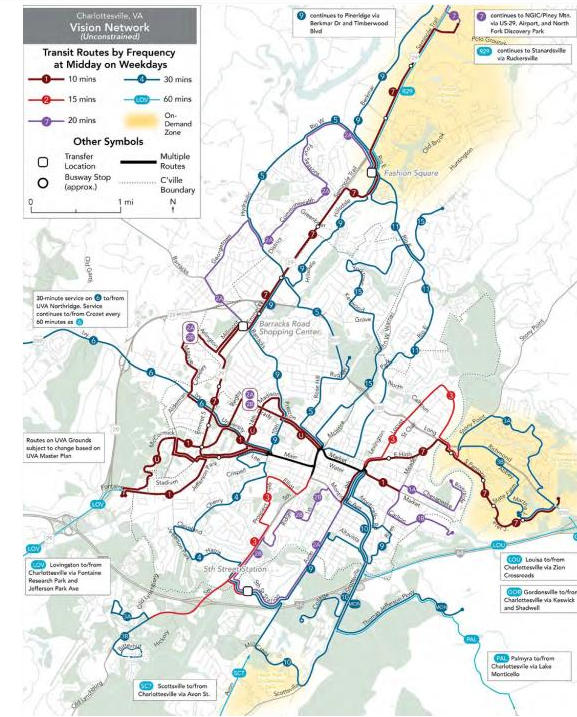
Project Overview

- Regional Transit Vision Plan (2022) developed a constrained and unconstrained network of services
- Localities, transit agencies have completed their own studies as well
- **This study will develop an implementation plan that identifies costs for those services and feasible short-, mid-, and long-term timelines**

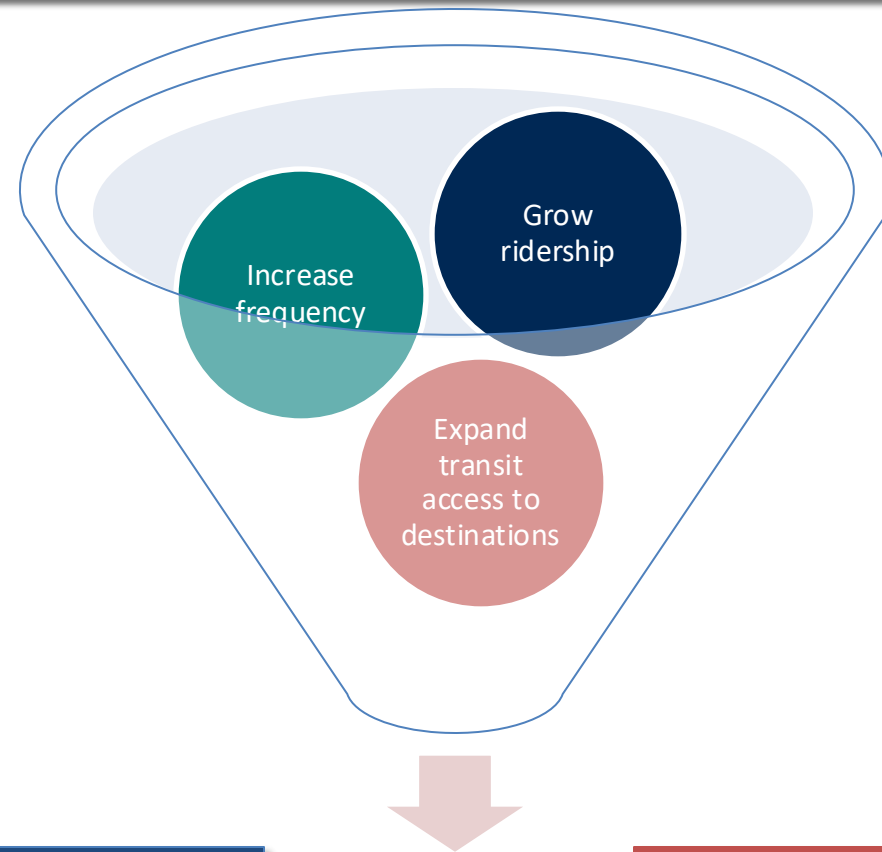


Sample of Plans Reviewed

- TJPDC Regional Transit Vision Plan
- CAT Service Optimization Plan
- CAT Transit Strategic Plan
- Jaunt Transit Development Plan
- Jaunt Microtransit Feasibility Study
- Jaunt Rural Transit Needs Assessment
- BRITE Afton Express Transit Service Plan
- Comprehensive Plans (All Localities)
- Albemarle County Transit Expansion Study
- UVA Parking and Transportation Master Plan
- CAT Facility Design & Zero Emissions Vehicles Feasibility Study
- Jaunt Feasibility Study of Alternative-Fuel Vehicles



Priorities Into Prioritization Criteria



»»» Increase Intensity

↗ Increase Footprint

Measuring the Impact of Service Improvements



Increase Intensity

- People with access to increased frequency of service
- Bonus for:
 - Serving larger proportion of low-income households
 - Providing high-frequency service to people who don't already have it
 - Improving from 60 min service



Increase Footprint

- Additional people with access to transit service across the week
- Bonus for:
 - Serving larger number of low-income households
 - Serving key activity centers – medical, schools, senior centers, etc.

PRIORITIZATION TOOL & PRELIMINARY RESULTS

Prioritization Methodology

- **Step 1: Consolidate service improvements into routes/services**
 - 13 CAT fixed routes
 - 7 Jaunt fixed routes
 - 2 CAT microtransit/on-demand services
 - 7 Jaunt microtransit/on-demand services
- **Step 2: Assign each route/service as increasing intensity, footprint, or mixed**

Prioritization Factors

- Total population
- Age 65+
- Disability population
- Total households
- Zero-car households
- Poverty 200%
- Minority population
- Activity Centers (Retail, School, Senior Center, Medical)

Prioritization Scoring

Step 3: Score routes/services

- Each route/service is scored across 14 metrics, each rated 1-5 based on which percentile-based breaks the route's value falls in relative to all other routes in study area (1= lowest percentile break, 5 = highest). The overall score is the weighted sum of those individual metric scores.

Metric	Category	Weight
% Population Age 65+	Equity	1
% Population with Disabilities	Equity	1
% Zero-Vehicle Households	Equity	1
% Population Below 200% Poverty	Equity	2
% Minority Population	Equity	2
Population per Square Mile	Pop Density	2
Retail Counts per Square Mile	Activity Centers	1
School Counts per Square Mile	Activity Centers	1
Senior Facility Counts per Square Mile	Activity Centers	1
Medical Facility Counts per Square Mile	Activity Centers	1

Activity Center Definitions

- Sourced from openstreetmap
- Albemarle's Comprehensive Plan Activity Centers and Employment Centers are built into the tool and can be included as factors as well

Category	Subcategory
Medical	Clinic
	Hospital
	Doctor
Senior Center	Social Facility
	Community Center
	Assisted Living Facility
Schools	Retirement Community
	College
	School
Retail	University
	Convenience
	Supermarket
	Variety Store
	Grocery

Prioritization Scoring

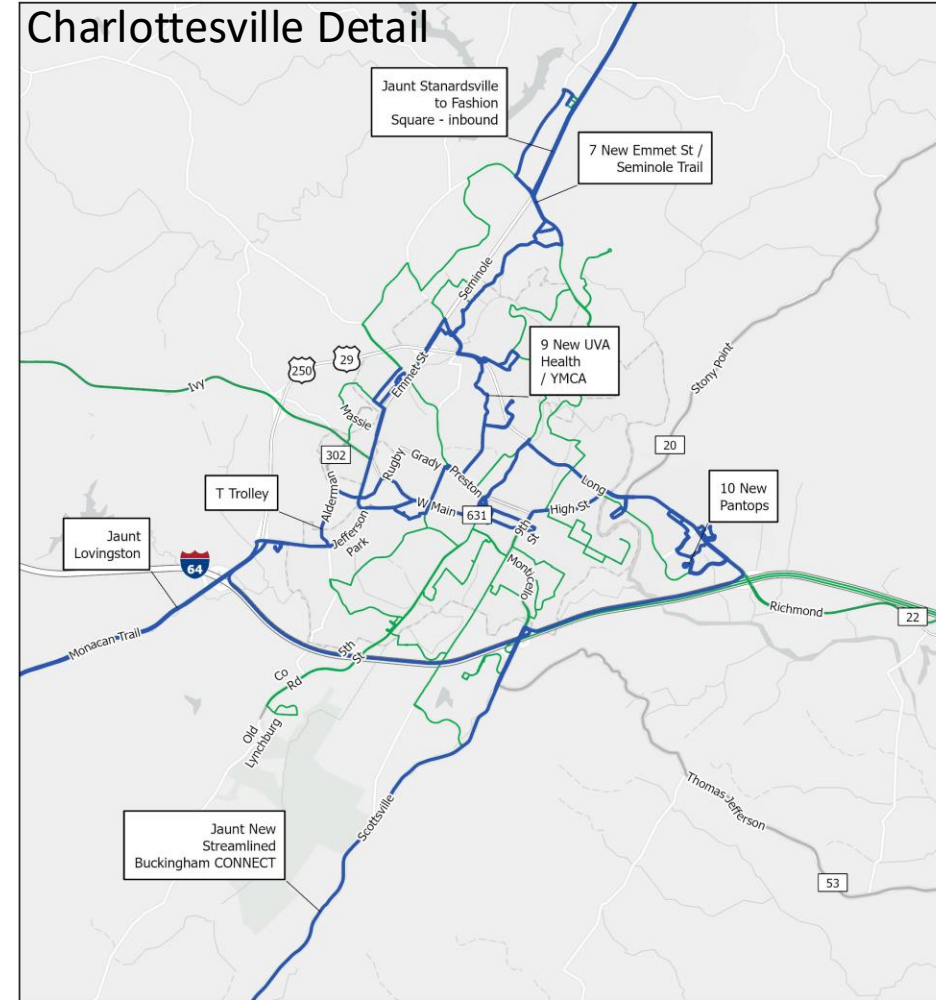
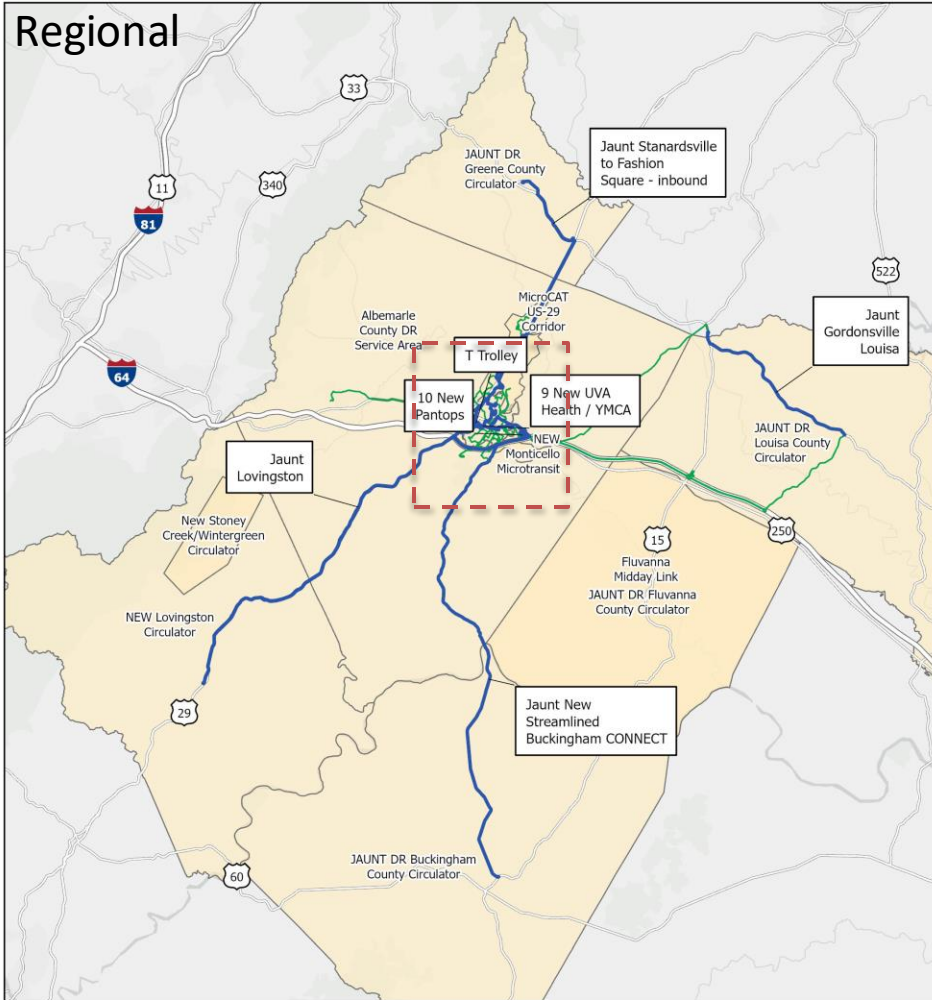
Step 4: Score routes/services

- Each metric can be normalized in five different ways:
 - **Unnormalized:** raw count of people, households, and counts of activity centers: useful for measuring overall magnitude of impact.
 - **Per Route Mile:** raw count / route length (miles): useful for measuring impact relative to operations cost (especially when combined with trips per day). Cannot account for demand response.
 - **Per Square Mile:** raw count / corridor ¼ mile buffer area (sqmi): useful for measuring magnitude of impact relative to access/stop locations. Cannot account for operational cost.
 - **Population:** raw count / relevant universe population: useful for measuring proportion for population metrics (age, race, disability, minority status)
 - **Households:** raw count / total households: useful for measuring proportion for household metrics (vehicle ownership, poverty).

Preliminary Results: All Routes

Rank	Agency	Route / Service	Improvement Type	City/County	Newly Frequent?	Overall Score
1	Jaunt	Jaunt New Streamlined Buckingham CONNECT	Intensity	Albemarle, Buckingham		47
2	CAT	Route 7	Mixed	Charlottesville	✓	45
2	CAT	Route Trolley	Footprint	Charlottesville	✓	45
4	Jaunt	Jaunt Stanardsville to Fashion Square - inbound	Footprint	Albemarle, Grenne		43
5	Jaunt	Jaunt Gordonsville Louisa	Footprint	Louisa		41
6	CAT	Route 9	Mixed	Charlottesville		40
6	CAT	Route 10	Mixed	Charlottesville		40
8	Jaunt	Jaunt Lovingston	Intensity	Albemarle		39
9	CAT	Route 5	Mixed	Charlottesville		37
9	CAT	Route 6	Mixed	Charlottesville		37
11	CAT	Route 4	Mixed	Charlottesville		36
11	Jaunt	Jaunt Crozet	Intensity	Albemarle		36
13	Jaunt	Outer County On-Demand Services	Footprint	Buckingham		35
13	CAT	Route 3	Mixed	Charlottesville		35
13	Jaunt	Jaunt Louisa Express	Footprint	Albemarle, Louisa		35
16	CAT	Route 8	Mixed	Charlottesville		34
17	Jaunt	Jaunt Gordonsville Connector	Footprint	Albemarle		33
18	CAT	Route 11	Mixed	Charlottesville		32
19	CAT	Route 2a/ 2b	Footprint	Charlottesville		31
19	CAT	US 29 and Pantops	Intensity	Albemarle		31
21	Jaunt	Outer County On-Demand Services	Footprint	Nelson		30
22	CAT	Route 15	Footprint	Charlottesville		29
22	Jaunt	Outer County On-Demand Services	Footprint	Greene		29
24	Jaunt	Outer County On-Demand Services	Footprint	Louisa		27
25	CAT	Route 1	Intensity	Charlottesville		26
25	Jaunt	Outer County On-Demand Services	Footprint	Fluvanna		26
25	Jaunt	Fluvanna Midday Link Service	Footprint	Fluvanna		26
28	Jaunt	Monticello Microtransit Service	Footprint	Albermarle		22
28	CAT	South Albermarle	Footprint	Albemarle		22

Prioritized Route/Service Map



Preliminary Results: Top 10 Routes

Rank	Agency	Route / Service	Route Name	Improvement Type	City/County	Newly Frequent?	Overall Score
1	Jaunt	Jaunt New Streamlined Buckingham CONNECT	Buckingham Connect	Intensity	Albemarle, Buckingham		47
2	CAT	Route 7	7 New Emmet St / Seminole Trail	Mixed	Charlottesville	✓	45
2	CAT	Route Trolley	T Trolley	Footprint	Charlottesville	✓	45
4	Jaunt	Jaunt Stanardsville to Fashion Square - inbound	Stanardsville/US29 Connect	Footprint	Albemarle, Greene		43
5	Jaunt	Jaunt Gordonsville Louisa	Gordonsville/Louisa Connect	Footprint	Louisa		41
6	CAT	Route 9	9 New UVA Health / YMCA	Mixed	Charlottesville		40
6	CAT	Route 10	10 New Pantops	Mixed	Charlottesville		40
8	Jaunt	Jaunt Lovingston	Lovingston Connect	Intensity	Albemarle		39
9	CAT	Route 5	5A UVA-Commonwealth-North Fork & 5B-UVA-Commonwealth-Walmart	Mixed	Charlottesville		37
9	CAT	Route 6	6 New Ridge St / Prospect Ave	Mixed	Charlottesville		37

Summary Statistics by Project Type

	Project Type		
	Footprint	Mixed	Intensity
Average Score	31.6	37.3	35.8
Number of Projects	15	9	5
Sum of Additional Weekday VRM	5,242	6,364	3,787

Sensitivity Analysis 1:

Double Population Density Weight

Agency	Route / Service	Route Name	Original Weight		Updated Weight	
			Rank	Score	Rank	Score
Jaunt	Jaunt New Streamlined Buckingham CONNECT	Buckingham Connect	1	47	1 (→)	55
CAT	Route 7	7 New Emmet St / Seminole Trail	2	45	5 (↘)	49
CAT	Route Trolley	T Trolley	2	45	2 (→)	53
Jaunt	Jaunt Stanardsville to Fashion Square - inbound	Stanardsville/US29 Connect	4	43	3 (↗)	51
Jaunt	Jaunt Gordonsville Louisa	Gordonsville/Louisa Connect	5	41	3 (↗)	51
CAT	Route 9	9 New UVA Health / YMCA	6	40	9 (↘)	44
CAT	Route 10	10 New Pantops	6	40	7 (↘)	46
Jaunt	Jaunt Lovingston	Lovingston Connect	8	39	6 (↗)	47
CAT	Route 5	5A UVA-Commonwealth-North Fork & 5B-UVA-Commonwealth-Walmart	9	37	13 (↘)	41
CAT	Route 6	6 New Ridge St / Prospect Ave	9	37	8 (↗)	45

Note: This analysis uses the factor of age 75+ instead of age 65+, but the routes/services included in the top 10 ranking is consistent.

Sensitivity Analysis 2:

Normalize by Route Miles instead of Square Miles

Agency	Route / Service	Route Name	Original Weight		Updated Weight	
			Rank	Score	Rank	Score
Jaunt	Jaunt New Streamlined Buckingham CONNECT	Buckingham Connect	1	48	9 (↘)	35
CAT	Route 7	7 New Emmet St / Seminole Trail	2	45	2 (→)	47
CAT	Route Trolley	T Trolley	2	45	1 (↗)	47
Jaunt	Jaunt Stanardsville to Fashion Square - inbound	Stanardsville/US29 Connect	4	43	13 (↘)	32
CAT	Route 9	9 New UVA Health / YMCA	5	41	3 (↗)	43
CAT	Route 10	10 New Pantops	5	41	4 (↗)	41
Jaunt	Jaunt Gordonsville Louisa	Gordonsville/Louisa Connect	5	41	12 (↘)	33
Jaunt	Jaunt Lovingston	Lovingston Connect	8	39	17 (↘)	29
CAT	Route 5	5A UVA-Commonwealth-North Fork & 5B-UVA-Commonwealth-Walmart	9	38	9 (→)	35
CAT	Route 6	6 New Ridge St / Prospect Ave	10	37	6 (↗)	37

Note: This analysis uses the factor of age 75+ instead of age 65+, but the routes/services included in the top 10 ranking is consistent.

Discussion

- Changing the different factor weights is simple using the prioritization tool – do we want to keep as is, or adjust?
 - Keep population density as it is in the main list or double the weighting?
 - Normalize by route miles instead of square miles?

Metric	Category	Weight
% Population Age 65+	Equity	1
% Population with Disabilities	Equity	1
% Zero-Vehicle Households	Equity	1
% Population Below 200% Poverty	Equity	2
% Minority Population	Equity	2
Population per Square Mile	Pop Density	2
Retail Counts per Square Mile	Activity Centers	1
School Counts per Square Mile	Activity Centers	1
Senior Facility Counts per Square Mile	Activity Centers	1
Medical Facility Counts per Square Mile	Activity Centers	1

Next: Implementation Plan

Development of a regional transit service implementation plan focused on the prioritized list

- Refine operating cost estimates & develop capital cost estimates (infrastructure and fleet) - on-going
- Identify potential funding sources (federal/state/local) and strategies
- Program services over a five-to-ten-year horizon based on availability of resources (short, mid, and long range)
- Draft matrix for CARTA board discussion in July

Next Steps

- Finalize prioritized list of survey improvements
- Develop public survey with prioritized list of service improvements
- Develop Implementation Plan

