2023

Albemarle County Transit Services and Funding Review: Task 2 Technical Memo



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Disclaimer

TTI performed this research on behalf of the County of Albemarle in Virginia. The contents of this memo reflect the views of the authors, who are responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official view or policies of the Albemarle County. This memo does not constitute a standard, specification, or regulation.



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EXECUTIVE SUMMARY

On behalf of Albemarle County in Virginia, the Texas A&M Transportation Institute (TTI) conducted a review of transit services and funding in Albemarle County, including the services provided by Charlottesville Area Transit (CAT) and Jaunt. This memo is the first deliverable in TTI's assessment and will be reviewed and commented on by Albemarle County, CAT, and Jaunt. This technical memo documents TTI's understanding of transit services in the County, including what entities operate them, what the services cost, and how the services are funded. This memo also includes TTI's preliminary findings and recommendations. There remain a few outstanding questions and points of needed clarification; therefore, any information, findings, and recommendations contained in this memo should be considered preliminary and subject to further revision. This memo will serve to back up the remaining deliverables, which include a white paper on transit funding and a presentation for the November 1, 2023, meeting of the Albemarle County Board of Supervisors.

Below are a few commendations found in this tech memo:

- Generally speaking, the transit services and service levels in the region appear appropriate for the service area. Although there is some overlap (particularly when the new microtransit pilot zones are implemented), the differences in services are significant enough to not be considered wasteful or unnecessary.
- The region has a complex operational and funding structure; however, the cost allocation methods used by both transit operators (i.e., CAT and Jaunt) are reasonable and follow industry best practice.

Below are some highlighted findings and recommendations. The full list can be found in Section 6.

- Successfully operating, funding, and managing the costs and demand ADA paratransit will be a key to ongoing financial sustainability in the region.
- The mechanisms for funding and operating ADA paratransit should be reevaluated, including reevaluating whether the 25 percent split of Section 5307 to Jaunt for ADA operational expenses is accurate and the best approach.
- Cost allocation methodologies need to be fully documented and agreed upon by all involved parties.
- Capital cost allocation should be a part of both CAT's and Jaunt's budget and requests for contributions from local jurisdictions.
- Establishing a fiscal year budget and contribution amounts should be a joint process between CAT and Jaunt—especially because Jaunt's contributions are dependent on the amount of funds received from CAT for ADA paratransit.
- Establishing documented service standards for all services in the region will help guide service planning and decision making.
- Establishing documented performance targets in agreements for transit services would help set common expectations about the level and quality of service being funded.



EXISTING CONDITIONS, BEST PRACTICES, AND PRELIMINARY FINDINGS AND RECOMMENDATIONS

Task 2 Technical Memo of Albemarle County Transit Services and Funding Review

1 INTRODUCTION

On behalf of Albemarle County in the Commonwealth of Virginia, the Texas A&M Transportation Institute (TTI) is conducting a review of transit services and funding in Albemarle County (hereinafter referred to as *the County* or *County*). The County is part of a regional transit partnership (RTP), which was founded through a partnership between the County and the City of Charlottesville (hereinafter referred to as *the City*) with the University of Virginia. Services in the County are provided by Jaunt, a public service corporation, and Charlottesville Area Transit (CAT), which is a department of the City. Both providers are also part of the RTP. In partnership with the Virginia Department of Rail and Public Transportation, the RTP's members cooperate to fund and make decisions on transit-related matters in the Charlottesville and Albemarle County region. CAT's services are limited to the City and the surrounding urbanized area. In addition to providing service in the County and the City, Jaunt operates service in five other adjacent counties, including Buckingham, Fluvanna, Greene, Louisa, and Nelson Counties.

As a member of the RTP and a funding contributor to services operated, the County requested TTI's assistance to gain a fuller understanding of the efficiency and effectiveness of the transit services operated in the County, the current and potential sources of funding to support transit service, and whether the current services, costs, and funding approaches reflect industry best practices.

This technical memo (*memo*) is the first interim deliverable in the project and seeks to document TTI's understanding of the region's existing transit services, costs, and funding as well as industry best practices related to service levels, planning, and funding. This memo also contains preliminary findings and recommendations based on that understanding. This memo is delivered as a draft to all three organizations directly overseeing or providing transit service in the County, including the County, CAT, and Jaunt, and needs to be reviewed by the three organizations for their comments and feedback. There remain a few outstanding questions and points of needed clarification; therefore, any information, findings, and recommendations contained in this memo should be considered preliminary and subject to further revision.

This memo is organized into the following sections:

- Section 2: Summary of Methodology.
- Section 3: Transit Services in the County.
- Section 4: Transit Operators, Costs, and Funding.
- Section 5: Best Practices Research.



- Section 6: Preliminary Findings and Recommendations.
- Section 7: References.
- Appendix A: Jaunt Albemarle County Service Maps.
- Appendix B: Full Results of CAT's Fixed-Route Cost Allocation.

2 SUMMARY OF METHODOLOGY

To gather the information contained in this memo, TTI engaged in an iterative fact-finding procedure focused on collecting key information and data directly related to the core purpose of the study, reviewing that information, and seeking clarification and additional information as necessary through emails and interviews.

TTI requested data and information from the County, CAT, Jaunt, and the Virginia Department of Rail and Public Transportation (DRPT).

TTI also conducted the brief video call interviews listed in Table 1.

Organization	Date and Time (Central)	Attendees
DRPT	Monday, October 2, 2023 12:00 pm – 12:45 pm	 Grant Sparks, Director of Statewide Grant Programs Katy Miller, Transit Programs Manager
CAT	Tuesday, October 3, 2023 2:00 pm – 3:30 pm	 Garland Williams, Director of CAT Barry Herring, Assistant Director of Finance and Grants Management Janice Woodson, Senior Accountant
Jaunt	Friday, October 6, 2023 9:00 am – 10:30 am	Ted Rieck, Chief Executive OfficerJacquelyn Spence, Senior Director of Operations

TABLE 1. INTERVIEWS LISTED IN CHRONOLOGICAL ORDER.

To document best practices, TTI reviewed published industry-relevant literature and documents directly related to:

- Service planning of fixed-route and demand response services.
- Cooperation, coordination, and sharing the cost of transit in multi-jurisdictional regions.

Based on its review of existing conditions and industry best practices, TTI developed preliminary findings and recommendations, documented in this memo. The County, CAT, and Jaunt will review these preliminary findings and recommendations and, if desired, will provide comments back to TTI for consideration by TTI and The County.



3 TRANSIT SERVICES IN THE COUNTY

This section of this memo documents TTI's understanding of the transit services provided in the County by CAT and Jaunt. Given the short timeframe TTI had to document the transit services, most of the information contained in this section is based on publicly available sources such as CAT's and Jaunt's websites and General Transit Feed Specification (GTFS) data sets published by CAT and Jaunt or is taken from presentations and documents provided by the County, CAT, or Jaunt.

3.1 OVERVIEW OF TRANSIT SERVICES

The study region is divided into three main geographies:

- The City of Charlottesville.
- The urbanized area (UZA) outside the City of Charlottesville but in Albemarle County.
- The rural areas in Albemarle County.

Figure 1 displays these three geographies; Table 2 displays the population and land area of each.



FIGURE 1. GEOGRAPHIES WITHIN THE ALBEMARLE COUNTY STUDY AREA.

Note: The map shows the 2010 Charlottesville UZA boundaries.



Area	Population	Population %	Land Area (sq. mi.)	Land Area %	Population Density (people / sq. mi.)
City of Charlottesville	52,021	33%	10.94	1.5%	4,755.1
Urbanized Area (outside Charlottesville)	50,811	32%	23.96	3.3%	2,120.7
Rural Area of Albemarle County	56,116	35%	701.33	95.3%	80.0
Total Albemarle County	158,948	100%	736.23	100%	215.9

TABLE 2. POPULATION AND LAND AREA IN THE STUDY REGION.

Note: The population estimates in this table used Census 2020 population data but as divided into geographies from Census 2010, including 2010 Charlottesville UZA. The 2010 UZA boundary was used, because most of the FY2024 budget analyses were based on the 2010 UZA boundary.

As previously stated, service in the region is operated by CAT and Jaunt. Jaunt also provides service to areas outside Albemarle County.¹ For planning and reporting purposes, transit providers divide their services into *modes*, which are different forms of transit defined by the typical vehicle used and how customers can access the service. The modes of transit offered (or soon to be offered) in the region include:

- Local bus: A bus service that has fixed stops and schedules and usually seeks to meet the needs of local (e.g., intra-city) travel. Buses follow a pre-determined route, and customers access the service at regularly placed bus stops or stations.
- ADA paratransit: A demand response service provided to people with disabilities. Under the Americans with Disabilities Act (ADA), this service is required whenever fixed-route bus and/or rail service (e.g., local bus) is operating and must accommodate trips that have origins and destinations within ¾-mile of fixed routes. ADA paratransit is not required to complement commuter bus and rail routes do not require ADA paratransit.
- Commuter bus: A bus service that has fixed stops and schedules and usually seeks to meet the needs of longer (e.g., inter-city) travel. Buses follow a pre-determined route, and customers access the service as stops or stations. Commuter buses usually have a cluster of stops at both the beginning and end of the route but have no or very few stops in between.
- General public demand response: A demand response service open to any rider, regardless of the
 presence or absence of a disability. General public demand response can come in many forms;
 however, generally, customers request trips at least a day in advance, and vehicles come to pick up
 customers at/near their desired origins and drop them off at/near their desired destinations. In
 many cases, multiple customers ride in the same vehicle even though they may be heading to
 different places.
- Microtransit: A form of demand response service that is typically characterized by a technologydriven trip request platform (often a web or mobile application) and real-time trip scheduling to allow for transit vehicles to come on the same day of the request—often within an hour or less.

¹ Although these other services



Table 3 lists the unique services offered by CAT and Jaunt in the region. Each of these services is described in more detail in the following sections of this memo.

Service	Service Area	Service Description	Operator	Mode
Rural general public demand response	Rural areas of Albemarle County (also provided in areas outside of Albemarle County)	Curb-to-curb demand response for the general public. Jaunt has several types of general public demand response services, discussed in more detail later in this memo.	Jaunt	Demand response
ADA paratransit for CAT	¾-mile buffer around CAT's fixed routes (with some extensions beyond the ¾-mile buffer)	ADA paratransit provided for eligible individuals within ¾-mile of the CAT's fixed-routes, including those that extend into Albemarle County	Jaunt	ADA paratransit
Sponsored demand response	Jaunt's service area	Demand response service provided under contract on behalf of human services agencies for beneficiaries of those agencies' programs	Jaunt	Demand response
CONNECT commuter routes	Outer counties, Albemarle County, and Charlottesville	Commuter bus routes that connect outlying areas to Charlottesville, including Crozet Connect and 29 North Connect	Jaunt	Commuter bus
CAT local bus	Charlottesville and Albemarle County	Fixed routes that extend from Charlottesville into Albemarle County	САТ	Local bus

The following sections describe the services listed above in more detail, organized by operator.

3.2 CAT

CAT operates the CAT local bus service and will also be operating the microtransit service, which should be launched on or near October 30, 2023. CAT also operates a free trolley service in downtown Charlottesville.

3.2.1 CAT FIXED ROUTE SERVICE

CAT's fixed-route services, including bus routes and the trolley, are mapped in Figure 2. As can be seen in Figure 2, several of CAT's fixed routes extend into the County; however, all fall within the 2010 and 2020 Charlottesville UZA (a map of the 2020 UZA is shown later in this memo).





FIGURE 2. CAT FIXED-ROUTE SERVICES.

Notes: Routes and stops from CAT GTFS file.

Map displays the 2010 Charlottesville UZA.

Generally speaking, CAT's fixed routes, including the Trolley, operate Monday through Saturday from 6:00 am to 10:30 pm (approximately 16.5 hours a day). Routes operate with either a 60-minute or 30-minute headway; CAT currently does not operate Sunday service.² Table 4 lists all of CAT's fixed routes.

² Although Route 12 was previously operated as a Sunday route, TTI assumes that this route has been continued, because the route is not listed on CAT's website or in CAT's FY2024 cost allocation results.



Route Name	Weekday and Saturday Span ^a	Weekday and Saturday Headways (mins.)	Extends into County?
1 – PVCC & Woolen Mills	6:15 am – 10:27 pm	60	Yes
2 – Downtown-Fifth St Station/PVCC	6:35 am – 10:30 pm	30	Yes
3 – Downtown-Southbound/Belmont Park	6:00 am – 10:27 pm	60	Yes
4 – Downtown-Cherry Ave & Harris	6:25 am – 10:27 pm	30	No
5 – Barracks Ctr-Fashion Sq Mall	6:30 am – 10:30 pm	30	Yes
6 – Downtown-Ridge St	6:30 pm – 10:27 pm	60	No
7 – Emmet Street & Seminole Trail	6:20 am – 10:35 pm	30	Yes
8 – Prospect Ave-Barracks Rd	6:30 am – 6:27 pm	60	Yes
9 – Downtown-Rose Hill	7:00 am – 10:27 pm	30	Yes
10 – Pantops	6:30 am – 10:27 pm	60	Yes
11 – Downtown-Locust Ave & Rio Rd	6:00 am – 10:27 pm ^b	60	Yes
Trolley	6:40 pm – 10:30 pm	25	No

TABLE 4. CAT FIXED ROUTES.

Notes:

Source: CAT Lifeline Reduced Service Schedule (<u>https://www.charlottesville.gov/DocumentCenter/View/9624/Extended-Lifeline-Service-Schedules-5-3-2023</u>). Route names are truncated as shown in the source file.

^a Route spans are based on the earliest listed start time for a route and the latest listed ending time for a route.

^b Trips after 6:27 pm do not run on Saturdays.

3.2.2 MICROTRANSIT PILOT

CAT is also launching a microtransit pilot project to serve the areas of US-29 North and Pantops (see Figure 3). CAT released an RFP and awarded the contract to VIA Transportation, who will be providing turnkey microtransit services. The microtransit service should commence on or around October 30, 2023. Service will be offered Monday through Saturday from 6:30 am to 9:00 pm (about 14.5 hours) in both zones, and the target response time for both zones is 15 minutes.³

Based on the microtransit study⁴, the service should require four vehicles in concurrent operation.

⁴ Albemarle County Transit Expansion Study: Final Report (February 2022).



³ The target response time is the time it should take from the customer booking their trip to the vehicle arriving to pick up the customer.



FIGURE 3. MAP OF THE MICROTRANSIT PILOT SERVICE ZONES.

Source: Albemarle County Transit Expansion Study: Final Report (February 2022, p. 117).

3.2.3 SERVICE FARES

Currently, CAT does not charge fares on any of its fixed routes. The funding to remain fare free comes from a state Transit Ridership Incentive Program (TRIP) Grant. TTI assumes the microtransit pilot will also be fare free.



3.2.4 CUSTOMER SERVICE

CAT provides all customer service functions for its fixed routes, including producing static and real-time transit information, staffing a call center, handling complaints, and managing the website and other customer-facing tools.

3.3 JAUNT

Jaunt operates demand response and commuter bus services in the region.

3.3.1 DEMAND RESPONSE SERVICES

Within the region, Jaunt operates the demand response services listed in Table 5. Appendix A contains maps of the services listed in Table 5. In some cases, Jaunt comingles⁵ trips from different services on the same vehicle to help improve service productivity and cost-effectiveness. Based on discussions with Jaunt leadership, improving the productivity of its demand response services is a work-in-progress and a high priority in the coming years.

⁵ Using a single vehicle to provide multiple trip types, resulting in there being two or more individuals on the same vehicle concurrently but from different services (e.g., an ADA customer and a 20 North Link customer).



Service Name	Service Description	Weekday Span	Rural / Urbanª	County / City⁵
20 North Link	Commuter-oriented, weekday peak hour demand response service to take customers from the Route 20 corridor to Charlottesville and surrounding areas.	<u>Mon. – Fri.</u> AM: 7:30 am – 8:30 am PM: 3:00 pm – 3:30 pm	Both	Both
29 North Link	Commuter-oriented weekday peak hour demand response service to take customers from the US-29 North area into Charlottesville and surrounding areas.	<u>Mon. – Fri.</u> AM: 6:00 am – 8:00 am PM: 3:00 pm – 3:30 pm	Both	Both
Other Demand Response	General public demand response operating during weekdays, focused on travel between communities in Albemarle County.	<u>Mon. – Fri.</u> 10:00 am – 2:00 pm	Both	County ^c
ADA Paratransit	ADA paratransit service for people with disabilities provided under an agreement with CAT within the CAT ADA paratransit zone (roughly ¾-mile from any CAT fixed route).	<u>Mon. – Fri.</u> 6:15 am – 11:00 pm <u>Sat.</u> 6:15 am – 11:00 pm <u>Sun.</u> 7:15 am – 10:00 pm	Urban	Both
Albemarle Priority Service	Service that supplements the ADA paratransit service by providing general public demand response service to non-ADA-eligible riders outside of CAT's ADA boundary. The service is open to anyone (regardless of disability) in the priority service area and customers can travel to anywhere in the ADA area. The service is considered urban, because it falls within the urbanized area.	<u>Mon. – Fri.</u> 6:15 am – 11:00 pm <u>Sat.</u> 6:15 am – 11:00 pm <u>Sun.</u> 7:15 am – 10:00 pm	Urban	Both
Crozet Link	Commuter-oriented weekday peak hour demand response service to take customers from the Crozet area into Charlottesville and surrounding areas. Divided into two zones— one for east Crozet and one for west.	<u>East:</u> Mon. – Fri. 8:00 am – 2:00 pm <u>West:</u> Mon. – Fri. 9:00 am – 5:00 pm	Both	Both
Crozet Circulator	General public demand response that provides trips within the Crozet area.	<u>Mon. – Fri.</u> 8:00 am – 4:00 pm	Rural	County
Earlysville Link	Commuter-oriented weekday peak hour demand response service to take customers from the Earlysville area into Charlottesville and surrounding areas.	<u>Mon. – Fri.</u> AM: 6:00 am – 9:00 am PM: 3:00 pm – 3:30 pm	Both	Both
Esmont- Scottsville Link	Commuter-oriented weekday peak hour demand response service to take customers from the area in south Albemarle County, including Esmont, Scottsville, and surrounding areas, into Charlottesville and surrounding areas.	<u>Mon. – Fri.</u> AM: 6:00 am – 9:00 am PM: 12:00 pm – 4:00 pm	Both	Both
Esmont- Scottsville Circulator	General public demand response that provides trips within the Esmont-Scottsville area in south Albemarle County.	<u>IVION. – Fri.</u> 8:45 am – 3:00 pm	Rural	County

TABLE 5. JAUNT DEMAND RESPONSE SERVICES IN THE REGION.



Service Name	Service Description	Weekday Span	Rural / Urbanª	County ∕ City⁵
Keswick Link	Commuter-oriented weekday peak hour demand response service to take customers from the areas in east Albemarle County, including Keswick, Rugby, Cobham and surrounding areas, into Charlottesville and surrounding areas.	<u>Mon. – Fri.</u> AM: 8:00 am – 8:30 am PM: 3:00 pm – 3:30 pm	Both	Both
Sponsored Service	Service sponsored by human services agencies in the region, including InnovAge/PACE, Jefferson Area Board of Aging, Barrett Adult Day Care, and LogistiCare, which is the statewide Medicaid non-emergency medical transportation broker.	As dictated by service agreements with sponsors.	Both	Both

Notes:

Source: Adapted from Exhibit A of the June 2023 draft transit services agreement between Jaunt and Albemarle County.

^a Services are marked as rural, urban, or both based on whether the service area appears to cover the rural area only, urban area only, or both.

^b Services are marked as county, city, or both based on whether the service area appears to cover the county only, city only, or both.

^c Other demand response is not provided to residents within the city limits of Charlottesville; only ADA is provided within the city limits.

In summary, excluding ADA paratransit and Albemarle Priority service, Jaunt's demand response operation is open five days a week for about 10 hours a day.

In addition to the services listed above, Jaunt also provides similar demand response services (excluding ADA paratransit) beyond Albemarle County, including to:

- Fluvanna County.
- Greene County.
- Louisa County.
- Nelson County.

All demand response services provided by Jaunt are advanced reservation services and require customers to book their trips at least one day in advance. Reservations can be made up to 14 days in advance. Customers make reservations by calling Jaunt's call center or by sending an email (at least two days before the trip date).

3.3.2 CONNECT COMMUTER ROUTES

Jaunt operates several commuter bus routes under the brand name *CONNECT* (see Table 6). These commuter bus routes connect outlying areas with the University of Virginia (UVA) and downtown Charlottesville. Figure 4 displays a map of the CONNECT routes zoomed out to display all of Albemarle County; Figure 5 displays the same routes but zoomed in to focus on the routes' alignments and stops within the City.





FIGURE 4. JAUNT CONNECT ROUTES (COUNTY-WIDE DETAIL).

Notes:

Source: Jaunt GTFS Files. Map displays the 2010 Charlottesville UZA.





FIGURE 5. JAUNT CONNECT ROUTES (CITY-WIDE DETAIL).

Notes:

Source: Jaunt GTFS Files. Map displays the 2010 Charlottesville UZA.

TABLE 6. CONNECT COMMUTER ROUTES.

Route Name	Weekday Span ^a	Weekday Trips ^b	Contains Stops in the County?
Crozet East	AM: 5:31 am – 8:15 am	AM: 3 trips	Yes
	PM: 3:47 pm – 7:06 pm	PM: 4 trips	
Crozet West	AM: 5:53 am – 8:55 am	AM: 3 trips	Yes
	PM: 3:49 pm – 7:10 pm	PM: 4 trips	
Crozet Evening	PM: 7:30 pm – 8:53 pm	1 trip	Yes
29 North	AM: 6:05 am – 8:43 am	AM: 3 trips	Yes
	PM: 4:35 pm – 7:15 pm	PM: 3 trips	
Buckingham East	AM: 5:45 am – 7:07 am	AM: 1 trip	Yes
	PM: 4:00 pm – 5:27 pm	PM: 1 trip	
Buckingham North	AM: 6:00 am – 7:43 am	AM: 1 trip	Yes
	PM: 5:02 pm – 6:51 pm	PM: 1 trip	
Lovingston	AM: 6:31 am – 7:31 am	AM: 1 trip	Yes
	PM: 4:48 pm – 5:35 pm	PM: 1 trip	

Notes:

Source: Jaunt website.

^a All routes operate Monday through Friday. Times shown represent the period's earliest departure time and the latest arrival time.

^b The number of trips is based on the number of columns trips shown on the Jaunt website.



The three Crozet routes listed in Table 6 are shown in Figure 6, below. The East and West routes are very similar; however, each serves a slightly different set of bus stops, with only three shared stops in Charlottesville:

- JPA @ West Complex.
- JPA @ Penn Hall.
- Walter St. & Omni Hotel.

The Evening route is a one daily trip that serves all the stops served by the East and West routes.

Figure 7 displays the route map for 29 North CONNECT. This memo does not show maps for Buckingham and Lovingston CONNECT routes, because these routes are designed to serve and are funded by Buckingham and Nelson Counties (none of Albemarle's contribution is used to fund these two routes).





FIGURE 6. MAPS OF CROZET CONNECT.





FIGURE 7. MAP OF 29 NORTH CONNECT.

Source: https://ridejaunt.org/connect/29-north-connect-service-schedule/

3.3.3 SERVICE FARES

Currently, all of Jaunt's non-sponsored services are fare free, including all demand response and fixed route service. Jaunt charges sponsors \$50.00 per revenue vehicle hour. The hours attributed to individual sponsors is calculated by Jaunt's vehicle hours allocation methodology, which is documented later in this tech memo.

3.3.4 CUSTOMER SERVICE

For the services it operates, Jaunt provides all aspects of customer service, including reservations (for demand response), producing static transit information, staffing a call center, handling complaints, and managing the website and any other customer-facing tools. For ADA paratransit service, Jaunt does not perform eligibility screening, which is provided by CAT.

3.4 SERVICES AND THE 2020 UZA

So far in this memo, any map that displayed the Charlottesville UZA used the 2010 Census boundaries. To better understand the implications of the 2020 Census, TTI also mapped CAT and Jaunt routes against *both* the 2010 and 2020 UZA boundaries (see Figure 8). In the figure, dark gray shows where both the 2010 and 2020 UZA boundaries are the same. Any light gray areas outlined in red are places where the UZA grew, and any light gray areas without a red outline are placed where the UZA shrunk. Generally



speaking, the 2010 and 2020 boundaries align; however, the UZA grew slightly to the southwest and east and the large arm of the 2010 UZA that extended to the west is no longer considered part of the UZA. The changes to the UZA boundaries will have some implications on future service and cost allocations, including changing the classifications of some existing trips from rural to urban or vice versa.





Sources: Routes are from CAT and Jaunt GTFS data. Census 2010 and 2020 boundaries are from the U.S. Census Bureau.

4 TRANSIT OPERATORS, COSTS, AND FUNDING

This section describes the organizational structure, costs, and funding of the two transit operators providing County service (CAT and Jaunt) and also how the costs of both organizations are allocated to Albemarle County.

4.1 CAT

4.1.1 ORGANIZATIONAL STRUCTURE

CAT is a department of the City of Charlottesville. CAT is overseen by the Transit Director, Garland Williams, who is supported by a staff of 134 FTEs providing all transit functions except for human



resources and information technology, which appear to be provided as a central service from the City. Figure 9 is an organizational chart for CAT.





stes all transit services it currently provides but will begin ou

CAT directly operates all transit services it currently provides but will begin outsourcing the new microtransit pilot service to VIA in October 2023.

4.1.2 ASSETS AND FACILITIES

Pre-COVID, CAT operated 26 buses at peak operations⁶ and had a fleet of 36 buses, with 5 buses considered inactive. CAT's pre-COVID spare ratio was 19.2 percent.⁷ CAT currently operates 19 buses at peak operations and owns a fleet of 40 buses⁸, with 5 buses considered inactive. CAT's current spare ratio is 84.2 percent. CAT has a single operations, maintenance, and administrative facility, and all bus routes serve the Downtown Transit Station, located in the heart of Charlottesville.

The microtransit pilot vehicles will be provided by the turnkey operator, VIA.

⁸ Based on CAT's Department Overview & Budget Summary PowerPoint, interview with CAT, and subsequent clarifications.



⁶ Based on CAT's 2021 NTD data.

⁷ Spare ratio is calculated as (total active fleet – peak vehicle requirement) / peak vehicle requirement as defined in FTA Circular 9030.1E,

V.11.c, page V-12. Using pre-COVID data: (31 – 26) / 26. Using current data: (35 – 19) / 19.

4.1.3 COSTS AND SOURCES OF APPLIED REVENUE

4.1.3.1 COST AND REVENUE SUMMARY

CAT's reported FY2024 operational expenses total to \$14,286,170, as shown in Figure 10. This \$14.3 million includes a line item for passing through \$2.29 million along to Jaunt for operation of CAT's portion of the ADA paratransit service.

Expenditure Assumptions FY24		24	Maintenance	
Inditsit			Personnel Expenditures	\$
Operations	perations		Operating Expenditures	¢
Personnel Expenditures	\$5,630,866		operating Experiatores	7
			Total Cost for Maintenance	1
perating Expenditures	\$1,104,442			
	¢c 725 200		Marketing	
otal Cost for Operations	Ş0,735,308		Personnel Expenditures	\$
Administration			Operating Expenditures	\$
ersonnel Expenditures	\$ 782,394		Total Cost for Marketing	4
perating Expenditures	\$ 906,717		Iotal Cost for Marketing	Ŷ
			Safety and Security	
aunt pass-through (ADA)	\$2,290,395		Personnel Expenditures	\$
otal Cost for	\$3,979,506		Operating Expenditures	\$
dministration	+-,		Total Cost for Safety and Security	
Total Estimated Cost for FY 24			\$14,286,170	

FIGURE 10. CAT FY2024 OPERATIONAL EXPENSES.

Source: CAT Department Overview & Budget Summary. Note: Excludes the costs for the microtransit pilot.

Table 7 displays a summary of the sources of CAT's FY2024 revenues applied to operational expenses. Revenues are mainly from federal and state sources, with a little less than a third of its revenues coming from local sources.



Source	Amount	Percentage
Federal ^a	\$6,945,690	49%
State ^b	\$3,105,580	22%
Local ^c	\$4,234,900	30%
Total	\$14,286,170	100%

TABLE 7. CAT FY2024 SOURCES OF REVENUE APPLIED TO OPERATIONAL EXPENSES.

Notes:

Source: Adapted from CAT Department Overview & Budget Summary

Excludes revenues applied to the microtransit pilot.

^a Federal includes all federal funds applied to CAT expenses, including Section 5307, CARES/ARP, and the amount of Section 5307 and ARP funds allocated to Jaunt for ADA paratransit operations.

^b State includes state operating assistance and the TRIP grant that supports CAT's continued zero fare operation.

^c Local includes all contributions from local governments, any revenues earned from operating purchased service, and advertising.

CAT also has a \$23,011,897 capital improvement plan; however, the details of what's in the \$23 million plan are unclear at this time. Some additional information is shown in Figure 11, which displays CAT's transit projects (mostly capital) over \$75,000.

FIGURE 11. CAT TRANSIT PROJECTS OVER \$75,000.

Transit project over \$75K										
Project	Funding Total	Completion Date								
State Demonstration Project Grant (Micro-transit)	\$ 1,940,000	18 months – from 91/19/23								
Passenger Amenities/Improvements	\$ 324,000	TBD								
Operations Annex Facility Modifications	\$ 24,689,925	NEPA – FY25								
Administration Facility Addition	\$ 12,932,060	NEPA – FY25								
AVL System Upgrade	\$ 550,000	FY26								
Inventory Management Software	\$ 217,500	FY25								

Source: CAT Department Overview & Budget Summary.

4.1.3.1.1 FEDERAL FUNDS

CAT's FY2024 federal funds are from two Federal Transit Administration (FTA) grant programs:

 Section 5307 Urban Formula Program (Section 5307 for short). FTA makes an apportionment of Section 5307 funds to the Charlottesville UZA annually, as authorized by the Infrastructure Investment and Jobs Act (IIJA; also known as the Bipartisan Infrastructure Law) and appropriated by Congress. CAT is the designated recipient of those funds. A portion of these funds are passed through to Jaunt for operation of ADA paratransit services.



• CARES/ARP funding programs, which were special apportionments made available during the COVID-19 pandemic. According to CAT staff, it is likely that, by the end of FY2026, CAT will have spent out all remaining CARES/ARP funds.

Table 8 displays CAT's FY2024 anticipated federal funds and how they will be used.

Program	Amount	Percentage	Notes			
Section 5307	\$2,867,365	41%	Used only for CAT operational expenses associated			
Operating			with fixed-route service; requires 50% local match.			
Assistance						
CARES / ARP	\$1,787,930	26%	Used for CAT operational expenses associated with			
			fixed-route service; no local match required.			
Section 5307 &	\$2,290,395	33%	Used only for ADA paratransit operational expenses;			
CARES / ARP			funds passed through CAT to Jaunt. Requires 50%			
Passed to Jaunt			local match for the Section 5307 portion.			
Total	\$6,945,690	100%				

TABLE 8. CAT FY2024 SOURCES OF FEDERAL FUNDS.

4.1.3.1.2 STATE FUNDS

CAT's state funds come from two main sources: the DRPT Making Efficient and Responsible Investments in Transit (MERIT) Operating Program and the DRPT TRIP Program. The MERIT program is a formula-driven operating assistance program, subject to annual state appropriations and limited to no more than 30 percent of a transit agency's prior fiscal year operational budget.⁹ DRPT reported that the funding in the MERIT program is relatively consistent from year to year; however, agency size and performance factors may cause annual fluctuations in the awarded amounts. MERIT grants are paid out by DRPT as monthly or quarterly disbursements and are not reimbursement-based.

The TRIP program is a competitive grant program to help offset the costs of zero fare operations; however, funding to an individual recipient (e.g., CAT) is available for up to five years only. Over the duration of the TRIP grant, local share of the costs will increase annually while the state share will decrease (see Figure 12).

First Year	Second Year	Third Year	Fourth Year	Fifth Year
Up to 80% of	Up to 60% of	Up to 30% of	Up to 20% of	Up to 10% of
eligible project				
costs	costs	costs	costs	costs

FIGURE 12. STATE SHARE OF TRIP PROJECT COSTS.

⁹ Full details on how the MERIT program works, including the formula factors and weights can be found in <u>https://drpt.virginia.gov/wp-content/uploads/2023/07/drpt-operating-assistance-technical-guidance.pdf</u>.



CAT is also receiving state funds to offset the costs of the microtransit pilot program. Although these funds are not shown in Figure 10 or Table 7, CAT does anticipate receiving \$1,552,000 from a state demonstration grant, which will be matched by a \$388,000 contribution from Albemarle County.

4.1.3.2 ADA PARATRANSIT

ADA paratransit costs attributable to the City¹⁰ are also a part of CAT's operational budget and are included in the FY2024 budget and future budgets based on CAT passing through Section 5307 funds to Jaunt, who operates ADA paratransit service for CAT's fixed routes, and the City of Charlottesville providing local match to those passed through Section 5307 funds. CAT splits its Section 5307 funding and allocates a portion to Jaunt as an operating assistance grant. Under the split arrangement, Jaunt acts as a subrecipient and receives about 25 percent of CAT's annual Section 5307 apportionment (the same split approach was also used for CARES/ARP funding). The percentage split was based on a 2013 analysis by the Thomas Jefferson Planning District Commission (the Metropolitan Planning Organization, or MPO). In FY2024, as stated previously, CAT passed through \$2.29 million to Jaunt in a combination of Section 5307 and CARES/ARP funds.

Although CARES/ARP funds do not require local match, Section 5307 funding requires local match of 50 percent of net operating assistance (operating expenses less fares). Therefore, essentially a dollar of local match must be provided for every dollar of Section 5307 funds spent by Jaunt. According to a 2018 subrecipient agreement between CAT and Jaunt (which is value for five years), the City of Charlottesville provides matching funds equal to "fifty percent (50%) of the total dollars provided to Jaunt from the City's Section 5307 Operating Grant to be paid to Jaunt under this agreement." This language seems to suggest that, if the CAT provides Jaunt with, for example, \$1 million in Section 5307 funds, the City would provide 50 percent of that (i.e., \$500,000) in match. However, it is unclear as to whether this 50 percent in City-sourced match is a lower limit or upper limit and whether the terms of this subrecipient agreement are still being followed today.

TTI did find specific data that appears to represent the City's FY2024 contribution to Jaunt on the City's website at <u>https://stories.opengov.com/charlottesvilleva/published/ b9R Idr0</u>. The data for FY2024 indicates that the City contributed \$1.97 million to Jaunt, which is more than 50 percent of the \$2.3 million identified in CAT's FY2024 budget presentation as federal funds passed through to Jaunt. Based on its review of Jaunt's cost allocation methodologies, discussed below, it appears that the City's contribution to Jaunt is calculated not using the 50 percent language contained in the subrecipient agreement, but instead on Jaunt's methodology.¹¹

4.1.3.3 MULTI-YEAR SOURCES OF REVENUE

Based on FTA data, annual Section 5307 apportionments to Charlottesville have been consistently increasing over time and will likely continue to increase in the future (assuming continued federal support). Figure 13 displays FY2021 through FY2023 actual Section 5307 apportionments as well as TTI's projections for FY2024 and FY2026. (Note that annual FTA apportionments do not have to tie directly to

¹¹ TTI reached this conclusion by examining Jaunt's cost allocation workbooks and finding the requested City contribution amount of \$1,973,232, which is exactly what was posted on the City's website.



¹⁰ ADA paratransit costs outside the City are attributable to (and charged to) the County.

funds applied each fiscal year, because FTA does allow funds to be used beyond the fiscal year in which the grant was awarded.)



FIGURE 13. FTA SECTION 5307 APPORTIONMENTS TO THE CHARLOTTESVILLE UZA FY2021 TO FY2026.

Note: FY2021 – FY2023 are from FTA actual apportionment tables. FY2024 – FY2026 are TTI-forecasted amounts based on the annual growth in the overall Section 5307 authorized amounts under the IIJA. The forecasted amounts are likely to be impacted slightly by planned service changes and the results of the 2020 Census; however, the impacts of the census on FY2024 and subsequent apportionments is unknown until FY2024 apportionments are released by FTA.

Section 5307 funding beyond FY2026 is uncertain at this time, because the last year of the IIJA if FY2026.

CAT provided TTI with its operational budget forecast, which included operational expenses and applied revenues from FY2019 through FY2026 (see Figure 14). TTI summarized the data contained in this budget based on the major revenue source categories federal, state, and local (see Figure 15).



	Actual	Actual	Actual	Actual	Approved Budget	Projected Budget		
	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024 FY2025 F		FY2026
EXPENSES:								
Transit Operations	5,599,260	5,619,227	6,003,136	6,403,423	6,309,808	6,650,408	7,187,908	7,350,408
UVA Trolley Service				80,040	82,440	84,900	87,500	90,070
Transit Administration	1,039,267	597,056	742,580	1,310,414	1,699,138	1,689,112	1,838,449	1,866,025
Transit Maintenance	1,649,021	1,826,755	2,182,284	2,456,036	2,782,762	3,097,836	3,144,304	3,191,468
Transit Marketing	103,373	93,288	82,496	107,708	198,914	219,741	223,037	226,383
Transit Safety & Security	-	128,561	202,413	220,071	232,251	253,778	257,585	261,448
	\$ 8,390,921	\$ 8,264,887	\$ 9,212,908	\$ 10,577,692	11,305,313	11,995,775	12,738,782	12,985,803
REVENUES:								
State Assistance	1,947,527	2,155,557	2,101,957	3,075,767	2,729,126	2,729,126	2,783,709	2,839,383
DRPT - TRIP Program	-				501,939	376,454	188,227	-
Reserve/Savings	-				-	-		
Federal Assistance	1,605,573	2,011,141	1,903,103	2,530,638	2,867,365	2,867,365	2,924,712	2,983,206
Albemarle County	1,178,382	923,498	579,584	1,000,000	1,000,000	1,300,000	1,859,184	1,991,478
C'ville	2,942,409	2,147,115	2,565,164	2,622,660	2,513,651	2,825,000	3,509,331	3,718,976
UVA Trolley Service	76,400	77,926	80,040	80,040	82,440	84,900	87,500	90,070
UVA Fixed Route Service	177,600	180,906	186,760	-	-	-	-	-
Transit Pass & Farebox	344,735	279,192	-	-	Zero Fare	Zero Fare	Zero Fare	Zero Fare
Advertising/Other	126,805	133,250	50,242	84,334	25,000	25,000	25,000	25,000
CARES/ARP	-	356,302	1,746,058	1,184,253	1,585,792	1,787,930	1,361,119	1,337,689
	8,399,431	8,264,887	9,212,908	10,577,692	11,305,313	11,995,775	12,738,782	12,985,802
Surplus/(Deficit)	8,510	(0)	0	0	(0)	-	(0)	(0)

FIGURE 14. CAT MULTI-YEAR FIXED-ROUTE BUDGET FORECAST.





Source: CAT FY2024 Budget and Three-Year Projection (see Figure 14).

As can be seen from Figure 15, local sources are forecasted to make up a larger and larger proportion of CAT's fixed-route operational expenses, reaching a total of \$5.8 million by FY2026. This is largely due to costs that are not offset by corresponding increases in the state or federal revenues. Although total local dollars from Charlottesville are almost twice that as those from Albemarle County (see Figure 16), Albemarle County's contribution is expected to increase from \$1.3 million in FY2024 to \$2.0 million in FY2016 (a 53 percent increase).





FIGURE 16. CAT FIXED-ROUTE LOCAL CONTRIBUTION AMOUNTS FY2021 - FY2026.

One shortcoming of the data contained in this budget is that it only shows the budget for CAT's fixedroute service and excludes costs and revenues for ADA paratransit (i.e., it does not show the Section 5307 revenue passed through to Jaunt nor City contributions to Jaunt for allocable ADA expenses). Although ADA paratransit is not a direct expense for CAT, it is important to understand the full cost of transit service funded by the City, including revenues received and contributions made by the City for both fixed-route and the allocable portion of ADA paratransit service. Using the City's website, TTI found the City's contributions to Jaunt from FY2021 to FY2024 (see Figure 17). These contributions are mainly for the City's share of Jaunt's expenses associated with providing ADA paratransit service.



FIGURE 17. CITY CONTRIBUTIONS TO JAUNT FY2021 TO FY2024.



TTI then estimated CAT's full federal apportionments for each fiscal year (adding back in what was passedthrough to Jaunt and not shown in the fixed-route budget in Figure 14) and combined the City's contribution to fixed-route and ADA paratransit under the *local* category. The results are shown in Figure 18 but are limited to FY2021 through FY2024, because forecasted Jaunt operational expenses for FY2025 and FY2026 were not available to TTI at the time of writing this memo.





Notes:

Local funding includes County contributions for fixed route, City contributions for fixed route, City contributions for the allocated costs of ADA paratransit, purchased service revenue from UVA, and advertising / other. State funding includes the state MERIT and TRIP grant programs. Federal funding includes Section 5307 and CARES / ARP as estimated by TTI, based on the assumption that the Section 5307 and CARES / ARP funds shown in *Figure 14* represent 75% of the funds available in the fiscal year. Also, the total FY2024 cost does not match CAT's FY2024 operational budget (*Figure 10*), because *Figure 10* does not include the City's contribution to Jaunt.

A few items to note from this analysis:

- Transit costs are steadily increasing (as is the norm across the industry); however, the costs are outpacing the growth federal and state funds, resulting in more local funds needed to support transit services.
- Across the four years shown, the amount of federal funding applied is higher than the Section 5307 apportionments to the Charlottesville UZA (shown in Figure 13). This is possible because CAT has available CARES / ARP funds to spend down; however, these funds will likely be exhausted by FY2026, potentially causing a substantial increase in local funding needed for FY2027.

4.1.4 METHODOLOGY FOR ALLOCATING OPERATIONAL COSTS TO ALBEMARLE COUNTY

CAT allocates its fixed-route service costs between the City and the County using a cost and revenue allocation methodology based on forecasted annual hours for each route that will fall within the City limits (costs and revenues attributable to the City) and outside the City limits (costs and revenues attributable to the City) and outside the City limits (costs and revenues attributable to the City). The cost allocation model for FY2024 follows the steps shown in Figure 19.



FIGURE 19. CAT FIXED-ROUTE COST ALLOCATION STEPS.

Forecast Total Operational Cost and Applied Revenues

- •Based on adopted service plans
- •Include fixed and variable operational costs
- •Establish assumptions for revenues available to apply from Section 5307, CARES / ARP, DRPT MERIT, DRPT TRIPS, purchase of service contracts, and advertising / other sources.

Allocate Costs to Routes & City / County

- •Forecast each route's total annual vehicle hours
- •Using GIS analysis, assign each route's hours to either the City or the County
- •Calculate the percentage of route hours in the City or the County
- •Use the percentage of route hours to assign the total operational cost for the fixed-route system

Allocate Forecasted Revenues to Each Route

• Using the percentage of route hours in the City or County, assign that percentage of federal grants, state grants, and other revenues to the route

Calculate the Remaining Cost of Each Route (Entity Contribution)

- •For each route, subtract the applied revenues from the forecasted route cost
- •The remaining route cost becomes the necessary contribution from each entity

A sample of the fixed-route cost allocation results are shown in Figure 20. (The full results are contained in Appendix B.) CAT forecasted total operational expenses for FY2024 fixed-route service to be \$11,995,775. As an example of how this cost is applied to routes, we'll look at Route 1. Route 1 is forecasted to have a total of 4,900 vehicle hours in the year. Of those hours, 3,724 will occur within the



City limits, and 1,176 will occur outside the City limits in Albemarle County. All routes combined are forecasted to operate 48,435 hours, making the County's portion of Route 1 equal to 2.43 percent of all hours (1,176 ÷ 48,435). Therefore, the County portion of Route 1 receives 2.43 percent of the cost (2.43 percent of \$11,995,775 is \$103,046.25) and 2.43 percent of all revenues, including federal (Section 5307 and ARP / CARES, state, and advertising). After applying all revenues to the County's portion of Route 1, the remaining balance becomes the County's contribution to operating Route 1. This is repeated for all of the fixed routes.

Route	Route Name	Annual Hours	Jurisdiction	s	Projected cheduled Cost (Hours)	Fe	Projected deral Operating Assistance	%
1	PVCC & Woolen Mills	3,724.00	City of C'Ville	\$	326,313.12	\$	77,974.70	4.21%
2A	Downtown-Fifth St. Station	4,095.00	City of C'Ville	\$	358,821.76	\$	85,742.85	4.63%
2B	Downtown-PVCC	1,188.00	City of C'Ville	\$	104,097.74	\$	24,874.85	1.34%
3	Downtown-Southwood	5,819.00	City of C'Ville	\$	509,886.16	\$	121,840.70	6.58%
3E	Downtown-Belmont Park	3,700.00	City of C'Ville	\$	324,210.14	\$	77,472.17	4.18%
4 :	wntown-Cherry Ave & Harris F	4,900.00	City of C'Ville	\$	429,359.37	\$	102,598.28	5.54%
5	Barracks Ctr-Fashion Sq Mall	6,864.00	City of C'Ville	\$	601,453.61	\$	143,721.35	7.76%
6	Downtown-Ridge St	3,500.00	City of C'Ville	\$	306,685.26	\$	73,284.49	3.96%
78	Emmet Street & Seminole Trai	19,430.00	City of C'Ville	\$	1,702,541.33	\$	406,833.60	21.96%
8	Prospect Ave-Barracks Rd	9,100.00	City of C'Ville	\$	797,381.68	\$	190,539.67	10.29%
9	Downtown-Rose Hill	4,782.00	City of C'Ville	\$	419,019.69	\$	100,127.55	5.41%
10	Pantops	2,654.00	City of C'Ville	\$	232,555.05	\$	55,570.58	3.00%
110	owntown-Locust Ave & Rio R	1,709.00	City of C'Ville	\$	149,750.03	\$	35,783.77	1.93%
TROLLEY	Trolley	17,000.00		\$	1,489,614.13	\$	355,953.23	19.22%
Sub	ototal	88,465.00		\$	7,751,689.08	\$	1,852,317.79	100.00%

FIGURE 20. SAMPLE OF CAT'S FIXED-ROUTE FY2024 COST ALLOCATION.

Route	Jurisdiction	Annual Hours	ost Total	Projected Scheduled Cost (Hours)	Fe	Projected deral Operating Assistance	%
1	PVCC & Woolen Mills	1,176.00	Co. of Albemarle	\$ 103,046.25	\$	24,645.31	2.43%
2A	Downtown-Fifth St. Station	2,205.00	Co. of Albemarle	\$ 193,211.72	\$	46,209.95	4.55%
2B	Downtown-PVCC	2,112.00	Co. of Albemarle	\$ 185,062.65	\$	44,260.96	4.36%
3	Downtown-Southwood	3,781.00	Co. of Albemarle	\$ 331,307.71	\$	79,238.02	7.81%
5	Barracks Ctr-Fashion Sq Mall	13,936.00	Co. of Albemarle	\$ 1,221,133.09	\$	292,055.29	28.77%
7	Emmet Street & Seminole Trai	14,070.00	Co. of Albemarle	\$ 1,232,874.76	\$	294,863.51	29.05%
8	Prospect Ave-Barracks Rd	900.00	Co. of Albemarle	\$ 78,861.92	\$	18,861.21	1.86%
9	Downtown-Rose Hill	1,018.00	Co. of Albemarle	\$ 89,201.60	\$	21,334.12	2.10%
10	Pantops	6,346.00	Co. of Albemarle	\$ 556,064.19	\$	132,992.46	13.10%
11	Downtown-Locust Ave & Rio R	2,891.00	Co. of Albemarle	\$ 253,322.03	\$	60,586.38	5.97%
Sul	ototal	48,435.00		\$ 4,244,085.92	\$	1,015,047.21	100.00%

	Grand Total	136,900.00	\$	11,995,775.00	\$	2,867,365.00	
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A few notes on this cost allocation methodology:

- The methodology is straightforward and reasonable, following industry practices for sharing the costs of fixed-route transit services.
- The methodology assumes that all fixed and variable costs are shared among all routes in proportion to the hours of the route. This currently appears to be accurate, given CAT's relatively simple



organizational structure, operational model, and facilities. However, the cost allocation model may need to be updated with the implementation of new services (e.g., if microtransit service remains in the long run), new facilities, or changes in organizational structure.

- The methodology does not include any capital costs, meaning that the City is funding all capital costs (e.g., vehicle replacements or facility upgrades) without County financial assistance.
- The contribution is calculated as the difference between the forecasted cost and the application of available revenues. Therefore, if available revenues are understated, contributions may be overestimated.¹² TTI was not able to confirm that CAT's federal funding is fully utilized in the cost allocation, which assumed that there would be \$2.87 million in Section 5307 and \$1.79 million in CARES / ARP funding available in FY2024 for a total of \$4.65 million. Discussions with CAT staff indicated that CAT typically spends all of its available Section 5307 funding; however, TTI did not have time to request or review actual Section 5307 drawdowns by CAT.¹³

4.2 JAUNT

4.2.1 ORGANIZATIONAL STRUCTURE

Jaunt is a public service commission in the Commonwealth of Virginia and is led by the Chief Executive Officer, Ted Rieck. Jaunt is governed by a Board of Directors, which comprises 14 voting members, including four from the City of Charlottesville, four from Albemarle County, and two from Louisa, Fluvanna, and Nelson counties. Figure 21 displays Jaunt's organizational chart. Jaunt is a stand-alone organization, 100 percent dedicated to providing transportation. As a stand-along organization, Jaunt has all the functions and departments necessary to operate, maintain, and manage transportation services. All of Jaunt's services are directly operated using its own vehicle operators and mechanics.

 ¹² The agreement between CAT and the County contains provisions for issuing credits or refunds to the County in the event that CAT spending is less than budgeted or more federal and state funds were applied than originally anticipated.
 ¹³ NTD data are not yet published for any fiscal years after FY2021.






4.2.2 Assets and Facilities

In 2021, Jaunt operated 55 revenue vehicles at peak operations¹⁴ and owned a fleet of 109 vehicles. However, based on recent discussions with Jaunt¹⁵, Jaunt's fleet is down to 86 vehicles, and its current peak operations requires between 53 and 55 vehicles, giving Jaunt a spare ratio of 56 percent¹⁶, which is high for an agency of Jaunt's size, and which exceeds FTA standards.¹⁷ Jaunt recognizes this issue and is working on both:

- Identifying its true baseline peak vehicle requirement after implementing scheduling efficiencies recommended by TTI in a separate technical assistance project.
- Slowly managing down its fleet size and optimizing its fleet mix (i.e., types of vehicles). Slow change is required to ensure no unintended negative impacts occur (e.g., unanticipated maintenance issues or vehicle shortages).

Jaunt's fleet is a mix of minivans, vans, and body-on-chassis cutaways.

¹⁷ FTA guidance (FTA Circular 9030.1C) is that an agency receiving 5307 funds and has 50 or more revenue vehicles should have a spare ratio of no higher than 20%.



¹⁴ Based on Jaunt's 2021 NTD data.

¹⁵ Based on TTI interview with Jaunt.

¹⁶ Spare vehicle ratio is calculated as (total active vehicles – peak vehicles) ÷ peak vehicles = (86 – 55) ÷ 55 = 56%.

Jaunt's primary facilities for administration, operations, and vehicle storage and maintenance are located at 104 Keystone Place, Charlottesville, VA 22901. Jaunt also has a facility in Greene County.

The administrative building houses Jaunt management, the call and control center functions, and all administrative functions. The maintenance facility includes 4 working bays plus a storage bay, with lifts in three of the bays. Fueling is done via fuel cards. Jaunt also has access to a single maintenance bay and fueling (via key fobs) at the Greene County facility.

Most of Jaunt's vehicles are stored at its main facility; however, a dozen vehicles are stationed at the Greene County facility, and a few—mostly used for Link and Circulator services outside of Albemarle County—are parked at drivers' residences or a nearby out parking facility.

4.2.3 COSTS AND SOURCES OF APPLIED REVENUE

4.2.3.1 SUMMARY

Jaunt's reported FY2024 operational expenses total to \$12,102,503 as shown in Table 9.

Object Class	FY2024 Adopted Budget
Salaries & Wages	\$6,473,042
Fringe Benefits/Staff Development	\$2,606,728
Travel/Business Meals/Meetings/Training	\$20,486
Facility/Equipment Maintenance/Utilities	\$164,399
Supplies & Materials	\$1,242,313
Marketing & Advertising	\$110,000
Insurance & Bonding	\$403,770
Professional Services	\$1,049,590
Miscellaneous	\$32,202
Total Operating	\$12,102,530

TABLE 9. JAUNT FY2024 ADOPTED OPERATIONAL BUDGET.

Source: Jaunt FY2024 Budget Workbook, provided by Jaunt.

Jaunt operates several different services (as described in Section 3.3); Table 10 displays the total operational cost of the main service types.



TABLE 10. JAUNT FY2024 COSTS FOR MAIN SERVICE TYPES.

Mode	Service	FY2024 Forecasted Cost ^a	% of Cost
Commuter Bus	CONNECT Commuter Bus Routes ^b	\$1,224,432	10%
Demand Response	ADA Paratransit ^c	\$5,470,668	45%
Demand Response	General Public Demand Response ^d	\$5,114,095	42%
Subtotal	Costs Attributable to Local Governments ^e	\$11,809,195	98%
Demand Response	Sponsored Service ^f	\$293,344	2%
Grand Total		\$12,102,539	100%

Notes:

Source: Adapted from Jaunt FY2024 Budget Workbook, provided by Jaunt.

^a Forecasted costs are based on Jaunt's operational cost allocation model. In some cases, the costs are directly from Jaunt; in others, the costs are estimated by TTI (see notes below).

^b Cost of CONNECT routes are calculated by TTI based on Jaunt's cost formula, the forecasted hours for commuter bus routes in Jaunt's FY2024 Budget Workbook, and the average speed of the two Albemarle County commuter bus routes, provided by Jaunt.

^c Cost of ADA paratransit calculated by Jaunt in its FY2024 Budget Workbook.

^d General public demand response includes all non-ADA demand response services operated by Jaunt, including link, circulator, and other demand response. Cost is estimated: (Total cost) – (CONNECT cost) – (ADA paratransit cost) – (Sponsored service cost).

^e Total cost of Jaunt's services excluding sponsored service operated for human services agencies.

^f Sponsored service operated for human services agencies.

Table 11 displays a summary of the sources of Jaunt's FY2024 revenues applied to operational expenses. Total applied revenues is \$9.00 more than the total operational costs of Jaunt shown in Table 9; however, the difference is inconsequential and most likely caused by rounding errors and there being multiple iterations of Jaunt's FY2024 budget.

Source	Amount	Percentage
Federal ^a	\$4,021,571	33%
State ^b	\$1,962,138	16%
Local ^c	\$6,118,830	51%
Total	\$12,102,539	100%

TABLE 11. JAUNT FY2024 SOURCES OF REVENUE APPLIED TO OPERATIONAL EXPENSES.

Notes:

Source: Adapted from Jaunt FY2024 Budget Workbook, provided by Jaunt.

^a Federal includes all federal funds applied to Jaunt expenses, including Section 5307, CARES/ARP, and Section 5311.

^b State includes state operating assistance and state technical assistance grants. Jaunt does not receive any portion of the TRIP grant to offset zero-fare operations.

^c Local includes all contributions from local governments and revenues earned from operating sponsored service.



4.2.3.1.1 FEDERAL FUNDS

Jaunt's federal funds are from the three sources shown in Table 12.

Program	Amount	Percentage	Notes
Section 5307	\$951,804	24%	Used only for ADA paratransit operational expenses; funds passed through CAT. Requires 50% local match.
CARES / ARP (Section 5307)	\$374,395	9%	Used only for ADA paratransit; funds passed through CAT. No local match required.
Subtotal Urban Funding	\$1,326,199	33%	
Section 5311	\$2,695,372	67%	Used only for rural service operational expenses; funds managed through DRPT. Requires 50% local match.
Total	\$4,021,571	100%	

T		FV2024	Co	F	Funne
IABLE IZ.	JAUNI	F12024	SOURCES OF	FEDERAL	FUNDS.

Source: Jaunt's FY2024 Budget Workbook, provided by Jaunt.

It's important to note that there is a difference between the Jaunt's forecasted FY2024 urban funding (i.e., 5307 and CARES / ARP) from CAT and CAT's FY2024 budget. In CAT's budget, \$2.3 million in Section 5307 and CARES / ARP funds are going to be passed to Jaunt in FY2024 (see Figure 10). However, Jaunt's FY2024 budget anticipated \$1.3 million (42 percent less than CAT's budgeted value).

4.2.3.1.2 STATE FUNDS

Jaunt's FY2024 state funds come from two main sources:

- DRPT MERIT program (discussed in Section 4.1.3.1.2), totaling \$1,854,386.
- DRPT Technical Assistance grants, which help Jaunt pay for technical studies. Jaunt is receiving Technical Assistance grants for two studies¹⁸:
 - Battery Electric Vehicle Implementation Study: \$42,400 in state funds (\$42,400 in local funds).
 - Mobility-on-Demand Service Design and Development: \$65,352 in state funds (\$65,352 in local funds).¹⁹

4.2.3.2 ADA PARATRANSIT

As shown in Table 10, ADA paratransit service costs Jaunt around \$5.5 million to operate (about 45 percent of Jaunt's FY2024 operational budget). Jaunt receives federal urban funding (passed through CAT), state funding (from DRPT), and local funding (from the City and the County) to help offset the costs of the ADA paratransit services. Table 13 below shows, using Jaunt's and CAT's different anticipated urban funding values, approximately how much of the cost of ADA paratransit cost falls on the City and County after accounting for federal and state grants. In total, the \$5.5 million ADA paratransit program costs the City and County between \$2.3 and \$3.2 million after applying federal and state grants.

¹⁹ This mobility-on-demand (MOD) study is to determine where and how MOD might make sense in Jaunt's seven-jurisdiction service area.



¹⁸ Source: <u>https://data.drpt.virginia.gov/stories/s/xaxm-cj87</u>.

Cost / Revenue Element	Using Jaunt's FY2024 Budget	Using CAT's FY2024 Budget
Total Cost of ADA Paratransit ^a	\$5,470,668	\$5,470,668
Less Applied Urban Funds ^b	(\$1,326,199)	(\$2,290,395)
Less Applied State Funds ^c	(\$899,397)	(\$899,397)
Remaining Balance (Local Contribution) ^d	\$3,245,072	\$2,280,876

TABLE 13. JAUNT FY2024 ADA PARATRANSIT COSTS AND REVENUES.

Notes:

^a Provided by Jaunt in its FY2024 Budget Workbook.

^b Jaunt amount based on Jaunt's FY2024 Budget Workbook. CAT amount based on CAT budget presentation.

^c Calculated by TTI by taking total state funds assigned to County and City service in Jaunt's FY2024 Budget Workbook and allocating those totals based on the proportion of service cost falling within each jurisdiction's urbanized area.

^d Total cost less urban and state funds. The local contribution would be split between the County and City based on the proportion of ADA service within each jurisdiction (a procedure described below).

4.2.3.3 MULTI-YEAR SOURCES OF REVENUE

Based on DRPT data, from FY2021 to FY2024, Jaunt has received the federal and state grants shown in Table 14. Overall, Section 5311 operating funds have remained consistent over time, and, given the anticipated annual growth in 5311 appropriations authorized under the IIJA, it is likely that Section 5311 funds will continue to be a reliable source of funding for rural service.

TABLE 14. JAUNT FEDERAL	AND STATE GRANTS	FY2021 - FY 2024.
TADLE 14. JAONT LEDENAL	AND STATE GRANTS	112021 112024

Grant Program	Revenue Source	FY2021	FY2022	FY2023	FY2024
Section 5311 Capital	Federal	\$0	\$1,969,464	\$326,084	\$1,760,313
5311 Operating	Federal	\$0	\$2,799,443	\$2,650,146	\$2,764,461
Section 5307 ^a	Federal	\$1,785,896	\$636 <i>,</i> 841	\$956,676	\$1,248,077
FTA CARES Operating (5311 funded 100%)	Federal	\$6,916,193	\$0	\$0	\$0
FTA CARES Capital (5311 funded 100%)	Federal	\$3,331,939	\$0	\$0	\$0
FTA ARPA	Federal	\$0	\$1,334,150	\$0	\$0
State Operating	State	\$756,644	\$2,178,030	\$2,538,349	\$1,854,386
State Capital	State	\$0	\$32,854	\$65,217	\$74,337
Section 5339	Federal	\$0	\$0	\$0	\$0
Section 5310	Federal	\$0	\$0	\$0	\$0
State Special Programs (Internship Program)	State	\$0	\$32,000	\$0	\$0
State Special Programs (Technical Assistance)	State	\$125,000	\$25,000	\$0	\$107,752
	Total	\$12,915,672	\$9,007,782	\$6,536,472	\$7,809,326

Note: ^a Section 5307 appears to represent that pass-through Section 5307 amounts provided by CAT; however, the FY2024 value does not match other values provided by CAT or Jaunt.

Source: FY2021 – FY2023 data provided by DRPT. FY2024 obtained from the DRPT open data portal (<u>https://data.drpt.virginia.gov/stories/s/FY24-DRPT-Transit-SYIP-Tables/5zkh-nezf</u>).

Jaunt also provided a multi-year budget covering the period from FY2024 to FY2028 (see Figure 22). However, TTI did not have the opportunity to assess the reasonableness of projected funding and costs.



r	-														1 F		
		FY2022		FY2023		FY2024		FY2025		FY2026		FY2027		FY2028		Inflation	
Item		Actual	But	dget Approved		Budget		Projected		Projected	- 1	Projected		Projected	1 4	FY25 to FY28	Comment
Sources of Financial Resources																	
Fee Revenue:																	
Farebox Fee	\$	-	\$	-	\$	-	s	-	\$	-	s	-	\$	-			
Contract Revenue																	
Operating	\$	301,635	\$	589,587	\$	293,344	\$	305,078	\$	317,281	\$	329,973	\$	343,171		4.0%	FY26 to FY28 assumption
Capital					\$	-	\$	-	\$	-	\$	-	\$	-		4.0%	
Total Contract	\$	301,635	\$	589,587	\$	293,344	\$	305,078	\$	317,281	\$	329,973	\$	343,171			
7-1-15-0		201 625	~	500 507	~	000.044	~	0.05 0.70	~	047.004	~	000.070	~	040.474			
Total ree Revenue	2	301,035	ş	363,367	Ş	293,344	ş	305,078	ş	317,281	ş	329,975	Ş	343,171			
Governmental Revenue:																	
dovernmental nevenue.																	
Federal Grants																	
Operating	\$	4,270,257	\$	4,079,100	\$	4,021,574	\$	3,799,182	\$	3,922,310	\$	4,050,074	\$	4,182,658		1.0%	Urban only; rural inflationary
Capital	\$	198,646	\$	644,021	\$	4,793,701	\$	1,563,164	\$	1,869,400	ŝ	1,888,094	\$	1,906,975		1.0%	ARPA FY25 and FY26
Total Federal	\$	4,468,903	\$	4,723,121	\$	8,815,275	\$	5,362,346	\$	5,791,710	s	5,938,168	\$	6,089,633	11		subject to CAT approval
Virginia DRPT																	
Operating	\$	2,184,647	\$	2,551,858	\$	1,962,138	s	1,854,386	s	1,891,474	s	1,929,303	\$	1,967,889		2.0%	
Capital	\$	2,958	Ş	56,268	\$	511,719	Ş	421,708	Ş	425,925	ş	430,184	ş	434,486		1.0%	
Total Virginia	Ş	2,187,605	ş	2,608,126	Ş	2,473,857	Ş	2,276,094	Ş	2,317,398	Ş	2,359,487	ş	2,402,375			
Local Community																	
Local Government	è	4 571 139	ė	4 534 533	ė	E 763 300	ė	E 003 884	÷	6 333 500	÷	5 491 002	ė	5 741 170		4.0%	
Canital	ę ¢	4,3/1,138	P Č	4,034,022	₽ ¢	3,702,300 819.449	ç	830 832	ç	839 140	ç	847 532	ç ¢	856.007		1.0%	
Total Local	s	4.571.877	S	4,648,689	s	6.581.838	s	6.823.716	s	7.071.740	s	7.329.435	ŝ	7.597.186	11	1.078	
i otar eotar	ľ	1,0712,077	Ŷ	1,010,000	Ŷ	0,002,000	Ŭ	010201120	Ť	1,012,010	Ĩ	1,023,105	Ť	1,001,200			
In Lieu of Local (UVA)	\$	-	\$	-	\$	33,785	s		\$	-	s	-	\$	-			
Account Transfer (Jaunt Rebate)	\$	-	\$	-	\$	29,313	\$	-	\$	-	\$	-	\$	-			
Other Revenue	\$	78,335	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-			
Total Revenue	\$	11,608,355	\$	12,569,523	\$	18,227,413	\$	14,767,233	\$	15,498,129	\$	15,957,063	\$	16,432,366			
Uses of Financial Resources																	
Salaries & Wages	Ş	4,976,641	ş	6,117,880	ş	6,473,053	ş	6,731,975	ş	7,001,254	ş	7,281,304	ş	7,572,556		4.0%	
Fringe Benefits/Staff Development	Ş	1,819,770	ş	2,616,417	ş	2,606,730	ş	2,710,999	ş	2,819,439	s	2,932,216	Ş	3,049,505		4.0%	
Fraility (Caulors Meals/Meetings/Training	S.	0,404	ş	19,300	\$	20,480	s	21,305	s	22,157	s	23,043	ş	23,965		4.0%	
Supplies & Materials	2	253,750	e e	1 687 077	2	1 2/12 313	<i>.</i> .	1 329 375	د د	1 382 446	ŝ	1 437 744	e e	1 495 254		4.076	
Marketing & Advertising	ŝ	110.366	ć	110,000	ŝ	110.000	ŝ	114 400	š	118,976	ŝ	123,735	ŝ	128,684		4.0%	
Insurance & Bonding	ŝ	370.863	ŝ	388,500	ŝ	403,770	ŝ	419,921	š	436,717	ŝ	454,186	ŝ	472,354		4.0%	
Professional Services	ŝ	510,651	ŝ	728,889	\$	1,049,590	s	1,091,574	s	1,135,237	ŝ	1,180,646	ŝ	1,227,872		4.0%	
Miscellaneous	\$	30,279	\$	26,794	\$	32,202	\$	33,490	\$	34,830	\$	36,223	\$	37,672		4.0%	
Capital Expenditure	\$	202,343	\$	714,356	\$	6,124,870	\$	2,530,703	\$	2,843,860	\$	3,165,810	\$	3,197,468		0.0%	Based on current plan subject
Future Transit Development	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-			to revision.
DRPT Payment	\$	103,244	\$	-	\$	-	\$	-	_		\$	-	\$	-			FY2022 one-time payment
Total Expenditure	\$	9,138,872	\$	12,569,523	\$	18,227,413	\$	15,154,617	\$	15,972,731	\$	16,819,835	\$	17,397,654			
Net Change in Fund Balance	\$	2,469,484	\$	(0)	\$	(0)	\$	(387,384)	\$	(474,602)	\$	(862,772)	\$	(965,289)	ιL		

FIGURE 22. JAUNT FIVE-YEAR FINANCIAL PROJECTIONS.

Source: Jaunt FY2024 Budget Statement.

4.2.4 METHODOLOGY FOR ALLOCATING OPERATIONAL COSTS

Jaunt allocates its commuter bus and demand response costs to the different jurisdictions it serves using a cost and revenue allocation methodology that allocates costs and revenues to each service group, jurisdiction, and geography. The FY2024 cost allocation follows these steps (each discussed in more detail below):

- Classifying services.
- Analyzing historical data.
- Forecasting future trips, hours, and miles by service.
- Developing the FY2024 operational expenses budget by line item.
- Calculating a service cost formula.
- Using the service cost formula to assign costs to services.
- Developing the FY2024 revenue budget.
- Applying revenue to services based on their forecasted costs.



4.2.4.1 CLASSIFYING SERVICES

A key first step, even before cost allocation begins, is to consistently classify services by type, jurisdiction, and geography. Jaunt operates many different services. Most fall within the study region (e.g., see Table 5 and Table 6); however, others fall outside the region in the other counties that Jaunt serves.

Table 15 displays how Jaunt classifies its CONNECT commuter bus routes.

Route Name	Jurisdiction	Geography
Crozet East	Albemarle County	Rural
Crozet West	Albemarle County	Rural
Crozet Evening	Albemarle County	Rural
29 North	Albemarle County	Urban
Buckingham East	Buckingham County	Rural
Buckingham North	Buckingham County	Rural
Lovingston	Nelson County	Rural

TABLE 15. JAUNT CLASSIFICATION OF CONNECT COMMUTER BUS ROUTES.

Classification of demand response services is more complex. Figure 23 displays all the different services operated by Jaunt, including the commuter bus services listed in Table 15.



		Days of	Service Day			
Jurisdiction	Service	Week	Begin	End	Service Area	
Albemarle	20 North Link	M-F	7:30 am – 8:30 am	3:00 pm – 3:30 pm	Charlottesville/Albemarle	
	29 North Connect (CB)	M-F	6:05 am – 8:43 am 4	:23 pm – 6:18 pm	Charlottesville/Albemarle	
	29 North Link	M-F	6:00 am/8:00am	3:00 pm-3:30pm	Charlottesville/Albemarle	
	29 North Link Rural				Charlottesville/Albemarle	
	29 North Link Urban				Charlottesville/Albemarle	
	Other DR (Rural)	M-F	10:00 AM	2:00 PM	Intra community	
	Other DR (Urban)				Intra community	
	Urban DR (ADA)	M-Sat	6:15AM	11:00 PM	Charlottesville/Albemarle	
	Urban DR (ADA)	Sun	7:15AM	10:00 PM	Charlottesville/Albemarle	
	Albemarle Priority Service	M-Sat. Sun	6:15AM, 7:15AM	11:00PM, 10:00PM	Charlottesville/Albemarle	
	Albemarle Priority Service Rural		,		Charlottesville/Albemarle	
	Albemarle Priority Service Urban				Charlottesville/Albemarle	
	Crozet East Connect (CB)	M-F	5:56 am-8:21 am	3·47 nm-6·07 nm	Charlottesville/Albemarle	
	Crozet West Connect (CB)	M-F	6:16 am-8:22 am	3:49 pm-6:16 pm	Charlottesville/Albemarle	
	Crozet Loop	M-E	7:20 PM	9.52 DM	Charlottesville/Albemarle	
	Crozet Loop	IVI-I M.E	9:00 A M	2:00 PM	Charlottesville/Albemarle	
	Crozet Link Most		0:00 AM	2.00 PIVI	Charlottesville/Albemarle	
	Crozet Link West	IVI-F	9.00 Alvi	5.00 PIVI	Charlottesville/Albernarie	
	Crozet Link Orban				Charlottesville/Albemarie	
			0.00.444	4.00.014	Charlottesville/Albemarie	
	Crozet Circulator	M-F	8:00 AM	4:00 PM	Intra community	
	Earlysville Link	M-F	6:00 am-9:00am	3:00 pm-3:30pm	Charlottesville/Albemarle	
	Earlysville Link Urban				Charlottesville/Albemarle	
	Earlysville Link Rural				Charlottesville/Albemarle	
	Esmont-Scottsville Link	M-F	6:00 am/9:00am	12:00 pm/4:00pm	Charlottesville/Albemarle	
	Esmont-Scottsville Circ	T,Th	8:45 AM	3:00 PM	Intra community	
	Keswick Link	M-F	8:00 am-8:30am	3:00 pm-3:30pm	Charlottesville/Albemarle	
Charlottesville	Cville ADA	M-Sa	6:15AM	11:00 PM	Charlottesville/Albemarle	
	Cville ADA	Su	7:15AM	10:00 PM	Charlottesville/Albemarle	
	Albemarle DR	M-F	10:00 AM	2:00 PM	Charlottesville/Albemarle	
	Albemarle DR Rural				Charlottesville/Albemarle	
	Albemarle DR Urban				Charlottesville/Albemarle	
	Albemarle Priority Service	M-Sat, Sun	6:15AM, 7:15AM	11:00PM, 10:00PM	Charlottesville/Albemarle	
	Crozet Link	M-F	8:00 AM	5:00 PM	Charlottesville/Albemarle	
	Crozet Link Rural				Charlottesville/Albemarle	
	Crozet Link Urban				Charlottesville/Albemarle	
	Earlysville Link	M-F	6:00 am-9:00am	3:00 pm-3:30pm	Charlottesville/Albemarle	
	Earlysville Link Rural				Charlottesville/Albemarle	
	Farlysville Link Urban				Charlottesville/Albemarle	
	Esmont-Scottsville Link	M-F	6.00 am/9.00am	12:00 nm/4:00nm	Charlottesville/Albemarle	
			oree any precam			
Buckingham	Buck Connect East (CB)	M-F	5:45am-7:07am	4:00nm-5:27nm	Charlottesville/Albemarle	
Duckingham	Buck Connect North (CB)	M-F	6:00 am-6:40am	5:02pm-5:48pm	Charlottesville/Albemarle	
	Buck connect North (cb)		0.00 um 0.40um	5.02pm 5.40pm	enanottestine//iibemane	
Eluvanna	Eluvanna Workday Link	ME	6:00 am 6:25am	4:1Epm 4:20pm	Charlottosvillo/Albomarlo	
Truvarina	Fluvanna Midday Link	T Th	7:20am 0:20am	4.15pm-4.30pm	Charlottesville/Albemarle	
	Fluvenne Circulator	1,111	7.50dill-9.50dill	1.45pm-2.45pm		
		IVI-VV-F	0.50d11	4.00pm	intra community	
Croone	Croope Link 1 Dural	NAE				
Greene	Greene Link 1 Kurai	IVI-F	6:30AM	9:00 AM	Charlottesville/Albemarle	
	Greene Link I Orban	IVI-F				
	Greene Link 2	M-F	8:00 AM	11:00 AM	Charlottesville/Albemarle	
	Greene Link 3	M-F	11:00 AM	2:00 PM	Charlottesville/Albemarle	
	Greene Link 4	M-F	2:00 PM	5:00 PM	Charlottesville/Albemarle	
	Greene Circulator	M-F	7:00am	9:00pm	Intra community	
	Greene Circulator	Sa	9:00am	4:00pm	Intra community	
Louisa	Louisa Link	M-W-F	7:30am-9:00am	2:45pm-3:30pm	Charlottesville/Albemarle	
	Louisa Circulator	M-F	6:00am	5:00pm	Intra community	
Nelson	Lovingston Connect (CB)	M-F	6:36 am-7:41am	4:30pm-5:48pm	Charlottesville/Albemarle	
	Nelson Circulator	M-T	8:00am	4:00pm	Intra community	
	Nelson Link	M,F	8:00am-9:30 am	2:30 pm- 3:30 pm	Charlottesville/Albemarle	

Source: Jaunt FY2024 Budget Workbook, provided by Jaunt.



Jaunt classifies demand response riders into services based on four main criteria:

- Whether the rider (and trip) is ADA eligible or not. To be classified as an ADA trip, the rider must be a registered ADA paratransit rider and must be taking a trip where both the origin and destination are within the CAT ADA paratransit buffer.
- Whether the trip is an urban or a rural trip. This distinction is based on whether the rider's home address is within the UZA or not.²⁰
- What jurisdiction the trip is assigned to, based on the rider's home address.
- Whether the trip is sponsored (i.e., paid for by a human services agency).

Table 16 displays an example of how different demand response trips would be classified by Jaunt.

Description	Client's Home Location Jurisdiction	Client's Home (Urban / Rural)	Assigned Trip Type	Assigned Jurisdiction / Funder
ADA paratransit client living in	Charlottesville	Urban	ADA	Charlottesville
charlottesville taking an ADA paratransit trip				
ADA paratransit client taking an ADA	Albemarle	Urban	ADA	Albemarle
paratransit trip	County			County
Non-ADA rider living along the 29 North	Albemarle	Urban	Link or	Albemarle
corridor traveling to downtown	County		Other DR	County
Non-ADA rider traveling from rural part	Albemarle	Rural	Link or	Albemarle
of Albemarle County to downtown	County		Other DR	County
Charlottesville	·			
NEMT rider traveling from urbanized	Charlottesville	N/A	Agency	Agency
			sponsored)	

TABLE 16. JAUNT DEMAND RESPONSE TRIP CLASSIFICATION EXAMPLES.

Although classifying riders is relatively straight forward, figuring out how many hours and miles are attributable to each service is more complex. Unlike fixed route, where an entire route or portions of a route can be classified by jurisdiction, demand response vehicles travel in many different directions and cross many boundaries, all while possibly carrying riders from different services in the same vehicle at the same time. Therefore, Jaunt uses its demand response scheduling and dispatching software to allocate vehicle hours to different services. Although there are additional steps in the procedure, Figure 24 displays the basic approach used. In the figure, "groups" represent the different services. Simplistically speaking, Jaunt takes every minute and allocates it to each service based on the number of people on board sharing in that vehicle minute. If there is one person on board, all of that minute is

²⁰ There are other acceptable methods for assigning a demand response trip to the urban or rural area and to a jurisdiction (e.g., based on the trip origin and destination instead of the home address); however, there is no single industry standard. Using a rider's home address is a method that assumes the jurisdiction in which a person lives should help pay for the trip the person takes.



credited toward whatever group (service) that person is assigned to. If there are four people on board, each person and their service is credited a fourth of the minute, and so on.

Arrival Time	Departure Time	Event	Passengers in Group	Passengers on Board		
9:00am	9:02am	Passenger Group A Pickup	1	1		
9:10am	9:14am	Passenger Group B Pickup	2	3		
9:22am	9:25am	Passenger Group C Pickup	1	4		
9:39am	9:42am	Passenger Group C Drop Off	1	3		
9:50am	9:51am	Passenger Group A Drop Off	1	2		
9:58am	10:00am	Passenger Group B Drop Off	2	0		
Total Event Time: 60 minutes						

FIGURE 24. JAUNT VEHICLE HOUR ALLOCATION METHODOLOGY (BASIC EXAMPLE).

Passenger Group A Allocation (1 passenger):

Segment Start	Segment End	Segment Duration	Segment Proportion	Attributable Time	
9:00am	9:10am	10 minutes	1/1	10 minutes	
9:10am	9:22am	12 minutes	1/3	4 minutes	
9:22am	9:42am	20 minutes	1/4	5 minutes	
9:42am	9:51am	9 minutes	1/3	3 minutes	
Total Attributable Time: 22 minutes					

Passenger Group B Allocation (2 passengers):

Segment Start	Segment End	Segment Duration	Segment Proportion	Attributable Time	
9:10am	9:22am	12 minutes	2/3	8 minutes	
9:22am	9:42am	20 minutes	2/4	10 minutes	
9:42am	9:51am	9 minutes	2/3	6 minutes	
9:51am	10:00am	9 minutes	2/2	9 minutes	
Total Attributable Time: 33 minutes					

Passenger Group C Allocation (1 passenger):

Segment Start	Segment End	Segment Duration	Segment Proportion	Attributable Time		
9:22am	9:42am	20 minutes	1/4	5 minutes		
Total Attributable Time: 5 minutes						

Source: Jaunt allocation documents obtained by TTI in prior technical assistance to Jaunt.

This methodology allows Jaunt to take the vehicle hours shared by multiple riders and assign those hours to specific services.

4.2.4.2 ANALYZING HISTORICAL DATA

Based on the historical ridership and vehicle hours data, Jaunt is able to calculate estimated performance measures for each demand response service, including passengers per vehicle hour, a key performance measure. Jaunt also has historical average vehicle speed data for each service. A sample of passengers per hour by service is shown in Figure 25.



Jurisdiction	Service	Average PPsH
Charlottesville	Crozet Link Urban	1.98
Charlottesville	Crozet Link Rural	1.98
Charlottesville	Esmont-Scottsville Link	1.16
Charlottesville	Earlysville Link Urban	1.14
Charlottesville	Earlysville Link Rural	1.14
Charlottesville	ADA Service	2.32
Charlottesville	Albemarle Demand Response Urban	1.5
Charlottesville	Albemarle Demand Response Rural	1.5
Charlottesville	Albemarle Priority Service	2
Charlottesville	COVID-19 Vaccination Trips Urban	2.35
Charlottesville	COVID-19 Vaccination Trips Rural	2.35
Albemarle	Crozet Circulator	2.4
Albemarle	Esmont-Scottsville Circulator	2.04
Albemarle	20 North Link	1.46
Albemarle	29 North Link Urban	1.8
Albemarle	29 North Link Rural	1.8
Albemarle	Crozet Link Urban	1.88
Albemarle	Crozet Link Rural	1.88
Albemarle	Earlysville Link Urban	1.12
Albemarle	Earlysville Link Rural	1.12
Albemarle	Esmont-Scottsville Link	1.64
Albemarle	Keswick Link	1.33
Albemarle	ADA Service	2.14
Albemarle	Albemarle Demand Response Urban	1.81
Albemarle	Albemarle Demand Response Rural	1.81
Albemarle	Albemarle Priority Service Urban	1.93
Albemarle	Albemarle Priority Service Rural	1.93
Albemarle	COVID-19 Vaccination Trips Urban	2.27
Albemarle	COVID-19 Vaccination Trips Rural	2.27

FIGURE 25. SAMPLE OF JAUNT PASSENGERS PER HOUR BY SERVICE.

Note: PPsH = passengers per service hour. *Source:* Jaunt FY2024 Budget Workbook.

4.2.4.3 FORECAST FUTURE TRIPS, HOURS, AND MILES BY SERVICE

Each of the demand response services has historical ridership data by month. Using the monthly historical ridership data, Jaunt projected monthly FY2024 ridership using simple linear regression (e.g., see Figure 26 for the projection of Albemarle County services).







Albemarle Monthly Demand Response Ridership Trend

Once these ridership projections were calculated, Jaunt then turned the projected ridership into forecasted hours using each service's average passengers per hour. For example, Jaunt projected FY2024 ADA Albemarle County ridership to be 56,654 trips. ADA Albemarle County passengers per hour is 2.14. Therefore, the forecasted FY2024 ADA Albemarle County hours is 26,473.6 (56,654 trips ÷ 2.14 passengers per hour).

Jaunt did this projection and forecast for *every demand response service* it operates.

Once hours per service were calculated, Jaunt then also estimated miles per service, using the average vehicle speed of each service.

4.2.4.4 DEVELOPING THE FY2024 BUDGET (COSTS AND REVENUES) BY LINE ITEM

Based on total services to be provided in FY2024 and any other special projects or known changes in costs, Jaunt developed a full FY2024 operational budget by line item (see Figure 27). Jaunt then assigned costs as variable hours-based, variable miles-based, and fixed (see the *Cost Model Category* column in Figure 27).



Source: Jaunt presentation at March 2023 Albemarle County Board meeting.

D. david C. da	Cost M		FY2022	FY2023	- FY2024	
Budget Code	Description	Category	Actual	Approved	Budget	
012-50000-000	Sal & Wages - CAT 2 - (Drivers)	Hours	\$ 2 329 626	\$ 3,474,290	\$ 3 112 751	
012-51000-000	Fringe Benefits - CAT 2 - (Drivers)	Hours	\$ 2,323,020	\$ 1,585,074	\$ 1 579 587	
050-50000-000	Sal & Wages CAT2 - (Drivers)	Hours	\$ 294 606	\$ 1,505,074	\$ 1,575,567	
050-51000-000	Fringe Benefits CAT 2 - (Drivers)	Hours	\$ 130 983	¢	¢	
050-51000-000	Thinge belients CAT 2 - (billets)	Tiours	\$ 130,303	- Ç	<u>,</u>	
Total Hours	Totals		\$ 3,608,073	\$ 5,059,364	\$ 5,022,337	
012 50000 000	Sal & Wages CAT 2 (Machaniss)	Milos	¢ 179.029	¢ 220.122	¢ 252.225	
012-50000-000	Sal & Wages CAT 5 - (Mechanics)	Niles	\$ 176,056	\$ 229,132	\$ 252,255	
012-51000-000	Supplies & Materials	Miles	\$ 50,905	\$ 92,225	\$ 91,521 \$ 1,170,797	
012-34000-000	Drofossional Convisas	Miles	\$ 095,190	\$ 1,010,503	\$ 1,173,787	
012-37000-000	FIDIESSIDIAL SERVICES	Miles	\$ 05,550	\$ 224,401 ¢	\$ 47,075 ¢	
050-50000-000	Sal & Wages CAT 3 - (Mechanics)	Niles		ې - د	ې - د	
050-51000-000	Fringe Benefits - CAT 3 - (Mechanics)	Miles	\$ -	Ş -	Ş -	
050-54000-000	Supplies & Materials	Niles	\$ 45,525	ې - د	ې - د	
041-54070-000	Venicle Parts (Accident)	IVIIIes	\$ 3,494	\$ -	Ş -	
041-57090-000	Contract Venicle Maint (Accident)	IVITES	\$ 225	Ş -	Ş -	
Total Miles	Totals		\$ 1,044,914	\$ 2,156,721	\$ 1,570,417	
011-50000-000	Sal & Wages - CAT 1 (Admin)	Fixed	737,100	665,813	873,344	
011-51000-000	Fringe Benefits - CAT 1 (Admin)	Fixed	217,036	216,831	275,315	
011-50000-000	Sal & Wages CAT 2 - (Admin as Ops)					
		Fixed	251,585	450,844	518,600	
011-51000-000	Fringe Benefits - CAT 2 - (Admin as Ops)	Fixed	107,307	163,275	148,148	
011-52000-000	Travel/Business Meals/Meetings/Training	Fixed	3,706	14,300	17,486	
011-53000-000	Facility/Equipment Maintenance/Utilities	Fixed	126,021	141,206	146,860	
011-54000-000	Supplies & Materials	Fixed	78,182	76,173	62,526	
011-55000-000	Marketing & Advertising	Fixed	107,417	110,000	110,000	
011-56000-000	Insurance & Bonding	Fixed	323,348	388,500	403,770	
011-57000-000	Professional Services	Fixed	423,547	504,429	787,013	
011-59000-000	Miscellaneous	Fixed	19,264	24,794	25,108	
012-50000-000	Sal & Wages CAT 1 - (Res/Dis/Sups)	Fixed	940,046	1,237,771	1,288,382	
012-51000-000	Fringe Benefits - CAT 1 - (Res/Dis/Sups)	Fixed	332,953	534,612	512,357	
012-52000-000	Travel/Business Meals/Meetings/Training	Fixed		-	-	
012-53000-000	Facility/Equipment Maintenance/Utilities	Fixed	15,909	19,105	17,540	
050-50000-000	Sal & Wages CAT 1- (Admin as Ops)	Fixed		-	-	
050-51000-000	Fringe Benefits CAT 1 - (Admin as Ops)	Fixed		-	-	
050-50000-000	Sal & Wages CAT 1 - (Res/Dis/Sups)	Fixed	211,794	-	-	
050-51000-000	Fringe Benefits - CAT 1 - (Res/Dis/Sups)	Fixed	102,043	-	-	
050-52000-000	Travel/Business Meals/Meetings	Fixed		-	-	
050-57000-000	Professional Services	Fixed	4,821	-	-	
050-53000-000	Facility/Equipment Maintenance/Utilities	Fixed	43,861	-	-	
050-55000-000	Marketing & Advertising	Fixed	711	-	-	
050-56000-000	Insurance & Bonding	Fixed	47,515	-	-	
050-59000-000	Miscellaneous	Fixed		-	-	
015-50000-000	Salaries and Wages	Fixed	33,844	60,031	-	
015-51000-000	Fringe Benefits	Fixed	7,542	24,400	-	
015-52000-000	Travel/Business Meals/Meetings	Fixed		-	-	
015-54000-000	Supplies/Transp/Shelters	Fixed		-	-	
015-59000-000	Miscellaneous	Fixed		-	-	
017-50000-000	Salaries and Wages	Fixed		-	215,504	
017-51000-000	Fringe Benefits	Fixed		-	-	
019-51130-000	Staff Development (RTAP)	Fixed	8,645	-	-	
040-51000-000	Fringe Benefits/Staff Development	Fixed	3,498	-	-	
040-52000-000	Travel/Business Meals/Meetings/Training	Fixed	2,698	5,000	3,000	
040-53000-000	Facility/Equipment Maintenance	Fixed	-	-	-	
040-54000-000	Supplies & Materials	Fixed	124	-	-	
040-55000-000	Marketing & Advertising	Fixed	2,238	-	-	
040-56000-000	Insurance & Bonding	Fixed		-	-	
040-57000-000	Professional Services	Fixed	16,528	-	-	
040-59000-000	Miscellaneous	Fixed	11,014	2,000	7,094	
040-81000-000	DRPT Refund	Fixed	103,244			
Total Fixed	Totals		\$ 4,283,541	\$ 4,639,083	\$ 5,412,045	
Grand Totals	Totals		\$ 8,936,529	\$ 11,855,167	\$ 12.004.799	

Source: Jaunt FY2024 Budget Workbook, provided by Jaunt.



Using the budget and cost assignments, Jaunt calculated the total hours-based, miles-based, and fixed costs for FY2024 (see Table 17).

Cost Pool	Amount
Hours-Based Costs	\$5,022,337
Miles-Based Costs	\$1,570,417
Fixed	\$5,412,045
Total	\$12,004,799

4.2.4.5 CALCULATING THE SERVICE COST FORMULA

From the cost pools and forecasted service data, Jaunt then calculated its service cost formula. The structure of the service cost formula is:

Service
$$Cost = ((hours - based cost per hour) \times hours$$

+ $(miles - based cost per mile) \times miles)) \times (1 + fixed cost ratio)$

Table 18 displays how Jaunt calculated the variable unit costs for the service cost formula.

Cost Pool	Amount		Variable		Unit Cost
Hours-Based Costs	\$5,022,337	÷	102,902 hours	=	\$48.8071 per hour
Miles-Based Costs	\$1,570,417	÷	1,734,714 miles	=	\$0.9053 per mile
Total Variable Cost	\$6,592,754				

TABLE 18. CALCULATING THE FY2024 UNIT COSTS.

Table 19 displays how Jaunt calculated the fixed cost ratio for the service cost formula.

TABLE 19. CALCULATING THE VARIABLE COST RATIO.

Fixed Cost		Variable Cost		Fixed Cost Rate
\$5,412,045	÷	\$6,592,754	=	82.0908%

After the inputs of the service cost formula are calculated, Jaunt's service cost formula becomes:

Service Cost = $(($48.8071) \times hours + ($0.9053) \times miles)) \times (1 + 82.0908\%)$

4.2.4.6 Using the Service Cost Formula to Assign Costs to Services

With the service cost formula in hand, Jaunt then forecasted the FY2024 operational cost of every service by inputting the service's forecasted hours and miles into the formula, aggregating the cost of the services based on the service's jurisdiction and geography (see Figure 28).



			Serv	vice Area		
Jurisdiction	Urban	Rural		Agency	Desert	Totals
Albemarle County	\$ 2,805,710	\$ 1,750,048	\$	-	\$ 798,889	\$ 5,354,646
Buckingham County	\$ -	\$ 288,974	\$	-	\$ -	\$ 288,974
Charlottesville City	\$ 2,562,540	\$ 19,397	\$	-	\$ 137,716	\$ 2,719,652
Fluvanna County	\$ -	\$ 232,541	\$	-	\$ -	\$ 232,541
Greene County	\$ -	\$ 1,094,121	\$	-	\$ 15,857	\$ 1,109,978
Louisa County	\$ -	\$ 1,724,812	\$	-	\$ -	\$ 1,724,812
Nelson County	\$ -	\$ 280,851	\$	-	\$ -	\$ 280,851
Total Jurisdiction	\$ 5,368,249	\$ 5,390,744	\$	-	\$ 952,462	\$ 11,711,455
Agency	\$ -	\$-	\$	293,344	\$ -	\$ 293,344
Totals						\$ 12,004,799

FIGURE 28. JAUNT FORECASTED FY2024 OPERATIONAL COSTS ASSIGNED TO EACH JURISDICTION AND GEOGRAPHY.

Source: Jaunt FY2024 Budget Workbook, provided by Jaunt.

4.2.4.7 DEVELOPING AND ALLOCATING THE FY2024 REVENUE BUDGET

Jaunt then developed the FY2024 revenue budget, anticipating revenues to be received from federal and state grants (see Table 11 and discussion in Section 4.2.3).

Each grant source is then allocated to each jurisdiction and geography as allowed, based on the forecasted cost of the service. For example, Section 5307 funds were only allocated to urban services and were split between Albemarle County and the City of Charlottesville in proportion of the urban costs of each jurisdiction. Section 5311 funds, assumed to be 50 percent of the rural cost of each jurisdiction, are then applied to rural service costs. State funds were allocated across all services in proportion to the total costs of each jurisdiction.

4.2.4.8 CALCULATING GOVERNMENT CONTRIBUTIONS

After calculating operational costs and allocating revenues, Jaunt then calculated the balance remaining that would need to be funded by each jurisdiction (see Table 20). Sponsored service is excluded from this calculation.

Jurisdiction	Operational Cost	Applied 5307	Applied 5311	Applied State	Remaining Balance
Albemarle County	\$5,354,646	\$678,760	\$875 <i>,</i> 024	\$897,118	\$2,903,749
Buckingham County	\$292,908		\$144,487	\$48,415	\$100,006
Charlottesville City	\$2,719,652	\$647,439	\$9,698	\$455,651	\$1,606,867
Fluvanna County	\$239,092		\$116,270	\$38,960	\$83,861
Greene County	\$1,148,649		\$547,061	\$185,966	\$415,623
Louisa County	\$1,766,620		\$862,406	\$288,975	\$615,240
Nelson County	\$287,618		\$140,426	\$47,054	\$100,139
Total	\$11,809,186	\$1,326,199	\$2,695,372	\$1,962,138	\$5,825,486

TABLE 20. JAUNT FY2024 COSTS, APPLIED REVENUES, AND REMAINING BALANCES BY JURISDICTION.

Source: Adapted by TTI from Jaunt FY2024 Budget Workbook.

Note: Total cost is less than that shown in prior figures, because sponsored service costs are not allocated to jurisdictions.



A few notes about Jaunt's operational cost allocation methodology:

- The methodology is reasonable and robust and, in general, follows industry standard practices (e.g., separating costs by urban/rural, jurisdiction, and using a two-variable cost allocation).
- The methodology assumes that all of Jaunt's costs are globally shared (i.e., allocable to all services) and that no costs can be directly assigned to a specific service. Based on our understanding of Jaunt's operations, this appears to be a valid approach. However, this assumption will need to be continually checked in the future.

4.2.5 METHODOLOGY FOR ALLOCATING CAPITAL COSTS

Jaunt also allocates its capital costs to jurisdictions using the methodology described below.

First, Jaunt established a five-year capital plan, comprised of revenue vehicles, parts, non-revenue vehicles, facility expenses, and IT (see Figure 29). From this five-year plan, Jaunt calculated the average annual capital needed, totaling \$2,609,576. This annual average becomes and targeted annual revenue to be received from federal, state, and local sources.

Five Year Capital P	ive Year Capital Plan											
Voor		Revenue		Darts	r	Non- revenue		Facility		п	Othor	Total
Teal		venicies		Parts	,	renicies		Facility			otter	TUtal
FY2024	\$	1,971,200	\$	28,350	\$	30,000	\$	121,000	\$	863,566		\$ 3,014,116
FY2025		1,885,312		62,843		85,000		122,050		1,174,500		3,329,705
FY2026		1,903,616		65,985		90,000		123,153		143,200		2,325,954
FY2027		1,979,761		69,284		-		24,310		100,800		2,174,155
FY2028		2,058,951		70,000		-		25,000		50,000		2,203,951
5 Year Total	\$	9,798,840	\$	296,462	\$	205,000	\$	415,513	\$	2,332,066		\$ 13,047,881
Five Year Annual A	verag	je										\$ 2,609,576

FIGURE 29. JAUNT FIVE-YEAR CAPITAL PLAN.

Source: Jaunt January 24, 2023, budget presentation to the City of Charlottesville.

Because Jaunt operates in a mix of urban and rural areas, it must follow a capital cost allocation plan to ensure that federal funds used to support its capital expenses from Section 5307 and Section 5311 programs are proportional to the amount of Jaunt's service that is urban or rural.²¹ Jaunt uses vehicle miles as the variable to establish what proportion of its service is urban or rural. Vehicle miles are classified as urban and rural (and by jurisdiction) using the same process used to classify hours and miles for operational cost allocation, discussed in Section 4.2.4.1. Figure 30 displays the miles attributed to each jurisdiction and geography.

²¹ In the past, all of Jaunt's vehicles were purchased with using Section 5311 funds, which was an issue identified by DRPT with corrective action mandated in DRPT's October



Jurisdiction	Urban	Rural	Agency	Total	Share
Albemarle	415,563	294,164		709,727	40.75%
Charlottesville	295,553	3,822		299,375	17.19%
Buckingham		73,093		73,093	4.20%
Fluvanna		55,707		55,707	3.20%
Greene	2,666	158,239		160,905	9.24%
Louisa		379,058		379,058	21.76%
Nelson		63,971		63,971	3.67%
Agency			70,645	70,645	< <no allocation<="" td=""></no>
Totals	713,782	1,028,054	70,645	1,812,481	100.00%

FIGURE 30. JAUNT FY2024 CLASSIFICATION OF MILES BY JURISDICTION AND GEOGRAPHY.

Source: Jaunt FY2024 Budget Workbook.

Note: The miles estimates shown here appear to be slightly different than what was used in earlier operational cost allocations.

Jaunt allocated the total targeted annual capital revenue of \$2,609,576 using the percentage of miles classified into each cell in Figure 30 (see Figure 31).

FIGURE 31. JAUNT FY2024 TARGETED ANNUA	AL CAPITAL REVENUE	BY JURISDICTION AND	GEOGRAPHY

Jurisdiction		Urban		Rural	Agency		Total
Albemarle	\$	598,320	\$	423,532	\$ -	\$ 1	1,021,852
Charlottesville		425,532		5,503	-	\$	431,035
Buckingham		-		105,238	-	\$	105,238
Fluvanna		-		80,205	-	\$	80,205
Greene		3,838		227,829	-	\$	231,668
Louisa		-		545,760	-	\$	545,760
Nelson		-		92,105	-	\$	92,105
Agency		-		-	101,713	\$	101,713
Totals	\$ 1	l,027,691	\$ 1	L,480,172	\$ 101,713	\$ 2	2,609,576

Source: Jaunt FY2024 Budget Workbook.

Note: The miles estimates used to allocate the capital revenue appear to be slightly different than what was used in earlier operational cost allocations.

For FY2024 capital cost allocations, Jaunt assumed that no capital funds would be available for urban service, meaning that the \$1,027,691 in urban capital expenses would need to be covered with 84 percent local funds and 16 percent state funds. Using the miles and federal shares, Jaunt calculated a blended federal, state, and local funding mix (see Table 21). The *Blended* column in the table is calculated by multiplying the percentage of miles in the last row of the urban column (39.4%) by the applicable federal share for urban (0%) and then adding that to the percentage of rural miles (60.6%) times the applicable federal share for rural (80%). The process is repeated for each funding source. The result is that Jaunt's capital projects could be funded at 48.5 percent federal, 16 percent state, and 35.5 percent local.



Funding Source	Urban	Rural	Blended
Federal	0.0%	80.0%	48.5%
State	16.0%	16.0%	16.0%
Local	84.0%	4.0%	35.5%
Totals	100.0%	100.0%	100.0%
Miles	39.4%	60.6%	

TABLE 21. JAUNT CAPITAL COST SHARES BLENDING APPROACH.

Jaunt then calculated the 35.5 percent local share of annual capital target of \$2.61 million, setting the local capital contribution to be allocated among jurisdictions to be **\$926,535** (35.5% of \$2.61 million).

Each jurisdiction then would contribute to that local amount based on the percentage of total miles within the jurisdiction. The challenge of this approach is that agencies with largely rural service end up paying more to help offset the lack of federal funding available for urban service.

Therefore, Jaunt took a different approach than the blending of federal, state, and local shares. Instead, Jaunt calculated the needed local capital contribution for urban and rural service separately, based on the anticipated ratios of federal, state, and local share shown in the urban and rural columns of Table 21. Using this approach, Jaunt was able to isolate rural-only jurisdictions' local capital contributions from jurisdictions that also have urban service, which requires a higher local contribution percentage. Jaunt assigned urban and capital expenses to jurisdictions based on how many miles each jurisdiction had in the urban and rural areas. The results of this allocation approach were presented in several presentations, including the January 24, 2023, presentation to the City of Charlottesville (see Figure 32). (Note that the amounts shown in Figure 32 do not quite match the desired local contribution of \$926,536 calculated above, but the variance is likely due to small changes in service plans and/or capital costs that have occurred since the January 2023 presentation).



Jurisdiction	Urban	Rural	Agency		Total
Albemarle	\$ 397,823	\$ 16,965		\$	414,788
Charlottesville	\$ 366,669	\$ 220		\$	366,890
Buckingham		\$ 4,066		\$	4,066
Fluvanna		\$ 3,213		\$	3,213
Greene		\$ 9,126		\$	9,126
Louisa		\$ 21,862		\$	21,862
Nelson		\$ 3,689		\$	3,689
Agency*		\$ -	\$ 104,075	\$	104,075
Totals	\$ 764,492	\$ 59,142	\$ 104,075	\$	927,709
Rate Per Service Mile	\$ 1.3275	\$ 0.0577	\$ 1.4732	\$	0.51258

FIGURE 32. JAUNT FY2024 CAPITAL CONTRIBUTION RESULTS.

Source: Jaunt January 24, 2023, Budget Presentation to the City of Charlottesville.

One critical assumption in Jaunt's capital cost allocation methodology is that there is no federal share for urban capital expenses. This assumption is currently accurate; however, if Jaunt and CAT were to agree and cooperate on pursuit of capital funds that could be used for urban service, the local contribution required decreases significantly, because the urban expenses now can be funded 80 percent federal, 16 percent state, and 4 percent local.

Table 22 displays TTI's calculated results of the three different approaches for capital cost contribution allocation:

- Option 1: Assumes no federal urban share and uses a blended approach that spreads requires all parties to help offset the lack of federal urban share.
- Option 2: Assumes no federal urban share and uses a direct allocation approach that separates urban capital from rural capital so that rural-only jurisdictions do not have to share in the increased local share of urban capital.
- Option 3: Assumes there is federal urban share of 80%, reducing the local share to 4%.



Jurisdiction	Option 1: No Urban Federal; Blended Shares	Option 2: No Urban Federal; Split Shares (Current Option)	Option 3: Urban Federal; Split Shares
Albemarle	\$362,811	\$519,530	\$40,874
Charlottesville	\$153,040	\$357,667	\$17,241
Buckingham	\$37,365	\$4,210	\$4,210
Fluvanna	\$28,477	\$3,208	\$3,208
Greene	\$82,254	\$12,337	\$9,267
Louisa	\$193,773	\$21,830	\$21,830
Nelson	\$32,702	\$3,684	\$3,684
Agency	\$36,114	\$4,069	\$4,069
Total	\$926,535	\$926,535	\$104,383

TABLE 22. JAUNT CAPITAL COST CONTRIBUTION OPTIONS (CALCULATED BY TTI).

Notes: Values calculated by TTI as analyzed from data in Jaunt's FY2024 Budget Workbook. Option 2 is essentially the option that was shared among local jurisdictions to date; however, TTI's calculations do not align exactly with Jaunt's.

A couple of notes about Jaunt's capital cost allocation methodology:

- Jaunt and its funding partners are following industry best practice to plan for and share in capital expenses. Jaunt's allocation of the local share of capital expenses to each jurisdiction and geography (using miles) is reasonable and transparent.
- The current lack of federal assistance for urban capital funding places a significant burden on the entities with urban service (i.e., the County and the City).

4.3 SUMMARY OF ALBEMARLE COUNTY SERVICES, COSTS, AND CONTRIBUTIONS

Table 23 displays the complete picture, as TTI understands it, of the Albemarle County's services, costs, and contributions (excluding capital contributions). This table is not meant to compare providers against one another. Instead, it is mean to show the full cost of service supported by the County. In fact, using this table to make provider comparisons would be inaccurate and misleading, because both providers apply federal and state funds in slightly different ways, use different methods for forecasting and allocating costs and hours, and have different organizational structures.²²

²² For example, as a department of the City, CAT can benefit from any central services or support from the City—costs that may not be reflected in its budget. Jaunt is a stand-alone provider and does not benefit from services provided by a larger organization, so *all costs* are reflected in its budget.



Service	Provider	Allocated FY2024 Operational Cost	Forecasted Hours	Operational Cost per Hour	County Operational Contribution	County Cost per Hour
ADA Paratransit	Jaunt	\$2,846,838	26,474	\$107.53	\$1,543,800	\$58.31
Non-ADA Demand Response & CONNECT Commuter Bus	Jaunt	\$2,507,808	20,612	\$121.67	\$1,359,949	\$65.98
Subtotal	Jaunt	\$5,354,646	47,086	\$113.72	\$2,903,749	\$61.67
Microtransit	CAT	\$1,940,000	18,096	\$107.21	\$388,000	\$21.44
Fixed-Route Bus	CAT	\$4,244,086	48,435	\$87.62	\$1,300,000	\$26.84
Subtotal	CAT	\$6,184,086	66,531	\$92.95	\$1,688,000	\$25.37
Total		\$11,538,732	113,617	\$101.56	\$7,495,498	\$65.97

TABLE 23. FY2024 ALBEMARLE COUNTY SERVICES, COSTS, AND CONTRIBUTIONS.

Sources: Documents and files provided by CAT and Jaunt, as analyzed and adapted by TTI.

In addition to the \$7.5 million in County contributions to support the operational costs of the services, the County is also contributing \$414,788 towards Jaunt's capital costs, for a total of **\$7,910,286**.

5 BEST PRACTICES RESEARCH

This section provides a summary of industry standards, guidelines, and norms in two key areas:

- Level and quality of public transit service.
- Regional transit funding and cooperation.

5.1 LEVEL AND QUALITY OF PUBLIC TRANSIT SERVICE

The level and quality of transit service play a pivotal role in passenger satisfaction, level of ridership, and operational costs. The Third Edition of the Transit Capacity and Quality of Service Manual (National Academies of Sciences, Engineering, and Medicine, 2013) offers valuable guidance on these matters, addressing the various factors that impact level and quality of transit services, particularly the availability of services.

5.1.1 SERVICE AVAILABILITY CONCEPTS

In this section, we focus on factors impacting the availability of transit service (i.e., the degree to which a transit service is available to customers). Service availability is considered as one the most significant factors affecting the quality of the service and use of public transit as a daily travel mode. Service availability is classified into four primary dimensions: spatial, temporal, informational, and capacity. This memo focused on two of the dimensions:

- Spatial availability.
- Temporal availability.



5.1.1.1 SPATIAL AVAILABILITY

Spatial availability is defined differently for fixed-route and demand-response services. For fixed-route services, key factors affecting spatial availability include:

- Pedestrian access (for passengers walking to transit stops). This factor includes the distance to stops and stations (assuming passengers are willing to walk up to a ¼-mile for infrequent local bus service and up to a ½-mile for frequent, higher quality service), the pedestrian environment (e.g., sidewalks and street crossings), sidewalk accessibility, and bicycle facilities.
- Availability of park-and-ride lots and facilities (for passengers who drive to transit stops).

For demand response services, key factors affecting spatial availability include:

- Availability of the service at passengers' doorsteps.
- Availability of the demand response service at trip origins and destinations needed by passengers, including the use of demand response for the first-/last-mile to transit stations.

5.1.1.2 TEMPORAL AVAILABILITY

Temporal availability is defined as whether the service is available at the times when potential passengers need to use the service. Factors affecting temporal availability include:

- Frequency of the service. (Applies mainly to fixed-route service.) Frequency is how often the bus arrives in a given period of time and is usually expressed as the headway (i.e., the number of minutes between bus arrivals; e.g., the bus arrives every 30 minutes). More frequent service may be necessary in densely populated areas and is associated with higher ridership.
- Service span. Service span is what days and hours the service operates (e.g., Monday through Saturday, 6 am to 10 pm). The longer the service span, the greater the variety of trip purposes that can be covered by the service, and therefore the more useful it is.
- Response time. (Applies to demand response services.) Response time is the time between a passenger making a trip request and the passenger being picked up. In traditional demand response, response time is typically conceived as a reservation window, which is the earliest and latest point in time at which a passenger can request a trip (e.g., trips must be requested at least a day in advance and can be made up to 7 days in advance). In on-demand services (e.g., microtransit), response time is typically measured in minutes (e.g., riders will be picked up no more than 15 minutes from the time of request).

5.1.2 SERVICE GUIDELINES FOR AVAILABILITY

The TCQSM and other industry documents provide service availability guidelines for fixed route and demand response services. This section describes service guidelines in the following areas:

- Fixed route frequency.
- Fixed route span of service.
- Demand response span of service.
- Demand response response time.
- Microtransit service standards.



5.1.2.1 FIXED-ROUTE FREQUENCY

The frequency of the fixed-route service can vary across different operating contexts and is typically influenced by a combination of transit agency goals and passenger demand. Table 24 displays guidelines for fixed-route frequency.

Average Headway	Frequency level	Desirable Transit Service Type	Land Use / Route Attributes	Density
<=5 min	Very frequent service	Bus or rail service	Routes converge to serve a major activity center	Very high density
>5-10 min	Frequent service	Bus or rail service	Routes converge to serve a major activity center	High-density
11-15 min	 Relatively frequent service Long service hours, including weekends 	Light rail or BRT service	 Routes with strong anchors on both ends and park-and-ride lots 15 dwelling units/net acre for bus service (Pushkarev et al., 1977) 	High-density corridors
16-30 min	Around 20- or 30-min headways (3 or 2 buses per hour)	Commuter rail, commuter bus	7 dwelling units/net acre for bus service (Pushkarev et al., 1977)	Moderate- density corridors
31-59 min	Around 40 to 45 min headways	Bus	5-6 dwelling units/net acre (Pushkarev et al., 1977)	Low to moderate density corridors
60 min	Maximum headway for fixed-route bus service	Bus	4 dwelling units/net acre (Pushkarev et al., 1977)	Low density
> 60 min	Undesirable frequency	Bus		Needs to be complemented with DRT service

TABLE 24.	TCQSM	FIXED	ROUTE HEADWAY	GUIDELINES

Source: Adapted from the TCQSM, 3rd Ed.

5.1.2.2 FIXED ROUTE SPAN OF SERVICE

Span of service plays a vital role in determining service availability and overall service quality. From the passengers' viewpoint, extending service hours offers them greater flexibility. Service span guidelines are established by considering what types of trips could be accommodated given different service spans (see Table 25).



Service Hours	Trip Time Coverage	Trip Purpose Coverage	Other Aspects of the Service
> 18 hours	Late hours at night,	 A full range of trip purposes Late night work trips 	 Can be operated certain days (e.g., Friday and Saturday nights) Can be operated on certain routes in certain hours
15-18 h	Late hours at evening	A broad range of trip purposes	Can be operated on certain routes in certain hours
12-14 h	 A long trip time service span to add time flexibility 	Work trips	
7-11 h	 During the middle of the day Not covering office hours 	Not work trips. Not flexible errands trips	 Can be operated on common weekday service hours for small city service Can be operated on weekend for small city service
4-6 h	 Peak-period hours service (a.m. and p.m. departure times) Hourly service (during a defined period of time) 	Limited purposes	Can be provided on minimum service hours for hourly service (e.g., small city weekend service)
< 4 h	Round trip in one day or a half day	Trip purposes with little or no flexibility	Can be provided on rural routes with only a few daily departures (e.g., morning, midday, afternoon)

TABLE 25. FIXED ROUTE SERVICE SPAN GUIDELINES.

Source: Adapted from the TCQSM, 3rd Ed.

5.1.2.3 DEMAND RESPONSE SPAN OF SERVICE

Demand response span is greatly affected by the days the service operates. There are 5 service levels for days of the service from seven-day-service to less-than-weekly service. Demand response services with more days of operation provide more flexibility for the passengers and cover more trip purposes (see Table 26).



Service	Trip Day Coverage	Trip Purpose Coverage	Service Limits
7 days/week	Weekdays and weekends	 Work trips Educating trips Social and recreational trips 	
6 days/week	Weekdays and at least one weekend day	Work tripsEducating tripsMedical trips	
5 days/week	Weekdays	 Essential shopping trips Personal business Medical appointments Social or government services Part-time employment and education trips 	Provides only minimum service that attract choice riders, depending on hours per day of service
Less than 5 days/week	Weekdays		Limits access to some medical services (e.g., dialysis, some medical clinics)
Less than weekly	Weekdays	 Grocery shopping Banking One-time medical appointment Trips 	Limits the opportunity to use DRT for purposes other than lifeline trips

TABLE 26. DEMAND RESPONSE DAYS OF SERVICE.

rce: Adapted from the TCQSM, 3rd Ed.

The availability of demand response is also closely tied to the operational hours of the service on any given day. Demand response operates from a minimum of less than 5 hours per day at the lowest service level and extends to 16 or more hours per day at the highest service level (see Table 27).



Service	Trip Day Coverage	Trip Purpose Coverage	Service Limits
>= 16 h/day	Daytime hours until midevening	 All trip purposes Employment trips Education trips 	Service for most communities
12-15.9 h/day	During typical business hours including early evening hours	 Employment trips Education trips Medical and health trips 	Service for most communities
9-11.9 h/day	During daytime business hours	Employment tripsMedical trips	Transit-dependent residents in small, isolated communities
5-8.9 h/day	Daytime hours	 Essential shopping, Personal business Medical appointments Human or government services Parttime employment and educational trips 	Transit-dependent residents in small, isolated communities
< 5 h/day	Daytime hours	 Grocery shopping trips Banking/financial trips Medical trips 	Transit-dependent residents in small, isolated communities

TABLE 27. DEMAND RESPONSE HOURS OF SERVICE.

Source: Adapted from the TCQSM, 3rd Ed.

5.1.2.4 DEMAND RESPONSE RESPONSE TIME

Demand response response time significantly impacts service availability for passengers and can vary across different levels. Table 28 displays different approaches and categories of response times for demand response (excluding on-demand services like microtransit).



Service Response Time	Trip Types	Trip Purposes	Booking Method
Guaranteed (Standing order or subscription service)	Recurring trips	 Work trips School trips Medical trips Human service trips 	 One call to request service on the requested days and time No need for standing- order service before each trip
Same-day service	Spontaneous trips		Take a trip within as little as 2 to 3 hours of a trip request
Same-day service on space available basis	 Same-day trips Last-minute and not time sensitive 		 Book a same-day trip if space is available (Same-day cancellations) Short-notice basis (additional capacity)
Will-call or Call When Ready	Return trips	Specific trip purposes (medical appointment)	Call for return trip when ready

TABLE 28. DEMAND RESPONSE RESPONSE TIME CATEGORIES.

Source: Adapted from the TCQSM, 3rd Ed.

5.1.2.5 MICROTRANSIT SERVICE STANDARDS

Various factors are taken into account when assessing service guidelines in microtransit, including the following standards selected from Capital Metro's (in Austin, TX) Microtransit Service Standards (Hansen et al., 2021):²³

- Arrival Time: Microtransit buses are considered on-time if they reach the pickup location within a window of <u>0 to 15 minutes</u> after the trip scheduled and requested by passenger. Normally, arrival time should exceed <u>90%</u>.
- On-board Time: It is supposed that microtransit trips should be able to be completed between 0 minutes to 20 minutes after the pickup of the customer. The operational standard for on-board time is that 95% of trips are met by the <u>20-min</u> threshold. A 95% success rate in meeting the 20-minute threshold for trips is considered as the operational standard for on-board time.
- Completed Trips: At least <u>85%</u> of trips requested by microtransit passengers should be completed.
- Shared Rides: The service standards for each neighborhood zone is to have <u>25%</u> of trips booked as shared-ride trips.

5.2 FUNDING AND SHARING THE COSTS OF TRANSIT SERVICE

In a region like Albemarle County, sorting out the different funding streams usable for certain transit costs and figuring out how partners should cooperate in paying transit costs can be complex.

Federal and state sources applicable to the County are covered in more detail elsewhere in this tech memo. However, two applicable guidelines related to federal funding include:

²³ The TCQSM does not have service guidelines for microtransit.



- Maximize the use of federal share of transit costs. This is especially true if a transit agency is struggling to come up with adequate local share or to spend down its federal grants. There are several core strategies that can be helpful in maximizing federal share:
 - Leverage higher federal match rates for qualified operational costs. FTA policy typically allows for a 50 percent federal share of net operational costs (costs after fares are applied); however, some operational costs are reimbursable at the "capital" rate (i.e., 80 percent), including but not limited to:²⁴
 - Maintenance, including vehicle and facility maintenance.
 - The capital portion of the cost of a contract (called the "capital cost of contracting").
 - A portion of ADA paratransit operational expenses (up to 10 percent of an agency's apportionment and up to 20 percent if the agency meets additional criteria²⁵).
 - Mobility management.
 - Administrative expenses (only allowable under Section 5311 and if approved by the state).
 - Pursue competitive grant opportunities, especially bus and bus facilities grants. (In the case of the study region, DRPT manages the competitive grant opportunities for small urban and rural transit agencies.)
- Ensure that federal funding sources for urban and rural programs are only applied to allocable urban and rural expenses. This does not mean that a transit agency that receives both urban and rural funds needs to have separate dedicated operators, vehicles, and facilities. Instead, agencies receiving both types of funds need a transparent and documented (and in some cases approved) methodology for allocating operational and capital costs to urban and rural funding sources.
- Ensure that federal grants are only used to reimburse allowable transit costs. Not all transit costs are allowable for grant reimbursement (e.g., speeding tickets and costs associated with operating school bus or charter service).²⁶

In addition to federal and state sources, funds can be generated locally (e.g., by local governments) to help support transit. *TCRP Report 129* lists six primary categories of potential funding sources that can be leveraged at the local and regional levels to reinforce the public transit system. These categories are outlined as follows (National Academies of Sciences, Engineering, and Medicine, 2009):

- Conventional funding sources reliant on taxes and fees.
- Usual funding sources tied to businesses, activities, and their associations.
- Income generated from projects.
- Fresh funding sources centered on users or market dynamics.
- Financing mechanisms.
- Fare policy and strategic approaches.

section5302&num=0&edition=prelim .

²⁶ For a full discussion of allowable and unallowable costs, see the FTA Section 5307 circular, Section 5311 circular, 2 CFR 200, and the National Rural Transit Assistance Program's *Fundamental Financial Management for Rural Transit Providers*.



²⁴ For a full discussion, see the FTA Section 5307 circular and Section 5311 circular.

²⁵ These criteria are defined in 49 USC §5302 <u>http://uscode.house.gov/view.xhtml?req=granuleid:USC-prelim-title49-</u>

Not every conceivable funding source may be accessible for use at the local and regional levels, owing to contextual factors such as:

- Governance traditions and principles related to taxation and expenditures.²⁷
- Various transit agency types and services that require funding.²⁸
- Distinguishing funding for projects from funding for programs.
- The present and future role of transit within a community.
- State and local laws.

Nevertheless, funding mechanisms become notably more complicated when transit agencies collaborate to offer services across a region encompassing diverse jurisdictions. Developing a comprehensive costsharing and fundraising approach becomes a matter of heightened importance when multiple transportation providers and authorities are engaged in delivering transit services.

Industry guidance exists for cost allocation procedures that promote coordination and service delivery at both the local and regional levels. *TCRP Report 144* (2011) serves as an illustrative example, presenting a methodology for estimating transportation costs associated with services delivered through partnerships. This methodology centers on allocating costs proportionally among each partner involved. The cost-sharing model outlined in this study is designed to assess the service's cost, taking into account factors like the service's route, mode, and whether the contracted service's pricing aligns with its cost structure. Within this model, various service metrics (e.g., mileage, hours, and mode) and service-related costs (comprising fixed costs, costs varying with service mileage, and costs contingent on hours-of-service operations) are factored in, all serving as input variables. The model subsequently computes the corresponding costs for the alternative service and determines the service price required to cover all associated costs (National Academies of Sciences, Engineering, and Medicine, 2011).

Typically discussed as a "two-variable model," the approach outlined in TCRP Report 144 represents the industry standard. National RTAP's *Advanced Topics in Financial Management* (National RTAP, 2021) also provides step-by-step guidance for operational cost allocation, capital cost allocation, and local share allocation.

Although there is no specific law or rule that dictates how cost allocation must be done, the resources above represent industry best practice. A different approach could be used by the region; however, the *Advanced Topics in Financial Management* (National RTAP, 2021) suggests that cost allocation models should meet a few basic principles:

• Reasonable: the model should make sense and be defensible.

²⁸ Decision-making and funding mechanism are different based on the nature of the agencies. The two most frequent transit organization types are independent authorities, and municipal transit systems. There are also other transit agencies that owned/operated by the state (e.g., New Jersey Transit Corporation (NJ Transit), Rhode Island Public Transit Authority (RIPTA)).



²⁷ For instance, in the state of Texas, the provision of public transit funding is traditionally considered as a responsibility of local governments. Accordingly, only a limited number of small urban and rural transit agencies are provided a modest amount of direct funding by the state. However, states provided the local officials to design transit system and the authority to raise necessary revenues through local funding options.

- Consistent: the model should treat and allocate costs consistently within a given period and across periods of time.
- Replicable: the model's results should be capable of being reproduced by anyone who follows the steps. There should not be any "secret" or "hidden" calculations.
- Documented: The model should be fully documented.
- Avoid unnecessary complexity: additional complexity often leads to unnecessary burden for very little improvements in "accuracy."
- Use available data: use the financial and operational data currently available, if possible.
- Align data collection with the model (as necessary): if new data needs to be collected, then update data collection systems in order to do so.

6 PRELIMINARY FINDINGS AND RECOMMENDATIONS

This section contains TTI's preliminary findings and recommendations, which are grouped into the following areas of analysis:

- Transit services and service levels.
- Transit operations.
- Operational and capital cost allocation models.
- Cooperative planning, operations, and funding.

6.1 TRANSIT SERVICES AND SERVICE LEVELS

TTI examined the transit services and service levels operated in the region and compared them its professional knowledge and industry standards and norms. As a disclaimer, TTI was not scoped to do a complete, area-by-area and route-by-route review of the region's transit services. Therefore, TTI's observations are based on a high-level review of the services using publicly available or provider-provided information.

6.1.1 FIXED-ROUTE SERVICES

Current and planned FY2024 fixed routes operate Monday through Saturday, from around 6:00 am to 10:30 pm (about 16.5 hours daily), with either a 30-minute or 60-minute headway. The days and hours of service provide transit for a broad range of trip purposes, including regular work trips and personal trips. The frequency of routes appears appropriate given the city's population and population density. (Industry norms suggest that about 3,000 people per square mile is a reasonable starting point for infrequent transit²⁹, and 10,000 people per square mile is adequate density to justify high-frequency service.) Charlottesville's population density is around 4,755 people per square mile, making CAT's current 30- or 60-minute headways reasonable. CAT's plans for reinstating pre-COVID service levels is also reasonable, including adding back Sunday service, as appropriate. As an alternative to reinstating all fixed routes, CAT could consider implementing general public demand response service on Sundays (likely provided by Jaunt) if running fixed-route not feasible or the fixed routes are already known to have low ridership on Sundays. The option of having demand response service in the CAT area on Sundays could be even more

²⁹ For example, see discussion in https://kinder.rice.edu/urbanedge/excerpt-many-cities-have-transit-how-many-have-good-transit.



viable given that Jaunt is currently running ADA paratransit on Sundays, even though CAT is not operating fixed routes on Sundays.

No specific findings or recommendations.

6.1.2 ADA PARATRANSIT

ADA paratransit service in the region is operated by Jaunt and is funded under a multi-party arrangement that can be somewhat difficult to follow. Providing ADA paratransit is an obligation of CAT because it operates fixed routes. CAT receives federal funding for the urban area (Section 5307) and uses some of this federal funding³⁰ to support ADA paratransit in addition to contributing local funds to Jaunt. Some of CAT's fixed routes extend into the County beyond city limits, and, under the agreement between CAT and the County, the County is financially responsible for the fixed-route costs in the urbanized area outside city limits. By logical extension, the County is also responsible for covering a portion of Jaunt's ADA paratransit costs associated with fixed routes outside the city limits. Unlike the City, the County doesn't receive any dedicated transit funding and so has to use its local funds to cover any remaining ADA paratransit costs after Jaunt applies federal and state funds to its ADA paratransit operations. (The rural federal grants Jaunt receives from DRPT cannot be used for ADA paratransit expenses.)

Therefore, the funding for Jaunt's ADA paratransit comes from:

- 25 percent of CAT's annual Section 5307 (and related CARES/ARP funds) apportionment.
- State funds received by Jaunt from DRPT and allocated to its ADA paratransit operations.
- A contribution from the City for the ADA paratransit trips with home addresses inside city limits.
- A contribution from the County for the ADA paratransit trips with home addresses outside the city limits but inside the ADA paratransit service area.

ADA paratransit will cost an estimated \$5.47 million in FY2024 (see Table 10), which as a ratio, is about half of CAT's fixed route service cost of \$12 million (see Figure 20). Another way to think of the relative size of the ADA paratransit program is to imagine that CAT operated and paid for both fixed-route and ADA paratransit, giving it a \$17.47 million operational budget (\$12 million plus \$5.47 million), of which ADA paratransit would be 31.3 percent of the total transit agency budget. ADA paratransit is a necessary and beneficial service; however, because of the general convenience of ADA paratransit compared to fixed-route services, ADA paratransit demand and costs can be difficult to manage. Also, given that fixed-route fares are currently zero fare, ADA paratransit also must be zero fare, making it even more difficult to manage ADA paratransit costs.

ADA paratransit appears to be operated as required by law both in terms of geographic coverage and span of service.

Finding 1: Jaunt is operating ADA paratransit on Sundays, which is not required, assuming no fixed routes are operating on Sundays. CAT let the decision of running ADA paratransit on Sundays up to Jaunt. Jaunt chose to continue running the service to provide people with disabilities basic

³⁰ See the discussion of the ADA paratransit funding in Section 4.1.3.2.



mobility on Sundays and also to avoid causing objections that naturally arise when service is discontinued.

Recommendation 1: If CAT is going to re-implement Sunday fixed-route service this fiscal year, then no changes are necessary. However, if reimplementation of Sunday fixed-route service will be delayed beyond this fiscal year or indefinitely, then a decision of whether to keep the Sunday ADA service should be made by all three parties (the County, CAT, and Jaunt) in full light of the marginal cost of operating Sunday ADA service.

This decision could also include discussion of, as an alternative to implementing Sunday fixedroute service (at least in the near-term), if operating general public demand-response (*open to all riders*) may be more cost-effective than running ADA paratransit alone or ADA paratransit plus fixed-route.

Finding 2: The regional's multi-jurisdictional approach and historical context of operating ADA paratransit makes final responsibility for performance and cost management of ADA paratransit unclear. For example, if ADA paratransit performance deteriorates, which entity is ultimately responsible for taking corrective action? If ADA paratransit demand and costs continue to increase to an unsustainable amount, which entity is responsible for implementing policies, strategies, or initiatives to help control costs and maintain financial stability? Clarity in the ownership of ADA paratransit is critical because of how costly the service can become as well as the liability associated with not meeting the requirements under federal rules and regulations.

Recommendation 2: Explore contracting alternatives for ADA paratransit that help to motivate continued improvements in cost effectiveness. Options include, but are not limited to:

- Continue the interlocal arrangement with Jaunt for ADA paratransit services but explore the costs and benefits of converting the arrangement to a fee-for-service contract in which Jaunt is reimbursed at a fixed cost per hour or cost per mile rate that updates annually.
- Explore putting out a request for proposals for the ADA service, giving private providers (as well as Jaunt) the opportunity to bid on the service. (And bid prices to include the cost of vehicles.) Proposers may also be able to include additional cost-savings approaches (e.g., providing alternative services and opt-in programs that allow some ADA paratransit customers the option for using non-dedicated service providers like taxis and transportation networking companies). Evaluate the cost-effectiveness of this approach, including the benefits of the buyer (likely CAT) being able to retain its Section 5307 funds and use them to help pay for the cost of contracting out the ADA paratransit service, rather than simply "passing" the funds on to the provider.³¹

Recommendation 3: Regardless of contracting alternative, explore governance and performance management options that help build an organized strategy and clear ownership of

³¹ There are additional benefits to having a contract for service, including that the buyer would be able to see higher federal share for the service under FTA's capital cost of contracting provisions. Note that, under capital cost of contracting, if Jaunt were to win the service, CAT may want to seek FTA guidance on establishing the allowable capital cost of contracting rates giving Jaunt's assets are partially federally funded.



the ADA paratransit service to draw clearer lines of responsibility. Either CAT or the County (or an independent oversight entity) should take a leadership role in proactive ADA paratransit management. (In our opinion, it makes the most sense for CAT to serve in this role, given it is responsible for most of the ADA paratransit service demand and cost.)

- **Finding 3:** The 25 percent split of Section 5307 is 10 years old and is not necessarily in line with current conditions. The split was calculated by the MPO in 2013 and likely needs to be re-evaluated.
- **Recommendation 4:** If CAT maintains Jaunt as a subrecipient of its Section 5307 funds for ADA paratransit, the region should re-evaluate the 25 percent split of Section 5307 funds for ADA paratransit to ensure that the split is in line with current ridership and cost patterns.

The split approach / policy could also include annual updates so that the split is not assumed to be a constant value and is based on current conditions in the region.

- **Finding 4:** Increasing costs of ADA paratransit may be difficult to manage without helping manage down demand. TTI's understanding is the CAT handles eligibility determination processes, and that CAT currently does not have procedures to implement conditional eligibility.
- **Recommendation 5:** Conditional eligibility is a way to ensure that riders with disabilities get the ADA paratransit they need based on their specific characteristics and also that trips the rider is able to take on fixed route are not taken on ADA paratransit. This helps to reduce some ADA paratransit demand and protect service capacity for eligible riders. The region should explore the feasibility, costs, and benefits of a conditional eligibility program as a strategy for containing costs and maintaining capacity of ADA paratransit service, especially if ADA paratransit will remain zero fare for the foreseeable future.

6.1.3 DEMAND RESPONSE SERVICES (NON-ADA)

The non-ADA demand response services in the region generally operate five days a week, and overall, service runs about 10 hours a day.³² The current days and hours of operation meet industry guidelines (from the TCQSM) for providing essential shopping trips, personal business, medical appointments, access to social or government services, and to part-time employment and education trips. With the days and hours of operation, the demand response services are reasonable for meeting the needs of transit-dependent populations.

Finding 5: The separation (i.e., using different vehicles) for different demand response services could lead to reduced productivity and cost-efficiency—especially if these separations result in reduced opportunities to group trips together using the same vehicles.

³² Ten hours daily service is an approximation of aggregating the span of all of Jaunt's different non-ADA demand response services.



Recommendation 6: Jaunt has pursued and should continue to pursue and implement more cost-effective scheduling and dispatching techniques as recommended in a prior TTI report.

6.1.4 COMMUTER BUS

Jaunt's commuter bus routes have a reasonable span of service and number of trips; however, their service-effectiveness is mixed. 29 North CONNECT seems well-desired (based on customer comments in the County's microtransit study); however, the route has low productivity (4.3 passengers per hour³³). Crozet CONNECT has even lower productivity at 1.94 passengers per hour³³. Typical targets for fixed-routes, especially commuter services is more than 5 passengers per hour.

- **Finding 6:** The two commuter buses funded by the County (29 North and Crozet) appear to have low productivity. Without trip-level loading data, it is difficult for TTI to make further evaluations of these routes or ways to improve the productivity (and therefore the cost-effectiveness) of the routes.
- **Recommendation 7:** Analyze the trip-level and segment-level use of the routes in comparison to their cost. Consider options for improving the cost-effectiveness of the routes, including better advertising, streamlining routing, reducing hours or trips, and even discontinuing the service.

6.1.5 MICROTRANSIT PILOT PROJECT

The 29 North zone of the proposed microtransit service overlaps with both Jaunt's 29 North CONNECT route and Jaunt's general public demand response service. The Pantops zone overlaps with CAT Route 10 and with Jaunt's general public demand response service. However, at least as pilot, largely funded by a state grant, the overlaps in service are justifiable, because the microtransit service has much better response time than traditional demand response (15 minutes for microtransit as compared to day-before for demand response). Also, during the pilot, the County and CAT can collect data on usage, trips taken on microtransit, any trip reductions on overlapping services, and actual microtransit costs to better understand demand and project future costs and compare the cost-effectiveness of microtransit versus fixed routes and also demand response.

As a general caution, however, once microtransit services are piloted, several challenges tend to co-occur:

- Removing the services, even if they are poorly performing can cause significant criticism. Once they are in, they can be very hard to take out.
- Because on-demand service is very popular and convenient, demand for the service may be difficult to meet. Also, requests for microtransit expansion will likely increase—with many communities wanting their own service.
- Operating microtransit fare free³⁴ can exacerbate both above bullet points. Fare free microtransit with 15-minute response times is a very attractive service option, and, without fares as a tool by

³⁴ TTI assumes the microtransit service will be fare free; however, this has not been confirmed.



³³ As forecasted by Jaunt in its FY2024 Budget Workbook.

which CAT and the County can manage demand, there is a risk that the demand may be difficult to meet without increasing the service's cost.

- **Finding 7:** TTI's understanding is that there is not a mutually adopted set of service standards for microtransit to help establish performance criteria and to help plan for future microtransit implementations.
- **Recommendation 8:** CAT and the County should establish and adopt service standards for microtransit that also discuss the connections among microtransit, fixed route, and general public demand response. These service standards will help CAT and the County plan for and evaluate microtransit services in the larger context of regional goals, funding, and other considerations.
- **Recommendation 9:** CAT and the County should carefully evaluate the microtransit service's performance, demand, and costs and should consider fare options for microtransit that will help manage demand and offset the service's costs.

6.2 TRANSIT OPERATORS

6.2.1 CAT

TTI's review of CAT uncovered no significant organizational or operational issues or concerns notwithstanding any other findings and recommendations elsewhere in this memo. Note that TTI does not warrant or guarantee that there are no issues—only that, based on the information we were provided, no significant issues were apparent.

- **Finding 8:** With 35 active vehicles in its fleet, a current peak vehicle requirement of 19, and pre-COVID peak vehicle requirement of 26, CAT's pre-COVID spare ratio was 19.2 percent, and CAT's current spare ratio is 84.2 percent. Under pre-COVID operations, CAT's fleet appears to be correctly sized; however, CAT's fleet is relatively large at current peak vehicle requirements.
- Recommendation 10: CAT should carefully examine the size of its revenue fleet to ensure it is optimally sized given its local operating conditions and needs and anticipated service levels. Although the FTA requirement of not exceeding a 20 percent spare ratio does not apply to CAT,³⁵ 20 percent serves as an industry standard and target—especially as fleets get closer to 50 vehicles. If CAT does not return fully to pre-COVID service levels, CAT should identify ways to reduce the size of its fleet.

6.2.2 JAUNT

TTI's review of Jaunt for this project uncovered no significant organizational issues. Jaunt has a robust organizational structure and a reasonable approach to operations. Jaunt does have some areas of improvement (mentioned elsewhere in this memo); however, any issues identified appear to be left over challenges from historical practices and/or prior leadership. TTI did have one finding related to Jaunt's fleet size (described below), but, otherwise, Jaunt's appeared to have a solid transit operation and

³⁵ The 20 percent spare ratio maximum applies only to transit agencies with 50 or more fixed-route vehicles.



management structure. Note that TTI does not warrant or guarantee that there are no issues—only that, based on the information we were provided, no significant issues were apparent.

- **Finding 9:** With 86 vehicles in its fleet and a peak vehicle requirement of 55, Jaunt's fleet appears oversized, having a spare ratio of 56 percent (see section 4.2.2).
- **Recommendation 11:** Jaunt is already aware of this issue and is moving in the right direction toward reducing the size of its fleet to a new baseline after also implementing efficiencies in its scheduling and dispatching. Jaunt should continue to examine its procedures (including optimizing is scheduling and dispatching and its fleet replacement plan) to help reduce and proactively manage vehicle requirements to attain the optimal fleet size, targeting 20 percent spare ratio.³⁶ For reference, if Jaunt had a 20 percent spare ratio today, it would have 69 vehicles (assuming 58 vehicles required at peak operations).

6.3 OPERATIONAL AND CAPITAL COST ALLOCATION MODELS

6.3.1 CAT

CAT's fixed-route operational cost allocation model is reasonable and follows industry accepted practices. Although the model is single-variable (based on miles), given the homogeneity of CAT's service, a single-variable model is accurate enough and simpler to implement.³⁷ However, the model may need future updating in the event there are changes in CAT's cost structures and/or services (e.g., operating microtransit beyond the pilot period). The model assumes all operational costs are shared across all routes and services, and this may not always be the case.

Finding 10: Although the operational cost allocation model is discussed in presentations and is trackable in an Excel workbook, the model does not appear to have full documentation.

Recommendation 12: CAT's operational cost allocation model needs to be fully documented with a level of detail beyond what's discussed visible in PowerPoint presentation or an Excel workbook. CAT should develop a cost allocation document that includes the sources of data for the model, the procedures for calculating key inputs, and how to interpret the results. The cost allocation document should be reviewed and agreed upon by CAT and the County and adopted either formally or at least as a referenced document in the agreement between CAT and the County.

Finding 11: CAT does not currently allocate any of its fixed route capital costs to Albemarle County.

Recommendation 13: Although allocating capital costs is not a requirement, ensuring that capital costs are adequately funded helps transit operators and funders ensure that transit capital assets are in a state of good repair and are replaced or rehabilitated when necessary. Given about

³⁷ This is in contrast to Jaunt's operational cost allocation model, which, because of the different services Jaunt operates, a two-variable model is preferred to help improve accuracy of cost allocations.



³⁶ Note that although 20 percent is a guideline, FTA requirements to have no more than a 20 percent spare ratio do not apply to Jaunt, because the 20 percent spare ratio requirement is only for transit providers with 50 or more fixed-route vehicles.
35 percent of fixed route miles are attributable to the County, allocating a portion of CAT's capital costs to the County could help both parties ensure the long-term sustainability of the capital assets used to support the fixed route service. CAT and the County should discuss options for capital cost allocation. One option would be to follow Jaunt's capital cost allocation approach discussed in Section 4.2.5.

6.3.2 JAUNT

Jaunt's fixed-route operational cost allocational model is reasonable and follows the industry standard two-variable approach, which is appropriate for Jaunt given the variety of services Jaunt operates. The model does assume that all costs apply to all routes and services, which appears currently accurate. However, future cost allocations should continue to double-check this assumption to ensure that, if any costs directly attributable to a specific service exist, those costs are directly assigned to that service.

Jaunt's operational cost allocation model is detailed in two documents:

- Appendix C of its 2022 Transit Development Plan, which presents the methodology for taking operational costs, assigning them to cost pools, and using hours and miles of each service allocate those costs.
- A document called *Jaunt Hours Allocation Methodology* (version 3.0), which describes how the vehicle hours and miles of individual passenger trips are allocated and classified based on trip type (e.g., ADA paratransit, non-ADA urban, rural general public, etc.).
 - **Finding 12:** Although Jaunt has two documents describing its methodology for allocating operational costs, the two documents combined still do not provide 100 percent of the detail needed to fully understand and replicate Jaunt's operational cost allocation model (e.g., *how* trips are classified as urban or rural is not described in either document).
 - **Recommendation 14:** Jaunt's documentation of its operational cost allocation model needs a few additional points, for example, how trips are classified by type, and how revenues are applied to allocated expenses. And, preferably, the entirety of Jaunt's operational cost allocation model, including all steps, should be compiled into a single document that includes the sources of data for the model, the procedures for calculating key inputs, and how to interpret the results. The cost allocation document should be reviewed and agreed upon by Jaunt and the County and adopted either formally or at least as a referenced document in the agreement between Jaunt, the County, and Jaunt's other funding partners.

Jaunt's capital cost allocation model also is reasonable and follows industry standard practices. The singlevariable, miles-based approach is a reasonable and defensible way to allocate Jaunt's capital expenses.

Finding 13: Urban capital costs are currently assumed to have \$0 federal share, causing a larger local share for urban assets, which falls on local governments with urban service.

Recommendation 15: The lack of federal support for urban capital is a not a "new" problem except that it has only been newly discussed due to the DRPT audit and cure letter, mandating



that rural funds are not used for urban assets. Jaunt, CAT, and Albemarle County should pursue federal capital funding opportunities through the MERIT competitive capital program at DRPT or find ways to leverage existing 5307 funds to support capital needs beyond the fixed-route system.

- **Finding 14:** Jaunt's capital cost allocation model is new this year and has not yet been fully finalized or fully documented. Some basic concepts are contained in Jaunts 2022 Transit Development Plan.
- **Recommendation 16:** Jaunt's capital cost allocation model needs to be fully documented with a level of detail beyond what's visible in PowerPoint presentations or an Excel workbook. Jaunt should develop a cost allocation document that includes the sources of data for the model, the procedures for calculating key inputs, and how to interpret the results. The cost allocation document should be reviewed and agreed upon by Jaunt, the City, and the counties Jaunt serves. The document should be adopted either formally or at least referenced in the agreements between Jaunt and its funders.

6.4 COOPERATIVE PLANNING, OPERATIONS, AND FUNDING

This section contains findings and recommendations related to the documents or procedures related to cooperative planning, operations, and funding of transit services. There are three key agreements or contracts of interest:

- The agreement between the City and Jaunt for Jaunt's provision of ADA paratransit services and CAT's splitting the Section 5307 funds with Jaunt.
- The agreement between CAT and the County for CAT's provision of fixed-route transit services.
- The agreement between the County and Jaunt for Jaunt's provision of commuter bus, demand response, and ADA paratransit services.

In all agreements reviewed, the transit services to be provided and the cost of these services were welldocumented. However, TTI did identify some areas for improvement.

- **Finding 15:** The policies and procedures that govern transit service planning decisions and cost allocations are not compiled into a single, up-to-date, and easily accessible comprehensive repository.
- **Recommendation 17:** The parties of the RTP should develop (if not already developed), adopt, and maintain core documents governing processes and decision-making in the region. These documents should include, but are not limited to:
 - Service standards for the fixed-route, commuter bus, demand response, ADA paratransit, and microtransit services in the region. Service standards become the common ground providing guidance for service planning and evaluation decisions and could include discussion of fixed route policies (e.g., bus stop spacing and minimum headways), demand response policies



(e.g., advanced reservation windows and hold time targets), minimum spans of service for all modes, minimum productivity targets for all modes, etc.

- Policies and procedures regarding how coordinated service planning decisions are made and approved by the parties of the RTP.
- Policies and procedures for evaluating service against service standards, including clear lines of responsibility.
- Policies and procedures for updating service standards, including initiating a change, seeking approval for the change, and finalizing the change.
- Policies and procedures for allocating operational costs, capital costs, and revenue (mentioned in other recommendations).

Finding 16: The agreements between the parties do not specify or reference transit service performance standards or targets, for example, for on-time performance, complaints, and safety. This leaves expectations unstated and does not set targets for provider performance.

- **Recommendation 18:** The funding and operating parties should agree on a set of performance targets in the areas of on-time performance, complaint rate, safety and security, cost effectiveness, cost efficiency, vehicle reliability, and other measures as appropriate. These performance targets could be documented in the service standards recommended above and cross referenced in any service agreements or could be documented in the individual agreements themselves. The performance targets do not necessarily have to be tied to financial penalties or incentives, given the funding and operating entities are both helping to subsidize the transit services. However, having the performance targets documented helps to ensure everyone's on the same page regarding the quality of service that should be delivered to the region. The performance targets should include clear operational definitions of all performance measures.
- **Finding 17:** The agreements do reference the cost of the services but do not reference or explain the methodologies used to establish costs (i.e., the cost allocation methodology).
- **Recommendation 19:** Agreements should document the cost allocation methodology or at least reference the documents that explain the cost allocation methodologies that are approved / adopted by all parties (see the recommendations in Section 6.3). Doing so prevents unexpected changes in methodology, ensures transparency regarding the allocation model, supports long-term understanding of historical costs, and is a preventive measure against staff turnover.
- **Finding 18:** The subrecipient agreement effective September 7, 2018, between the City and Jaunt seems to contain outdated language regarding the city's provision of local match for the Section 5307 funds split with Jaunt. In particular, Section 2.01 states, "The City has provided or will be providing matching funds from local sources in an amount equal to fifty percent (50%) of the total dollars provided to Jaunt from the City's Section 5307 Operating Grant...." The agreement was good for 5 years, so we are assuming that this agreement is being updated.

Recommendation 20: Ensure that the language in the updated agreement between the City and Jaunt contains an accurate description of how the City's contribution to Jaunt will be calculated.



- **Finding 19:** The process for establishing the FY2024 service plan and budget for both CAT and Jaunt appeared to lack a unified approach and planning and budgeting. The main indicator for this was the difference between the assumed pass-through urban funding from CAT to Jaunt, discussed in Section 4.2.3.1.1.
- **Recommendation 21:** Because there are multiple funders of CAT's and Jaunt's services, and, because Albemarle County contributes funding to both CAT and Jaunt, and because CAT passes funds along to Jaunt, which affects the County's contribution, CAT and Jaunt should be taking an increasingly cooperative approach to planning and budgeting for the upcoming fiscal year. Both parties should further coordinate regarding planned service levels and changes, potential changes to ADA paratransit, and anticipated federal and state revenues so that all parties receive one, comprehensive picture of the services, costs, and revenues.
- **Finding 20:** Based on CAT's projected budget through FY2026, it appears the CAT's CARES/ARP funding will be exhausted, which will result in increased reliance on local contributions after FY2026, because there will be less federal funds to support fixed route transit and less federal funds passed through to Jaunt for ADA paratransit.
- **Recommendation 22:** All parties should continue strategizing for ways to prepare for or mitigate the impacts of spending down all CARES/ARP funds so as to reduce the financial shock experienced by the City and County when their contribution amounts have to increase.



7 REFERENCES

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8 APPENDIX A: JAUNT ALBEMARLE COUNTY SERVICE MAPS

All maps in this Appendix except for the 20 North Link map are from the June 2023 draft service agreement between Jaunt and Albemarle County. The 20 North Link map was provided by Jaunt in an email.































9 APPENDIX B: RESULTS OF CAT'S FIXED-ROUTE COST ALLOCATION

New System - FY2024				Aw	g. Cost/Hour. \$	\$ 11,995,777 \$ 81	00		Farebox	Revenue		05	ity of Charlottesvile	Fixed Route \$ 2,825,000			
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Albemarle Federal Credit \$	5 1,015,047.21			UVA Contribu	tion \$	\$ 84,90	001						ARES Funds Indret Shortfall Covered	\$ 820,813			
State Operating Assistance State Credit - City State Credit - City State Credit - City State Credit -	3,105,580.00 2,006,204.68			Trolley Contr Pre-paid Fares Pre-paid Fares	ibution (City) (City) (City)	84,90	8		GAP Fund Charlotte	ing - CARES sville Credit dia Credit	\$ 1,787,930.00 \$ 967,116.61	1000	y CARES Funds y CARES Funds Iniv. of Virginia - System Iniv. of Virginia - Trolley EDEDAI Occording	\$ 84,000			
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									PROJECTED RE	VENUE							
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2B Downtown-PVCC 3 Downtown-Southwood	1,188.00 5,819.00 Ci	ty of CVIIe S	509,886.16	\$ 24,874.85 \$ 121,840.70	1.34%	26,94	40 1.34% 98 6.58%	\$ 39,077.16 \$ 191,405.73	1.38% 6.78%	\$ 12,987.45 \$ 63,614.44					216.88	104,097.74 509,886.16	
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Grand Total	136,900.00	S	11,995,775.00	\$ 2,867,365.00	~	\$ 3,105,580	00	\$ 4,125,000.00		\$ 1.787,930.00		• \$	•	\$ 84,900.00	\$ 25,000.00	11,995,775.00	

