Introduction

▪ A feasibility study and implementation plan for expanded transit service to population and employment centers within Albemarle County, particularly:
  – The Pantops area,
  – Thomas Jefferson’s Monticello, and
  – Along US-29 North Corridor (between City limits and the UVA Research Park/Rivanna Station)

▪ Innovative transit options (to include on-demand service) that emphasize accessibility and responsiveness to customer needs will be investigated alongside traditional fixed-route options
Introduction

▪ Good data is critical to establishing a clear understanding of the needs and opportunities present in each study area.

▪ Three key datasets:
  – Market Analysis
  – Service Analysis
  – Stakeholder Outreach
Market Analysis

- **US-29 North Corridor**
  - Extends from approximately Barracks Road to the northern end of Dickerson Road.
  - Boundaries include the Barracks neighborhood, Hydraulic Road, Woodburn Road, Rio Mills Road, and the Charlottesville Albemarle Airport (CHO) to the west.
  - Eastern boundaries include the Meadow Creek neighborhood, Polo Grounds Road, Proffit Road, and Pritchett Lane.
  - Key destinations in the study area include:
    - The Shops at Stonefield
    - Fashion Square Mall
    - Rio Hill Shopping Center
    - Walmart Supercenter
    - Hollymead Town Center
    - CHO
    - UVA Research Park
    - Defense Intelligence Agency
  - Transit service includes
    - CAT Routes 5, 7, 8, 11, and 12
    - Jaunt 29 North Route
Market Analysis

- There are many ways to provide transit service – each with its own ideal operating environment.
- The aim of the market analysis is to understand the environment in which transit services must operate.
- Key components of the environment include:
  - Density
  - Demographics
  - Land-use
  - Built environment

Reference: https://www.cnu.org/publicsquare/2017/04/13/great-idea-rural-urban-transect
Transit Potential

- Transit service is generally most efficient in areas with high concentrations of people and jobs.
- Fixed-route transit service begins to make sense at densities above 5 people and/or jobs per acre.
- For lower-density areas, or areas with challenging pedestrian environments, other service models may be more effective.
Transit Potential

- In the US-29 North Corridor study area, moderate-to-high transit potential is found primarily south of the Rivanna River.
- The highest density in the corridor is found near Commonwealth Drive, between Hydraulic Road and Greenbrier Drive.
- A pocket of moderate transit potential also exists in the Hollymead area.
- Most areas with density sufficient to support fixed-route service are currently served by at least one CAT or Jaunt route.
- Largest service gaps include neighborhoods northeast of Rio Road and Hollymead area.
Transit Need

- Certain population subgroups are more likely to use transit than other modes as their primary means of transportation.
  - Zero-Vehicle Households
  - Low-Income Households
  - Persons with Disabilities
  - Older Adults
  - Youth and Young Adults

- As opposed to Transit Potential, Transit Need is a relative measure.

- Areas with relatively high Transit Need may still have low fixed-route Transit Potential.
Transit Need

- In the US-29 Corridor study area, Transit Need is highest in thesouthwester leg of the study area, between Barracks Road and Greenbrier Drive.

- Parts of the study area with the highest Transit Need align fairly closely to areas with highest fixed-route transit potential.

- Largest service gap is neighborhoods northeast of Rio Road.
Land Use / Built Environment

- Certain land uses tend to generate a high percentage of total transit trips.
  - Multi-family housing, medical, educational, major retail, community and civic centers, major employers

- Fixed-route service requires a supportive pedestrian environment to be most effective.
  - Sidewalks, crosswalks, direct paths

- Areas that lack the serve area characteristics to support fixed-route transit service may be good candidates for demand response service.
  - Microtransit is a new technology-driven approach to demand response service
  - Similar interface to Uber/Lyft but with dedicated vehicles
Service Analysis

- Aims to identify the strengths and weaknesses of each CAT route and Jaunt service operating in the study area, and to highlight opportunities to improve service.
  - CAT Routes 5, 7, 8, 10, 11, and 12
  - Jaunt 29 North CONNECT, Buckingham CONNECT

- The market analysis provides important context for the service analysis.
  - Particularly important due to challenges in obtaining representative data
CAT Route 5

- Operates between the Barracks Road Shopping Center and Walmart, via Barracks Road, Georgetown Road, Commonwealth Drive, Rio Road, and Berkmar Drive.

- Key destinations served in the study area:
  - Shops at Stonefield
  - Fashion Square Mall
  - Virginia Workforce Center
  - Albemarle Square Shopping Center
  - Rio Hill Shopping Center
  - US-29 Walmart
CAT Route 5

- Current Lifeline Reduced Service:
  - Monday-Saturday: 6:15 am – 9:00 pm
  - Headway: 60 minutes

- Areas of high ridership during pandemic:
  - Georgetown @ Hessian Hills (multi-family housing)
  - Commonwealth @ Peyton (multi-family housing, Costco, Stonefield Commons)
  - Fashion Square Mall
  - Rio Hills Shopping Center (Kroger)
  - US-29 Walmart

- Potential Issues
  - Circuitous alignment to serve Fashion Square Mall
  - Past challenges with on-time performance
  - Poor access to Albemarle High School
CAT Route 5

- Upcoming Changes (Proposed by CAT)
  - Terminate north end of route at Fashion Square Mall
  - Extend south end of alignment to UVA Hospital
  - Operate at 30-minute frequencies, weekdays and Saturdays
CAT Route 7

- Operates between downtown Charlottesville and Fashion Square Mall, via UVA, Barracks Road Shopping Center, Hydraulic Road, and Hillsdale Drive.

- Key destinations served in the study area:
  - Shops at Stonefield (southbound trips only)
  - COSTCO
  - Food Lion
  - Fashion Square Mall
CAT Route 7

- Current Lifeline Reduced Service:
  - Monday-Saturday: 6:35 am – 9:15 pm
  - Headway: 30 minutes

- Areas of high ridership during pandemic:
  - Shops at Stonefield
  - Mall Drive @ Hillsdale Drive (multi-family housing)
  - Fashion Square Mall

- Potential Issues
  - Inconsistent northbound and southbound alignment along Seminole Trail forces out-of-direction travel
  - Past challenges with on-time performance
CAT Route 7

- Upcoming Changes (Proposed by CAT)
  - Extend Route 7 to Walmart and operate seven-days a week
  - Operate at 30-minute frequencies on weekdays and Saturdays / 60-minute frequency Sunday
  - Provide supplemental weekday service between downtown and Barracks Road Shopping Center during peak periods, resulting in 15-minute service along this segment
CAT Route 8

- Operates between downtown Charlottesville and the Shops at Stonefield, via Barracks Road Shopping Center.
- Key destinations served in the study area:
  - Shops at Stonefield
CAT Route 8

- **Current Lifeline Reduced Service:**
  - Monday-Saturday: 6:30 am – 6:27 pm
  - Headway: 60 minutes

- **Areas of high ridership during pandemic:**
  - Barracks Road Shopping Center (outside of study area)

- **Potential Issues**
  - One-way end-of-line loop allows passengers to cross Seminole Trail westbound but not eastbound
CAT Route 8

- Upcoming Changes (Proposed by CAT)
  - Modify Route 8 to operate as a new crosstown route between Shops at Stonefield and Willoughby Square
  - Operate 60-minute frequencies, weekdays and Saturdays
CAT Route 11

- Operates between downtown Charlottesville and the Fashion Square Mall, via Rio Road.
- Key destinations served in the study area:
  - Charlottesville Catholic School
  - Charlottesville-Albemarle Technical Education Center
  - Fashion Square Mall
CAT Route 11

- Current Lifeline Reduced Service:
  - Monday-Friday: 6:00 am – 9:00 pm
  - Saturday: 6:00 am – 6:30 pm
  - Headway: 60 minutes

- Areas of high ridership during pandemic:
  - Mall Drive @ Hillsdale Drive (multi-family housing)
  - Fashion Square Mall

- Potential Issues
  - No direct access to a supermarket
CAT Route 11

- Upcoming Changes (Proposed by CAT)
  - Add service to the Center on Rio Road – northbound only (southbound service not possible because there is no signal at Rio Road and Belvedere Blvd.)
  - Eliminate Locust/Pearltree/St. Clair loop to provide time for new Rio Road service
  - Operate 60-minute frequencies, weekdays and Saturdays
Jaunt Route 29 North CONNECT

- Operates between Hollymead Town Center and downtown Charlottesville, via UVA and UVA University Hospital.

- Current Service:
  - Monday-Friday:
    - 6:05 am – 8:43 am
    - 4:33 pm – 7:15 pm
  - 3 morning and 3 afternoon trips
Jaunt Route Buckingham CONNECT North

- Operates between Buckingham County and destinations in Charlottesville and Albemarle County, including downtown Charlottesville, UVA University Hospital, Barracks Road Shopping Center, and Hydraulic Road.

- Current Service:
  - Monday-Friday:
    - 6:00 am – 7:43 am
    - 5:02 pm – 6:48 pm
  - 1 morning and 1 afternoon trip
Stakeholder Questions

▪ Are there any current CAT or Jaunt routes in the study area that should be changed?

▪ Are there parts of study area that are not currently served that should be?

▪ How are people reaching unserved areas today (other than driving)?

▪ Are there any other issues that serve as barriers to transit use in the study area (schedules, fares, amenities, etc.)?

▪ Would you see real-time on-demand service as an upgrade or downgrade from traditional fixed-route service?