Project Background

- **Goal:** To identify short-range opportunities to expanded transit service to key population and employment centers in Albemarle County.

- **Focus of study on two growth areas and one major cultural destination:**
  - US-29 North corridor (between Charlottesville city limits and the North Fork UVA Discovery Park/Rivanna Station area)
  - The Pantops area, east of Charlottesville
  - Thomas Jefferson’s Monticello
Transit Market

- There are many ways to provide transit service – each with its own ideal operating environment.

- Density is key for fixed-route service
  - The more people and/or jobs per acre, the greater the ridership potential for fixed-route transit service.

- Fixed-route service also requires a supportive pedestrian environment to be most effective.
  - Sidewalks, crosswalks, grid-network of streets

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

- For lower-density areas, or areas with challenging pedestrian environments, demand-response service is often a better option than fixed-route service.
  - Large capture area
  - Can meet riders where they are

- Microtransit is a new technology-driven approach to demand-response service.
  - Familiar interface for those who have used Uber/Lyft app (phone reservations also possible)
  - Dedicated fleet
  - Predictable / affordable fares
  - Used for local circulation and regional feeder service
  - Data-rich platform (useful for future planning).
Key Findings

- The US-29 North corridor and Pantops area are fast-growing, destination rich environments, but still relatively low density and automobile-oriented.

- Monticello typically attracts ~500,000 visitors per year.
  - 98% arrive by personal or rented vehicle
    - 6% very likely to use transit if offered
    - 16% likely to use transit if offered
  - 98% of employees arrive by personal vehicle
    - 8% very likely to use transit if offered
    - 21% likely to use transit if offered
Service Scenarios

- Two service scenarios were developed for each study area, including a mix of fixed-route and microtransit options.

- Scenarios were presented at a series of public and stakeholder meetings, as well as on the project website.
  - 39 meeting participants

- Meeting attendees and website visitors were asked to complete a preference survey.
  - 159 surveys submitted
Preferences

- Among meeting attendees and survey participants, there was a strong interest and preference for microtransit service in all three study areas.

  - “I think microtransit would be more helpful for those with mobility concerns who find it difficult to get to a bus stop and who want reliable service for appointments.”
  - “Microtransit makes sense for shopping centers where rider demand probably varies considerably by time of day.”
Preferences (US-29 North Corridor)
Preferences (Pantops)
Preferences (Monticello)
Recommendations (US-29 North)

- **Microtransit Pilot Project**
  - **Market**
    - 14 square mile zone
    - Entirely within the region’s urbanized area
    - Growing area with ~15,000 people / ~6,200 jobs
    - Initial daily ridership ~75 per weekday (potential ridership up to 360/day)

- **Service Parameters**
  - Weekdays only
  - 6:00 am – 9:00 pm
  - 3 vehicles for 15-minute median wait times

- **Estimated Operating Cost**
  - ~$1.32 million annually, including vehicle operating costs and platform/software fees

- **Operational Responsibility**
  - CAT branded and/or operated, as service area is entirely within the region’s urbanized area
  - CAT serves as grant applicant
Recommendations (Pantops)

- **Microtransit Pilot Project**
  - **Market**
    - 2 square mile zone in urbanized area
    - Several large multi-family housing communities, including senior housing
    - Challenging pedestrian environment
    - ~4,500 people / ~7,500 jobs
    - Initial daily ridership ~25 per weekday (potential ridership up to 240/day)
  - **Service Parameters**
    - Weekdays only
    - 6:00 am – 9:00 pm
    - 1 dedicated vehicles + 1 shared vehicle for 15-minute median wait times
  - **Estimated Operating Cost**
    - ~$432,500 annually, including vehicle operating costs and platform/software fees
  - **Operational Responsibility**
    - CAT branded and/or operated, as service area is entirely within the region’s urbanized area;
    - CAT serves as grant applicant
Microtransit Pilot Project (long-term)

- Scope of recommendations expanded beyond focus on just Monticello
  - Monticello alone would have limited utility/ridership
- Proposed zone includes Monticello Visitor Center, Neighborhoods South of I-64, PVCC, and James Madison’s Highland
- Zone would require at least two microtransit vehicles, which are not available or programmed for in the near-term
Implementation Strategy
## Microtransit: Pantops and 29 North

<table>
<thead>
<tr>
<th></th>
<th>Year 1 Cost</th>
<th>Year 2+ Cost</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Service Initiation Fee</td>
<td>$50,000</td>
<td>-</td>
<td>Average of multiple providers. Final fee depends on provider and set up options.</td>
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<tr>
<td>Annual Operating Cost</td>
<td>$425,000</td>
<td>$425,000</td>
<td>Based on 1 vehicle at $100/hour</td>
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<tr>
<td>(Pantops)</td>
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<tr>
<td>Annual Software Fee</td>
<td>$7,500</td>
<td>$7,500</td>
<td>Typical fee was approximately $600/vehicle/month.</td>
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<td>(Pantops)</td>
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<tr>
<td><strong>Total Software + Operating Costs (Pantops)</strong></td>
<td><strong>$432,500</strong></td>
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<tr>
<td>Annual Operating Cost</td>
<td>$1,300,000</td>
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<td>(29 North)</td>
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<tr>
<td>Annual Software Fee</td>
<td>$22,500</td>
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<td>Typical fee was approximately $600/vehicle/month.</td>
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<td>(29 North)</td>
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<tr>
<td><strong>Total Software + Operating Costs (29 North)</strong></td>
<td><strong>$1,322,500</strong></td>
<td><strong>$1,322,500</strong></td>
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<tr>
<td>Advertising</td>
<td>$135,000</td>
<td>$100,000</td>
<td>Based on CAT estimates of advertising needs</td>
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<td><strong>TOTAL (Approx.)</strong></td>
<td><strong>$1,940,000</strong></td>
<td><strong>$1,855,000</strong></td>
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## Short-Term Implementation

### DRPT Transit Demonstration Project Grant

- Grants can generally cover first year of service and additional start up needs, including advertising, software training, and other service-related needs.
- Grant period can be for 18 months to cover pilot development and full year of service.
- Grant requires 20 percent local match.

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<th></th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
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<tbody>
<tr>
<td>Grant Funding Awarded (Jul 1)</td>
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<td>Grant Duration (18 Month Request)</td>
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<td>Pilot Program Advertising &amp; Development</td>
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<td>Vehicle Delivery</td>
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<td>Pilot Program (Year 1) – Microtransit Service</td>
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<td>Continued Microtransit Service (to be determined)</td>
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Pilot Grant Request (est.): $1,940,000  
**Albemarle County (20%):** $390,000  
Additional Years (est.): $1,855,000  
**Albemarle County:** $1,855,000 (max)
Questions / Comments