

## **SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION**

### **ITEM 2205-15: Approving the Selection of Via Mobility, LLC, as the Consultant for the Microtransit Feasibility Study**

#### **PROPOSAL**

At its May 9, 2022 meeting, the SJTPO Technical Advisory Committee recommended that the Policy Board approve the selection of Via Mobility, LLC in association with Connect the Dots (DBE firm) for the SJTPO Microtransit Feasibility Study technical study.

#### **BACKGROUND**

The Request for Proposal (RFP) for the technical study was issued on Tuesday, February 1, 2022, with proposals due on Tuesday, March 15, 2022.

This technical study seeks consultant assistance to determine whether a technology-driven microtransit is a viable service model for the Route 54/40 Community Shuttle and make the service more competitive when seeking public and private funding through grants and other sources. The Pascale-Sykes Foundation, one of the main funders behind the shuttle, is scheduled to sunset at the end of 2022, which made this technical study a priority.

The Notice of Availability of Requests was sent to 257 contacts. Two (2) proposals were received. Proposals were reviewed and scored by the TAC-designated Consultant Selection Committee with representatives from NJ TRANSIT, Atlantic County, Cumberland County, Cross County Connection Transportation Management Association, and SJTPO.

Proposals were evaluated based on the technical approach, value given stated costs, consultant team qualifications, and DBE participation. Scores for each reviewer were converted to ranks, which were then averaged amongst all reviewers with **Via Mobility, LLC**, emerging as the top-ranked firm. For this technical study, Via Mobility is partnering with Connect the Dots as the DBE/ESBE firm.

The scope of work and the associated project costs were reviewed and negotiated with a total revised cost of **\$68,335**, with a 25.7% DBE participation.

The project will be funded within SJTPO's Technical Program in the FY 2023 UPWP, as Task 23/401 Microtransit Feasibility Study with a \$70,000 budget. The task was added to the FY 2022 UPWP as a one-year study, with an anticipated project completion date of June 30, 2023.

# Scope of Work

## A. Narrative

**Integration and regional connectivity.** Our study and examination of possible pilot services will be guided by a consistent focus on exploring connectivity between various modes and by the goal of serving demand as efficiently as possible. As examples, we will consider how microtransit service may drive ridership to the regional routes, how microtransit can build upon (or replace) existing human services transportation options in the region, and generally how new services can improve the functionality of the transportation network in Atlantic County and SJTPO's other service areas.

### Task 1. Coordination and Outreach

Via will begin by facilitating a kickoff meeting with SJTPO, the Cross County Connection Transportation Management Association (CCCTMA), and Connect the Dots, to establish the schedule for project coordination and outreach, review the project scope, and refine the scope of work. Via will also facilitate an introductory meeting of the project steering committee, including key stakeholders from SJTPO, CCCTMA, the South Jersey Transportation Authority (SJTA), and stakeholders from Atlantic County, and local municipal representatives. The specific tasks to be included in these meeting are the following:

- Discuss project goals, impetus, potential obstacles, logistics, and key decision makers
- Finalize the project timeline and scope of work, including draft and final report reviews
- Establish roles, communication protocol, and expectations, including frequency of meetings with SJTPO, CCCTMA, SJTA, and the steering committee
- Discuss available sources of data for existing conditions analysis and any remaining data needs
- Identify key stakeholders to include in engagement strategy
- Establish format for recording meeting minutes and documentation, which will be shared following each meeting

Following this meeting, Via will prepare a detailed project schedule, data request memo, and outline of the public outreach strategy.

In addition to these initial meetings, Via proposes biweekly meetings with the SJTPO project manager to discuss the project, and will provide detailed status updates, including information on tasks completed, upcoming tasks, project delays, assistance from project stakeholders, and progress toward DBE goals.

### *Task 1 Deliverables*

- **Email and status updates:** Via will regularly meet with the SJTPO project manager to discuss the project, and will provide detailed status updates — including information on tasks completed, upcoming tasks, project delays, assistance from project stakeholders, and progress toward DBE goals — to SJTPO and CCCTMA every two weeks.
- **Meeting and discussion summaries:** Following each meeting, Via will provide minutes of meetings and email discussions. These will include summaries of talking points and decisions made. Minutes will be sent within three business days of meetings.
- **Meeting materials:** Via will prepare agendas and all materials for each meeting as requested.
- **Project schedule:** Via will provide a schedule for meeting dates, biweekly project check-ins, and task completion dates. Via will update this schedule as needed.

## **Task 2. Analysis of Service Area Existing Conditions**

### *2.1. Summary of Transit Plans*

Via will conduct a review of past planning efforts conducted by SJTPO, CCCTMA, and SJTA along with studies completed by municipalities or other organizations that SJTPO recommends as being useful for the project. In addition, we will gather relevant service data, such as ridership data from CCCTMA. This information will allow us to further understand the transit needs across Atlantic County and the City of Vineland in Cumberland County.

### *2.2. Market and Transit Gaps Analysis*

Via will carry out a transit market analysis in the area surrounding the current shuttle, incorporating information on the land use, demographic, and socioeconomic conditions around the Route 54/40 Community Shuttle. Using Remix Explore and ArcGIS, the Via team will analyze employment and employee origins/destinations using data from the U.S. Census Longitudinal Employer-Household Dynamics (LEHD). Via will also develop maps depicting the spatial distribution of populations with a high propensity to use transit (i.e., zero-vehicle households, low-income people, seniors, and people with disabilities) to identify areas with high transit needs.

Via will supplement these data with development, population, and employment forecasts, if available, and will also work with SJTPO, CCCTMA, and key stakeholders to identify major travel activity centers in the focus area or areas where concerns about transit access are well known. From these findings, Via will identify where transit market opportunities exist, particularly those which are unserved or underserved under current or future conditions.

To determine gaps in existing services, Via will analyze the performance and coverage of the existing Route 54/40 Community Shuttle. With ridership data from CCCTMA, Via will assess

route coverage, performance during peak and off-peak times, trip volumes, vehicle miles, and vehicle hours. Via will also examine pedestrian accessibility levels to inform potential microtransit stop locations.

<i>Task 2 Deliverables</i>
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| <ul style="list-style-type: none"><li>• A technical memorandum summarizing the results of the Task 2 analysis.</li></ul> |
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### **Task 3. Route 54/40 Community Shuttle Microtransit Simulations**

#### *Task 3.1 Develop Service Alternatives*

Via's approach in developing transit service alternatives is grounded in assessing how these transit services can better serve travel demand and promote regional connectivity while simultaneously working to understand what types of services are practical and financially feasible given local resources.

Via will identify and model transit service alternatives that may include any of the following:

- Strategies for coordinating existing human services transportation providers;
- Local coverage options (including fixed-route, deviated fixed-route, and demand-response) for areas in western Atlantic County and the City of Vineland
- Regional coverage options for sparsely populated areas, with an emphasis on providing connection to regional activity centers, including pre-scheduled demand-responsive service, services with intermittent schedules, volunteer-driven programs, and vanpool;
- Strategies for providing regional connections between cities and counties in Atlantic County, including scheduled fixed-route services, and demand-response services;
- Other services identified through stakeholder engagement efforts, which we will conduct over the course of the project.

The development of service alternatives for simulation and assessment will be driven by the transit market analysis, the transit needs assessment, and engagement with SJTPO, CCCTMA, and other regional stakeholders. Each of these transit service alternatives will incorporate variations in service zones, routes, use case, and other service design parameters such as wait time targets, walking allowances, and trip restrictions (if applicable).

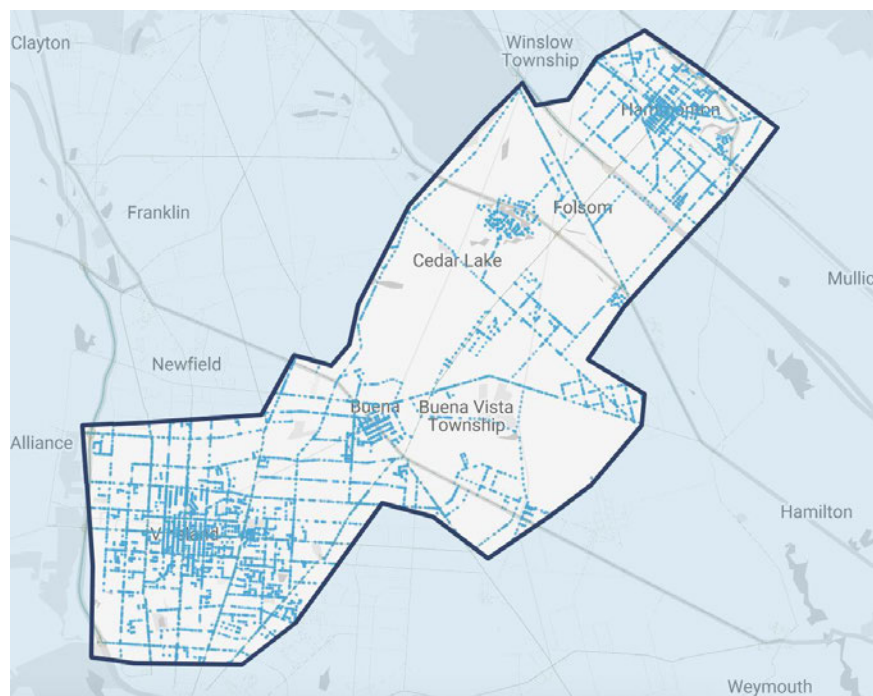
For each of the alternatives, Via will develop a map and a basic overview of service characteristics, including population and employment in the service zone, likely customer use cases, estimated ridership, key destinations served, and recommended service parameters (e.g., maximum rider wait times, maximum walking distances to pickup locations or bus stops, and allowances for detours to aggregate demand in demand-responsive modes).

### *Task 3.2 Run Microtransit Simulations*

Based on the priorities identified in Task 3.1, Via will develop specific service scenarios to simulate in detail. For each scenario, Via will carry out iterative simulations to understand the impact of adjustments to service design parameters on cost and performance.

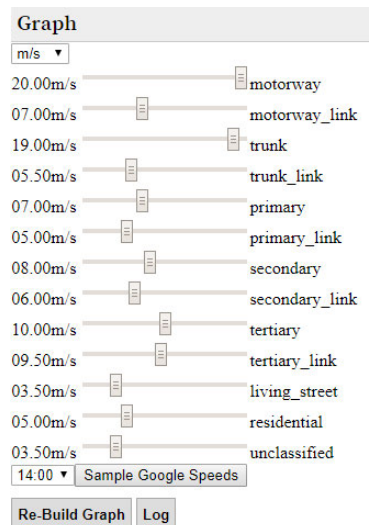
Via's simulations are designed to demonstrate the dynamic relationship between service zone boundaries, service parameters like maximum and average wait time, walk distance to pickup/dropoff, and journey times, and fleet size/cost. This highly technical exercise leverages Via's proprietary microtransit simulation tool, which allows us to predict how different service zones and fleet configurations will perform as real services. Via's software has the ability to simulate a wide range of different service types (such as curb-to-curb vs corner-to-corner) and algorithm parameters (such as walking distances, detour allowances, and more). This will help to inform SJTPO's service design, regardless of the technology provider and/or operator selected for the service. Below we outline the basic steps our project team will follow to simulate the potential zones:

1. **Upload service zone options.** The origins and destinations of all trips are limited to these zones. We can easily iterate upon these boundaries as we go, helping to understand how small boundary changes impact overall service performance.
2. **Generate underlying road map** by pulling data within the service zone boundaries from OpenStreetMap, including all roads categorized by type, turn restrictions, and street walkability and drivability information.



*Screenshot of Via's simulation tool, showing a potential microtransit zone (outlined in dark blue) in Atlantic County. The blue dots represent virtual bus stops, discussed below.*

- Determine traffic speeds** by querying Google’s Maps APIs for traffic speeds specific to the time of day during which the service is being simulated. This ensures that wait times and trip times of the simulated service reflect real-world traffic data at the time of day for which service is being modeled.

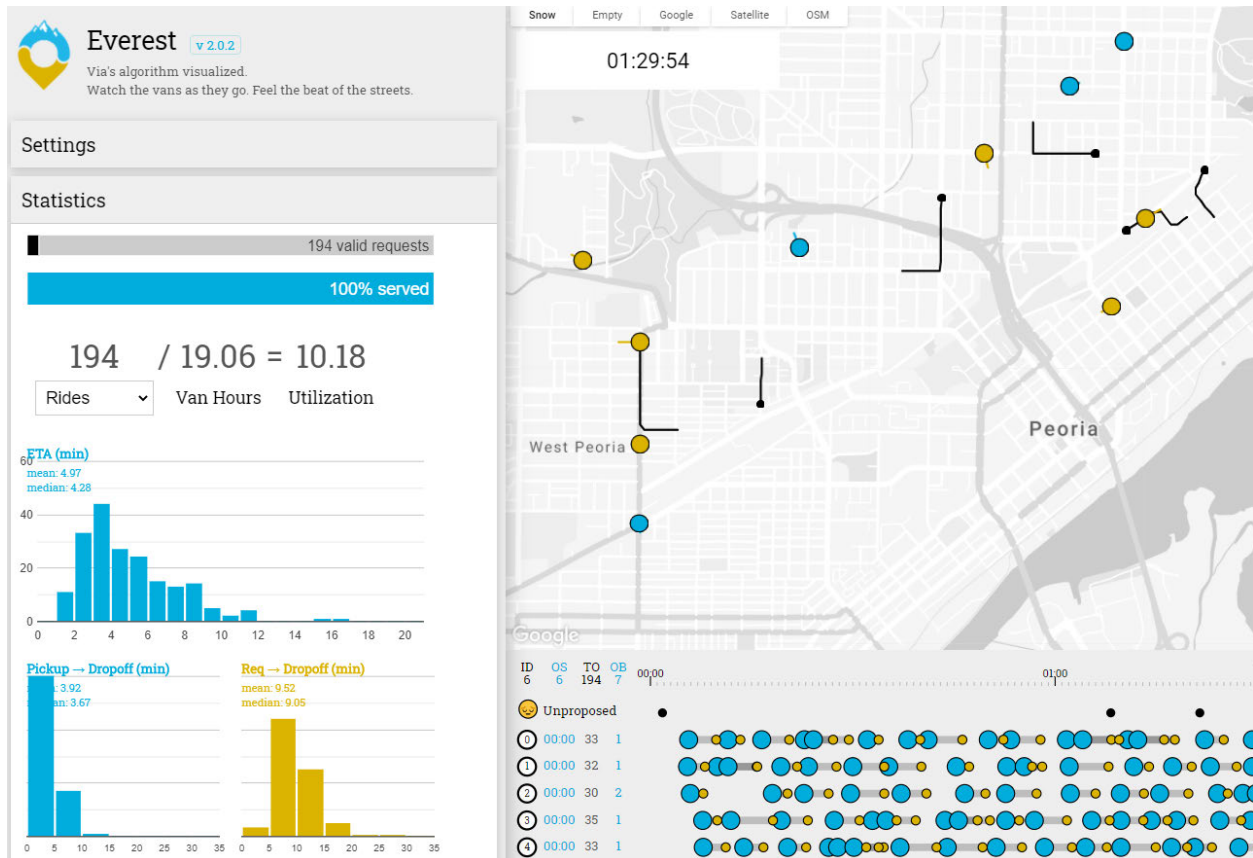


*Screenshot of Via’s simulation tool, showing the different road types in a microtransit zone. Each road type has a different average vehicle speed, taken from Google’s Maps API based on the selected time of day.*

- Set “terminals”** to designate staging areas for vehicles that do not have active ride assignments. Terminals are safe parking areas that are distributed throughout the service zone. When empty, vehicles will be routed to the terminal where the system has predicted demand. This ensures that each vehicle is used efficiently and that passengers will benefit from the shortest possible wait times.
- Generate “Virtual Bus Stops,”** to determine safe places for pickups and drop-offs, for microtransit and deviated fixed-route services. By default, Via’s simulation tool generates Virtual Bus Stops throughout a zone, at points where vehicles can safely park and pickup and drop-off passengers, whether as part of an on-demand microtransit service, a pre-scheduled service, or a deviated fixed-route service. Via’s simulation can be configured to assess curb-to-curb, corner-to-corner, or bus-stop-to-bus-stop service for riders. Typically, there are hundreds or thousands of Virtual Bus Stops in a zone. When setting up the zone, Virtual Bus Stop generation considers unique features of the zone, such as the pedestrian walking map, no parking/standing areas, and bus stops.
- Create demand scenario(s)** to simulate the number and types of trip requests we expect to see in a given zone. Using information gathered in the demand analysis phase, combined with Via’s experience operating alternative transit services, we can estimate travel patterns within the zone, and input them into the simulation tool.



7. **Set simulation parameters** by determining the optimal configuration for achieving the service quality and passenger aggregation targets. These inputs — like fleet size, vehicle capacity, optimal wait times, and walk distances to/from Virtual Bus Stops — are those we adjust most frequently when creating and iterating upon a new service.



After these variables are set, the scenario is ready to run. We will perform a number of different simulations for the service, demonstrating how adjusting service parameters will impact the quality of service, capacity, and efficiency. A screenshot of the simulation tool is shown above. The map displays routing, pickups, and drop-offs, while the dashboard left of the map displays key performance indicators including the number of requests, wait time distributions, and pickup and drop-off walking distance.

The results of the simulations Via will be distilled into insights such as:

- Predicted quality of service and utilization;
- Impact of additional (or fewer) vehicles on quality of service and utilization;
- Impact of shorter or longer permissible wait times and diversions for microtransit;
- Impact of providing curb-to-curb, corner-to-corner, stop-to-stop, or hybrid virtual bus stop solutions for microtransit;
- Impact of total service zone size and shape on service quality;
- Impact of different vehicle sizes on the quality of service.

<i>Task 3 Deliverables</i>
<ul style="list-style-type: none"><li>• A technical memorandum summarizing the results of a minimum of six microtransit service simulations.</li><li>• A second steering committee meeting to review simulation results and to solicit feedback.</li></ul>



#### **Task 4. Community and Stakeholder Outreach**

In order to enhance community outreach, Via will partner with Connect the Dots, a DBE firm specializing in community outreach. A key outcome of Connect the Dots' and Via's work on the study will be strengthened relationships among local leaders in the transportation and transit sector, laying the foundation for successful implementation of recommendations made in the final report. Additionally, Connect the Dots and Via will leverage extensive experience leading public engagement around issues of transportation and equity. The team is experienced in facilitating conversations that promote transparency, innovative thinking, and coalescence around shared priorities.

Via and Connect the Dots will develop all outreach materials, which will run throughout the course of the study, including materials in Spanish as necessary.

#### **Outreach Approach**

The project team will work with SJTPO to develop an iterative engagement process that is inclusive, context-specific, and designed to directly impact decision-making. Tactics for engagement will include:

The outreach process will commence upon project launch and the project team will continue to conduct outreach throughout the full length of the project.

**Public Involvement Plan:** The Via team will develop a Public Involvement Plan to custom-build our messaging specific to SJTPO's riders. This planning document will further refine the timeframe and expectations for engagement, the entities involved, and the activities recommended by the project team following initial discussions with community partners.

**Focus Groups:** The Via team will design and facilitate two focus groups to reach existing riders and potential riders. These focus groups will be 60-90 minutes and dive deeper into the questions of how riders would use microtransit and what the community members' needs are for the existing route. This will be directly tied to decisions in service and pricing and inform on the needs and desires for the route.



In addition, focus groups will cover issues around access and barriers to using transit services, along with key destinations to be served. Conversations will also examine the potential to expand service into surrounding areas such as Hamilton or Weymouth Townships. Participants in the focus groups will be compensated for their time.

**Stakeholder Interviews:** up to five Community Stakeholder Interviews will be held to tailor our strategies specifically to the community. These interviews will be prioritized to open dialogues with key communicators and voices underrepresented in planning processes, seeking to understand both what communications and outreach are best for the community, as well as the level of knowledge and any preconceptions about microtransit existing among riders. Examples of groups underrepresented in the planning process could include: Migrant workers, the elderly, Limited-English proficiency populations, the mentally and physically disabled, and the poor.

<i>Task 4 Deliverables</i>
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| <ul style="list-style-type: none"><li>• Public outreach materials</li><li>• Summaries of focus group meetings, Community Stakeholder Interviews, and all other public meetings</li></ul> |
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### **Task 5. Microtransit Service Planning for Route 54/40 Community Shuttle Pilot**

Via will identify key service characteristics and options for an effective microtransit service in western Atlantic County. For each service scenario identified, Via will use our simulations to determine the dynamic relationship between service zone boundaries; service parameters like maximum and average wait time, walk distance to pickup/dropoff, and journey times; and fleet size/cost. The Via team will work with SJTPO to assess the tensions and tradeoffs that arise in each scenario and clarify the costs and benefits of each.

Via will provide SJTPO with analysis of each the following:

- **Service Zone, Hours, and Performance Targets:** Via will assess potential service zones, service hours, and performance targets (e.g., average wait times, rides per vehicle hour, ride-pooling percentages, and average journey time). Via’s simulations will provide detail on the fleet size and service parameters required to achieve these performance targets. Via will also identify areas outside of specific service zones that should be considered for eligibility for pickups or dropoffs, such as major hospitals or job centers.
- **Number of vehicles and optimal vehicle sizes:** Via’s simulations will provide an estimate of the number of vehicles required to serve anticipated demand levels at the desired quality of service for each scenario.
- **Pickup/dropoff locations:** Via’s service simulations automatically generate recommended pickup and dropoff points, including points where existing fixed route stops exist, and we can refine this analysis as part of service recommendations.

- **Connections to NJ Transit service and regional destinations:** Via’s simulations will demonstrate opportunities to connect with NJ Transit service — including through formal integrations — along with key regional destinations.

Beyond recommendations focused on service characteristics and performance, Via will provide recommendations on additional characteristics of a successful microtransit service, including:

**Operating requirements and funding opportunities:** Via will examine all existing funding sources and review potential new sources of funding for SJTPO. Via will advise SJTPO on developing a strategy to incorporate federal funding into the budget for a microtransit service in Atlantic County.

**Potential service models:** Via will provide an overview of operating models and options for microtransit service, along with costs, benefits, and financial considerations for each.

- Via will provide an overview of different driver/operator models.
- Via will provide an overview of different fleet models, including considerations around purchasing or leasing new vehicles for the service or relying on existing vehicles.
- Via will detail potential opportunities for further partnerships with regional partners, including other agencies or non-profits.

**Marketing and outreach strategies:** Via will provide an overview of the marketing and public education steps required to ensure a successful initiation of a new microtransit service. Via’s in-house transit marketing agency has extensive experience working with our partners to plan and execute public engagement campaigns once a service has been launched. For example, Via regularly designs and implements rider education strategies incorporating the following elements:

- Customized promotional codes for specific marketing campaigns.
- Signage at existing bus stops and in vehicles.
- Creating short, informative videos for websites and social media channels,
- Partnering with local businesses to offer custom promos.
- Street marketing and event exhibiting at local community centers.
- Press conferences and ribbon-cutting ceremonies with public officials on the launch date.
- Rider surveys to understand how customers are using a service.

**Technology:** Via will provide an overview of key features for microtransit technology solutions. Typically, this includes a rider app to book rides (along with phone booking capabilities), a driver app to route trips, and a backend system to manage the system and analyze service performance.

<i>Task 5 Deliverables</i>
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- A technical memorandum detailing the analysis conducted in Task 5, with conclusions and recommendations.

### **Task 6. Cost-Benefit and Budget Analysis**

Via will carry out an analysis of the costs, benefits, and budget required for a new microtransit service.

This process begins during the simulation phase where, based on the estimated service level (e.g., number of vehicles, hours of service), the Via team will develop a mileage, vehicle hour, and budget for potential microtransit service. The Via team will also estimate key operational metrics, such as cost per passenger and cost per vehicle hour, along with costs associated with driver training, insurance, marketing, and software. This analysis will provide SJTPO with a full cost breakdown of the potential service.

Via will also provide SJTPO with an overview of the impact of dedicating funding toward microtransit, such as how well it will support the needs of underserved or transit-dependent populations, what operational challenges or opportunities may exist, and what key metrics will be helpful in tracking service performance. For example, Via will provide a list of sample and suggested Key Performance Indicators (KPIs) to track progress. Some of these KPIs will be developed based on the microtransit simulations, while some may relate to broader goals for the service developed during stakeholder interviews or through previous planning efforts. These KPIs may include:

- Ridership
- Utilization (riders per vehicle hour)
- Cost per passenger
- Customer satisfaction
- Average and maximum wait time (time between ride request and pick-up)
- Average and maximum in-vehicle journey time
- Number of individuals with disabilities served

Via will also prepare a multi-year budget, (spanning at least three years in duration), detailing both the operating and capital costs necessary to sustain a microtransit operation along the Route 54/40 Community Shuttle corridor. Funding and revenue assumptions for this budget will be clearly laid out.

#### *Task 6 Deliverables*

- A multi-year budget addressing both capital and operating expenses covering a period of at least three years.
- A technical memorandum addressing cost-benefit and budget analysis.

## **Task 7. Final Report**

Via will develop a final report including information gathered in Tasks 2-6, including analysis of potential microtransit service area, technology needs, fleet size, and budget. The Final Report will also include a complete timeline for implementation of a microtransit pilot.

<i>Task 7 Deliverables</i>
<ul style="list-style-type: none"><li>• A third steering committee meeting to review a draft report.</li><li>• Final Report summarizing our analysis of a potential microtransit service in Atlantic County</li></ul>

<b>Task Name</b>	<b>Via Mobility, LLC</b>	<b>Connect the Dots</b>	<b>Total</b>
Task 1: Coordination and Outreach	\$7,935	\$0	\$7,935
Task 2: Analysis of Service Area Existing Conditions	\$6,080	\$0	\$6,080
Task 3: Route 54/40 Community Shuttle Microtransit Simulations	\$8,293	\$0	\$8,293
Task 4: Community and Stakeholder Outreach	\$6,784	\$17,580	\$24,364
Task 5: Microtransit Service Planning for Route 54/40 Community Shuttle Pilot	\$6,281	\$0	\$6,281
Task 6: Cost-Benefit and Budget Analysis	\$7,007	\$0	\$7,007
Task 7: Final Report	\$5,376	\$0	\$5,376
Travel and other direct expenses	\$3,000	\$0	\$3,000
<b>Total</b>	<b>\$50,755</b>	<b>\$17,580</b>	<b>\$68,335</b>



**SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION**

**RESOLUTION 2205-15: Approving the Selection of Via Mobility, LLC, as the Consultant for the Microtransit Feasibility Study**

**WHEREAS, the South Jersey Transportation Planning Organization (SJTPO) is the Metropolitan Planning Organization (MPO) designated under Federal law for the southern region of New Jersey including Atlantic, Cape May, Cumberland, and Salem Counties; and**

**WHEREAS, the Fiscal Year 2023 SJTPO Unified Planning Work Program (UPWP) includes Federal Highway Administration planning funds for this project; and**

**WHEREAS, the Notice of Availability of Requests was sent to 257 contacts on February 1, 2022; and**

**WHEREAS, the Request for Proposal (RFP) announcement and supplemental materials were also posted on the publicly accessible SJTPO website; and**

**WHEREAS, two (2) proposals were received; and**

**WHEREAS, the SJTPO Technical Advisory Committee (TAC) endorsed the consultant selection committee with representatives from NJ TRANSIT, Atlantic County, Cumberland County, and Cross-County Connection Transportation Management Association (CCC TMA), and SJTPO, who reviewed and evaluated the proposals in accordance with SJTPO's published criteria; and**

**WHEREAS, the Consultant Selection Committee recommends Via Mobility, LLC, in association with Connect the Dots serving as the Disadvantaged Business Enterprise (DBE) firm; and**

**WHEREAS, the SJTPO TAC, at their May 9, 2022 meeting, endorsed the recommendation of the Consultant Selection Committee; and**

**WHEREAS, this project will be funded within SJTPO's Technical Program in the FY 2023 UPWP, as Task 23/401 Microtransit Feasibility Study with a \$70,000 budget; and**

**WHEREAS, the project cost is \$68,335.00 with a 25.7%, DBE participation, compared with SJTPO's DBE/ESBE goal of 13.23%; and**

**NOW, THEREFORE, BE IT RESOLVED, that the Policy Board of the South Jersey Transportation Planning Organization hereby approves the above selection for the FY 2021 Air Quality Technical Assistance technical study, with a maximum fee of \$68,335.00 and 25.7% DBE participation; and**

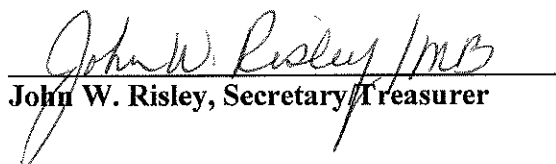
**BE IT FURTHER RESOLVED, that the Policy Board authorizes the Executive Director to execute the scope of work and cost modifications to the original contract amount, provided that funding is available and such modifications have been approved by the NJDOT, SJTA, and the SJTPO.**



**BE IT FURTHER RESOLVED, that the Policy Board requests that the South Jersey Transportation Authority execute the appropriate contractual arrangements with the consultant on behalf of the SJTPO.**

**Certification**

**I hereby certify that the foregoing is a correct and true copy of a resolution adopted by the Policy Board of the South Jersey Transportation Planning Organization at its meeting on May 23, 2022.**

  
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**John W. Risley, Secretary/Treasurer**