



SWRPC

Southwest Region
Planning Commission

Transit and Shared Ride Improvement Feasibility Study Proposal FY 2022-2023

Prepared by the Southwest Region Planning Commission

February 2, 2021

**37 Ashuelot Street
Keene, NH 03431
(603) 357-0557**

Introduction

In many ways, transit and shared ride services in the New Hampshire's Monadnock Region have made impressive strides over the last decade. At least three volunteer driver programs (VDPs) were built from scratch, one of them providing services to eastern Hillsborough County communities that never had service before. A new fixed bus route was launched in Hinsdale, a municipality with one of the largest transit dependent populations in the region. New wheelchair access non-emergency medical transportation was introduced to the entire region. Medicaid transportation advanced around the state including in the Monadnock Region. New non-emergency medical transportation shuttles services were launched transporting residents from Cheshire County to the Veteran's Administration facility in White River Junction, VT and Dartmouth-Hitchcock Hospital in Lebanon, NH. New shopping shuttles were introduced serving residents in the Keene, Marlborough and Swanzey area and the Peterborough, Jaffrey and Rindge area. All of this was accomplished with a very limited amount of funding. These achievements can mostly be attributed to the ingenuity, passion, advocacy, creativity, coordination, and hard work of groups like the Monadnock Region Coordinating Council (MRCC).

Yet despite these impressive accomplishments, the current system has many shortcomings. In most of the region, ride eligibility is often limited to specific groups of people subsidized by federal programs like the Federal Transit Administration's 5310 program for seniors and people with disabilities, or the Department of Health and Human Services' Medicaid Program. These "stovepipe" programs tend to create a situation where the funding determines service provision, rather than needs driving service provision. Other segments of the population with transportation challenges, including the Monadnock Region's youth and low-income populations--groups that aren't currently addressed by federal programs-- are often left without options. Meanwhile, the services that are offered would be considered inconvenient by most people if these services were to be relied upon for routine use. Fixed route services have 1-hour or longer headways, demand response transportation requires 24-hour or longer advance reservations, and arranging for a ride can be either confusing or burdensome due to the fractured number of service providers, many of which conduct ride eligibility screening. In areas outside of Keene and Hinsdale, transportation is less dependable because rides are not guaranteed. Throughout the region, evening and weekend services are largely non-existent, save for a handful of taxi businesses in the area, but these services are far too expensive for most of the population to use on a routine basis.

Encouraged by its past success and eager to address its continued challenges, the MRCC has determined that it is at an inflection point to explore ways of better meeting its mission and vision statements. Its mission is "[t]o actively lead and engage the Monadnock Region in building an innovative, coordinated, and resilient transportation network." Built into this statement are its values to constantly explore new ways of improving transportation service delivery, in a cooperative manner, in a way that provides users the reliability they need to carry on with their daily lives. The MRCC's vision is "[a] regional transportation network for everyone." Adopted in 2018, this vision describes a place for which the MRCC strives to achieve for the Monadnock Region in the near future. This umbrella category of "everyone" includes not only transit dependent groups, such as youth and low income groups mentioned above, but also "choice" riders, people that prefer having the choice of transit and ride sharing services which tend to be less expensive and more environmentally friendly than individual vehicle ownership. Designing transit and shared ride services for an expanded user base could act as a positive feedback loop, creating a larger, more efficient system based on economies of scale. These key words and phrases—innovative, coordinated, resilient, transportation for everyone—drive the direction of this proposal.

Proposal Statement

The purpose of this proposal is to explore two research topics for which the MRCC believes could lead to a more innovative, coordinated and resilient transportation system for everyone. These include an inquiry into the feasibility of microtransit and examining the feasibility of expanding and better supporting VDP services. Together, both research topics meet a number of regional project priorities listed in the MRCC's 2018 *Coordinated Community Transportation Plan for the Monadnock Region* including:

- Increase capacity to provide new evening/off-hour ride services;
- Increase capacity to provide transportation for employment, education and/or job training;
- Increase capacity to provide youth transportation; and
- Meet Section 5310 service providers' current unmet demand.¹

Microtransit

"Microtransit" is a form of demand responsive transit that offers flexible routing and/or scheduling of vehicles (often vans), typically booked through a smartphone application and sometimes through a call center. Microtransit services started in urban areas in the 2010s, alongside the increased technological sophistication and popularity of smartphones and apps, typically to provide transit services in underserved areas. More recently, microtransit has come to be seen as a viable approach to shared ride service delivery in rural areas. New programs, which have started across the country in places like Montpelier, VT and Gainesville, GA, are demonstrating that in certain cases microtransit can better serve rural population needs and wants, while improving cost efficiencies. Sometimes microtransit is seen as having a complementary role to existing services. Other times, its role may be to replace fixed route transit or legacy shared ride services (i.e. "dial-a-ride"), especially for services with a history of poor or declining performance. Of particular interest to the MRCC is that microtransit could potentially improve coordination, resilience and increase access to segments of the population due to the following potential benefits:

- Increased user friendliness with phone apps or call center;
- Improved user convenience with shorter wait times and more direct trips;
- Improved cost efficiencies partly due to increased ridership as a result of improved convenience, especially in areas served by fixed-routes with long headways and long walks to reach bus stops, as well as improved efficiency relative to legacy demand-response systems due to improved routing and trip assignment;
- Expanded labor force with which to recruit drivers (drivers do not require a commercial driver's license);
- Potential backup ride provision for service areas or times of day when rides cannot be guaranteed;
- A communications platform to improve coordination among multiple providers; and
- An ability to be scalable, flexible and adaptive to changing conditions.

In addition to the benefits for studying microtransit listed above, the microtransit arm of this proposal addresses some key research needs identified by Home Healthcare Hospice and Community Services (HCS), the City of Keene, and SWRPC through the Intermodal Transportation Center Feasibility Study it completed in 2020. HCS seeks to revitalize the City Express service which recently lost a route when Keene State College made a decision to cease its contributions to the service due to its own financial problems. HCS is also interested in obtaining expert

¹ See page 49 of the *Coordinated Community Transportation Plan for the Monadnock Region*

technical support to improve its service, after its own recent efforts to make changes to routes and schedules did not increase ridership as expected. The agency has also expressed that it has been increasingly difficult to find and hire drivers with commercial driver's licenses to operate its fleet of vehicles and is intrigued by the microtransit model's use of smaller vehicles. The City Express' largest local match supporter, the City of Keene, is also interested in the project. Excited to begin tackling its ambitious goal to transition Keene to 100% renewable energy, the City is interested in examining the role transit could play to "scale up" resident transit ridership and reduce the transportation sector's local carbon footprint.² Finally, another purpose of the microtransit study is to follow up on a recommendation from SWRPC's FY 2019 and 2020 study examining the feasibility of an intermodal transportation hub. Steadman Hill Consulting, a sub-consultant on the project, recommended researching microtransit for the Keene urbanized area as a potentially more efficient, cost effective way to provide transit service to the area. The intermodal transportation center would serve as a centralized hub for downtown pick-ups and drop-offs.

Volunteer Driver Program Improvements

In addition to microtransit, this proposal seeks to research innovative ways to build off its earlier successes with volunteer driver programs (VDPs). The Monadnock Region is endowed with a great number of charitable-minded people that volunteer to drive residents to medical non-emergency appointments, work, school, shopping, errands, and other trips using their own vehicles or agency vehicles. Given the rural nature of the region, most shared ride services available to residents are VDP services, rather than transit or shuttle services. The MRCC's records also indicate, that among Section 5310 eligible rides, the number of trips given through VDP services dwarf transit and shuttle rides. VDP rides are also attractive because they are inexpensive, since costs are driven mostly by volunteer mileage reimbursement and modest VDP overhead and programming.

Despite the appeal of VDP services, there are shortcomings which may be improved upon. Ride eligibility is often restricted to specific populations either because the service provider is member-based or relies on specific funding streams that preclude eligibility of certain riders. In meeting the MRCC vision, "a regional transportation network for everyone," research is needed to study the feasibility of expanding ridership to other groups using this service delivery model. The MRCC has identified youth and young to middle-age able-bodied low-income people as segments of the population that would benefit from VDP shared ride services in particular. Studying ways to expand ridership will require asking a whole host of research questions relating to operations and funding feasibility, as well as conducting an analysis of the capacity, readiness and interest of existing VDPs to expand their eligibility. Another shortcoming of VDP programs is that unlike fixed route services or shuttle programs, rides are not guaranteed to those that request them. Therefore, there is also a need to seek strategies that address unmet need such as introducing a taxi voucher program, stopgap service provision through microtransit, or other measures.

Proposed Work Plan

Most of the work in this proposal will be conducted by SWRPC staff, however, the proposal includes the procurement of consultant(s) that will provide technical assistance in assessing an alternative fixed route transit scenario for HCS' City Express, as well as an assessment of the feasibility of two microtransit scenarios. SWRPC

² See the attached support letter in from the City of Keene documenting this need located in Appendix B. See <https://www.keeneenergyplan.com/> for more information about the City of Keene's Sustainable Energy Plan.

will manage VDP improvement project activities independently of the consultant(s). All project activities will be conducted in coordination with HCS and the MRCC.

Research Objectives and Desired Outcomes

Microtransit

- Help the MRCC better understand microtransit benefits and costs and their potential applicability to the Monadnock Region.
- For the HCS City Express service, compare and evaluate different service delivery scenarios with the goal of improving on the existing service. The analysis would compare the existing fixed route system with at least one new revised fixed route system scenario and at least one microtransit scenario. The comparison and evaluation would assess anticipated performance measures relating to cost, ridership and convenience, and the result of the analysis would help HCS make decisions about future service provision.
- Assess the feasibility of at least one microtransit scenario in an area larger than Keene (e.g. Keene urbanized area or other geography based on consultation with microtransit consultant and the MRCC). The purpose of the analysis will be to examine the feasibility of microtransit in supporting or replacing existing transit and legacy shared ride services for the service area. The analysis would explore the impact of adjusting service zone boundaries and service parameters (i.e., pre-scheduled v. on-demand, maximum wait time for on-demand service or pickup window for pre-scheduled service) as they relate to rider experience and quality of service. The focus would be on transit dependent populations including seniors, people with disabilities, youth, low-income populations, and other transit-dependent groups identified by the MRCC. The evaluation would assess predicted performance measures relating to cost, ridership and convenience and the result of the analysis would help MRCC make decisions about future service provision.
- Evaluate potential for a microtransit online platform to integrate ride brokering functionality or other features that assist users in planning trips across multiple transportation services, including VDPs.

Volunteer Driver Program Improvements

- Help the MRCC better understand the feasibility of volunteer driver programs serving a broader cross-section of the population including area youth, low-income persons and other transit-dependent groups identified by the MRCC. The result of the analysis would help existing VDPs make informed decisions about whether to expand their services to other groups.
- Help the MRCC better understand the feasibility of programming innovations that would address unmet ride requests. The result of the analysis would help the MRCC make informed decisions about whether to develop programming to address unmet ride requests.

Schedule, Tasks and Deliverables

Phase I: Research and Consultant Procurement

July 1, 2021-December 31, 2021

Tasks	Deliverables
<u>Administrative (SWRPC)</u> <ul style="list-style-type: none"> Project related accounting and invoicing Track activities with narrative log system Conduct internal meetings on project coordination as needed Conduct oversight on work activities, manage consultant(s) and staff, and monitor project progress 	<u>Administrative (SWRPC)</u> <ul style="list-style-type: none"> Monthly invoices (6) Monthly reporting of activities (6)
<u>Microtransit (SWRPC)</u> <ul style="list-style-type: none"> Conduct case study research on microtransit systems applicable to the Monadnock Region Present findings to MRCC with technical memo and presentation Procure consultant(s) with experience with microtransit and rural fixed route systems 	<u>Microtransit (SWRPC)</u> <ul style="list-style-type: none"> Technical memo on case study research of microtransit systems Slide deck presentation on case study research of microtransit systems Documentation of MRCC feedback on technical memo and presentation Request for proposals, scoring rubric, interview questions, and proposal scoring results Consultant agreement(s)
<u>VDP Improvement (SWRPC)</u> <ul style="list-style-type: none"> Conduct research on VDP programs and the factors for limiting/expanding categories Conduct research on innovative practices for addressing unmet ride requests Present findings to MRCC with technical memo and presentation 	<u>VDP Improvement (SWRPC)</u> <ul style="list-style-type: none"> Technical memo on research of VDP programs Slide deck presentation on research of VDP programs Documentation of MRCC feedback on technical memo and presentation

Phase II: Service Plan Scenario Development and VDP Evaluations

January 1, 2022-June 30, 2022

Tasks	Deliverables
<u>Administrative (SWRPC)</u> <ul style="list-style-type: none"> Project related accounting and invoicing Track activities with narrative log system Conduct internal meetings on project coordination as needed Conduct oversight on work activities, manage consultant(s) and staff, and monitor project progress 	<u>Administrative (SWRPC)</u> <ul style="list-style-type: none"> Monthly invoices (6) Monthly reporting of activities (6)
Tasks (continued)	Deliverables (continued)
<u>Microtransit (SWRPC)</u> <ul style="list-style-type: none"> Prepare, meet with and follow-up with HCS and consultant(s) regarding HCS scenario development (up to 3 meetings) 	<u>Microtransit (SWRPC)</u> <ul style="list-style-type: none"> Agenda, meeting minutes and back-up materials showing update to

<ul style="list-style-type: none"> • Support consultant with guidance on HCS scenario assumptions, scenario designs, performance measures, and data inputs for scenarios • Prepare, meet with and follow-up with MRCC (or designee) and consultant regarding larger regional scenario development (up to 3 meetings) • Support consultant with guidance on larger regional scenario assumptions, scenario designs, performance measures, and data inputs for scenarios • Review and edit consultant(s) technical memos relating to HCS scenarios and larger regional scenarios • Update MRCC on microtransit activities of Phase II 	<p>MRCC on microtransit activities during Phase II</p>
<p><u>Microtransit (Consultant(s))</u></p> <ul style="list-style-type: none"> • Prepare, meet with and follow-up with HCS and SWRPC regarding scenario development (up to 3 meetings) • Develop up to 2 HCS scenarios (one microtransit and one fixed route alternative) • Prepare, meet with and follow-up with MRCC (or designee) and SWRPC regarding larger regional scenario development (up to 3 meetings) • Develop at least 1 larger regional microtransit scenario 	<p><u>Microtransit (Consultant(s))</u></p> <ul style="list-style-type: none"> • Technical memo on HCS scenarios including scenario assumptions, designs, performance measures, data inputs and results • Technical memo on larger regional scenarios including scenario assumptions, designs, performance measures, data inputs and results
<p><u>VDP Improvement (SWRPC)</u></p> <ul style="list-style-type: none"> • Prepare, meet with and follow-up with VDPs regarding expansion with objective to develop SWOT Analysis or other evaluation tool that assesses readiness for expansion • Prepare, meet with and follow-up with VDPs regarding addressing unmet need requests with objective to develop SWOT Analysis or other evaluation tool that assesses readiness • Conduct additional research as necessary relating to expansion and unmet need, based on meetings • Meet with VDP staff or boards as necessary to discuss readiness • Develop a technical memo relating to assessment on readiness for expansion • Develop a technical memo relating to assessment on readiness for addressing unmet need • Update MRCC regarding VDP improvement activities during Phase II 	<p><u>VDP Improvement (SWRPC)</u></p> <ul style="list-style-type: none"> • Technical memo relating to assessment on readiness for expansion • Technical memo relating to assessment on readiness for addressing unmet need • Agenda, meeting minutes and back-up materials as available for meetings with MRCC, Boards or other official meetings re: VDP improvement activities during Phase II

Phase III: Action Planning

July 1, 2022-December 31, 2022

Tasks	Deliverables
<p><u>Administrative (SWRPC)</u></p> <ul style="list-style-type: none"> • Project related accounting and invoicing 	<p><u>Administrative (SWRPC)</u></p> <ul style="list-style-type: none"> • Monthly invoices (6)

<ul style="list-style-type: none"> • Track activities with narrative log system • Conduct internal meetings on project coordination as needed • Conduct oversight on work activities, manage consultant(s) and staff, and monitor project progress 	<ul style="list-style-type: none"> • Monthly reporting of activities (6)
<p><u>Microtransit (SWRPC)</u></p> <ul style="list-style-type: none"> • If warranted, prepare, meet with and follow-up with HCS and consultant(s) regarding HCS preferred alternative and development of a more refined service plan (up to 3 meetings). Service plan will include proposed schedule, fare, route or service plan, capital equipment needs, etc. • If warranted, provide HCS and consultant(s) support in proposing new route or service plan to the public and taking feedback (up to 2 public meetings) • If warranted, prepare, meet with and follow-up with MRCC and consultant regarding preferred regional microtransit alternative and develop outline of more refined service plan (up to 3 meetings). Service plan will include proposed schedule, fare, service plan, capital equipment needs, etc. • If warranted, provide MRCC and consultant support in proposing new route or service plan to the public and taking feedback (up to 2 public meetings) 	<p><u>Microtransit (SWRPC)</u></p> <ul style="list-style-type: none"> • Documentation of public meeting(s) including meeting agendas, back-up materials and meeting minutes
<p><u>Microtransit (Consultant)</u></p> <ul style="list-style-type: none"> • If warranted, prepare, meet with and follow-up with HCS and SWRPC regarding HCS preferred alternative and development of a more refined service plan (up to 3 meetings). Service plan will include proposed schedule, fare, route or service plan, capital equipment needs, etc. • Development of HCS preferred alternative • If warranted, prepare, meet with and follow-up with MRCC and SWRPC regarding preferred regional microtransit alternative and develop outline of more refined service plan (up to 3 meetings). Service plan will include proposed schedule, fare, service plan, capital equipment needs, etc. • Development of preferred regional microtransit alternative 	<p><u>Microtransit (Consultant)</u></p> <ul style="list-style-type: none"> • If warranted, documentation of new HCS refined service plan • If warranted, documentation of new regional microtransit alternative service plan
<p><u>VDP Improvement (SWRPC)</u></p> <ul style="list-style-type: none"> • If warranted, prepare, meet with and follow-up with VDPs regarding the development of an implementation plan for expanding services to a broader cross section of stakeholders (up to 3 meetings) • If warranted, prepare, meet with and follow-up with MRCC regarding the development of an implementation plan for addressing unmet ride requests 	<p><u>VDP Improvement (SWRPC)</u></p> <ul style="list-style-type: none"> • If warranted, VDP implementation plan for expanding services to broader cross section of stakeholders • If warranted, MRCC implementation plan for addressing unmet ride requests