Sullivan County Coordinated Transportation Services Plan Update

Kittelson Engineering, PA and MUD Workshop

December 2025 Draft

ACKNOWLEDGEMENTS

The development of this plan was guided by the Project Management Team (PMT), Steering Committee (SC), and members of the public. Each individual devoted their time and effort to provide valuable input and feedback and their participation was instrumental in the development of the plan.

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TABLE OF CONTENTS

TABLE OF FIGURES

ACRONYMS

ACS – American Community Survey
AVL– Automatic Vehicle Location
CTSP – Coordinated Transportation Services Plan
DR – Demand-Response
FTA – Federal Transit Administration
HRTG – Highly Rural Transportation Grant
LEHD – Longitudinal Employer-Household Dynamics
LEP – Low English Proficiency
MB – Motorbus
NTD – National Transit Database
NYSDOT – New York State Department of Transportation
PMT – Project Management Team
RTAP – Rural Transportation Assistance Program
SC – Steering Committee
SDF – State Dedicated Fund
STOA – State Operating Assistance
SUNY – State University of New York
TAP – Transportation Alternatives Program
TCRP – Transit Cooperative Research Program
ZETT – Zero-Emission Transit Transition Program

INTRODUCTION

This Coordinated Transportation Services Plan Update (CTSP) identifies needs and strategies to make public transit, paratransit services (services for people with disabilities) and human services transportation programs more available and beneficial to the community.

Project Purpose & Processes

A series of technical memoranda were developed during the development of the CTSP. The initial technical memoranda provided an inventory of transportation providers serving Sullivan County and neighboring counties and summarized outreach with these providers. As work progressed, future conditions were evaluated, and mobility needs and opportunities were identified. The Project Management Team (PMT) guided the preparation of these technical memoranda in coordination with the Steering Committee. These interactions helped guide the development of the CTSP update as well as build the necessary consensus and support. Members of these groups are listed in the Acknowledgements section. The memoranda developed during the process include:

- Memo #1: Transportation Providers
- Memo #2: Demographics and Transit Markets
- Memo #3: Outreach Summary and Updated Needs Assessment
- Memo #4: Updated Gap Analysis

History of Sullivan County Transportation Services

The Move Sullivan public transit service was launched by Sullivan County in August 2019 in response to the growing economic development and the need to provide better access to employment, healthcare, and shopping. This was done through a contract with Rolling V Bus Corp. A fixed-route model was used and included separate paratransit service for eligible riders who lived within ¾ mile of the routes. The service began with two routes (A & B) that had the same stops but ran in opposite directions. These routes covered populated areas in the towns of Liberty, Fallsburg, and Thompson.

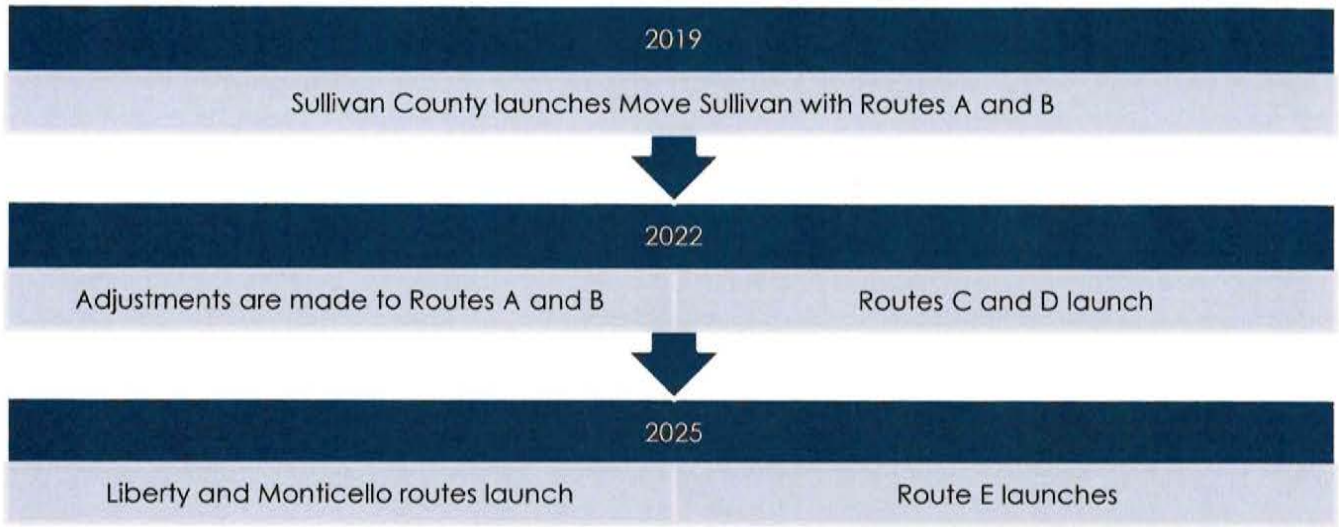
The service ran throughout the COVID-19 pandemic, supporting essential workers and those who needed to get to medical appointments and food shopping. Based on community feedback, route adjustments were made and transfer stops were added.

The County Legislature approved a fare collection system that began in November 2020 with one-way fare costing $2 or a person could purchase a booklet of 3 for $5. The fare collection was ended in August 2022 as it was proven to not be cost-effective.

Planning for expansion began in late 2021 with a communitywide survey. The results were stop changes for the original routes A & B and the addition of two new routes (C & D) that began in September 2022.

Route C expanded coverage in Liberty, Swan Lake, and the Town of Bethel and Route D served the lower end of the County covering Wurtsboro, Summitville, and Bloomingburg. Transfer points were included throughout allowing for people to move from one bus to another.

Another community wide survey was conducted in 2023 resulting in stop changes to existing routes and the addition of three new routes: Route E that expanded northwest to Roscoe, Livingston Manor, Callicoon Center, Jeffersonville, and White Sulphur Springs; a one-hour loop through the Village of Monticello and a one-hour loop through the Village of Liberty. Again, all link with existing transfer stops. The one-hour loops hit the dense housing areas, reduced the time spent on a bus and further supported shift workers. The one-hour loops began on January 21, 2025 and Route E began on March 4, 2025.



Community Involvement Activities

The project process included several touchpoints where stakeholders and the public could provide input. More information is available in the *Community Involvement* section of this report. Key activities included:

- Steering Committee: Technical memoranda and the draft CTSP update were provided for review to the Steering Committee, which provided insights and feedback on the materials. Steering Committee members were appointed by the Sullivan County Division of Community Resources at the onset of the project and consisted of members representing Sullivan County and local transportation providers.
- Focus Groups and Interviews: During summer and fall 2025, phone interviews and focus groups were conducted with key stakeholders from local organizations and communities in the project area to better understand the needs of the public.
- Provider Survey: A provider survey was online during the summer of 2025, inventorying human services transportation providers serving Sullivan County and neighboring counties. The results provided insight into the provider's rider eligibility characteristics and needs, service hours, operating statistics, marketing efforts, vehicle inventory, client type, trip costs, funding sources, and ways to enhance coordination and collaboration
- Community Survey: A community survey was provided during the fall of 2025. It asked about peoples' origins and destinations, reasons why they take transit, and ideas for improvements. The results provided an important picture of how and where people use the system.

Updating the Plan

The CTSP should be updated periodically to reflect changing needs, as well as lessons learned from implementing the plan's short-, mid-, and long-term recommendations. These updates will allow the County to monitor progress toward implementing projects, update the financial outlook, and verify the population, land use, and growth trends used to determine and prioritize service enhancements. The County and local jurisdictions can supplement this plan by considering transit improvements and walking and biking access to transit in their other planning efforts.

Benefits of Rural Transportation Services

Rural public transportation services play a vital role in connecting people, places, and opportunities in communities where distances are long and services are limited. Though often overlooked compared to urban transit, these systems provide essential mobility for residents who may have few other options. They strengthen local economies, improve access to healthcare, employment, education, and regional transportation, and enhance quality of life.

Economic Benefits

Rural transit systems create substantial economic value by lowering transportation costs and expanding access to essential services. Nationally, rural transit systems generate an estimated $1.6 billion in annual benefits, achieving a benefit-to-cost ratio of approximately 1.20. The majority of this value arises from low-cost mobility benefits, which enable residents to complete necessary trips for work, healthcare, and other daily needs.

Godavarthy, R.P., et al. (2015). Cost-Benefit Analysis of Rural and Small Urban Transit in the United States. Transportation Research Report. https://doi.org/10.3141/2533-16

Access to Healthcare

For many rural residents, reaching healthcare providers can be a challenge due to distance and limited transportation options. Studies show that individuals without driver's licenses are half as likely to seek medical care, but access to transit can increase the use of both routine checkups and ongoing treatment.[1] Even limited rural transit networks can help close this gap, improving health outcomes and ensuring that residents can receive the care they need.

Arcury TA, et al. (2005). Access to transportation and health care utilization in a rural region. Journal of Rural Health. https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1748-0361.2005.tb00059.x?sid=nlm%3Apubmed

Access to Employment & Education

Reliable transportation is key to economic opportunity in rural areas. In a recent study, approximately 20% of individuals who can work but are not currently employed reported transportation as a major barrier. By linking people to workplaces, schools, and training programs, rural transit systems open doors to employment and education that might otherwise be out of reach. These services not only support individual advancement but also strengthen the broader local workforce.

Mengedoth, J. (2023). Transportation Access as a Barrier to Work. Richmond Fed. https://www.richmondfed.org/-/media/RichmondFedOrg/publications/research/econ_focus/2023/q4/district_digest.pdf

Access to Regional Transportation

Rural transit provides a vital link between small communities and the broader regional transportation network. Nearly 29% of rural residents lack access to intercity bus transportation, limiting their ability to reach airports, rail stations, and other regional connections. Rural transit helps fill this gap by linking small communities to the broader transportation network, extending access to economic, educational, and social opportunities.

United States Department of Transportation (2023) Access to Intercity Transportation in Rural Areas. https://data.bts.gov/stories/s/Rural-Access-to-Intercity-Transportation/gr9y-9gjq/

BASELINE CONDITIONS

This section discusses baseline conditions of the transit system as reviewed in *Memo #1: Transportation Providers* and *Memo #2: Demographics and Transit Markets*.

Service Area

Sullivan County sits in New York's Hudson Valley, connecting to the Catskills and home to many small, thriving communities. Figure 1 shows population density and Figure 2 shows employment dot density in Sullivan County. Several of the County's larger communities include Liberty and Monticello Village, with additional population and employment clusters within the central and southeastern portions of the County.

Figure 1. Sullivan County Population Density

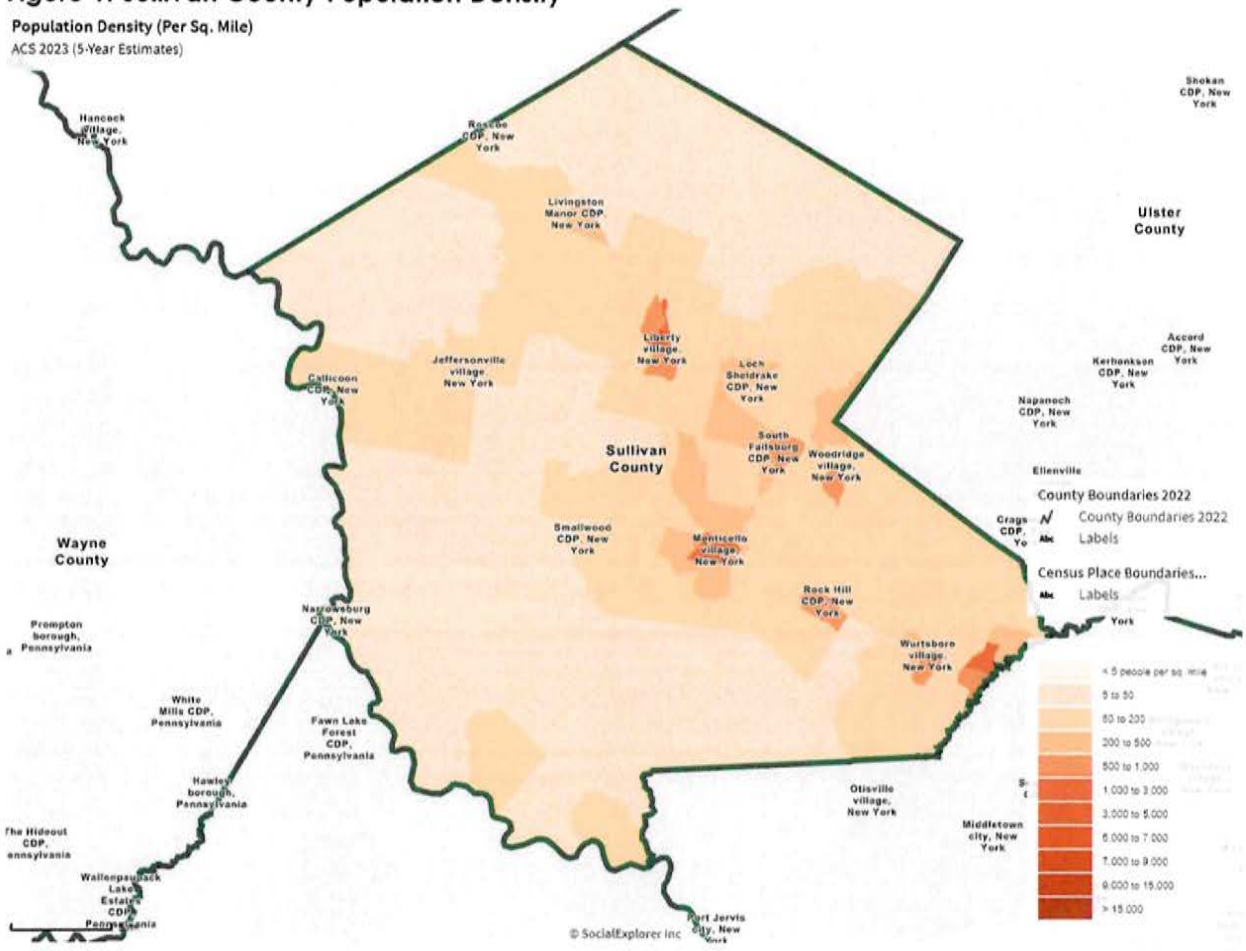
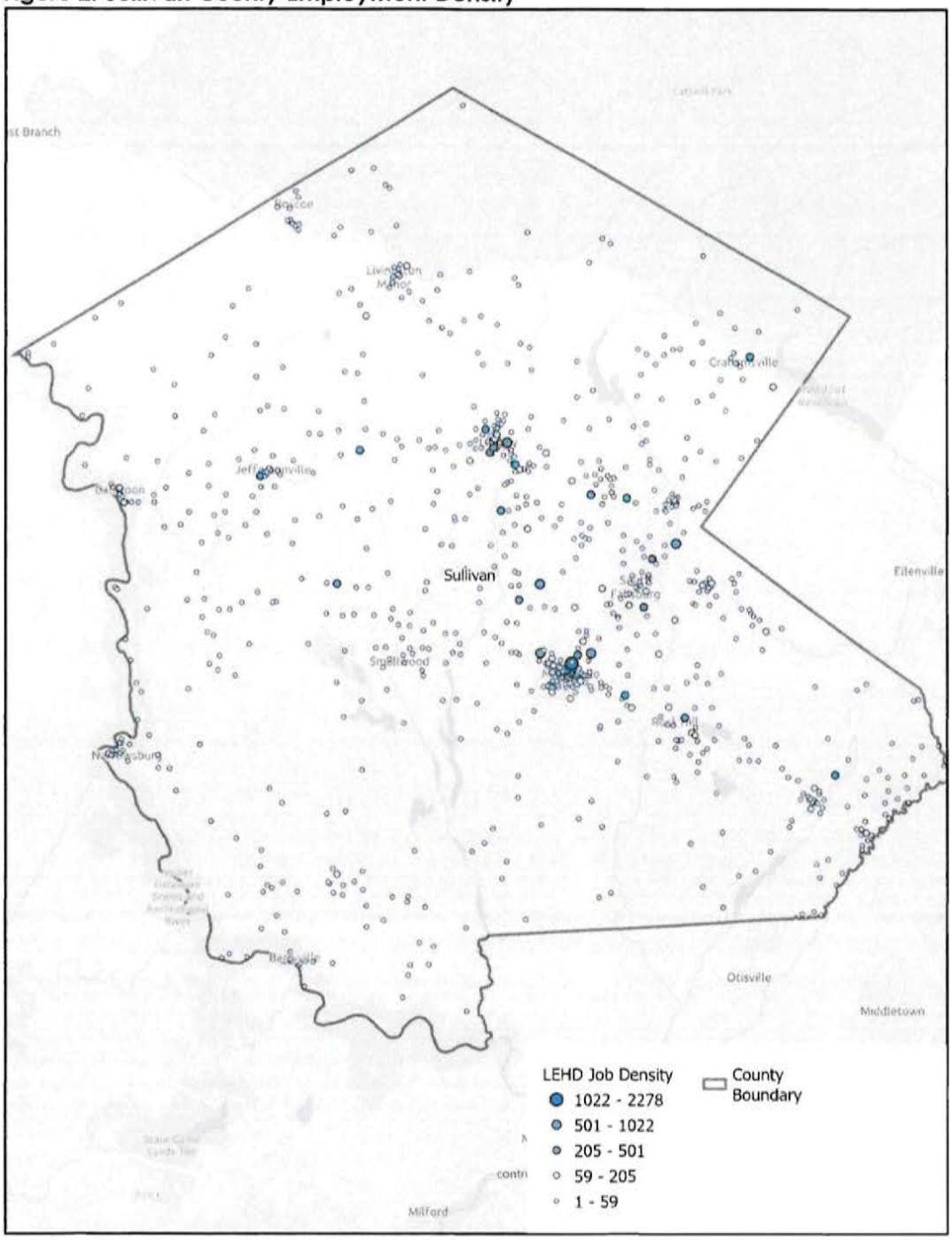


Figure 2. Sullivan County Employment Density



Demographics Profile

Transit-dependent populations in Sullivan County are composed of nine demographic groups listed below:

- **People with Disabilities –** people with a disability often have difficulty operating a vehicle and require access to public transportation.
- **Seniors (Age 65 and Over)** – individuals aged 65 and older may become less comfortable driving as they age or have limited physical ability to drive.

- **Youth (Under 18)** – individuals under 18 years old have limited access or ability to drive a vehicle.
- **People Experiencing Poverty** – individuals who live within a set of income thresholds established by the US Census Bureau, which vary by family size and composition. Low-income households tend to rely on public transportation as it is less expensive than owning and operating a vehicle.
- **People of a Racial/Ethnic Minority** – often live in neighborhoods that have suffered systemic disinvestment and other barriers to transportation.
- **Zero Vehicle Households** – persons residing in households without access to a vehicle typically rely on walking, biking, public transportation, or carpooling to meet their mobility needs.
- **Limited English Proficiency Households –** limited English proficiency (LEP) can be a barrier for interacting with the transportation system, particularly in terms of owning and operating a vehicle. Typically, households with low English proficiency rely on other modes to meet their mobility needs.
- **Veterans** - have devoted years of their lives into their respective field of expertise, with many impacted by limited mobility and high medical needs.
- **Multi-Unit Dwellings** – many of the above demographic groups may live in multi-unit dwellings, including special care facilities for seniors and/or people with disabilities.

Title VI of the Civil Rights Act of 1964 prohibits discrimination in the provision of federally supported benefits and services, including public transportation service. In addition to Title VI populations, this analysis provides information regarding populations who are typically more reliant on transit or have been historically underrepresented in planning processes. These metrics are summarized for Sullivan County in Table 1 using American Community Survey (ACS) data.

Values higher than the state average are in **bold red** text. The top three values for each category are detailed in a bulleted list below:

Below 100% Poverty Level
- Fallsburg – 84.9%
- Bloomingburg Village – 58.3%
- Loch Sheldrake – 49%

People with Disability
- Livingston Manor – 41.4%
- Woodbourne – 37.4%
- Hankins – 35.6%

Youth (Under 18) Population
- Bloomingburg Village – 60.1%
- Fallsburg – 45.7%
- Loch Sheldrake – 45.1%

Seniors (Over 65) Population
- White Lake – 67.7%
- Smallwood – 51.3%
- Mountain Dale – 38.6%

Racial/Ethnic Minority Population
- Loch Sheldrake – 68.2%
- South Fallsburg – 65.4%
- Monticello Village – 59.9%

Zero Car Households
- Kauneonga Lake - 52.1%
- Bloomingburg Village – 44.5%
- Woodridge Village - 37.7%

Population with Limited English Proficiency
- Bloomingburg Village – 38.4%
- South Fallsburg - 28.9%
- Smallwood -10.9%

Veteran Population
- Hankins – 19.2%
- Callicoon – 18.9%
- Hortonville -17.8%

As shown, Fallsburg, Bloomingburg Village, and Loch Sheldrake have high percentages of youth (age under 18), people below the poverty line, racial/ethnic minorities, people with limited English proficiency (LEP).

Table 1. Transit Dependent Populations

	Total Population (ACS)	Total Households (ACS)	Below 100% Poverty	People with a Disability	Youth (Under 18)	Seniors (65 and older)	Racial/Ethnic Minority	Zero Vehicle Households	Persons with LEP	Veteran
New York	19,391,750	7,668,956	13.7%	12.2%	20.8%	17.4%	42.9%	29.0%	7.6%	3.9%
Sullivan County	76,020	30,215	**15.2%**	**16.2%**	**21.7%**	**19.4%**	27.0%	8.8%	4.4%	**6.0%**
Monticello village	7,067	2,840	**29.5%**	**15.4%**	**22.6%**	13.7%	**59.9%**	28.5%	**9.5%**	**3.9%**
Liberty village	4,964	1,741	**17.7%**	**19.5%**	**30.8%**	12.2%	**49.8%**	25.0%	7.3%	**5.0%**
Rock Hill	2,523	930	4.2%	**13.8%**	17.7%	**30.2%**	29.5%	0.0%	5.1%	**5.9%**
South Fallsburg	1,850	630	**34.3%**	**19.4%**	**33.3%**	16.0%	**65.4%**	12.5%	**28.9%**	1.9%
Loch Sheldrake	1,229	232	**49.0%**	**14.4%**	**45.1%**	8.6%	**68.2%**	0.0%	0.0%	0.0%
Hurleyville	1,222	524	**18.0%**	11.0%	12.3%	**29.4%**	24.1%	12.6%	4.8%	1.7%
Wurtsboro village	1,181	510	10.6%	**12.6%**	20.6%	**22.0%**	16.1%	6.7%	2.5%	**7.3%**
Bloomingburg village	1,022	211	**58.3%**	8.1%	**60.1%**	5.8%	4.4%	**44.5%**	**38.4%**	2.5%
Woodridge village	950	289	**19.2%**	**20.0%**	**21.7%**	17.4%	38.9%	**37.7%**	5.2%	1.3%
Livingston Manor	689	372	**17.9%**	**41.4%**	16.1%	**30.6%**	16.0%	11.6%	5.1%	0.0%
Fallsburg	676	84	**84.9%**	5.9%	**45.7%**	10.9%	12.3%	0.0%	0.0%	3.5%
Smallwood	657	330	**25.7%**	**18.4%**	17.7%	**51.3%**	14.2%	0.0%	**10.9%**	**13.9%**
Woodbourne	644	228	**14.4%**	**37.4%**	**21.9%**	11.3%	**47.8%**	0.0%	0.0%	**9.1%**
Roscoe	558	228	**14.7%**	**32.1%**	5.6%	**29.7%**	6.1%	0.0%	2.2%	1.5%
Wurtsboro Hills	519	310	**17.3%**	**23.3%**	0.0%	**17.7%**	**44.3%**	0.0%	0.0%	6.2%
Kauneonga Lake	505	117	12.3%	1.6%	**28.7%**	8.3%	0.0%	**52.1%**	0.0%	**8.8%**
Narrowsburg	480	233	1.5%	**17.9%**	7.3%	**21.9%**	34.8%	0.0%	0.0%	3.1%
Jeffersonville village	415	169	**21.2%**	**20.5%**	12.8%	**19.0%**	19.5%	8.9%	0.0%	0.5%
Kiamesha Lake	348	176	0.0%	0.0%	**29.3%**	**28.2%**	**55.5%**	0.0%	0.0%	0.0%
Grahamsville	328	147	10.7%	**15.2%**	15.5%	**28.7%**	31.4%	4.8%	0.0%	**12.3%**
Lake Huntington	303	161	**14.5%**	**24.8%**	9.6%	**28.7%**	16.2%	9.9%	0.0%	2.6%
Hortonville	284	136	5.6%	10.6%	9.2%	**28.2%**	8.8%	0.0%	0.0%	**17.8%**
Mountain Dale	272	191	9.6%	0.7%	6.6%	**38.6%**	14.0%	0.0%	3.1%	**7.7%**
Mongaup Valley	269	81	0.0%	1.5%	**21.9%**	14.9%	22.7%	4.9%	0.0%	0.0%
Barryville	239	126	6.7%	**29.7%**	14.6%	15.5%	18.4%	0.0%	0.0%	**10.3%**
Swan Lake	211	104	10.9%	**33.6%**	2.4%	**29.4%**	28.9%	21.2%	0.0%	**9.7%**
Hankins	205	76	**26.3%**	**35.6%**	**39.0%**	9.8%	39.5%	5.3%	0.0%	**19.2%**
Eldred	201	105	**16.4%**	**31.8%**	15.9%	16.4%	4.5%	6.7%	0.0%	**4.1%**
Callicoon	169	93	0.0%	0.0%	12.4%	11.8%	18.9%	0.0%	3.2%	**18.9%**
White Lake	96	70	5.2%	**28.1%**	0.0%	**67.7%**	3.1%	0.0%	0.0%	**10.4%**
Bridgeville	72	53	0.0%	**30.6%**	0.0%	**18.1%**	19.4%	0.0%	0.0%	**6.9%**

Source: ACS 5-Year 2019-2023 Tables S1701, S1602, S1810, B25044, S2101

Existing Services

Table 2 shows information about the available transit services in Sullivan County. The primary transit provider in Sullivan County is Move Sullivan which operates seven different fixed-route bus routes servicing Monticello and Liberty in addition to other cities within Sullivan County.

Sullivan County provides both fixed-route and shopping bus services within Sullivan County. The Move Sullivan system operates seven fixed routes free of charge year-round, excluding holidays. Two additional routes in Highland Township and Delaware Township provide local circulation for a $1.50 fare. The fixed-route system is shown in Figure 3. The shopping bus operates weekdays, is free for Sullivan County residents age 60 and older, accommodates up to 14 passengers, is fully accessible for wheelchairs and other mobility devices, and requires reservations at least three days in advance.

Shortline Bus Company supplements local transit with three fixed routes serving Sullivan County and neighboring areas, including Orange, Delaware, and Ulster counties, as well as Northeastern Pennsylvania. Two routes run seven times per day (Monticello–Fallsburg–Sheldrake–Liberty and Pennsylvania/Newburgh/Middletown to the Catskills, including Ellenville and Monticello), while the third operates 13 trips daily, connecting the Galleria to Middletown, Monticello, Liberty, Roscoe, and Binghamton.

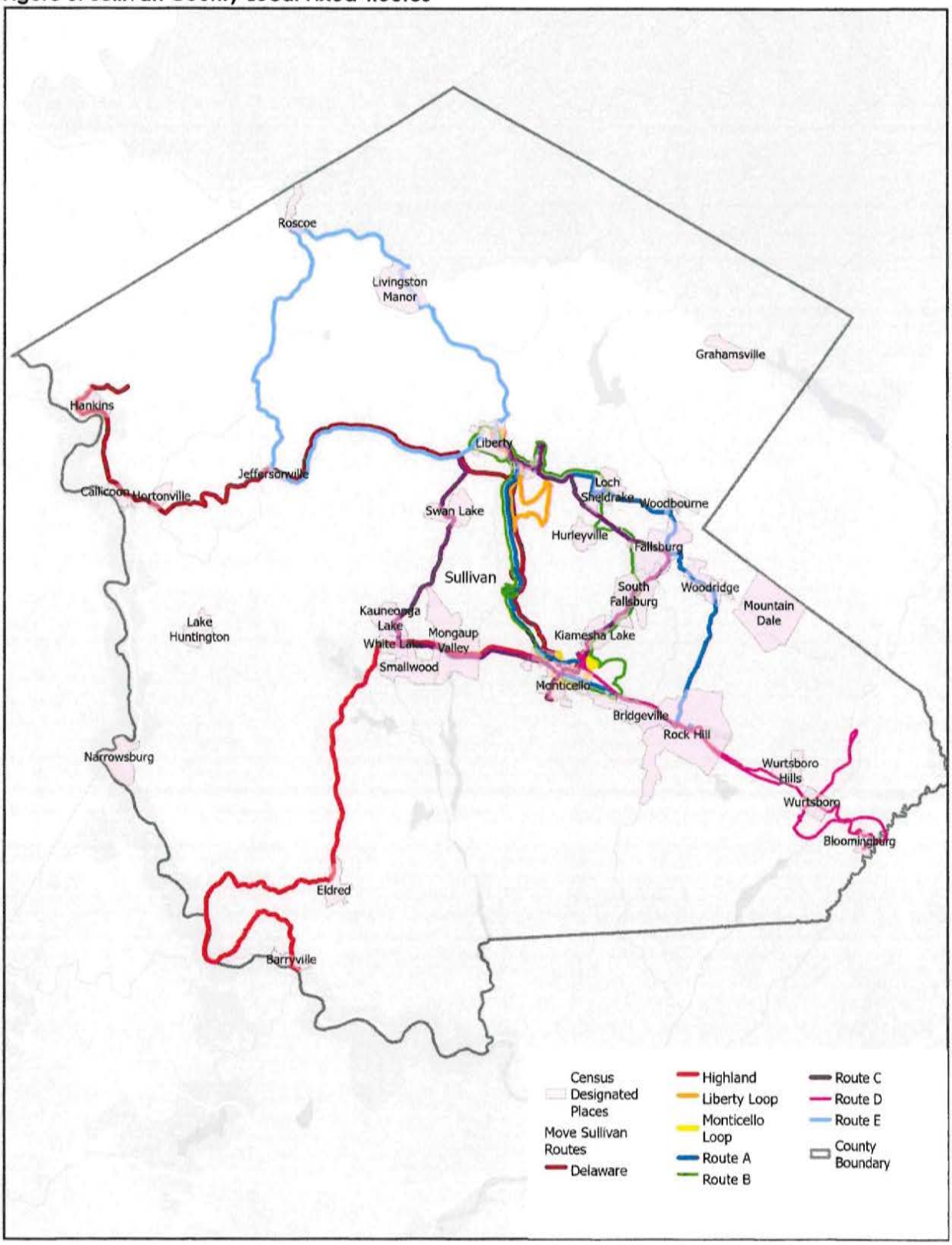
Table 2. Available Service Inventory (2025)

Transit Provider	Service Name	Service Type	Operating Hours	Service Area	Connections
Public Providers					
Sullivan County Transportation	Move Sullivan Route A	Fixed-Route Service (with ADA Complementary Paratransit Available)	Monday – Sunday, 5:30AM – 5:25PM	Liberty-Ferndale-Harris-Monticello-Rock Hill-Woodridge-Loch Sheldrake	» Shortline » Excellent Bus Company
	Move Sullivan Route B		Monday – Sunday, 6:00AM – 5:53PM	Monticello-Harris-Ferndale-Liberty-Loch Sheldrake-Hurleyville-South Fallsburg-Kiamesha	
	Move Sullivan Route C		Monday – Sunday, 6:00AM – 5:50PM	Monticello-Fallsburg-Hurleyville-Liberty-Swan Lake-Bethel-White Lake	
	Move Sullivan Route D		Monday – Sunday, 6:30AM – 6:20PM	Monticello-Wurtsboro-Summitville-Wurtsboro-Bloomingburg	
	Move Sullivan Route E		Monday – Sunday, 8:30AM – 6:37PM	Liberty-Livingston Manor-Roscoe-Jeffersonville-Youngsville-Sulphur Springs	
	Move Sullivan Monticello Loop		Monday – Sunday, 6:00AM – 5:53PM	Monticello Area	
	Move Sullivan Liberty Loop		Monday – Sunday, 10:00AM – 6:22PM	Liberty Area	
	Highland Township Area Route	Demand-Response Service	Thursday, 8:20AM – 4:45PM	Highland Township Area	
	Delaware Township Area Route		Friday, 8:05m – 3:10pm	Delaware Township Area	
	Shopping Bus		Monday	Town of Bethel Town of Neversink	
			Tuesday	Town of Fallsburg Town of Rockland	
			Wednesday	Town of Liberty Town of Mamakating	
			Thursday	Towns of Tusten, Highland and Lumberland Town of Thompson	
			Friday	Towns of Delaware, Fremont and Callicoon Liberty Village and Town of Fallsburg	
https://www.sullivanny.gov/Departments/Transportation					

Transit Provider	Service Name	Service Type	Operating Hours	Service Area	Connections
Shortline Bus Company	Monticello-Fallsburg-Sheldrake-Liberty	Fixed-Route Service	Monday-Sunday, 7:50 AM-1:30AM	Monticello-Fallsburg-Loch Sheldrake-Liberty	» Move Sullivan » Excellent Bus Company
	Galleria to Middletown, Monticello, Liberty, Roscoe and Binghampton Local	Fixed-Route Service	Monday-Sunday, 7:35 AM-2:40AM	Middletown-Monticello-Harris-Ferndale-Liberty-Parksville-Livingston Manor-Roscoe-Hannock-Deposit-Binghamton	
	Pennsylvania, Newburgh, and Middleton to Catskills (includes Ellenville to Monticello)	Fixed-Route Service	Monday-Sunday, 7:41 AM-11:22PM	Poughkeepsie-Newburgh-Middletown-Bloomingburg-Wurtsboro-Spring Glen-Ellenville-Kerhonkson-Honesdale, PA-Hawley PA-Milford PA-Port Jervis-Monticello-Fallsburg-Woodridge-Woodbourne-Liberty	
Shortlinebus.com					
Medical Providers					
Unity Ambulette	Non-Emergency Medical Transportation	Medical Taxi	Monday – Friday, 9:00AM – 5:00PM	Dutchess, Sullivan and Ulster County NY	
unityamb.com/					
Dependable Taxi Service	Non-Emergency Medical Transportation	Medical Taxi	By appointment	Sullivan County	
dependablecarservice.com/					
Medicar					
We Care Transportation	Non-emergency Medical Transportation	Medical Taxi	Monday – Sunday, 5:00AM – 12:00AM	Sullivan County	
wecaretravels.com					
A2B Taxi	Non-emergency Medical Transportation	Medical Taxi	Monday – Saturday, 6:00AM-7:00PM	Sullivan County	
a2btaxi.com					

Transit Provider	Service Name	Service Type	Operating Hours	Service Area	Connections
Faith-Based Providers					
Excellent Bus Company	Route A	Fixed-Route Service	Monday – Friday, 6:00AM – 5:00PM	Monticello-White Lake-Kauneonga Lake-Swan Lake-Liberty	» Move Sullivan » Shortline
	Route C	Fixed-Route Service	Monday – Friday, 6:00AM – 5:00PM	Fallsburg-Kiamesha Lake-Monticello-South Fallsburg-Loch Sheldrake-Liberty-Parksville	
	Route E	Fixed-Route Service	Monday – Friday, 6:00AM – 5:00PM	Monticello-White Lake-Kauneonga Lake-Swan Lake	
	Route I	Fixed-Route Service	Monday – Friday, 6:00AM – 5:00PM	Fallsburg-Kiamesha Lake-Monticello-White Lake-Kauneonga Lake-Swan Lake-Liberty	
	Route G	Fixed-Route Service	Monday – Friday, 6:00AM – 5:00PM	Monticello-Kiamesha Lake-Hurleyville-Loch Sheldrake-Liberty-Parksville	
ebstours.com/catskills/ 718 963 1495					
Private/Taxis					
First Student, Inc	After School Transportation	Fixed-Route Service	By appointment		
firststudentinc.com					
Rolling V Bus Corporation	Bus Charters	Fixed-Route Service Non-emergency	Monday – Sunday, 6:00AM – 6:00PM	Catskills Region	
www.rollingv.com					
Busy Bee Taxi	Private Transportation	Private/Medical Taxi	Monday – Thursday and Sunday, 5:00AM – 10:00PM Friday-Saturday, 5:00AM-12:00AM	Wurtsboro, Bloomingburg, Rock Hill	
busybeecab.com					
Mom's Car Service	These providers are active, though information is not available online.				
Community Transportation					
RX Transportation					

Figure 3. Sullivan County Local Fixed-Routes



AVAILABLE SERVICE ASSESSMENT

A gap analysis of existing services was conducted to identify spatial and temporal gaps in both fixed-route and demand-response services, as well as restrictions faced by users. The key findings are summarized below:

- Spatial Gaps
  - Rural communities between major population centers like Liberty and Monticello are difficult to access. Low density areas are difficult to serve with fixed-route systems and often expensive for demand-response services.
  - Outer communities like Wurtsboro connect to neighboring counties (Orange and Ulster) via Shortline with limited daily service
  - Coordination between the transportation services provided by Sullivan, Orange and Ulster Counties is limited
- Temporal Gaps
  - Some communities lack early morning and later evening fixed-route service. For example, the Liberty Loop doesn't start service until 10 AM. Other routes do not provide service after 5 PM. This is especially impactful as it limits employment opportunities for those who are not able to take transit to work or for certain medical appointments.
  - Late-night medical transportation is limited, with We Care Transportation the only provider offering the latest non-emergency medical transportation services (until 12:00 AM). Many medical providers do not operate on Saturday and/or Sundays as well.
  - Some Move Sullivan routes have long headways of 1.75–2 hours, limiting quick trips without causing long waits until the next bus; Shortline and Excellent Bus services operate on even longer headways.
  - Some loop routes are only serviced travelling in one direction. This can cause long travel times depending on the direction of a user's trip. For instance, their trip to the grocery store may only be 10 minutes, but they must ride the long side of the loop on return with a 50 minute trip.
- Other
  - Some services and programs are restricted to certain target demographics, such as the senior nutrition program. While target demographics for these programs have the highest need for them, there may be needs for broader users.

Key Finding: There is a need and desire for more transportation services in Sullivan County, but its rural nature can make serving the area difficult on limited budgets.

TCRP Report 161 Demand Analysis

This section provides insights on how well the current system meets expected demand. In 2012, the Transportation Research Board published a methodology to estimate rural transit demand through Transit Cooperative Research Program (TCRP) Report 161. This report provides step-by-step procedures for quantifying the need for passenger transportation services and estimates the demand that is likely to be generated given the service area's demographic characteristics and the current miles of service operated. It is an analysis that incorporates typical demographic factors that indicate a propensity to use transit but does not contain any specific land use variables and is generic for all rural areas in a given state.

The method estimates demand for four specific markets: general public rural passenger transportation, passenger transportation specifically related to social service or other programs, travel on fixed-route services in small cities (less than 50,000 population and less than 70 vehicle hours of service per day), and travel on commuter services from rural areas to urban centers. Tests by the researchers who developed the methods indicated that the methods provide reasonable first estimates of transit need (i.e., the methods account for about 40–70% of the variance in the demand estimate), but other factors not included in the models can still result in substantial differences between the methods' estimates and actual ridership.

The transit needs analysis incorporates current socioeconomic conditions in Sullivan County and current transit service. Inputs used to estimate transit need include:

1. City population
2. College and university enrollment (4-year only)
3. Annual revenue hours of service

These inputs are used to generate an expected number of transit trip demand. Note that TCRP 161 states the following with regard to its estimates:

> *The estimates of need made using the mobility gap method are typically far greater than the number of trips actually observed on rural passenger transportation systems and are likely greater than the demand that would be generated for any practical level of service. Much of the remaining trip-based mobility gap is likely filled by friends and relatives driving residents of non-car-owning households. Therefore, agencies choosing to use the mobility gap may wish to establish a target or goal for the proportion of the gap to be satisfied by publicly provided services. In the testing of these suggested methodologies with a number of rural transit agencies, it was found that, at best, only about 20% of the mobility gap trip-based need was met.*

Local Fixed-Route

The local fixed-route methodology considers city population, enrolled students at a four-year college (not community colleges), and number of service hours to estimate ridership. Both the Monticello and Liberty loop routes began service in 2025.

Monticello Loop

The small city fixed-route demand method inputs include city population (7,062), the population of enrolled students at institutes of higher education located within the city (0), and the annual revenue hours of service (1,820 hours). The city's transit demand is estimated at 18,100 annual 1-way passenger trips, which is about 13,600 1-way passenger trips for 9 months. There have been 5,373 trips recorded as of September 31, 2025 on the Monticello Loop, reflecting a gap in meeting transit demand estimates. With this route starting service in 2025, it is important to note that it takes time for new routes to establish ridership, and this number is expected to grow as more people become aware of the service.

Liberty Loop

The small city fixed-route demand method inputs include city population (4,964), the population of enrolled students at institutes of higher education located within the city (0), and the annual revenue hours of service (1,576 hours). The city's transit demand is estimated at 14,400 annual 1-way passenger trips, which is around 10,800 1-way passenger trips for 9 months. There have been 5,212 trips recorded as of September 31, 2025 on the Liberty Loop, reflecting a gap in meeting transit demand estimates. Similar to the Monticello Loop, it is important to note that ridership is expected to increase as more people become aware of the service.

Cost and Efficiency Analysis

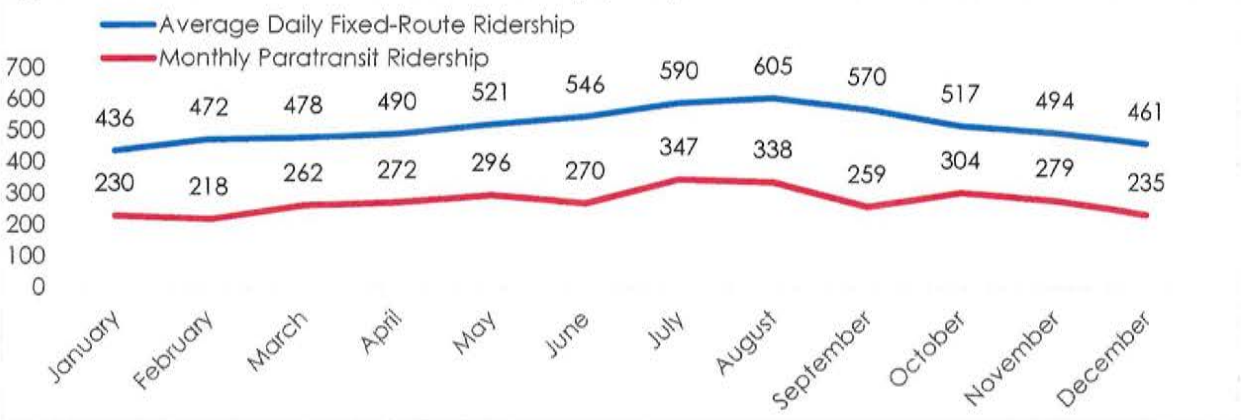
This sections an analysis of how much service is provided (miles, hours) as well as use and coverage of the service (ridership, meal deliveries). This analysis also considers how ridership changes in the summer months with Sullivan County's increased population. Historic service trends and comparison to similar providers also helps to understand transportation service performance in Sullivan County.

MONTH-LEVEL SYSTEM TRENDS

The month-level system trends data was provided by Sullivan County and includes average daily ridership for the fixed-route system and monthly ridership for the paratransit service.

- As shown in Figure 4, fixed-route daily ridership averages near 515 rides per day. There is a difference of 169 rides between the low of fixed-route demand in January and the peak of demand in August. Paratransit trips average 276 per month, with a maximum in July of 347 and minimum in February of 218.
- As shown in Figure 5, shopping buses and senior medical services provide high numbers of rides. Demand is generally high outside of the November/December period, and highest in the summer. Demand for veterans medical services and seniors to congregate sites is high as well, with some peaks seen in the spring of both 2024 and 2025.
- Throughout the different services, demand starts to pick up in May and peaks in the summer. Following August there tends to be a steady decline in ridership demand through the winter months.

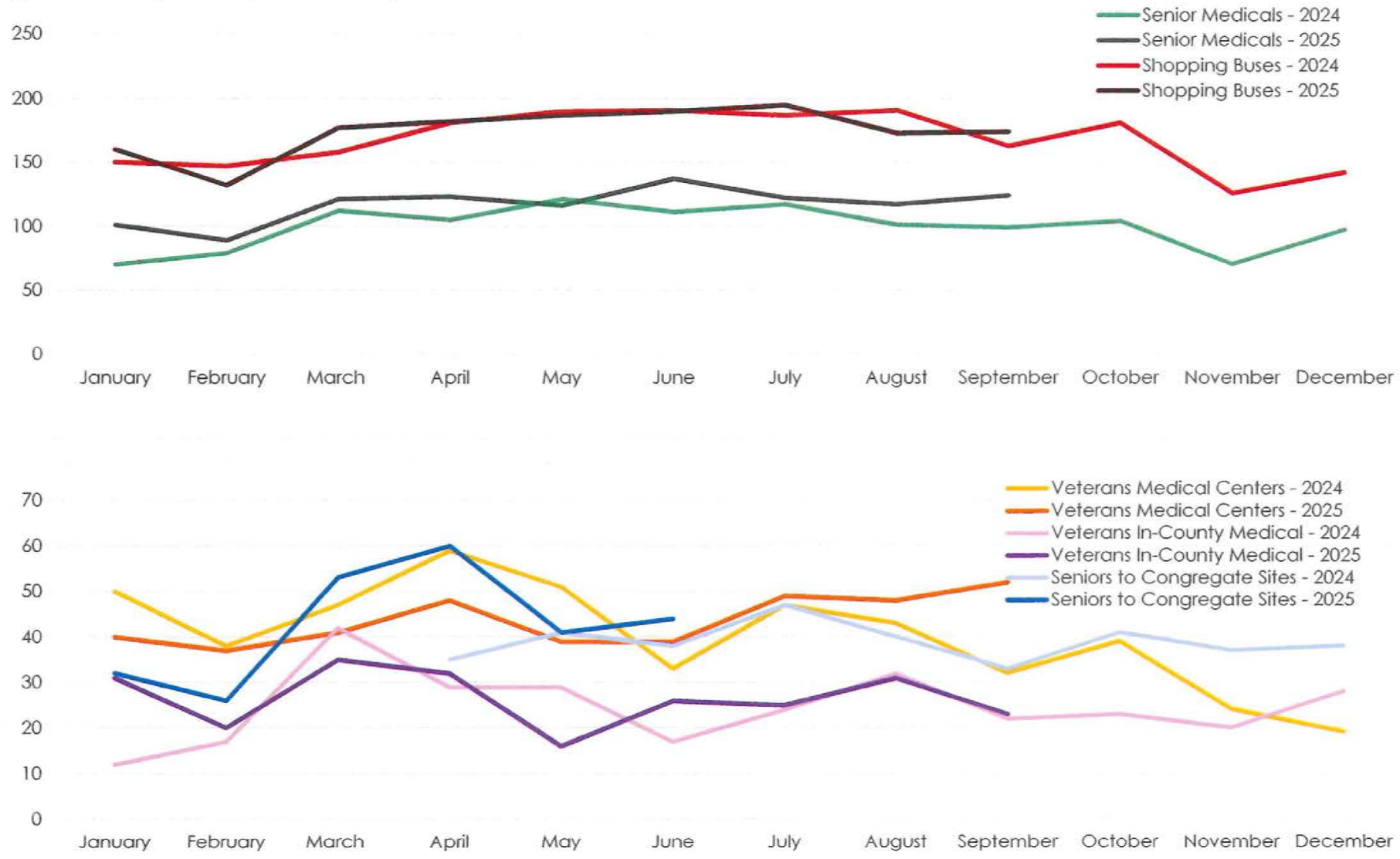
Figure 4. Fixed-Route and Paratransit Ridership (2024)



Key Finding: Summer time (May – August) is the peak demand for services. Both demand-response services and fixed-route services have the highest level of demand and ridership in the summer months.

This analysis points to a need for increased services, particularly in the summer months. Both fixed-route and demand-response services require appropriately staffing and funding to have the capacity to meet the influx in demand.

Figure 5. Monthly Rides by Demand-Response Services



HISTORIC SYSTEM TRENDS

The following data reflects service reported to the National Transit Database (NTD) from 2018 to 2023. Across all data, the large jump in service from 2019 to 2020 reflects the start of Move Sullivan services in August 2019. Data reported in 2020 and 2021 reflects combined demand-response (DR) and local fixed-route motorbus (MB) data. Data in 2022 and 2023 is reported separately.

Figure 6 displays the total service miles for each service by year. Since Move Sullivan began its fixed-route service in August 2019, the total number of miles has consistently increased until 2023. The miles travelled by the demand-response services increased between 2018 and 2019, decreased between 2019 and 2022, and again increased between 2022 and 2023. 2023 demand-response miles were above 2019 miles.

Figure 6. Total Miles (2018 – 2023, Source: NTD, Move Sullivan)

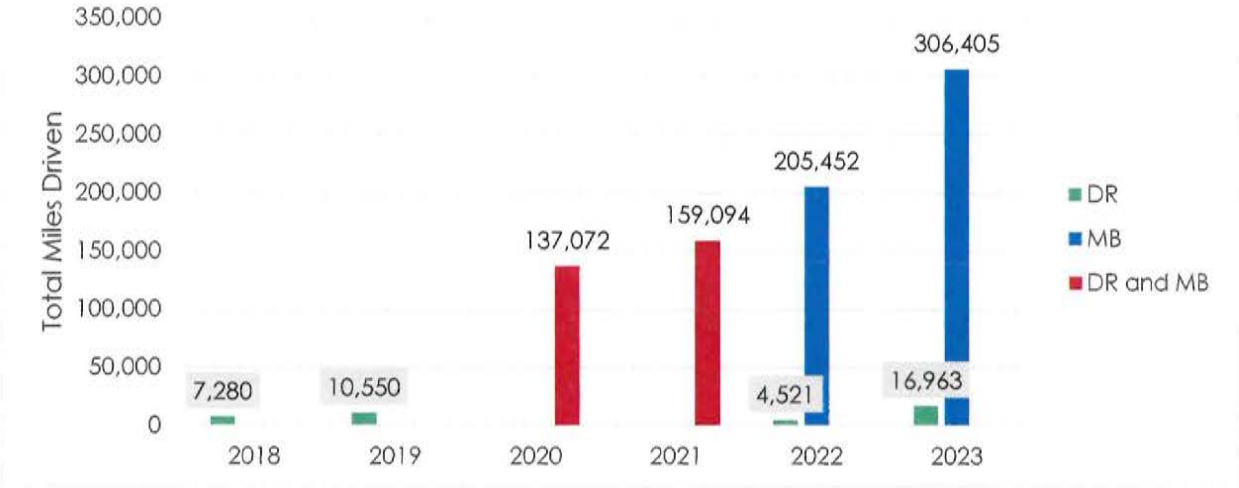


Figure 7 displays the total service hours for each service by year. Similar to the number of total annual miles travelled, since the start of the fixed-route service there has been a constant increase in annual operating hours between 2019 and 2023. Demand-response services experienced an increase in total annual operating hours between 2018 and 2019, decrease 2019 to 2022, and increase seen between 2022 and 2023.

Figure 7. Total Hours (2018 – 2023, Source: NTD, Move Sullivan)

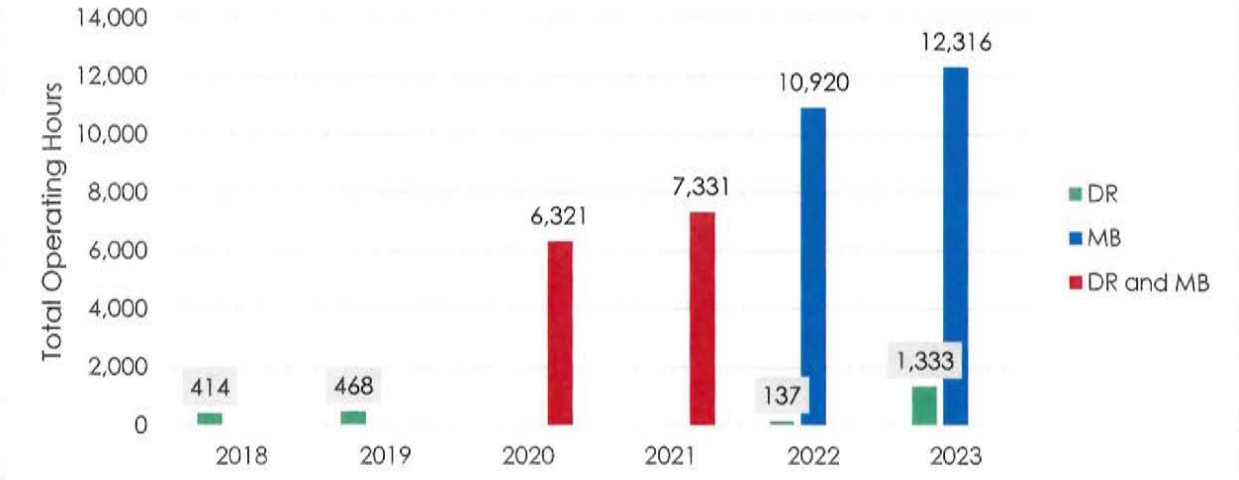


Figure 8 shows annual rides by service. Move Sullivan's ridership declined from 2020 to 2021 during the pandemic, rebounded in 2022, and nearly tripled by 2023. The decline in 2021 was also due to the implementation of a fare system, which decreased ridership. Demand-response rides dipped between 2018–2019 before rising between 2022 and 2023.

Figure 8. Total Rides (2018 – 2023, Source: NTD, Move Sullivan)

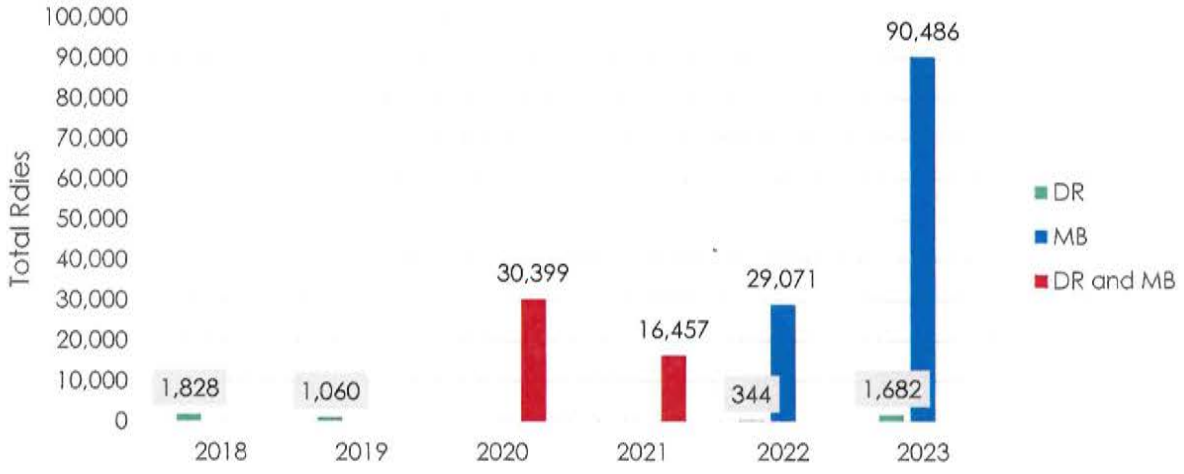


Figure 9 shows rides per hour by year. System rides per hour declined in between 2020 and 2021 due to the pandemic and the 2021 fare system implementation. Fixed-route rides per hour recovered in 2022 and nearly doubled in 2023. Demand-response rides per hour fell in between 2018 and 2019, recovered in 2022, then declined again in 2023.

Figure 9. Rides per Hour (2018 – 2023, Source: NTD, Move Sullivan)

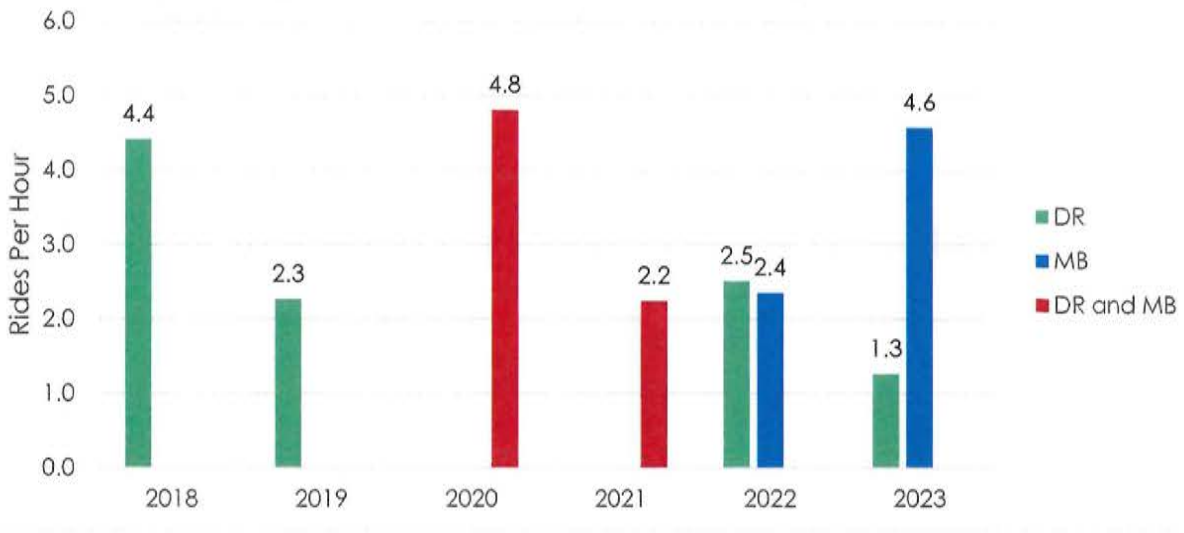
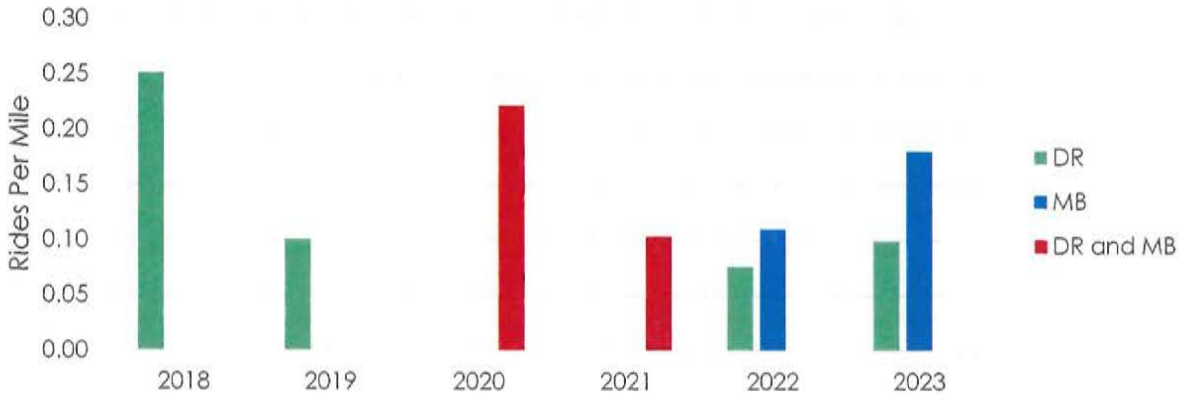


Figure 10 shows rides per mile by year. Overall trends are like rides per hour, with the exception that in 2022, fixed-route service recorded higher rides per mile than demand-response, reflecting the longer trip distances covered per passenger on the demand-response services.

Figure 10. Rides per Mile (2018 – 2023, Source: NTD, Move Sullivan)



Key Finding: This analysis suggests that demand for the Move Sullivan fixed-route system is strong, with ridership continuing to increase substantially. Continuing to improve the Move Sullivan system and market its availability to potential riders will draw more ridership and benefits to the community.

COMPARISON TO SIMILAR PROVIDERS

While each transit provider has a unique service area and operating characteristics, comparing similar transit providers can help to gauge Move Sullivan's performance. The most recent year of available NTD data, 2023, was obtained for Move Sullivan and peer transit providers were identified using the National Rural Transit Assistance Program's Rural and Small City Transit Agency Peer-Grouping Methodology.

Peer providers were identified in Georgia (Walker Transit), Michigan (Barry County Transit), North Carolina (Anson County Transit System and Person Area Transportation System) and Ohio (Caroll County Transit). Table 3 and Figure 6 through Figure 14 show the results. Key findings include:

- Move Sullivan's local fixed-route services operate more annual miles and hours than the only other peer with fixed-route service, the Person Area Transportation System (PATS). This reflects that the communities served by Move Sullivan are geographically far-spread. The average number of rides per hour is also higher compared to PATS.
- Move Sullivan lags behind its peers in annual miles and hours operated by its demand-response services. However, the gap is less pronounced when comparing average rides per hour, where Move Sullivan falls in the mid-to-lower range of its peers.

Key Finding: Despite providing relatively fewer hours and miles of service compared to identified peers, Move Sullivan serves substantially more rides across the system. However, costs on Move Sullivan are higher compared to peers. This may be due to the larger distance served by Move Sullivan and other local market factors.

Table 3. Transit Provider Comparison

		Move Sullivan	Walker Transit	Barry County Transit	Anson County Transportation System	Person Area Transportation System	Carroll County Transit System
Headquarter City Population		1,428	3,014	7,513	4,965	8,289	3,060
Annual Vehicle Revenue Miles	DR	16,963	422,229	349,782	308,913	388,983	354,208
	MB	306,405	-	-	-	31,677	-
Annual Vehicle Revenue Hours	DR	1,333	23,352	20,238	16,743	23,493	12,469
	MB	12,316	-	-	-	2,275	-
One-Way Passenger Trips	DR	1,682	31,847	64,144	23,363	51,106	25,763
	MB	90,486	-	-	-	57,881	-

Figure 11. Annual Vehicle Revenue Miles

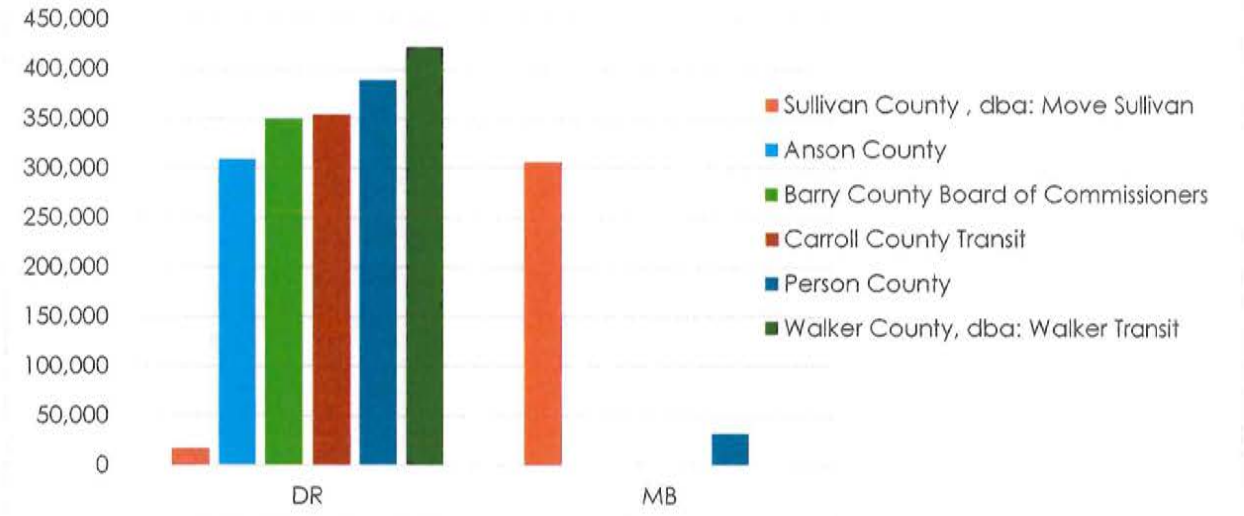


Figure 12. Annual Vehicle Revenue Hours

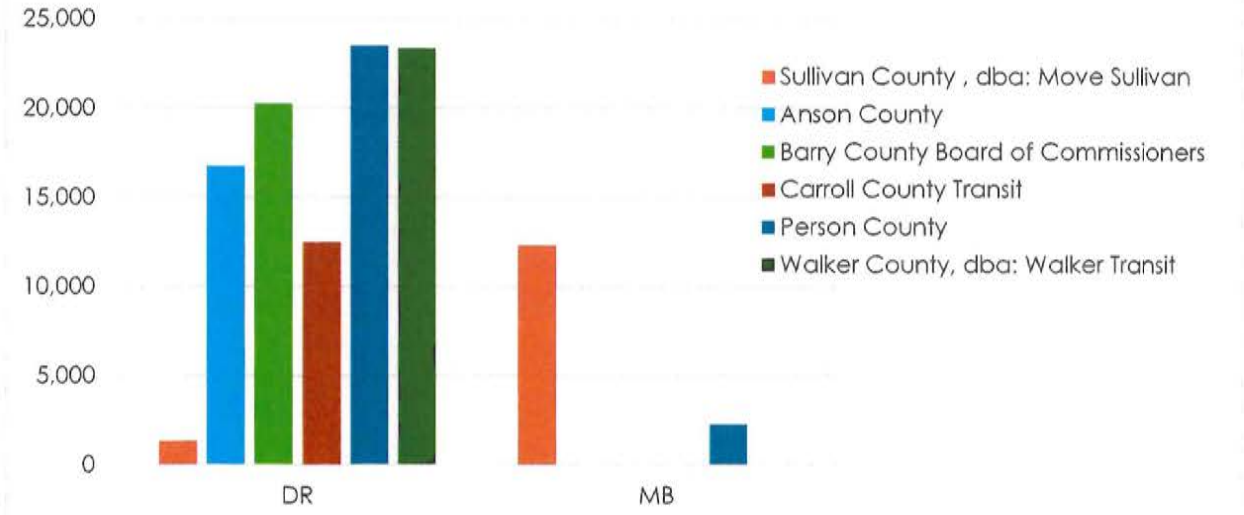


Figure 13. One-Way Passenger Trips

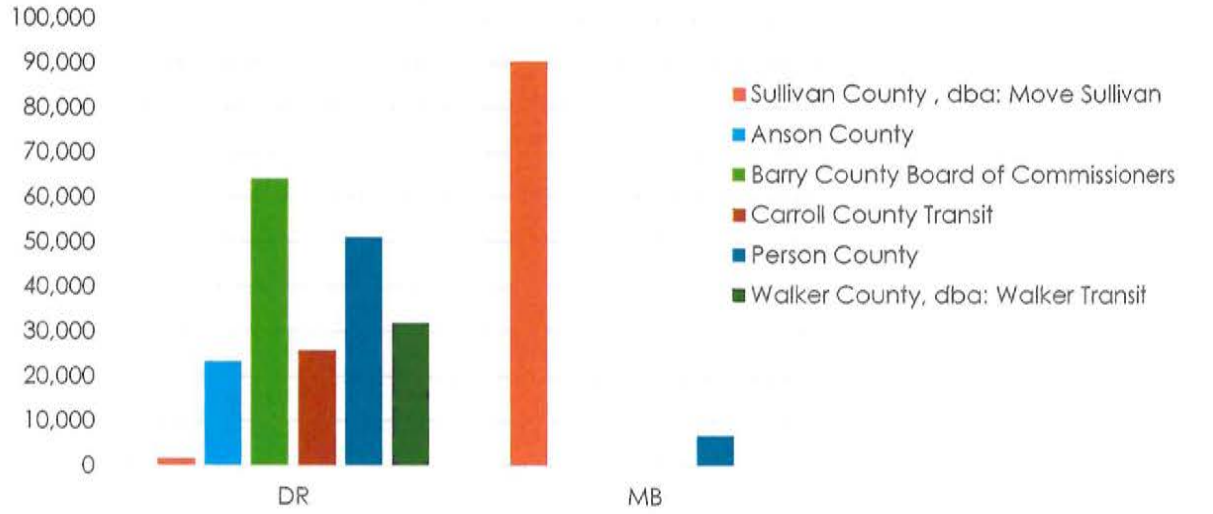
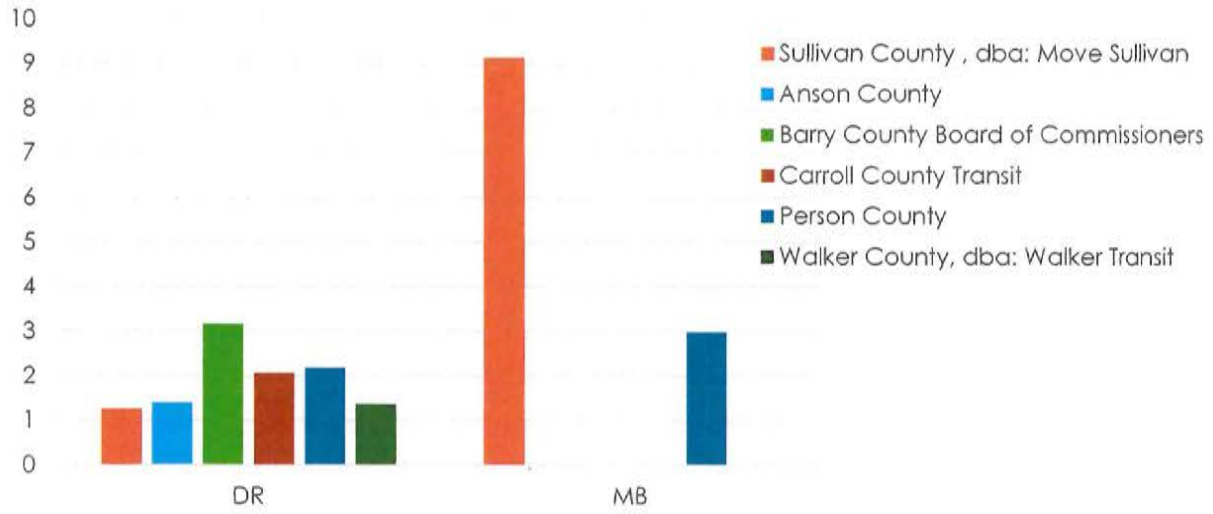


Figure 14. Rides per Hour



Spatial Analysis

This section summarizes map-based data to better analyze and visualize service performance and gaps throughout Sullivan County. This section summarizes findings from TM #2: Demographics and Transit Markets and presents additional analyses of activity centers access.

DEMOGRAPHICS FINDINGS

Key findings from TM #2: Demographics and Transit Markets are as follows:

- Fallsburg, Bloomingburg, and Loch Sheldrake have high percentages of youth (age under 18), people below the poverty line, racial/ethnic minorities, people with limited English proficiency (LEP). These demographic characteristics usually correspond with higher transit use.
- Areas of high population density generally share the same patterns as areas with high employment density. Monticello and the surrounding area generally has the highest population and employment density in Sullivan County followed by Liberty.

» Of the two largest population centers in Sullivan County, only Monticello has a significant population percentage for a demographic category associated with higher transit use. Liberty does not rank in the top three municipalities for any of the nine categories.

Key Finding: This analysis points to a need to ensure transit access to municipalities with high percentages of demographics who historically rely on transit. Fallsburg, Bloomingburg, and Loch Sheldrake rank high in multiple categories indicating transit dependence. At the same time, demographics who rely more heavily on transit may not make up as high of a percentage of the population in larger communities, but the larger communities will naturally have higher amounts of these populations. Demand-response services may be more fitting to meeting needs in smaller communities and rural areas while larger communities may be better served by more fixed-route services.

ACTIVITY CENTERS ANALYSIS

Activity centers that drive demand for transportation services include facilities such as nursing homes, clinics, colleges, schools, grocery stores, and jobs. Figure 15 shows the relative job density using LEHD data to fixed-route services. Figure 16 shows the locations of these activity centers compared to Move Sullivan fixed-route services. Key findings are as follows:

» Job Access: The fixed-routes service approximately 9,882 jobs within a 500 foot buffer. Denser population centers such as Monticello Village or Liberty Village have multiple bus lines and a higher overall job density.
» Overall, resources such as health destinations, grocery stores, and education opportunities are limited in Sullivan County and may be difficult to access, in particular by smaller communities where people must travel farther to reach resources.
» Nursing homes: Most of the nursing homes are located along or in close proximity to a fixed-route. The New Swan Lake Adult home is a quarter mile north of Route C.
» Clinics: Two of three clinics are located along the following fixed-routes:
    - Route A
    - Route B
    - Route C
» College: SUNY Sullivan is a community college located in Loch Sheldrake and is serviced by Route A and Route B.
» Schools: Most schools, about 80%, are located within a quarter mile of a fixed-route. One public school, Tri-Valley Secondary School, is about a third of a mile from the closest fixed-route. The Homestead School, a private school, does not have any fixed-route within a mile.
» Grocery Stores: Most grocery stores are within 500 feet of a fixed-route, though the Peck's Market in Livingston Manor is about 700 feet from Route E. 10 out of the 12 fixed-routes are within 500 feet of a grocery store in the county.

Key Finding: This analysis points to a need for better access to activity centers and jobs via transit. Most of the activity center are within a reasonable walking distance to the fixed-route transit network, but riders must be able to access the fixed-route network to make use of this connection.

There are multiple areas in Sullivan County with concentrations of jobs without access to transit. Narrowsburg and Grahamsville are two locations that are completely inaccessible through fixed-route transit.

Figure 15. Job Density and Fixed-Route

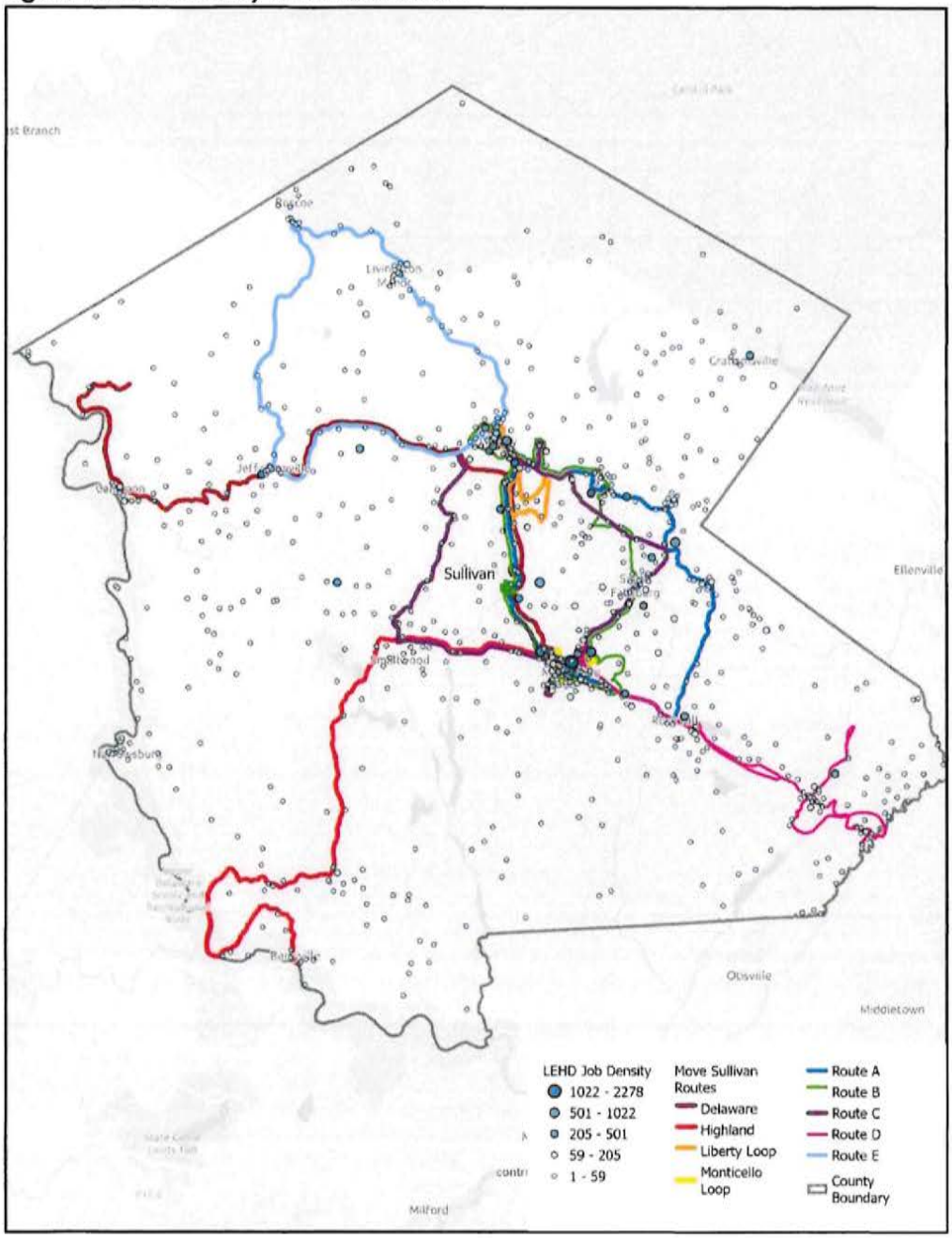
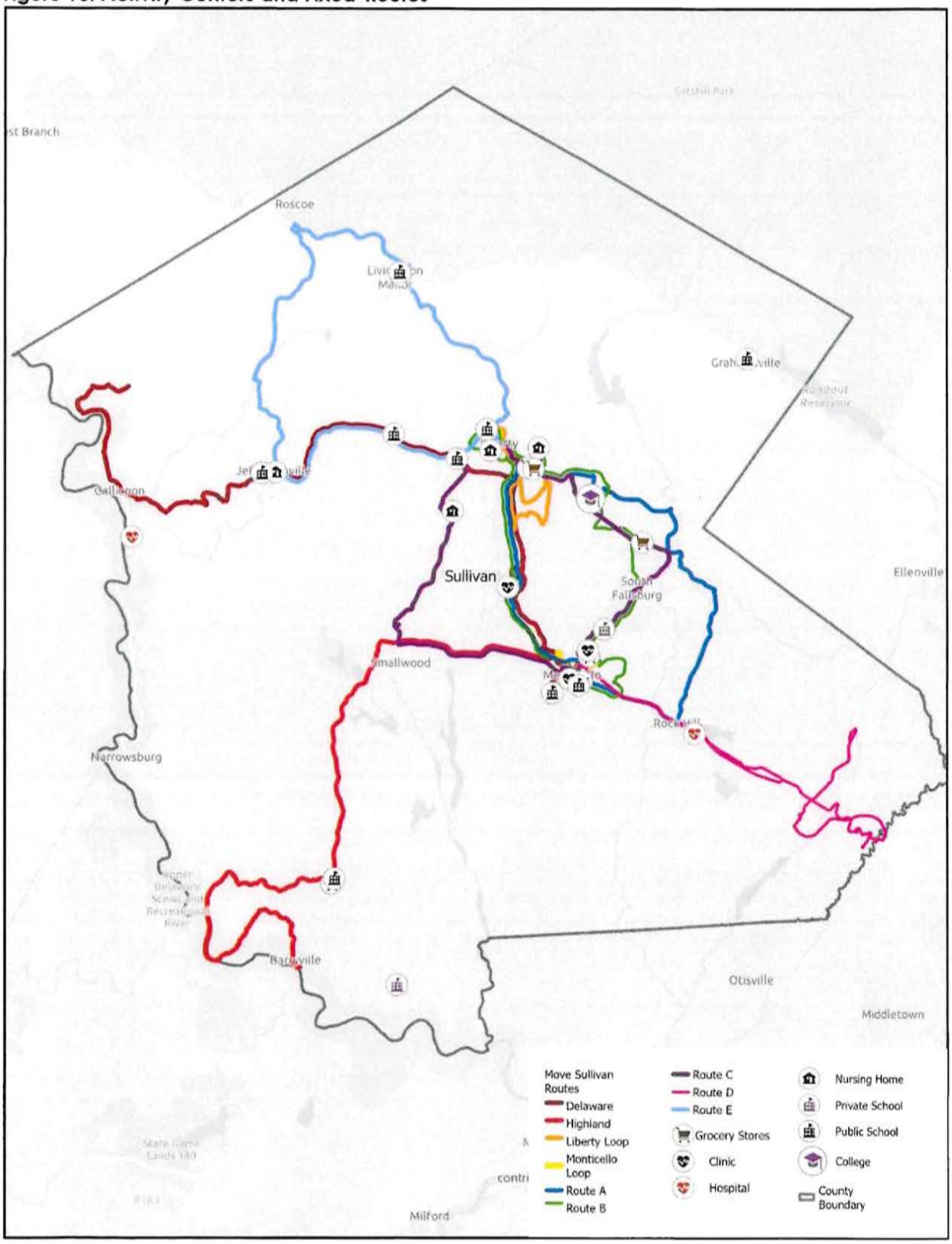


Figure 16. Activity Centers and Fixed-Routes

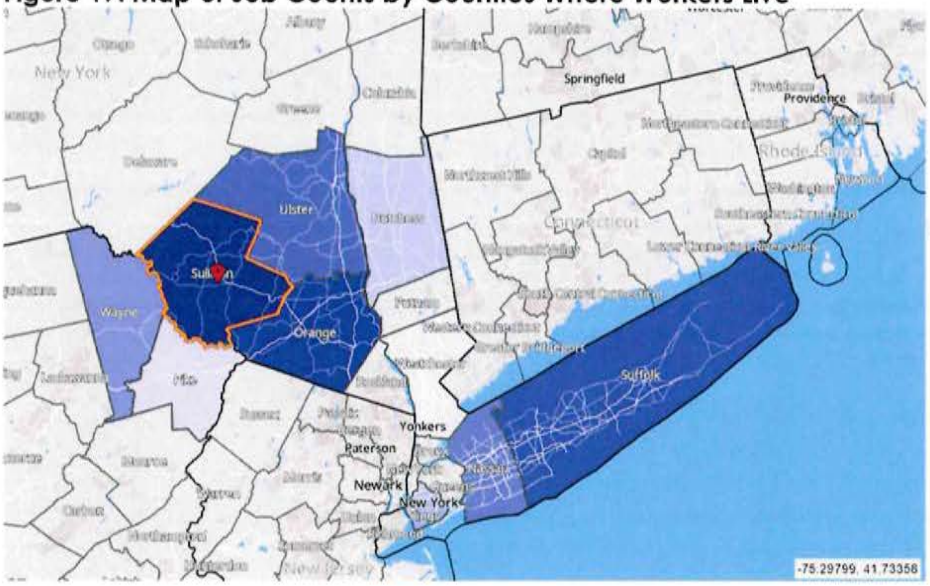


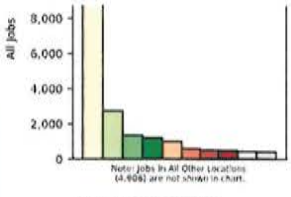
CENSUS COMMUTE PATTERNS AND TIME TO WORK ANALYSIS

Census commute patterns and the time to work analysis describe work travel patterns that may indicate general transit demand, and be indicative of broader travel needs. This information is largely based on Longitudinal Employer-Household Dynamics (LEHD) employment data from the U.S. Census Bureau[1]. This dataset provides valuable information about where workers live and work. Since this dataset is generated based on administrative records, some work locations may be over- or underrepresented. For example, if workers in Sullivan County have their paychecks processed with an address in Suffolk County, their job site may be shown in Suffolk County instead of Sullivan County, if no local address is given in the administrative data. All data in this section are from 2022 which is the most recent year with complete data. Key findings include:

- Figure 17 and Table 4 show where commuters employed in Sullivan County live. Nearly half of all of workers commuting to Sullivan County live in Sullivan County, with other commute counties including Orange, Ulster, and Wayne counties.
- Figure 18 and Table 5 show the number of workers who live in Sullivan County and where they commute. After Sullivan County, Orange County has the second largest share of workers who commute outside of Sullivan County.
- Figure 19 maps the number of jobs in Sullivan County and the surrounding counties by distance for workers who live in Sullivan County. Roughly a third of all jobs are within 10 miles of Sullivan County. Table 4 and Table 5 help to illustrate this statistic since the counties that border Sullivan (Ulster and Orange) are in the top 5 counties.
- Figure 20 is an inflow/outflow diagram of commuters and shows that 48.8% work and live in Sullivan County and 51.2% travel outside from outside the county to work. For those who live in Sullivan County, a majority (58.6%) travel outside the county to work.

Figure 17. Map of Job Counts by Counties Where Workers Live





View as Bar Chart

Job Counts by Counties Where Workers Live - All Jobs

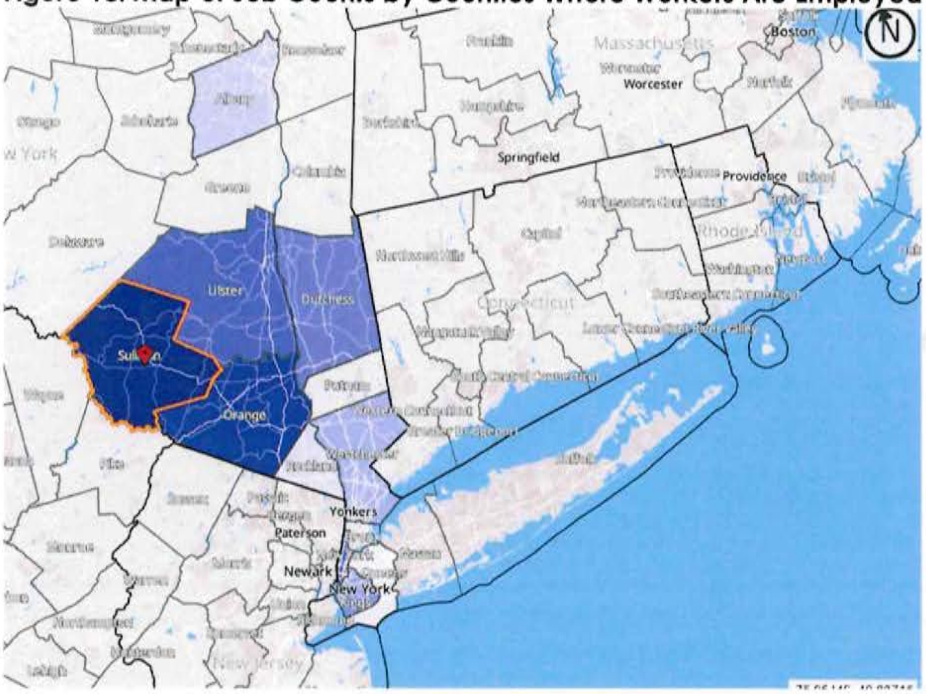
	2022 Count	Share
All Counties	26,701	100.0%
Sullivan County, NY	13,027	48.8%
Orange County, NY	2,746	10.3%
Suffolk County, NY	1,354	5.1%
Ulster County, NY	1,210	4.5%
Nassau County, NY	1,004	3.8%
Wayne County, PA	595	2.2%
Kings County, NY	513	1.9%
Dutchess County, NY	493	1.8%
Pike County, PA	436	1.6%
Westchester County, NY	417	1.6%
All Other Locations	4,906	18.4%

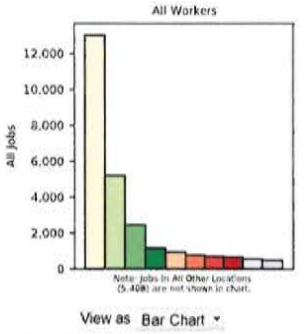
[1] https://onthemap.ces.census.gov/

Table 4. Job Counts by Counties Where Workers Live

Rank	County Name	Count of Workers	Share of Total Workers
1	Sullivan County, NY	13,027	48.8%
2	Orange County, NY	2,746	10.3%
3	Suffolk County, NY	1,354	5.1%
4	Ulster County, NY	1,210	4.5%
5	Nassau County, NY	1,004	3.8%
6	Wayne County, PA	595	2.2%
7	Kings County, NY	513	1.9%
8	Dutchess County, NY	493	1.8%
9	Pike County, PA	436	1.6%
10	Westchester County, NY	417	1.6%

Figure 18. Map of Job Counts by Counties Where Workers Are Employed





View as Bar Chart

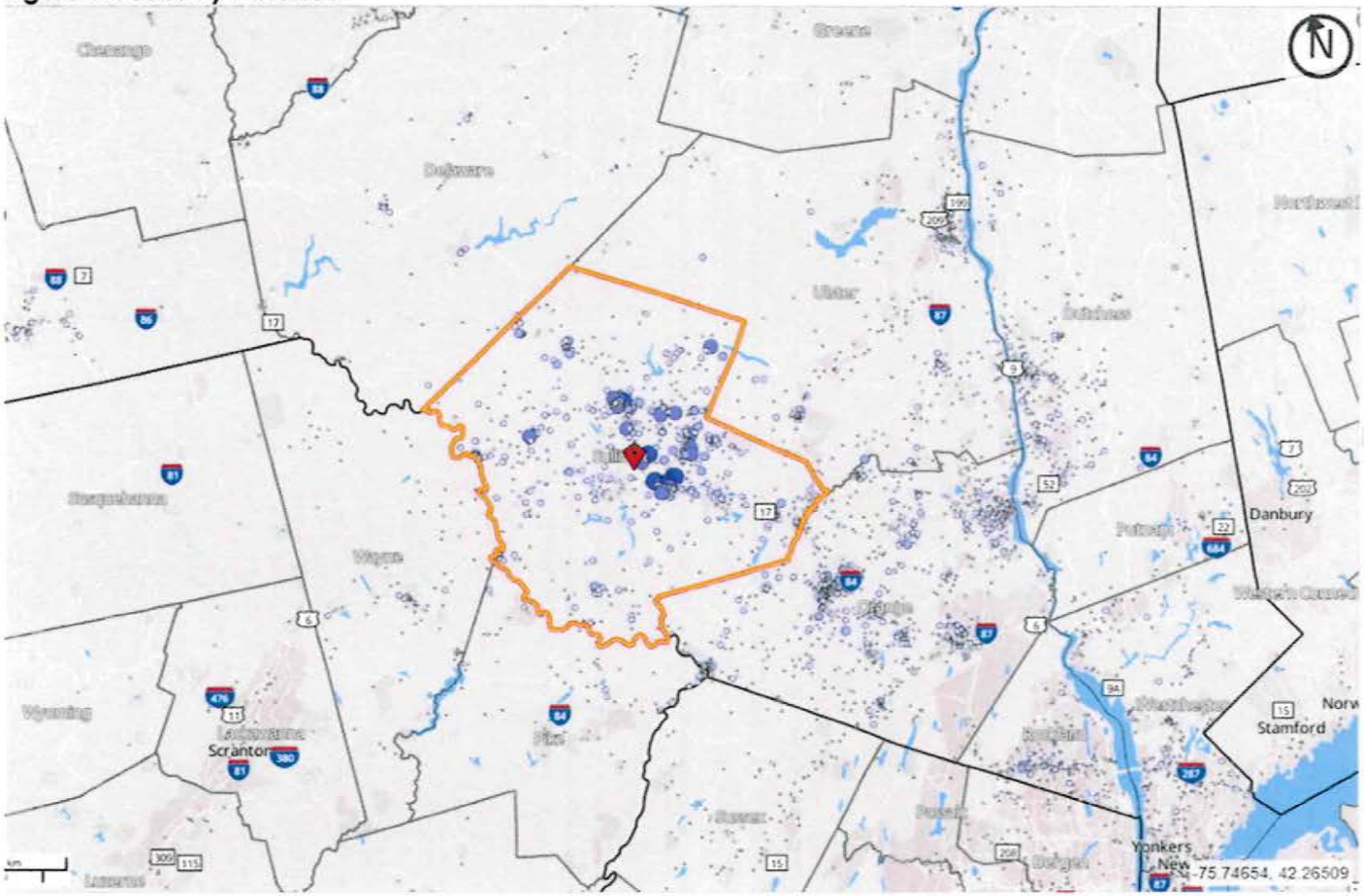
Job Counts by Counties Where Workers are Employed - All Jobs

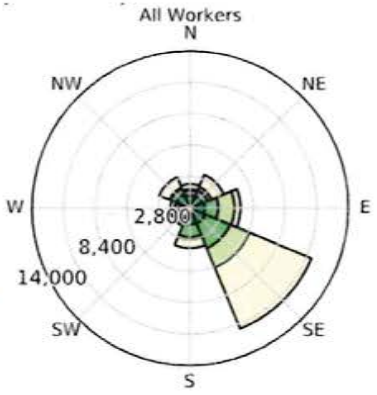
	2022 Count	Share
All Counties	31,440	100.0%
Sullivan County, NY	13,027	41.4%
Orange County, NY	5,208	16.6%
New York County, NY	2,458	7.8%
Ulster County, NY	1,181	3.8%
Dutchess County, NY	946	3.0%
Kings County, NY	773	2.5%
Westchester County, NY	710	2.3%
Albany County, NY	671	2.1%
Rockland County, NY	560	1.8%
Queens County, NY	498	1.6%
All Other Locations	5,408	17.2%

Table 5. Job Counts by Counties Where Workers are Employed

Rank	County Name	Count of Workers	Share of Total Workers
1	Sullivan County, NY	13,027	41.4%
2	Orange County, NY	5,208	16.6%
3	New York County, NY	2,458	7.8%
4	Ulster County, NY	1,181	3.8%
5	Dutchess County, NY	946	3.0%
6	Kings County, NY	773	2.5%
7	Westchester County, NY	710	2.3%
8	Albany County, NY	671	2.1%
9	Rockland County, NY	560	1.8%
10	Queens County, NY	498	1.6%

Figure 19. Jobs By Distance



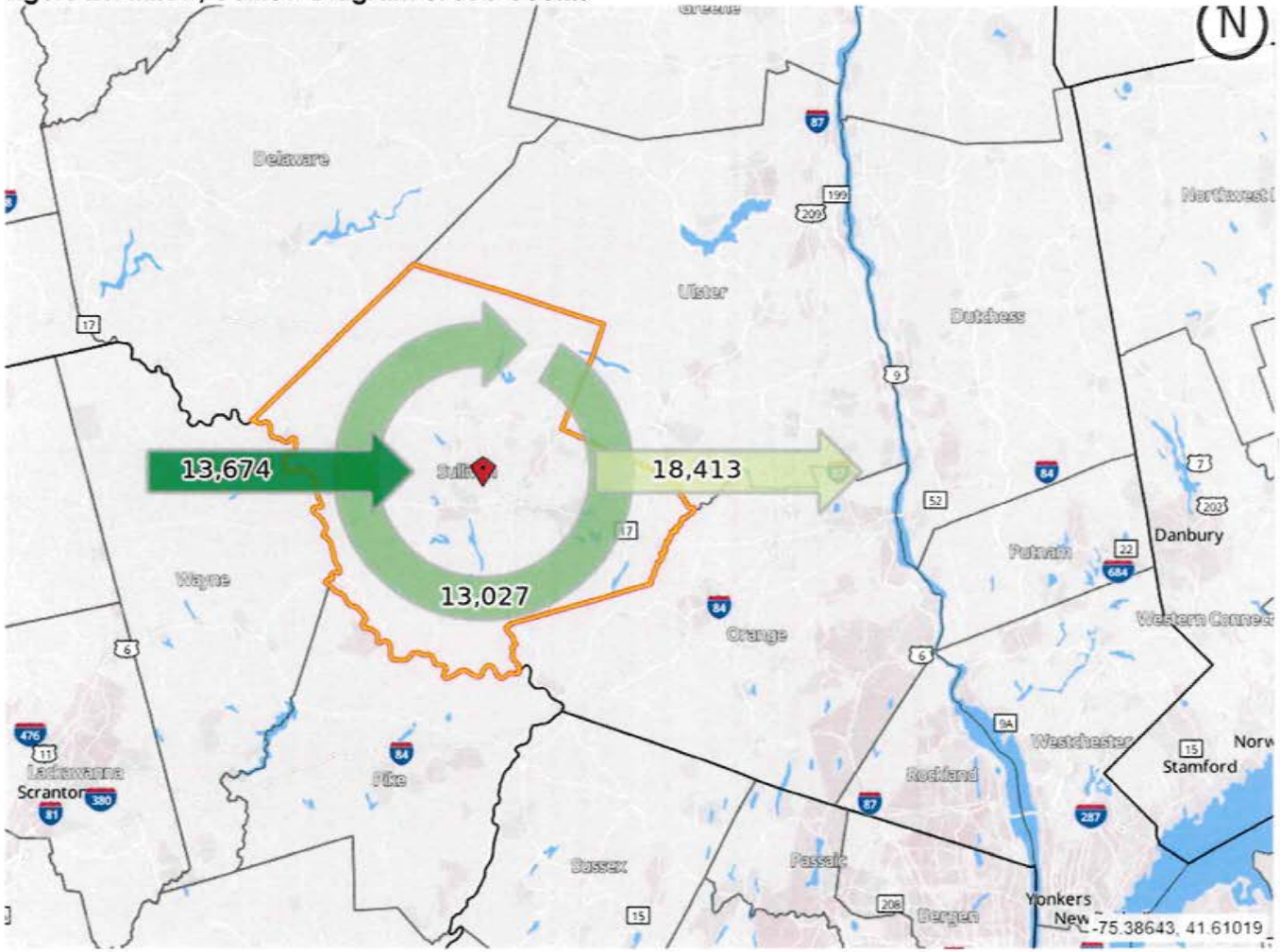


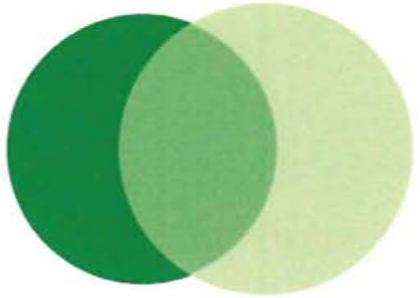
View as Radar Chart

Jobs by Distance - Home Census Block to Work Census Block

	2022 Count	Share
Total All Jobs	31,440	100.0%
Less than 10 miles	10,070	32.0%
10 to 24 miles	6,823	21.7%
25 to 50 miles	4,188	13.3%
Greater than 50 miles	10,359	32.9%

Figure 20. Inflow/Outflow Diagram of Job Counts





Inflow/Outflow Job Counts (All Jobs)

	2022 Count	2022 Share
Employed in the Selection Area	26,701	100.0%
Employed in the Selection Area but Living Outside	13,674	51.2%
Employed and Living in the Selection Area	13,027	48.8%
Living in the Selection Area	31,440	100.0%
Living in the Selection Area but Employed Outside	18,413	58.6%
Living and Employed in the Selection Area	13,027	41.4%

Reset Highlighting

COMMUNITY INVOLVEMENT

This section describes the various stakeholder involvement opportunities that informed this plan. The engagement strategy was conceived and designed with the following goals. It served as a "living document" to provide additional insights for greater inclusivity and effective outreach based on lessons learnt.

1. Develop a body of shared knowledge regarding issues and opportunities in Sullivan County in coordination with an appointed Steering Committee.
2. Work with the Steering Committee to develop a shared community vision in response to outreach findings and existing conditions analysis.
3. Solicit suggestions on transportation services systems and responsibilities to support the overall Sullivan County CTSP.
4. Identify potential key partnership(s) among stakeholder(s) that will benefit the implementation of the overall Sullivan County CTSP and community-at-large.
5. Keep an open communication channel throughout the duration of the planning process.

Steering Committee

The Steering Committee (SC) provided representation from transportation providers; agency members; organizations involved in the care of elderly and disabled populations; and other stakeholders invested in transportation options for Sullivan County. Table 6 summarizes the meetings and their goals and outcomes.

Table 6. Steering Committee Meeting Schedule

Meeting Number	Date	Goals and Outcomes
#1	September 10, 2025	Welcome and Project Kick-off Outreach Strategy and Network of Stakeholders Visioning Session
#2	October 15, 2025	Workshop on Vision and Goal Statement Initial Needs and Gaps Review
#3	November 12, 2025	Draft Plan presentation Feedback prior to legislation

Focus Groups

The following focus group sessions were conducted for group feedback on transportation issues:

- Education, Employment, and Training (September 19, 2025, 2:30-3:45 PM)
- Workforce Development Board (September 18, 2025, 12:00-1:00 PM)
- Orthodox Jewish Religious Group (September 15, 2025, 12:00-1:15 PM)
- Human Service Provider (September 12, 2025, 12:15-1:30 PM)

Stakeholder Interviews

The following interviews were conducted for stakeholder feedback on transportation issues:

- Refuah Health (September 18, 2025, 2:00-3:00 PM)

- SC Division of Health and Human Services (September 24, 2025, 2:00-3:00 PM)
- ARC Greater Hudson Valley (September 25, 2025, 1:00-2:00 PM)
- Garnet Medical Center Catskill (October 8, 2025, 1:00-2:00 PM)
- Sullivan County Partnership for Economic Development (October 20, 2025, 2:00-3:00 PM)
- SUNY Sullivan Community College (October 20, 2025, 3:00-4:00 PM)
- New Hope Community (October 20, 2025, 4:00-5:00 PM)
- Center for Discovery (November 18, 2025, 11:00 AM – 12:00PM)

Provider Survey

Transportation providers, including both public and private providers, responded to a survey about their operations and fleet, how their clients use their services, and what they perceived as Sullivan County's transit needs. The findings from this survey are incorporated into the "Baseline Conditions" section and informed this plan's needs and recommendations.

Community Survey

An online survey was available to the public from September 17, 2025 to October 27, 2025, with additional paper surveys received through November. The survey asked about:

- bus use, frequency of use, services used, trip purpose,
- what makes people not use transit for their trips,
- locations and intercity destinations where respondents would like to use transit,
- which time of day, and days of week they'd want to use transit,
- preferences for the type of bus service (balancing fewer transfers versus more frequent service), and
- demographic information.

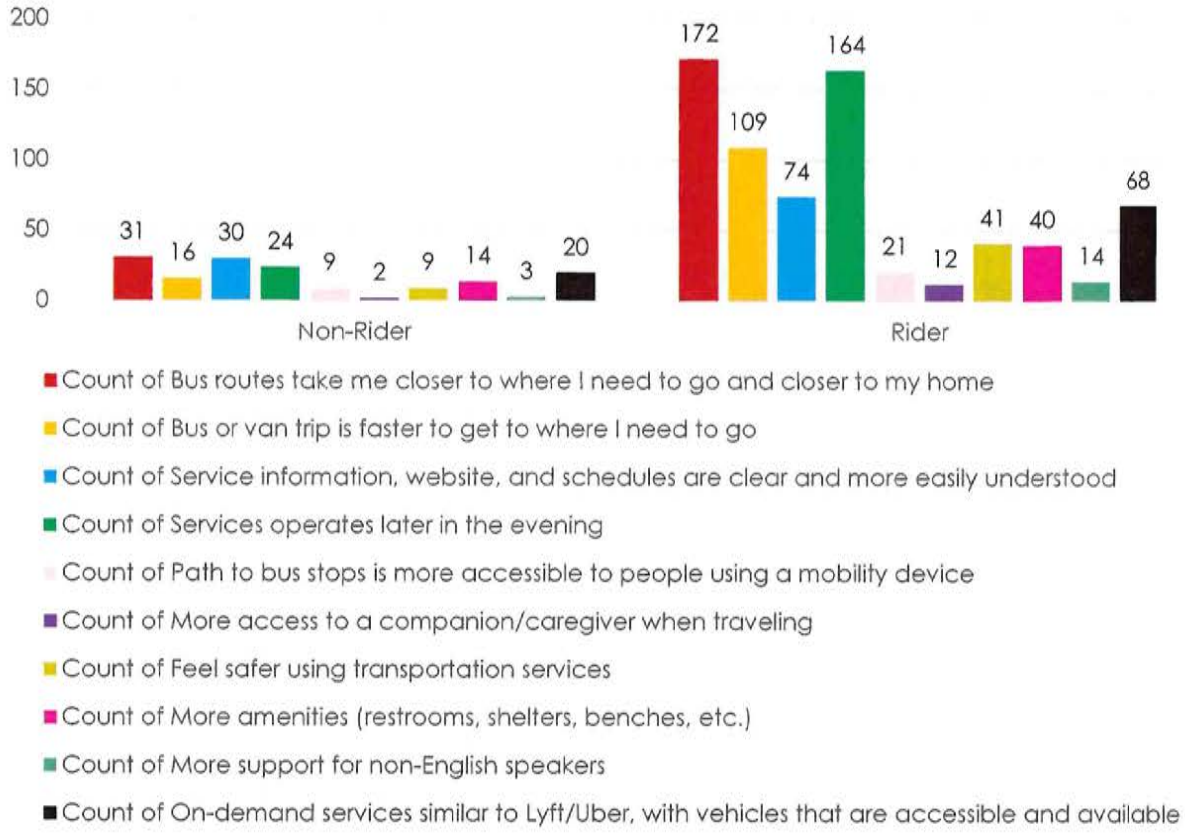
There were 460 responses to the survey. Key findings from the survey include:

- The most used transit service was Move Sullivan, though many respondents also report using medical transportation & taxi services. About 15% of respondents did not use any of these services.
- Most respondents who use transit services use them several times a week. Others report using these services once per week or a few times a month, while less than a tenth of respondents use these services a couple times a year.
- Respondents most commonly rode services between 9 AM and 3 PM, though use was high from 6 AM through 6 PM. Respondents also most frequently ride on weekdays, though weekends still had substantial ridership specifically on Sundays.
- Existing riders' top trip purposes include shopping, work, and health care. Education, social services, and recreation were also popular trip purposes.
- Nearly half of respondents use transit to reach Monticello or Liberty, while most others travel to nearby areas, especially Bloomingburg, South Fallsburg, Fallsburg, Hurleyville, and Loch Sheldrake.
- A majority of respondents cited a preference for driving as a reason for not using transit services. The next most common reasons were that service doesn't go where or when people need it to. Less respondents mentioned that buses aren't frequent or fast enough,

and only a few cited costs, difficulty paying fares, disabilities, or other personal reasons. As Move Sullivan services are free, the costs and difficulty paying fares responses indicate either fares/charges for other services like taxis, or a misunderstanding of how to use the Move Sullivan system.

- Transit riders generally felt they understood the services fairly well, with the most common responses being "very well", "well", or "neutral." Non-riders tended to report lower levels of understanding, most often choosing "poor" or "neutral." Only a few non-riders said they understood transit services very well.
- When asked what improvements would help most, respondents pointed to routes that go closer to their destinations or homes, faster trips, and longer evening hours. Many also supported clearer service information and more on-demand options, reflecting interest in greater convenience and flexibility.
- Both riders and non-riders most often wanted bus service to Monticello and Liberty, showing strong agreement across groups. Interest in other nearby communities such as South Fallsburg, Fallsburg, and Bloomingburg was also similar between riders and non-riders. Regional destinations like the New York City metro area and Orange County were popular as well, particularly among riders.
- **Demographics Findings:**
  - For transit riders, the largest respondent groups across categories are ages 30-39; White/Caucasian; no reported disabilities; full-time or part-time employed; households with 1 vehicle; and annual income between $10,000 - $24,999.
  - Among non-riders, the largest respondent groups across categories are ages 65 and older; White/Caucasian; no reported disabilities; full -time employed or retired; households with one vehicle; and annual income between $50,000-$74,999.

What improvements would benefit you when using transportation services in Sullivan County?



VISION AND GOALS

The following vision and goals were drafted based on conversations with key partners and desired outcomes for the transportation service network. It will be reviewed with the Steering Committee, updated, and used to guide strategies to meet these goals. The draft vision is as follows:

> *Strengthen the Move Sullivan network for greater economic mobility, access to medical services and other critical resources for all communities across the County by expanding routes and hours of operation, improving transit infrastructure, and adding "last-mile" transit access.*

Goal Statements

	Align Move Sullivan schedules and frequency with essential trips such as access to medical services, major industry work shifts, and day-to-day activities to meet needs and grow ridership.
	Increase access to the transportation service network through investments in last-mile travel, including on-demand transportation services, micromobility options, and paratransit services.
	Invest in infrastructure such as bus shelters and low-floor buses to enhance user experience.
	Explore incentives to increase ridership and access with potential implementation partners.
	Providing an accessible information distribution framework/system to accommodate a broad user demographic.

NEEDS ASSESSMENT

The goal statements were developed by summarizing the key needs heard throughout outreach and discovered through analysis of transportation services in Sullivan County. Specific findings and community feedback for each of these goals is as follows.

Align Move Sullivan schedules and frequency with essential trips such as access to medical services, major industry work shifts, and day-to-day activities to meet needs and grow ridership.

For strategies to address these needs, see: ***Service Plan***

Specific feedback from outreach included:

- Additional Routes/Services
  - Launch a western-corridor pilot: a fixed route as desired by Dr. Dufour linking Eldred and Callicoon via NY-55/17B with stops at Western Sullivan Public Library.
  - Additional service to BOCES Western Liberty campus as part of expansion in Western Sullivan County service.
  - Provide service to the Grahamsville area along Route 55.
  - Core corridors operate frequent service (30-minute headways or better) 6 AM–11 PM, while feeder/on-demand services cover early morning/overnight/low-demand periods to support 24/7 employers. Weekend and seasonal schedules are integrated and funded. Particular emphasis for service improvement should center on Liberty, Fallsburg, Monticello, and Bloomingburg.
  - Launch on-demand zones serving low-density areas and mobile home parks and integrate with fixed routes to solve first/last-mile gaps.
- Route Changes/Adjustments
  - Create targeted route adjustments in Bloomingburg & Liberty to reduce overcrowding and provide more direct A to B trips and change the structure of high-demand routes to bidirectional, as opposed to one-way loop, service.
  - Implement a hub-and-spoke and frequent-trunk system connecting Monticello, Liberty, Bloomingburg, Callicoon, and key employment clusters. Eliminate many long one-way loops in favor of direct routing and timed transfers at centralized nodes (e.g., Western Sullivan Library hub, supermarket nodes in key towns).
  - Expand early-morning service offers, perhaps with a similar emphasis as evening service routes (i.e., only on routes with particularly promising demand at such hours), targeted in particular to service industry workers.
  - Add extended evening service on high-ridership corridors (target 7 PM–11 PM on select routes serving healthcare facilities such as Arc Hudson Valley and Refuah Health) and pilot limited overnight/late-shift runs coordinating with hospitals, care facilities, and large employers, such as Walmart.

Increase access to the transportation service network through investments in last-mile travel, including on-demand transportation services, micromobility options, and paratransit services.

For strategies to address these needs, see: ***Service Plan, Management and Partnership Plan***

Specific feedback from outreach overlaps with the first goal statement (see above).

Invest in infrastructure such as bus shelters and low-floor buses to enhance user experience.

For strategies to address these needs, see: ***Capital Plan***

Specific feedback from outreach included:

- Install shelters, seating, lighting, and readable multilingual signage at high-use stops.
- Move Sullivan buses could be more accessible (low-floor boarding needed).
- Riders face unsafe walking/biking access to stops. Expanded protected active transportation routes should be created to both access Move Sullivan and provide feasible alternatives for certain trips.
- Procure replacement buses that better accommodate micromobility devices, wheelchairs, shopping carts, and strollers on a phased schedule, retrofitting highest-priority routes first when possible (serving group homes, healthcare shuttles, and medical providers).

Explore incentives to increase ridership and access with potential implementation partners.

For strategies to address these needs, see: ***Management and Partnership Plan***

Specific ideas from outreach included:

- Programs
  - Implement Sunday service pilot focused on areas with high Orthodox Jewish demand.
  - Offer on-demand service for evening workforce training sessions and healthcare appointments, again coordinated with transportation services offered for special-interest groups that are more widely visible and available for use (such as special-needs child transportation by the county's Division of Health & Human Services).
  - Partner with local institutions like SUNY Sullivan, as well as large employers, to establish a more robust and formalized carpooling network.
  - Consider offering nonmotorized transit services in key locations where physically active populations access Move Sullivan (e.g., pilot subsidized/free scooters and/or bikeshare between workforce housing and nearby Move Sullivan stops).
  - Continue countywide fare-free program (sponsored with employers/grants) with a commuter incentive card option for participating businesses offering discounts.
  - A mix of stable local funding streams, state/federal transit grants, employer contributions, and potential Medicaid waiver/1115 partnership programs to fund patient shuttles and structural operating costs (leveraging Division of HHS and Hudson Valley Care Coalition relationships) is used.

- Expanded micromobility offerings, including along the O&W Trail, to address mobility access, sustainability, and public health goals.

» Partnerships
- Formalize partnerships with Refuah Health for regular patient shuttle schedules, with the potential for these to be available to the general public as well, and with SUNY Sullivan and BOCES for shared trip planning and potential childcare coordination.
- Create a partnership with the New Hope Community to increase the accessibility and quality of paratransit services offered by all providers in Sullivan County.
- Launch an employer engagement program (Chamber of Commerce, the Workforce Board, major employers like Walmart, Garnet Hospital, Woodbourne Correctional Facility) to coordinate shift schedules, commuter incentives, and shared pickup points, making alternative transportation more convenient.
- Coordinate student and special-needs transport contracts with school districts and local education partners to consolidate routes and reduce duplication, as well as improve financial efficiency.
- Coordinate land use changes and business relocation incentives with both the Sullivan County Partnership for Economic Development and the Transportation Department to ensure growth and jobs are distributed in ways conducive to more regular transit service.

Providing an accessible information distribution framework/system to accommodate a broad user demographic.

For strategies to address these needs, see: ***Technology and Information Plan***

Specific feedback from outreach included:

» Implement real-time vehicle tracking and publish schedules to Google Maps and other trip planners; provide schedules in targeted languages (Yiddish, Hebrew, Spanish, and English) that can be printed and distributed via community partners.

» Create a clear, well-advertised paratransit and patient-shuttle information package coordinating all publicly available options, including those for particular trip types such as those provided by Refuah Health for accessing appointments.

» Integrate trip booking for fixed-route, microtransit, paratransit, on-demand services, and patient shuttles, with multilingual support and offline booking channels for limited-internet users.

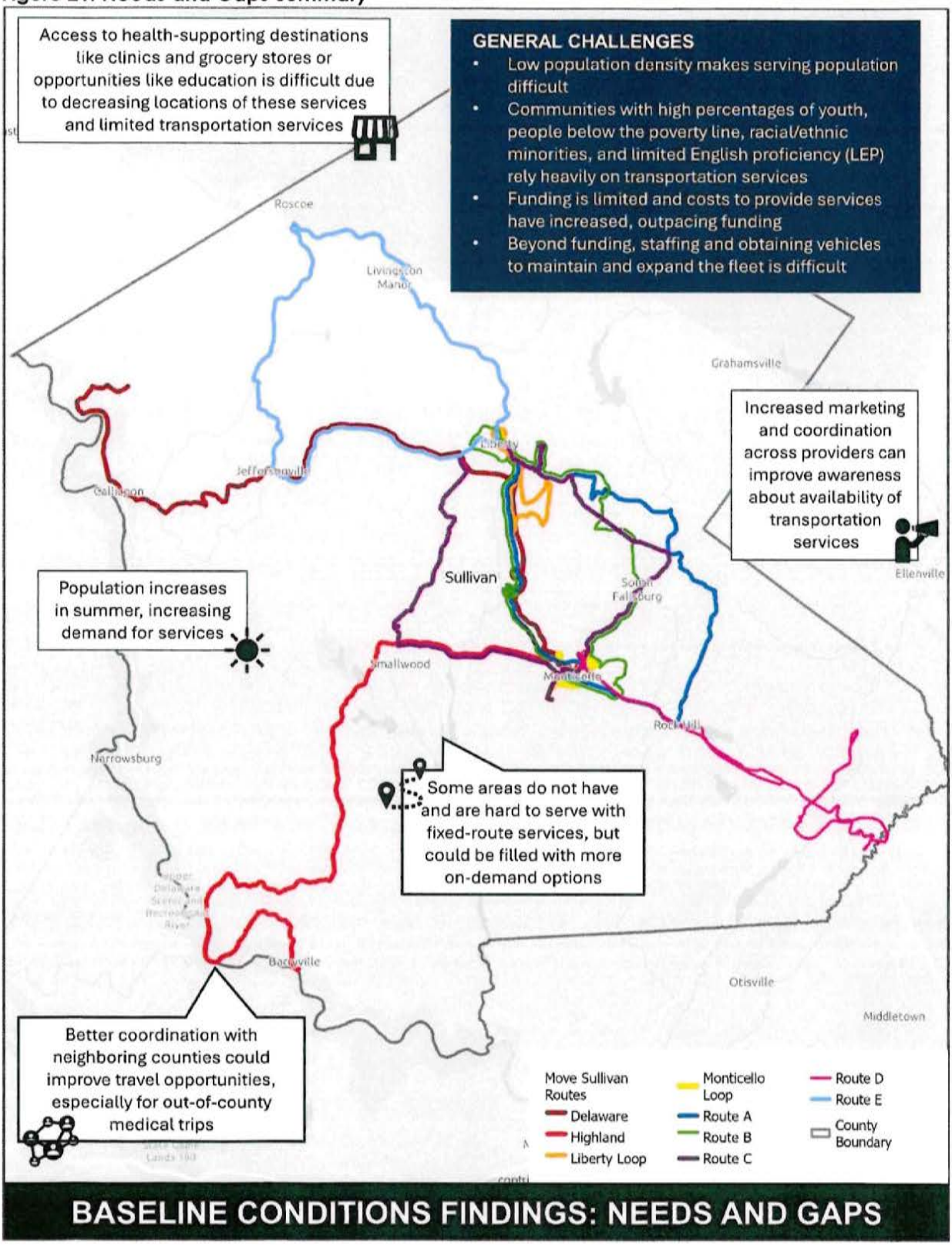
» Connections to services outside of Sullivan County, such as to Rockland and Orange Counties, should be seamless and with integrated information offerings such that service is easy and convenient to use, regardless of the service provider.

» Staffing
- Invest in driver recruitment and retention (apprenticeship programs through the Workforce Development Board of Sullivan, Inc. and the related Center for Workforce Development, competitive pay, predictable schedules) to address ensuing nationwide transit operator shortage.

Needs Summary

The needs and gaps identified through the baseline conditions analysis and outreach are summarized at a high-level in Figure 21.

Figure 21. Needs and Gaps Summary



BASELINE CONDITIONS FINDINGS: NEEDS AND GAPS

SERVICE PLAN

This section describes the toolkit of service types that could be considered to meet the above identified needs, describes potential adjustments to existing services to meet needs, or describes new routes or services that could be further explored.

Service Types and Characteristics

Public transportation service is generally designed with several factors in mind. These include:

- The characteristics and travel needs of potential riders (e.g., key origins and destinations within the service area);
- The trade-offs the community is willing to make in providing service (e.g., balancing geographic coverage and frequency); and
- The surrounding land use context and intensity of development (e.g., population and employment densities).

The service model may focus on one or several types of services, including:

- **Local fixed-route services**: These services tend to be the most visible and are increasingly cost-efficient as ridership increases. Local service provides connections within communities, generally with relatively closely spaced stops. Local service is suitable in areas with higher population and/or employment densities. The Americans with Disabilities Act (ADA) requires complementary paratransit service within ¾ mile of the fixed route during the hours that fixed-route service operates, which entails extra costs.
- **Deviated fixed-route services**: These services combine elements of fixed-route and demand-response service (e.g., a route serves specific stops at specific times) but is allowed to deviate from the route to pick up and drop off passengers. Some small-city systems with relatively low ridership use flexible routes to eliminate the need for ADA paratransit service (as the ability to deviate serves some needs of people with limited mobility), with the trade-off that additional time must be provided in the schedule to accommodate these deviations.
- **Demand-response services**: These services do not follow fixed routes or serve fixed stops and therefore can provide curb-to-curb service between origins and destinations. Passengers request rides (often over the phone or via a smartphone app), and the provider optimizes vehicle routing to serve passengers most efficiently. Transit accessibility is maximized, but per-trip costs can be significantly higher than other service types, as there are typically only one or two people traveling between any given origin and destination. Non-ADA passengers may not be able to travel at their desired time to better match trips.
    - Demand-response services with app-based requests and dynamic scheduling are often called *microtransit* programs.
- **Shuttles**: This service is designed to serve regular trips to key local or regional activity centers such as commercial districts, grocery stores, or medical facilities. These routes may be the only regular or fixed-route service available within the area or times that they operate. Service models for shuttles are typically deviated fixed-route or demand-responsive.
- **Vanpools**: Vanpools can be considered public transportation services. Vanpools are well-suited to commute trips between clustered residences and job locations, and vanpool fares can cover much of the expense of operating the program.

- **Rural intercity or intercommunity service**: This longer-distance fixed-route service typically connects individual communities, serving relatively few major stops at key activity or employment centers and connecting to local service with each city. Intercity frequency is based on market size and can be scaled to meet demand; some may operate every day, while others are "Lifeline" routes that operate once a week. If they meet Federal Transit Administration (FTA) "intercity" definitions, they are not required to provide ADA paratransit service, which lowers the overall cost of providing service, but limits flexibility in accessing services.

In addition to their capital and operating costs, each of these services requires coordination with other transit providers, connecting counties, communities, NYSDOT, or other organizations. For example, new transit services need to develop and provide their route information to adjacent providers and trip planning applications such as Google Transit. New services also need to use stops – existing transit centers, new stops, or improved existing stops -- that would then have more activity. Lastly, services need to consider the likely transfers to adjacent providers.

The current Move Sullivan costs by route are as follows and were used where specific route changes are discussed:

- Route A = $91.00
- Route B = $117.60
- Route C = $109.23
- Route D = $123.17
- Route E = $132.89
- Liberty Loop = $100.96
- Monticello Loop = $92.56

Table 7 shows estimates for the typical coverage area, route flexibility, vehicle size/capital cost, operating cost per hour, and rides per hour for the service types listed above. Generally, services using smaller vehicles or covering smaller geographic areas tend to be lower cost per hour. Those covering longer-distance or more fixed-route trips tend to have higher cost rides per hour than those serving more local, curb-to-curb needs. Typical operating costs per hour and rides per hour are based on 2023 NTD reported data for New York rural transit providers.

Table 7. Service Type Specifications

Services	Typical Coverage Area		Flexibility			Vehicle Size and Capital Cost		Typical Operating Cost per Hour	Rides per Hour
	Regional	Local	Fixed-Route	Deviated Fixed-Route	Demand-Response	Lower	Higher		
Fixed-Route	X	X	X				X	$105/hour	4-6
Deviated Fixed-Route		X		X			X	$100/hour	3-5
Demand-Response		X			X	X		$90/hour	2-4
Shuttles		X	X	X	X	X		$95/hour	3-4
Vanpools	X		X	X	X	X		$95/hour	4-5
Intercommunity Service	X		X	X		X	X	$150/hour	3-5

Different service types are appropriate based on existing and potential future land use. Table 8 summarizes appropriate transit service types by land use type and density, including typical service models and service frequencies. Based on existing land uses, the majority of Sullivan County can be considered "Low Density", with several of the larger communities moving toward "Mixed Neighborhoods" levels of densities. Sullivan County does not currently have "urban mixed-use" or "neighborhood & suburban mixed-use" densities, although parts of the growing communities could develop these higher densities in the future.

Table 8. Local Transit Service Design Guidance Summary

Land Use			Transit	
Land Use Type	**Households per Acre**	**Jobs per Acre**	**Appropriate Types of Transit**	**Frequency of Service**
Urban Mixed-Use	15+	15+	Bus Rapid Transit Rapid Bus Local Bus	10–15 minutes
Neighborhood & Suburban Mixed-Use	6–15	10–15	Local Bus	15–30 minutes
Mixed Neighborhoods	4–6	5–10	Local Bus Demand-Response	30–60 minutes or demand-response
Low Density	1–4	2–5	Demand-Response Shuttles or Vanpools	60+ minutes or demand-response

Source: Synthesis of industry standards, including TCRP Report 165: Transit Capacity and Quality of Service Manual, adapted to local context.

ON-DEMAND IN RURAL AREAS

This section describes several demand-response services in more rural areas. Table 9 compares Sullivan County to the described providers based on service area size, population served, and eligible riders. The discussion shaded in blue describes these different programs and their key takeaways from operating these systems.

Table 9. Service Area Size and Population

Provider/Area	Size	Population Served through Service	Density (pop per square mile)	Eligible Riders
Sullivan County	1,010 square miles	76,000 residents	76	-
Fort Erie On-Demand	64 square miles	32,900 residents	514	General public
RideConnection Door-to-Door Service	600 square miles	45,000 residents	90	Older adults and people with disabilities
Winnebago County Catch-a-Ride	580 square miles	170,000 residents	293	Residents of Winnebago County who meet employment and income criteria
Hermiston WORC Taxi Program	280 square miles	40,000 residents	143	People employed in western Umatilla County

Fort Erie On-Demand

In October 2021, Fort Erie, Ontario implemented a mobility-on-demand system integrated with smartphone software to replace its fixed-route community bus system, which consisted of four buses with three routes, each with a roughly 1-hour, one-way loop. The prior system had relatively low ridership with limited access for the rural area. The new service utilizes a fleet of six minivans, two of which are retrofitted with wheelchair-accessible ramps, to provide on-demand, curb-to-curb service. The system may require a passenger that requests a standard, non-wheelchair, van to walk up to a quarter mile to their pickup location to optimize vehicle routing while providing origin-to-destination service.

A ride can be booked either in advance or for as soon as possible (much like ride-hailing services). If the customer uses the app, the location of the minivan servicing the call is displayed

in real time. Fort Erie provides direct service to a few popular stops where passengers can board without booking ahead, such as the local Walmart, if a customer is at one of these locations and happens to see a Fort Erie Transit vehicle with space available. A ride costs the customer $3 (the same as a single-ride bus fare in the prior system) for service to anywhere in Fort Erie. Each van is equipped to accept cash, debit, credit, and smart cards with preloaded passes. Smart cards can be reloaded with the driver or online.

The on-demand system proved effective in providing service, eclipsing pre-pandemic ridership by 40%, decreasing greenhouse gas emissions per ride by 63%, and decreasing the cost to the town per ride by 29%.

Key challenges and lessons learned for the service include:

- Passengers not cancelling their trips, leading to "ghost stops" and wasted operating costs.
- "Deadheading", or operating without any rides, occurring between passenger pick-ups.
- Implementing a strong driver training program, include more one-on-one training, is essential for smooth operations.
- A fully on-demand system has lower scalability, so a hybrid or fixed option may be better if demand is high.

RideConnection Door-to-Door

RideConnection is a private, non-profit organization based in Portland, Oregon. The RideConnection network is made up of a collection of agencies who serve older adults and people with disabilities as well as low-income individuals and the general public by offering a variety of transportation options in Clackamas, Multnomah, and Washington counties. RideConnection provides 500,000 rides and supports more than 2,000 individuals with training and access to public transportation each year.

RideConnection's Door-to-Door began under TriMet in the 1980's for older adults and people with disabilities, with RideConnection established to take over the service in 1988. The program provides rides for any purpose including medical, meals, shopping, recreation, and volunteering or work. The service area for this program is Washington County, outside the TriMet service area. Rides can be completed beyond Washington County should the schedule allow. Services are prioritized for older adults and people with disabilities, but open to the general public. Most services are available Monday through Friday, and there is no cost though donations are welcome. Riders can request rides through calling the RideConnection Service Center, or via the online ride request tool. Rides are scheduled four days in advance.

Key challenges and lessons learned for the service include:

- Highly rural area causing the cost per service hour and cost per ride to be relatively high, compared to localized services.
- "Deadheading", or operating without any rides, occurring between passenger pick-ups.
- Implement a range of transportation options (directly operated, taxis, group rides/carpools) to cover a range of needs.

Winnebago County Catch-a-Ride

Winnebago Catch-A-Ride (WCAR) program was created in 2018 to integrate all available transportation services on one single platform, as well as add a ridesourcing program with volunteer drivers on the Feonix Mobility Rising platform. The WCAR program now subsidizes employment trips for previously unemployed, underemployed, disabled, and low-income workers in Winnebago County. The initial program was funded by an Accessible Transportation

Community Initiative grant of $100,000 and a $30,000 "Commute to Careers" grant from the Wisconsin Department of Workforce Development.

The ridesourcing program, added to address mobility gaps in the county, uses volunteer drivers using their personal vehicles. Riders are charged a $2 booking fee and a federal mileage reimbursement rate which makes the service affordable in rural communities. Payment from the riders goes directly to drivers. Riders need to use a call-in number to request rides, but eventually, a smart phone application will be available for riders to request and pay for their rides.

Volunteer drivers for the program are hired by WCAR project partners by conducting multiple outreach meetings within the county, attending career fairs, and advertising on mediums such as Indeed career website, Facebook, etc., As of March 2019, WCAR had six volunteer drivers distributed throughout Winnebago County. However, the WCAR program's goal was to hire 20 volunteer drivers to meet the unmet transportation needs.

Rides are available 24 hours a day, seven days a week, given that a volunteer is willing to take the ride. Riders must reside in the service area and be employed, and are eligible for rides until income exceeds income eligibility. Riders can apply on the Winnebago Catch-A-Ride website.

Key challenges and lessons learned for the service include:

- Inadequate strength and coverage of internet service make operating a reliable ridesourcing service with a smartphone application difficult.
- During COVID-19, the agency indicated that no volunteer drivers were available mid-2020. It is unclear if volunteer drivers have returned, though this program remains advertised on the WCAR website.
- There is a need to have a better broadband internet coverage in rural communities for technology-enabled services to exist and succeed.

Hermiston WORC Taxi Program

The Workforce On-demand Ride Cooperative (WORC) program allows people who are employed anywhere in western Umatilla County, OR, to purchase subsidized vouchers to use a taxi to get to and from work. Users must provide proof of employment (pay stub), photo identification, proof of address, and purchase WORC vouchers at Hermiston City Hall. Fares range from $3 per ride to $9 per ride depending on the distance. Service is available seven days a week, 5:30 AM to 10 PM, and must be arranged directly with the taxi provider(s) available.

Key challenges and lessons learned for the service include:

- Partnership with taxi providers can promote their business and efficiency while requiring limited start-up capital (vehicles, staff, etc.) for the public agency
- Capacity is dependent on taxi providers, and may be limited for riders.

Existing Service

Table 10 summarizes which services are currently available to which census designated places (CDPs), also shown in Figure 22. Some services pass by the edge of a community but do not provide service within ¼ mile for most of the population, shown in yellow, while several communities do not have fixed-route service, shown in red. Generally the largest communities are served by at least one route, with many served by several connections. This information was considered in subsequent sections describing adjustments to existing services or potential new services to fill these gaps.

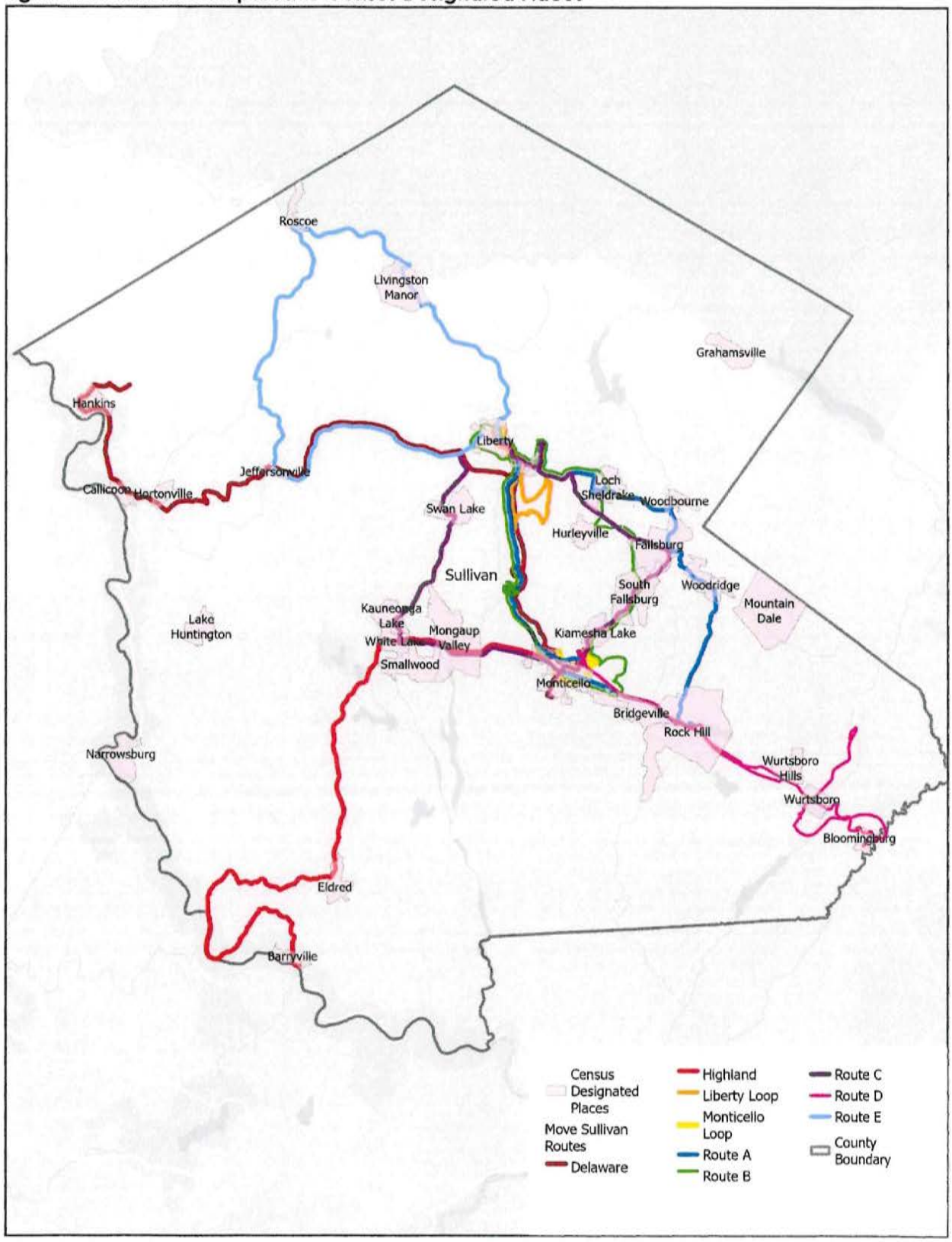
Table 10. Existing Service Summary by Community

Community	Total Population (ACS)	Local Fixed-Route		Intercommunity					Demand-Response		
		Monticello Loop	Liberty Loop	A	B	C	D	E	Delaware	Highland	Shopping Bus
Sullivan County	76,020	X	X	X	X	X	X	X	X	X	
Monticello village	7,067	X		X	X	X	X		X	X	
Liberty village	4,964		X	X	X	X		X			X
Rock Hill	2,523			X			X				
South Fallsburg	1,850				X	X					
Loch Sheldrake	1,229			X	X						
Hurleyville	1,222				X						
Wurtsboro village	1,181						X				
Bloomingburg village	1,022						X				
Woodridge village	950			X							
Livingston Manor	689							X			
Fallsburg	676			X		X					X
Smallwood	**657**					~				~	
Woodbourne	644			X							
Roscoe	558							X			
Wurtsboro Hills	519						~				
Kauneonga Lake	505					X					
Narrowsburg	480										
Jeffersonville village	415							X	X		
Kiamesha Lake	348				X	X					
Grahamsville	328										
Lake Huntington	303										
Hortonville	284								~		
Mountain Dale	272										
Mongaup Valley	269					X				X	
Barryville	239									X	
Swan Lake	211					X					
Hankins	205								X		
Eldred	201									X	
Callicoon	169								X		X
White Lake	96					X				X	
Bridgeville	72			X			X				

X Majority of community served

~ Some community served

Figure 22. Services Compared to Census Designated Places



Adjustments to Existing Routes and Services

This section describes the identified potential improvements to enhance existing routes and services. It should be noted that many of Move Sullivan's services are recently-implemented,

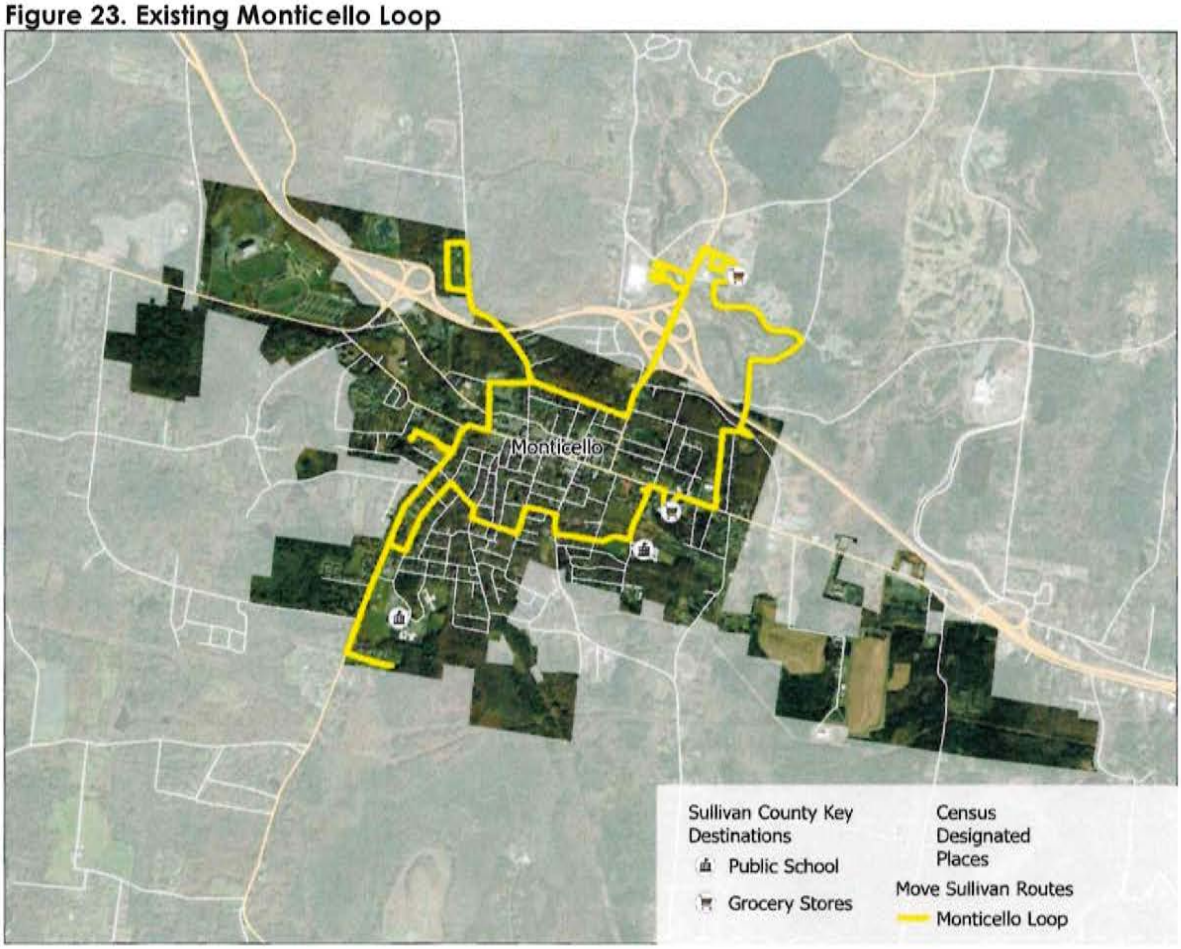
and while ridership continues to grow and be established, the needs for each route may change. Potential changes should consider community needs, existing ridership use, and improvement costs as each are furthered through implementation.

MONTICELLO LOOP

The existing Monticello Loop, shown in Figure 23, provides local trips through Monticello, 9 AM to 1 PM and 4 PM to 5 PM all days per week. Key findings from outreach and the service analysis included:

- Community members want more service in the early afternoon, specifically for this route
- There's general interest in earlier morning and later evening service throughout the County
- The loop can make some trips very long, depending on where you're getting on and off the bus.

Figure 23. Existing Monticello Loop



Regarding the feedback on service hours, the Monticello Loop could add service throughout the day to meet community requests. Table 11 shows several potential service hour expansions and the related annual operating costs to implement those hours. As shown, the investment to expand service hours is substantial and requires more funding to implement.

The long loop could be addressed in several ways. One would be to implement both directions of the loop, operating at the same time. However, this doubles operating costs. Another option would be to adjust the routing to an out-and-back line route. Converting to a line route resolves

the long transit trip, but may require riders to walk or bike further to get to a transit stop. This could be resolved by:

- Allowing deviations on the service, though deviations would need to be limited to ensure overall route schedule is maintained.
- Enhancing the facilities to comfortably walk and bike to the transit route. This would require infrastructure investments.

***Short-term recommendation**: Based on the higher costs to implement both directions of the loop, the near-term recommendation for the Monticello Loop is to further explore converting the route to an out-and-back line or minimizing the loop size to reduce the out-of-direction travel the loop causes.*

***Mid-term recommendation**: As funding is available, implement service during the early afternoon hours.*

***Long-term recommendation**: Monitor ridership patterns and demands and seek funding for additional service hours earlier in the morning and later in the evening on this service.*

Table 11. Monticello Loop Service Hour Alternatives

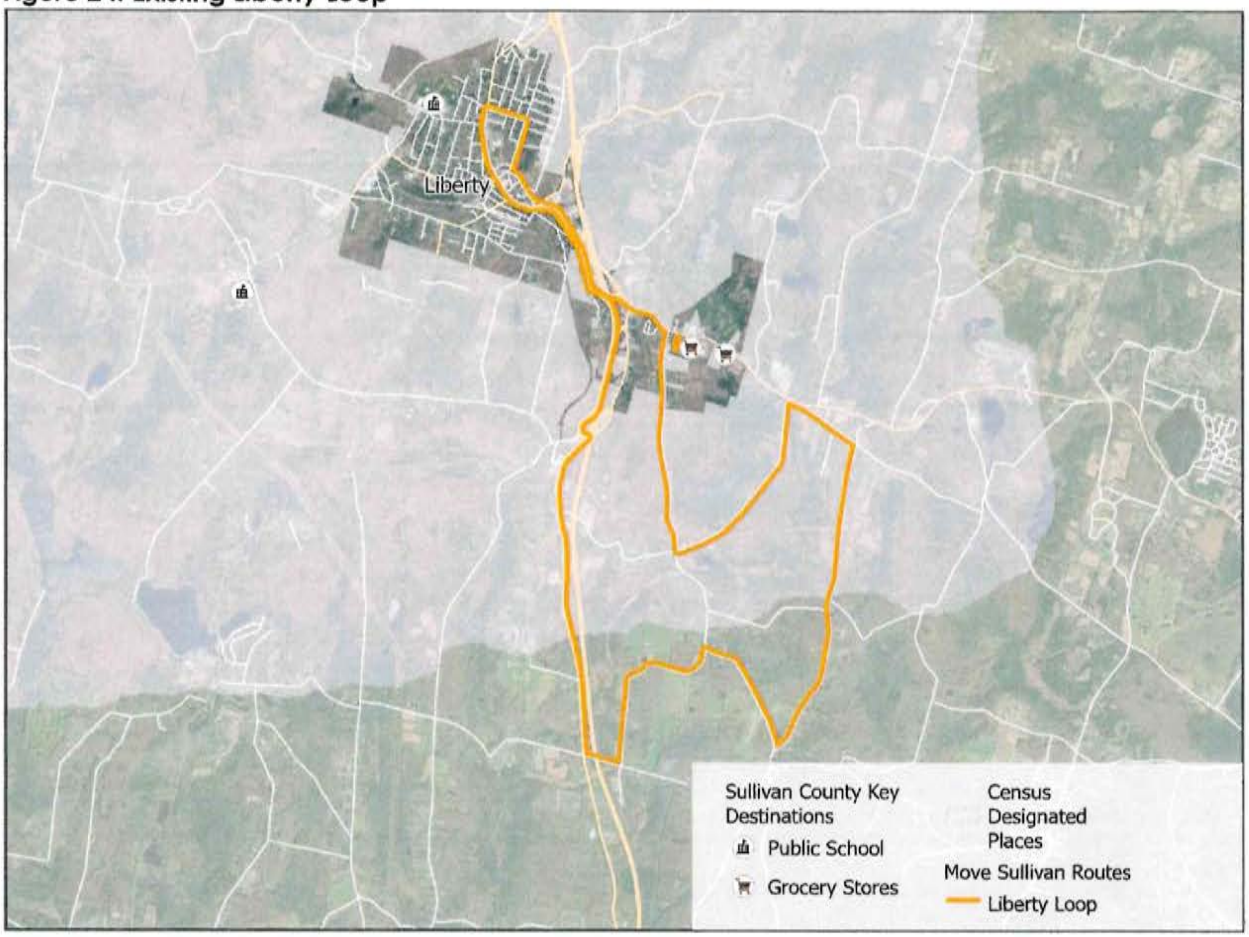
Alternative	Service Span	Hours per day	Trip Length (mins)	Trips per Day	Service Days	Approx. Annual Service Hours	Cost per Hour	Approx. Annual Operating Cost
Existing	9 AM – 1 PM, 4 PM – 5 PM	5	60	5	All Days	1,825	$92.56	$169,000
Add Afternoon Service	9 AM – 5 PM	8	60	8	All Days	2,920	$92.56	$270,000
Service All-Day	7 AM – 7 PM	12	60	12	All Days	4,380	$92.56	$405,000
Implement Both Directions of Loop	9 AM – 1 PM, 4 PM – 5 PM	5	60	10	All Days	3,650	$92.56	$338,000
Implement Both Directions of Loop and add Afternoon Service	9 AM – 5 PM	8	60	16	All Days	5,840	$92.56	$541,000

LIBERTY LOOP

The existing Liberty Loop, shown in Figure 24, provides local trips through Liberty, 10 AM to 2 PM and 5:30 PM to 6:30 PM all days per week. Key findings from outreach and the service analysis were similar to that from the Monticello loop and are included:

- Community members want more service in the early afternoon, specifically for this route
- There's general interest in earlier morning and later evening service throughout the County
- The loop can make some trips very long, depending on where you're getting on and off the bus.

Figure 24. Existing Liberty Loop



Regarding the feedback on service hours, the Liberty Loop could add service throughout the day to meet community requests. Table 12 shows several potential service hour expansions and the related annual operating costs to implement those hours. As shown, the investment to expand service hours is substantial and requires more funding to implement.

The long loop could be addressed in several ways. One would be to implement both directions of the loop, operating at the same time. However, this doubles operating costs. Another option would be to adjust the routing to an out-and-back line route. Converting to a line route resolves the long transit trip, but may require riders to walk or bike further to get to a transit stop. This could be resolved by:

- Allowing deviations on the service, though deviations would need to be limited to ensure overall route schedule is maintained.
- Enhancing the facilities to comfortably walk and bike to the transit route. This would require infrastructure investments.

***Short-term recommendation**: Based on the higher costs to implement both directions of the loop, the near-term recommendation for the Liberty Loop is to further explore converting the route to an out-and-back line or minimizing the loop size to reduce the out-of-direction travel the loop causes.*

***Mid-term recommendation**: As funding is available, implement service during the early afternoon hours.*

***Long-term recommendation**: Monitor ridership patterns and demands and seek funding for additional service hours earlier in the morning and later in the evening on this service.*

Table 12. Liberty Loop Service Hour Alternatives

Alternative	Service Span	Hours per day	Trip Length (mins)	Trips per Day	Service Days	Approx. Annual Service Hours	Cost per Hour	Approx. Annual Operating Cost
Existing	9 AM – 2 PM, 5:30 PM – 6:30 PM	5	60	5	All Days	1,582	$100.96	$184,000
Add Afternoon Service	9 AM – 7 PM	10	60	10	All Days	3,163	$100.96	$295,000
Service All-Day	7 AM – 7 PM	12	60	12	All Days	3,796	$100.96	$442,000
Implement Both Directions of Loop	9 AM – 2 PM, 5:30 PM – 6:30 PM	6	60	12	All Days	3,796	$100.96	$442,000
Implement Both Directions of Loop and add Afternoon Service	9 AM – 7 PM	10	60	20	All Days	6,327	$100.96	$737,000

INTERCOMMUNITY ROUTES

Move Sullivan operates five intercommunity fixed-routes, shown in Figure 3, operating 5:30 AM at the earliest to 8:30 PM at the latest. Key findings from outreach and the service analysis included:

- There's interest in later evening service throughout the County
- There's interest in increasing frequency of routes throughout the day.

Table 13 shows several potential service hour extensions or frequency increases and the related annual operating costs to implement those hours. As shown, the investment to expand service hours is often substantial and requires more funding to implement. Adding later evening hours can expand travel options for workforce, medical, and other essential needs at relatively lower costs. Increasing frequency can be beneficial, but is more substantial in costs and requires additional fleet and staff. While increased frequency is desirable and more convenient, it could be considered in the longer-term given these constraints.

***Mid-term recommendation:** Add additional evening service to the intercommunity routes.*

***Long-term recommendation**: Monitor ridership patterns and demands and seek funding for increasing route frequency where appropriate for these services.*

Table 13. Intercommunity Route Service Hour Alternatives

Alternative	Service Span	Hours per day	Trip Length (minutes)	Trips per Day	Service Days	Approx. Annual Service Hours	Cost per Hour	Approx. Annual Operating Cost
Route A								
Existing	5:30 AM - 5:30 PM	12	120	6	All Days	4,380	$91	$399,000
Add Later Evening Service - Weekdays Only	5:30 AM - 7:30 PM	14	120	7	Weekdays	3,650	$91	$446,000
	5:30 AM - 5:30 PM	12	120	6	Weekends	1,251		
Add Later Evening Service - All Days	5:30 AM - 7:30 PM	14	120	7	All Days	5,110	$91	$465,000
Double Frequency - Weekdays Only	5:30 AM - 5:30 PM	12	120	12	Weekdays	6,257	$91	$683,000
	5:30 AM - 5:30 PM	12	120	6	Weekends	1,251		
Double Frequency - All Days	5:30 AM - 5:30 PM	12	120	12	All Days	8,760	$91	$797,000
Route B								
Existing	6:00 AM - 6:00 PM	12	120	6	All Days	4,380	$117.60	$515,000
Add Later Evening Service - Weekdays Only	6:00 AM - 8:00 PM	14	120	7	Weekdays	3,650	$117.60	$576,000
	6:00 AM - 6:00 PM	12	120	6	Weekends	1,251		
Add Later Evening Service - All Days	6:00 AM - 8:00 PM	14	120	7	All Days	5,110	$117.60	$601,000
Double Frequency - Weekdays Only	6:00 AM - 6:00 PM	12	120	12	Weekdays	6,257	$117.60	$883,000
	6:00 AM - 6:00 PM	12	120	6	Weekends	1,251		
Double Frequency - All Days	6:00 AM - 6:00 PM	12	120	12	All Days	8,760	$117.60	$1,030,000
Route C								
Existing	6:00 AM - 6:00 PM	12	120	6	All Days	4,380	$109.23	$478,000
Add Later Evening Service - Weekdays Only	6:00 AM - 8:00 PM	14	120	7	Weekdays	3,650	$109.23	$535,000
	6:00 AM - 6:00 PM	12	120	6	Weekends	1,251		
Add Later Evening Service - All Days	6:00 AM - 8:00 PM	14	120	7	All Days	5,110	$109.23	$558,000
Double Frequency - Weekdays Only	6:00 AM - 6:00 PM	12	120	12	Weekdays	6,257	$109.23	$820,000
	6:00 AM - 6:00 PM	12	120	6	Weekends	1,251		
Double Frequency - All Days	6:00 AM - 6:00 PM	12	120	12	All Days	8,760	$109.23	$957,000
Route D								
Existing	6:30 AM- 6:30 PM	7	90	6	All Days	3,285	$123.17	$405,000
Double Frequency - Weekdays Only	6:30 AM- 6:30 PM	14	90	12	Weekdays	4,693	$123.17	$694,000
	6:30 AM- 6:30 PM	7	90	6	Weekends	939		
Double Frequency - All Days	6:30 AM- 6:30 PM	14	90	12	All Days	6,570	$123.17	$809,000
Route E								
Existing	8:30 AM - 6:45 PM	12	75	5	All Days	2,281	$132.89	$303,000
Add Later Evening Service - Weekdays Only	6:00 AM - 8:00 PM	14	75	6	Weekdays	1,955	$132.89	$346,000
	8:30 AM - 6:45 PM	12	75	5	Weekends	652		
Add Later Evening Service - All Days	8:30 AM - 6:45 PM	14	75	6	All Days	2,738	$132.89	$364,000
Double Frequency - Weekdays Only	8:30 AM - 6:45 PM	12	75	10	Weekdays	3,259	$132.89	$520,000
	8:30 AM - 6:45 PM	12	75	5	Weekends	652		
Double Frequency - All Days	8:30 AM - 6:45 PM	12	75	10	All Days	4,563	$132.89	$606,000

DEMAND-RESPONSE

Move Sullivan operates demand-response services in the townships of Delaware and Highland, operating from 8:00 AM to 3:15 PM on Fridays and 8:20 AM to 4:45 PM on Thursdays, respectively, as well as shopping buses which service different communities each weekday with 6 hours of service per day. Key findings from outreach and the service analysis included:

- Interest in expansion of services to operate additional days
- Additional service areas for demand-response/shopping shuttle-type services.

As shown in Table 14, the inclusion of an additional day of service would be roughly between $25,000 - $30,000 annually for each community or route served, per day of service.

***Mid-term recommendation**: As funding is available and ridership demands grow, implement an additional day of service for the Delaware Township, Highland Township, and/or Shopping Bus services.*

***Long-term recommendation**: If ridership patterns and demands for the routes grow and stabilize, transition from providing service to these areas from demand-response to fixed-route service.*

Table 14. Demand-Response Service Hour Alternatives

Alternative	Service Span	Hours per day	Trip Length (minutes)	Trips per Day	Service Days	Approx. Annual Service Hours	Cost per Hour	Approx. Annual Operating Cost
Delaware Township								
Existing	8 AM - 10:45 AM, 12:30 PM - 3:15 PM	5.5	165	2	Fridays	286	$90	$26,000
Additional day of Service	8 AM - 10:45 AM, 12:30 PM - 3:15 PM	5.5	165	2	Fridays	286	$90	$51,000
	8 AM - 10:45 AM, 12:30 PM - 3:15 PM	5.5	165	2	Additional Day	286	$90	
Highland Township								
Existing	8 AM - 10:45 AM, 12:30 PM - 3:15 PM	5.3	180	2	Thursdays	312	$90	$28,000
Additional day of Service	8 AM - 10:45 AM, 12:30 PM - 3:15 PM	5.3	180	2	Thursdays	312	$90	$56,000
	8 AM - 10:45 AM, 12:30 PM - 3:15 PM	5.3	180	2	Additional Day	312	$90	
Shopping Buses								
Shopping Buses	No schedule, serves a different community each weekday. Annual hours shown as if service provides 6 hours of service per community				Weekdays	7,821	$90	$704,000
Additional Service	As-needed; Example: 9 AM - 3 PM	6	180	2	Additional Day	312	$90	$28,000

New Routes or Services

New routes or services can help address the gaps in Move Sullivan's service. Table 10 details which communities in Sullivan County are not served by the current services. As shown in the previous sections, running a circulator like the Liberty or Monticello loops can cost near $170,000 - $180,000 per year, and longer intercommunity services can cost near $300,000 - $400,000 per year in operating costs. While these are costly, new routes or services could be piloted for shorter service windows or on fewer days per week to provide some minimum level of service and gauge demand in a service before launching more extensive service hours. In addition to the operating costs, new services require capital costs such as bus stops and vehicles to operate service, and piloting can be a good means of testing demand and where bus stops would be successful before making capital improvement investments.

Due to the additional operating and capital costs for implementing a new service, there needs to be careful consideration for the type of service and community size. Larger communities without service are a good starting point, since they already have a higher potential number of riders. Areas for new routes to consider could include:

Short-term recommendation: *Pilot a demand-response out-of-County medical service. The service could launch by operating 1-2 days per week and provide first/last-mile pick-ups and drop-offs between Sullivan and other counties. If space allows, the service could also be used for shopping or other out-of-County travel needs.*

Short-term recommendation*: Outreach also showed interest in connections between Eldred and Callicoon, which could provide connection to Narrowsburg depending on routing.*

Mid-term recommendation*: Referring to Table 10, Narrowsburg (see below) and Grahamsville are the first and second largest municipalities lacking any fixed-route service. These communities could be a good starting point when considering implementing a new intercommunity route.*

Mid-term recommendation*: Both in conversations in focus groups and with stakeholders as well as through the community survey, interest was high in first/last-mile services like on-demand transit that could be piloted along the existing intercommunity routes in communities that don't have local loop service, such as Rock Hill/Bridgeville, Fallsburg/South Fallsburg, or Loch Sheldrake/Hurleyville/Woodbourne. This type of service could facilitate local trips and improve connections to the existing intercommunity system.*

CAPITAL PLAN

This section provides an overview of the capital plan for Sullivan County, including bus stop improvements and fleet considerations. Safe and comfortable facilities can improve the rider experience and increase ridership by improving stop visibility, providing protection from poor weather, and improving access to transit. The right fleet configuration can enhance the rider experience, improve reliability, and balance costs with capacity needs. As populations continue to grow, so will demand for local and regional travel, in turn, increasing the need for major transit centers, park-and-rides, and vehicle storage and maintenance facilities in additions to bus stops and fleets.

Bus Stops, Facilities, and Access

Waiting at a bus stop is generally the first part of a rider's journey on a transit system, and a visible, safe, and comfortable stop is critical. Bus stops can be as large as transit centers and as small as a stop with signage. Bicycle and pedestrian access needs can include facilities along roadways, crossings, and bicycle storage. Park-and-rides can provide a useful location to transfer to regional services. Figure 26 shows a typical layout for a major bus stop with enhanced amenities and Figure 26 highlights the types of facilities that may be applicable for smaller stops.

Figure 25. Typical Bus Stop Layout with Enhanced Amenities

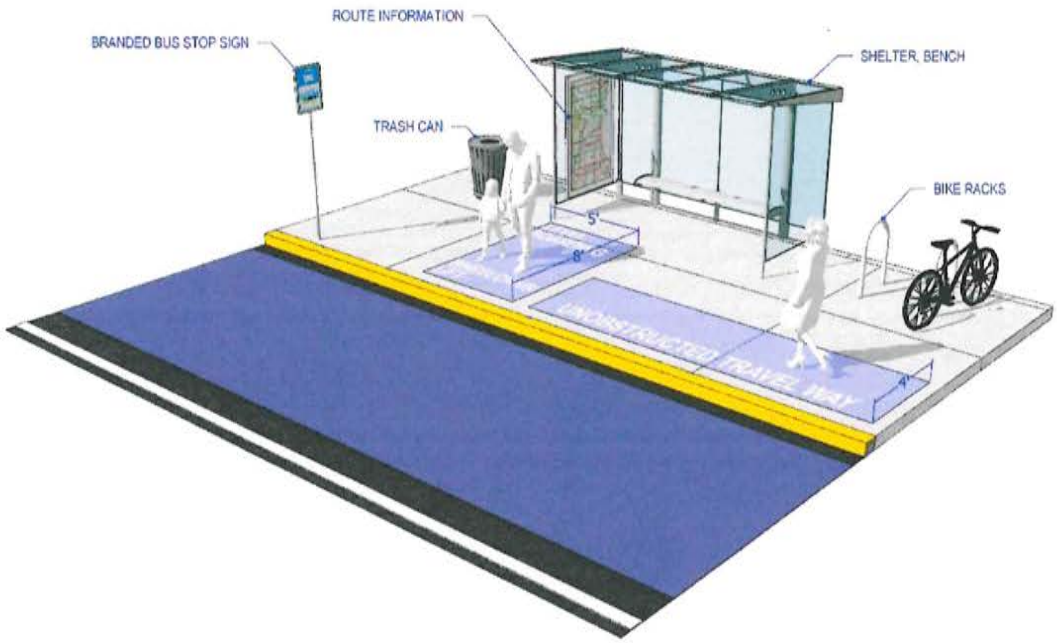


Figure 28: Bus Stop Facilities

DESIGNING BUS STOPS

Safe and comfortable facilities can improve the experience of riding transit and increase ridership by improving stop visibility, providing protection from poor weather, and improving access to transit. The following table shows typical stop amenities, describes their typical costs, and provides the activity levels that typically prompt inclusion of them. Scenarios that may trigger higher levels of amenities include:

- **Land use** – assisted living homes, medical facilities, veteran's resources, and other land uses may increase the need for benches or shelters at stops; low-density areas may see higher bike rack/locker demands due to the longer distance to travel to stops
- **Customer use** – amenities such as trash cans or information cases may be triggered by trash accumulating at stops, bus drivers receiving information requests from riders, or riders directly requesting these improvements
- **Coordination opportunities** – if a local jurisdiction is looking to provide lighting, repaving, etc. on a transit route, installing higher-level bus amenities may be advantageous to reduce cost even if a stop hasn't reached higher activity levels yet

AMENITY	TYPICAL COST *	STOP LEVEL		
		All Stops	Enhanced Stop	Major bus stop/ Transit Center
Signage & route information	$300 to $1,000	O	O	O
Lighting	$5,000 to $10,000	O	O	O
Bench	$500 to $1,500		3+ Boardings/ day	O
Shelter (small)	$6,000		20+ Boarding/ day	
Bike lockers	$2,000 to $3,000 per locker		Near bike routes	O
Bike racks	$150 to $300 (two-bike rack)		Near bike routes	O
Information cases (systemwide route information; advertising)	$1,000 to $10,000			O
Trash can	$1,000 to $1,500			O
Shelter/covered area (large)	Varies			O

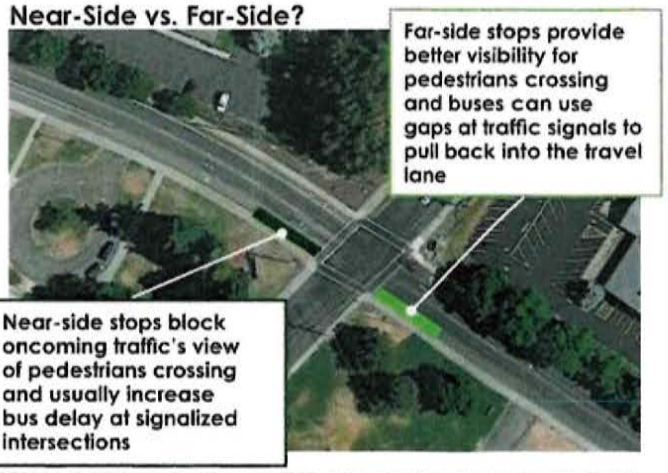
** Costs reflect capital cost to purchase. Additional costs to implement may include permits, fees, and installation.*
O Recommended

Placement and Pullouts:

Transit stops should be coordinated with roadway agencies to ensure stops are ADA-accessible and connect to low-stress walking and biking facilities and crossings. This coordination should include maintenance considerations, such as emptying trash cans and snowplow operations.

On major roadways with speeds of 35 mph or more, such as state highways, transit agencies may consider bus stops that allow buses to stop out of the traffic lane, to avoid rear-end collisions and discourage unsafe passing of the bus by motorists.

Near-Side vs. Far-Side?



PRIORITIZING IMPROVEMENTS

When first deciding where to place bus stop improvements as a system is being established, agencies should start with stops that they have high confidence will be permanent and those serving more routes – this includes transit centers or facilities where the right-of-way is already owned either by the agency or a strong public agency partner. Stop improvements may be more cost-effective if implemented at the same time as other public improvements, such as sidewalk infill, roadway repaving, or crossing enhancements.

If an agency doesn't have these opportunities, they can implement temporary improvements like sandwich boards used as signage and schedule information. Sandwich boards also provide an opportunity to get feedback on whether a stop should be made permanent or other designed system enhancements, and can potentially be set out and taken back in at the end of the day by neighboring businesses or property owners in exchange for advertising on the signage. These strategies can help raise awareness of services at a lower cost and generate community buy-in. Temporary improvements may be difficult to maintain due to vandalism/theft or weather.

TRANSIT CENTERS AND MAJOR TRANSIT STOPS

Transit centers provide a transfer point for bus routes, while major transit stops are typically provided at major activity centers. In addition to providing greater passenger amenities that improve rider comfort, transit centers and major transit stops provide visibility for the transit service, reminding residents and visitors of the availability of the service within their community. As service and ridership increase and major transit stops become apparent, Move Sullivan could consider enhancing these stops to improve rider experience. The following key concepts should be considered when constructing transit centers or major transit stops:

- The location of the stop or transit center should consider pedestrian access to nearby destinations, ease of access by bus that reduces out-of-direction travel and allows for safe bus operations, and a location that is highly visible, both to publicize the service and to enhance rider safety and security.
- The stop or transit center should be sized to accommodate planned 20-year growth, both in terms of the number of buses accommodated and the size of rider amenities, such as a passenger shelter.
- Materials used should consider life-cycle costing, which usually points toward high-quality, long-lasting materials that have lower ongoing maintenance costs. This feature is especially important in communities that are subject to high winds (e.g., the Gorge), heavy rains, and/or salt air.
- Public art should be considered for transit centers. Art has been shown to discourage vandalism and can also be used to involve the local art community in the transit center project. Regulations now require that public art funded through the FTA be "functional." Art associated with railings, benches, pavement, windscreens, or any other element of the shelter would meet the FTA requirement. Free-standing art, such as a sculpture, would not.
- Information cases should be located at transit centers and at some major stops to provide general schedule and overall system information.

Current bus stops that have more than ten boardings a day should be considered major stops, and merit consideration for a higher level of improvement (relative to the base level amenities

found at all bus stops), such as a shelter or information case. Final decisions about transit center locations and other stop improvements will depend on the final service network.

SHELTERS

Passenger shelters add to the comfort of using transit and are generally very popular with riders. An "off-the-shelf" passenger shelter (there are several companies that provide them) typically costs approximately $6,000 plus installation. In addition to initial capital costs, passenger shelters will incur maintenance costs, both for routine ongoing cleaning and repair and replacement as needed. The primary maintenance issues for shelters, apart from the routine cleaning, are vandalism and fading/clouding of the windscreen. For routine cleaning, trash receptacles, if included, would dictate the frequency that the shelter should be serviced. If trash receptacles are not provided, the regular cleaning and servicing of shelters can be as low as once per month.

Passenger shelters must be designed to meet the requirements of the ADA and should be located so as to provide safe and convenient pedestrian connections with nearby destinations. Coordination of shelter placement with sidewalk and other pedestrian improvements projects planned by state or local agencies is encouraged. In addition to the overhead protection (roof), shelter amenities can include:

- Windscreens
- Benches
- Trash receptacles
- Passenger information

Passenger shelters are recommended at high-use stops and all transit centers. The condition of existing shelters at these locations should be reviewed and additional amenities considered, although the final prioritization will depend on the future service plan.

There is a tradeoff between the level of wind/weather protection provided through the use of windscreens and an open shelter design, without a windscreen, that reduces maintenance costs. If vandalism is not a major problem, windscreens are recommended for shelters both to address winds and because the infrequent service can lead to longer wait times which suggests the need for a higher level of protection from the weather. Glass in lieu of acrylic should be considered to address weathering and fading issues.

BENCHES

An alternative to a shelter for a stop that has less ridership is a bench. Benches should be considered for stops with at least three boardings per day, although other factors, such as the proximity to senior housing and nearby businesses willing to contribute to the costs, should be factored into the decision as well. Benches that attach to the bus stop pole, such as the Simmi-Seat (see Figure 27) take up very little space, have low maintenance, and are relatively inexpensive. Benches with backs and wider seating can be more comfortable

Figure 27. Simmi Seat

for elderly and people with disabilities. Installed benches vary in price depending on materials, the quality of the product, and the installation conditions.

BICYCLE AND PEDESTRIAN ACCESS

Accessibility of transit stops is also integral to user experience. Every bus rider is also a pedestrian, and bicycles provide an important "last mile" option for transit, particularly for regional riders who may be fairly dispersed. Move Sullivan can work with local public works authorities to prioritize pedestrian and bicycle improvements that serve transit stops. It is of particular importance and a legal requirement to provide for access by persons with disabilities. Transit centers, shelters, and new or relocated bus stops should be designed to meet the requirements of the ADA. It is recommended that agencies prioritize street corners near transit centers and shelters for ADA ramps.

PARK-AND-RIDE LOTS

Park-and-ride lots are typically feasible in situations where there is either a parking charge or parking shortages at the rider's destination, or if there is a substantial savings in travel cost or time by using transit. As parking is typically free throughout the area, an interest in using all-day parking to save cost or time, or for short-term parking for pick-up/drop-off, are the more likely drivers for park-and-ride demands.

> ***Short-term through long-term recommendation**: Provide safe and accessible bus stops, including better amenities and comfortable walking and biking connections, especially at high-activity stops.*

Vehicle Fleet

Maintaining an operational fleet with the amenities and sizing to meet the area's needs will help to improve ridership and the existing rider experience, improve system performance, and maintain a reliable fleet. This section describes the vehicle types, fleet size and replacement rate, and storage and maintenance needs for the services.

VEHICLE TYPES

The types of vehicles operated for service should consider the passenger load, amenities such as bike racks, fueling types, and low-floor/kneeling models. All vehicles should be ADA accessible. Considerations include:

- **Low Floor** – Low-floor buses eliminate the steps in the vehicle, provide easier access for riders, speed boarding and alighting, and are much easier for drivers to operate than traditional lifts. Low-floor models may be difficult to use in areas with poor roadway condition or missing sidewalks. Eventually, as part of the normal bus replacement schedule and as sidewalk infrastructure improves, Move Sullivan can replace high-floor buses with low-floor models.
- **Passenger Load and Onboard Storage (strollers, shopping, etc.)** – The vehicle fleet will need to provide capacity for peak ridership times and consider the fuel cost savings of a smaller vehicle. Customers report current vehicles can be crowded at times, and potential larger vehicles may be needed as routes gain additional ridership. Related to passenger load is the need for passengers to bring strollers, shopping bags, or other items for their day-to-day trips.

- **Bike Racks** – Riders will need bike racks on vehicles if they need to bike on either the first- and last-mile of their journey or if secure bicycle storage is not available at bus stops. It is recommended that buses be equipped with front racks accommodating 2 bicycles to start, with rack usage monitored to assess future needs.
- **Fuel Type** –A bus with hybrid-electric propulsion costs $150,000 to $200,000 more than a similar bus with diesel propulsion but will generally reduce fuel costs by approximately 25 to 30 percent. A bus with compressed natural gas (CNG) costs $25,000 to $50,000 more than a similar bus with diesel propulsion but will generally reduce fuel costs by approximately 25 to 45 percent. Challenges in using hybrid-electric and CNG are the additional cost of purchasing new vehicles relative to diesel vehicles and the need for charging/dual fueling facilities. Certain fuel types are not currently feasible for Move Sullivan's longer routes, as the mileage range is not long enough and would require multiple buses to run a single route or breaks to charge/fuel.

FLEET SIZE AND REPLACEMENT

Properly maintained and replaced vehicles reduce the likelihood of vehicle breakdowns and/or disruptions to service. For determining fleet size, a 20 percent spare ratio is recommended. Move Sullivan currently contracts service and Sullivan County owns few vehicles, but fleet size and replacement schedules could be identified in partnership with their contractor.

STORAGE AND MAINTENANCE NEEDS

Locating vehicle storage and maintenance facilities near the area(s) where vehicles are used can help reduce "deadhead" miles and hours. Deadheading occurs when a vehicle travels without passengers between its storage location and the start/end of its route. Reducing deadheading reduces costs due to vehicle wear and tear, fuel, and driver time. Locating maintenance facilities near service areas also helps reduce response time if a vehicle breaks down.

> ***Short-term through long-term recommendation**: Provide safe and accessible bus stops, including better amenities and comfortable walking and biking connections, especially at high-activity stops.*
>
> ***Short-term recommendation**: Establish capital replacement plan to better project out when improvements like larger or low-floor vehicles could be obtained.*
>
> ***Short-term through long-term recommendation**: Obtain low-floor vehicles and adjust fleet size and composition as the fleet is replaced.*
>
> ***Long-term recommendation**: Pursue low-/zero-emission vehicles to stabilize fuel prices.*
>
> ***Long-term recommendation:** Ensure adequate storage and maintenance capabilities to meet future service needs.*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MANAGEMENT AND PARTNERSHIP PLAN

A coordinated, targeted, and effective public information and marketing campaign would help publicize and encourage people to use transit. This section provides transportation demand management, mobility management, and marketing program recommendations summarized in Figure 28.

These recommendations are aligned with the Sullivan County 2024 Strategic Plan to work with community partners and business to expand services and ridership.

Figure 28. Management and Marketing Summary

Mobility Management	Promote coordination between the County, local and regional partners, and other transit providers
	Partner with Employers
	Gain Community Support
	Build Connection with Grassroots Organizations and Healthcare Organizations
	Engage Property Owners for Curbspace
Marketing and Information	Expand Branding for Move Sullivan
	Provide Maps and Information in Single User-friendly Brochure
	Gather Information in a Single Website
	Provide Real-time Information And Trip-planning Technologies
	Advertise
Transportation Demand Management	Partner with Employers
	Support Vanpool Programs
	Promote Micromobility
	Leverage Technology and Programs to Support Transportation Options
	Target Tourism
Staff Management and System Performance	Create Measurable Outcomes for Services to Promote Effective Monitoring
	Increase Customer and Stakeholder Satisfaction
	Invest in Training Programs
	Partner with Education and Training Centers

Mobility Management Strategies

Management strategies are those that Move Sullivan and the County can conduct behind-the-scenes for effective implementation.

- **Continue to Enhance Coordination between Move Sullivan, Local and Regional Partners, and other Transit Providers –** Coordination between Move Sullivan and local partners, including local and regional transportation providers, and local jurisdictions, will lead to a comprehensive and efficient system in which users can travel seamlessly throughout and beyond the county. For example, the *Capital Plan* encourages coordinating stop improvements with sidewalk and other pedestrian improvements projects planned by roadway owners.
- **Partner with Employers.** Work with employers to identify needs and leverage local match opportunities to increase transit funding in Sullivan County. Market existing services through employers and CBOs to encourage information-sharing not only to employees and community members, but feedback from transit users back to the County.
- **Gain Community Support.** Gain community support by creating and supporting local programs, meeting the needs of many transit markets, promoting the service, and building consensus. Understanding not only each community's unique service needs, but how these populations would like to be engaged, can enhance relationships and build opportunities across Sullivan County.
- **Build Connection with Grassroots Organizations and Healthcare Organizations.** Establish these connections to provide service to populations throughout Sullivan County and to support access to service for individuals living in dispersed rural areas. Prioritize access for elderly and people with disabilities within the rural communities. Example coordination includes marketing via social media pages and attending community meetings to understand ongoing needs and advertise services. Medical providers in the County currently provide transportation services, riders of which could be cross-advertised with Move Sullivan and vice versa.
- **Engage Property Owners for Curbspace.** Sullivan County can pursue dedicated bus pullouts or shared amenities with property owners, both public and private. Sullivan County can advocate for bus stop amenities in future commercial development in municipalities across Sullivan County. Dedicated bus dwelling space in denser downtown areas would also be beneficial in promoting use of the service over single-occupancy vehicles.

Marketing and Information Strategy

The following describes actions to improve customer service and information that can be implemented in the short-term and that should be maintained on a long-term basis:

- **Expand Branding for Move Sullivan.** Branding is the foundation of the marketing strategy and provides an identity and image to potential customers. It helps create immediate recognition of all aspects of the service. Key elements of visible marketing tools include the name, logo, vehicle colors and graphics, and bus stop signage and facilities. It is important to be consistent with colors and graphics for maximum effect. A distinctive base color used consistently on transit vehicles and facilities becomes the "color of the bus" in the community. Vehicle graphics, bus stop signage, shelters, and benches enhance transit visibility throughout the community; their style, color, and quality should be consistent. Bus

stops and shelters are a convenient place to provide additional information about routes, schedules, and deviation zones.

- **Provide Maps and Information in a Single User-Friendly Brochure**. Printed brochures and pamphlets can be designed and distributed to various target audiences to promote services. The main element of this kind of promotion is to vary the communication style for distinct target groups while encouraging all to use the same transit service. A printed brochure or pamphlet should include one or more route maps showing all routes with bus stop locations, landmarks, and key destinations clearly depicted. How-to-ride information should also be included, including but not limited to availability of bike racks, onboard storage, fares where applicable, and more. Contact information that includes a website address, telephone number, and reference to a trip planning app (when available) should be provided.
- **Gather Information in a Single Website.** In addition to print materials, having information about the various services for all providers in one place can help riders understand what options are available to them. One example here – www.eogo.org/ - shows public and private providers, student transportation, veteran transportation, neighboring agencies, and regional providers in a single webpage.
- **Provide Real-Time Information and Trip-Planning Technologies**. Real-time bus arrival and route information helps improve the ridership experience by reducing passenger wait times at the stop (passengers know when they should leave for the stop) and provides confidence that a bus has not been missed. With longer headways creating long waits if a bus is missed, real-time information helps reassure riders that their bus is on the way. Information on all transit routes could be provided via Move websites, smartphones, "push" technologies such as text messages, and telephone support. More about these technologies is provided in the *Information and Technology Plan*.
- **Advertise**. Advertising via different media can help attract a range of riders. Display advertising of the services in weekday shopping papers and at medical providers' offices distributed in the community is a potential tool to introduce and promote service that can generate ridership. Other ways of promoting the service include radio spots; social media such as Facebook and Next Door; and email blasts.

Transportation Demand Management Strategies

Transportation Demand Management (TDM) strategies aim to shift behavior towards more efficient use of existing transportation facilities. These strategies, additional programs and partnerships could help expand transit awareness and use. Target strategies for commuters and commute trips are in line with NYSDOT's Transportation Alternatives Program. These strategies and programs also inherently enhance the mobility of the broader community. The following strategies and partnerships can help shift behavior towards transit use:

- **Partner with Employers –** Move Sullivan can collaborate with employers to market existing services to employees and seek financial partnership and buy-in from employers. This could range from simple information sharing (ex. having human resources share route information to current or potential staff) to active management of transportation services (such as employers seeking to implement vanpool, see below).
- **Support Vanpool Programs –** Coordinated shared rides for commuters traveling to major employment centers or regional hubs have substantial benefits. These programs lower

transportation costs for riders, reduce road congestion, and extend mobility options where fixed-route transit isn't feasible.

Vanpool and micromobility programs also support first/last-mile transportation.

- **Promote Micromobility** – E-bikes, scooters, or other small-scale mobility devices in village centers or around key destinations can extend access to short local trips, support first/last-mile travel, and provide affordable alternatives where full transit service isn't practical. In rural settings, shared micromobility programs have been successfully operated by organizations like local libraries or university campuses.
- **Leverage Technology and Programs to Support Transportation Options.** Transportation options technology platforms and organizational programs can support riders who have difficulty accessing medical appointments and resources, as well as health-supporting destinations like clinics and grocery stores throughout the county.
- **Target Tourism** – Partner with the New York State Department of Tourism and the Sullivan County Partnership for Economic Development to encourage tourists' use of transit. Partnering with tourist and business organizations informs and encourages tourists to use transit when they visit Sullivan County. Work with the Sullivan County Partnership for Economic Development to encourage new transit-oriented business development to promote ridership. Sullivan County sees an increase in ridership during the summer months which could help with fluctuations in demand in places where there are gaps in the network. While tourism isn't the highest need market for the County, marketing the existing services to tourists can help boost ridership and awareness of the services overall.

Staff Management and System Performance Strategy

Strategies to maintain and track the performance of the transportation system over time include:

- **Create Measurable Outcomes for Services to Promote Effective Monitoring –** Transit benchmarks provide the foundation for an effective monitoring program. Developing context specific service performance measures, such as average on-time arrivals for routes, is a great first step. Monitoring service performance can help Move Sullivan determine potential needs for changes to service. Additional monitoring can be done via feedback from riders and community members.
- **Increase Customer and Stakeholder Satisfaction –** Move Sullivan service must have a friendly face to be recognized and successful. Promoting awareness of the service provided through online and on-paper advertising will contribute to the success of the service. Move Sullivan can distribute these materials through partnerships with outside organizations, such as health and social service providers, workforce development groups, and community-based organizations.
- **Invest in Training Programs** – The face of Move Sullivan is the bus operators and customer service staff. Continue investing in training resources so that staff contribute to Move Sullivan's positive image.
- **Partner with Education and Training Centers** – Operating rural transit systems can be difficult when limited population centers also limits those who may be trained to operate and maintain vehicles or administer transit programs. Partnering with state and local education and training centers can help to increase the workforce pool for all transportation providers in Sullivan County. Additional dedicated transportation staff, such as transportation managers and travel trainers, can help to maintain the existing system and enhance the partnerships described in this section.

Potential Partners

Bringing this plan to fruition will require the active participation of several key organizations to varying degrees. Potential partners identified through outreach include governmental partnerships, community organizations, and employers. The rest of this Management and Partnership Plan will often refer to these organizations by the services they provide or roles they serve in the community. Potential partners include:

- Governmental Partnerships
  - **Sullivan County Division of Health & Human Services** - patient transport coordination, Medicaid waiver programs, and social services access.
  - **Sullivan County Divisions of Public Works and Planning** - corresponding land use changes to support improved transit service.
  - **Move Sullivan** - core operators and planners of transit service.
  - **School districts** (Liberty, Monticello, Fallsburg, Eldred, Sullivan West, etc.) - for student transport contracts and special needs busing coordination.
  - **SUNY Sullivan** - as an educational hub and potential partner for student transport and childcare-related transport.
  - **Town and village governments** (Monticello, Liberty, Bloomingburg, Eldred, Callicoon, etc.) - stop siting, infrastructure improvements, local shuttle routes, and local buy-in.
  - **New York State Department of Transportation (Region 9)** - capital and operating funding, corridor planning, safety and infrastructure improvements (e.g., Route 17 crossings).
  - **Workforce Development Board of Sullivan, Inc.** - workforce mobility, training programs for drivers, employer engagement.
  - **New York State Department of Corrections Woodbourne Correctional Facility** - major employer with round-the-clock shifts needing reliable transportation connections.
- Non-Governmental Organization and Community Organization Partnerships
  - **The Arc Greater Hudson Valley** - provider for group homes and staff transportation needs and could partner on hybrid paratransit models.
  - **BOCES (Sullivan County)** - major educational institution with both student and workforce training needs; interested in western corridor service and evening training access.
  - **The Center for Discovery** - a major educational and research institution and service provider for people with disabilities; Sullivan County's largest employer.
  - **New Hope Community** - a residential and training center for people with disabilities.
  - **Refuah Health Center** - currently running patient shuttles, also interested in regularized schedules and integration with public transit.
  - **Hudson Valley Care Coalition** - healthcare coordination, potential funding or alignment with value-based care models.
  - **Western Sullivan Public Library** - identified as a hub location and could be leveraged as a community information distribution point.
  - **Orthodox Community Leaders** - key for outreach, translation of materials, and alignment with cultural/religious and transportation needs.
  - **Civic associations** - for feedback loops, advocacy, and rider education.
  - **Faith-based/cultural nonprofits** - potential partners for offline booking and outreach in limited-English or limited-internet communities.
- Business Partnerships
  - **Large retail employees** (ShopRite, Walmart, supermarket nodes) - destinations for employees and shopping which could partner on commuter incentives.

- **Healthcare institutions** (Garnet Health, nursing homes, long-term care facilities, Refuah Health) - high transportation demand, particularly off-hours.
- **A. Alport & Son** - identified key local employer.
- **Jeff Bank** - key partner identified in engagement.
- **Irwin Siegel Agency** - key local employer useful for engagement, including other local health and social service agencies
- **Sullivan County Chamber of Commerce** - key conduit for coordinating with small- and medium-sized businesses and employer-sponsored commuter programs.
- **Sullivan County Partnership for Economic Development** - a private nonprofit focused on diversifying and expanding Sullivan County's economy through business and real estate analytic services.
- **Local supermarkets/shopping centers** - hubs for both jobs and daily life, natural pickup/dropoff nodes.
- **Sullivan County Child Care Council** – a private nonprofit focused on supporting providers through licensing, ongoing training and technical assistance. Families are provided with references to quality providers.
- Additional partnerships through Workforce Development Board of Sullivan, Inc.

***Short-term recommendation**: For many of the above recommendations, establish regular coordination meetings with connecting providers and partners to improve awareness and access to services.*

***Short-term recommendation**: Establish feedback and marketing program to engage with employers, education centers, specific communities, and more.*

***Short-term recommendation**: Continue to leverage local funds and seek new partnerships to obtain state and federal funds.*

***Mid-term recommendation**: Promote vanpools for employment.*

***Mid-term recommendation:** Promote rideshares.*

***Mid-term recommendation**: Partner with education and training centers to increase talent pool and communicate availability of positions.*

INFORMATION AND TECHNOLOGY PLAN

Information and technology services can improve the existing ridership experience, attract new ridership by improving ease of transit use, and provide information to Sullivan County to help plan and operate transit services in the future. The following sections describes potential benefits of information and technology improvements, including real-time vehicle arrival information, fare payment options, online/mobile trip planning tools, and dynamic dispatch/app-based bookings.

Real-Time Vehicle Arrival Information

Move Sullivan posts schedules for all routes but does not currently provide real-time vehicle arrival information for all services. Real-time information helps improve the ridership experience by reducing passenger wait times, providing confidence that a bus has not been missed, and generally creating a more informed and comfortable rider. This information can be made accessible via Move Sullivan's website, smartphones, and through "push" technologies such as text messages. *TCRP Synthesis 48: Real-Time Bus Arrival Information Systems* reports costs for AVL system implementation for smaller systems (10–25 Automatic Vehicle Location [AVL]-equipped vehicles), with total capital cost between $60,000 and $171,000 and per-vehicle cost between $3,000 and $8,100. However, these cost data were collected when the technology was newer; improved system efficiencies have led to decreased costs. These costs should be explored further with vendors. Buying systems that support GTFS-Realtime (GTFS-rt) allows for the real-time information to be shared to apps like Google Transit.

In addition to improving existing service, data gathered from technologies such as real-time vehicle arrival information and AVL (Automatic Vehicle Location) can help in analyzing the performance of existing and future service opportunities. For example, AVL data could be assessed to adjust schedules based on delay points and improve transfer connections.

> ***Short-term recommendation**: Pursuing real-time vehicle arrival information is recommended given the high value to riders, though funding for equipment and software and staff training to manage the system will be necessary to implement it.*

Fare Policies & Payment Options

Move Sullivan has seven fare-free routes and Sullivan County transportation has two services in Highland and Delaware Township with a flat rate of $1.50 per ride per person. The Highland Township route runs only on Thursdays and the Delaware Township route only runs on Fridays.

Currently, fares paid via cash are accepted. An opportunity to modify existing fare policy includes mobile ticketing. Mobile ticketing may reduce the current challenges riders face in obtaining exact cash on hand, increasing ridership and improving existing rider experience. Mobile ticketing also reduces administrative efforts in collecting and processing fare payment. Mobile ticketing platforms can be expensive, but Sullivan County could explore partnering with nearby agencies to get better pricing with economies of scale, with the added benefit of ease of travel for riders using multiple nearby systems with one platform. Any fare changes need to consider impacts to ridership (some riders may no longer ride if they cannot afford fare or do not

know how to use new payment formats) and community benefits compared to revenue generated.

> ***Mid-term recommendation**: Pursuing mobile-ticketing is recommended given the convenience to existing riders who pay fare, and ability to consider charging for routes that are currently fare-free in the future. Any fare changes would need to consider impacts to ridership and community benefit v. revenue generated.*

Trip Planning Support

Online mobile trip planning tools can help the public get travel information at any day or time. While some providers create proprietary trip planning tools, free and readily available trip planning tools are available and more fitting to Move Sullivan's size and needs. These tools include Google Maps, OneBusAway, Moovit, and Transit. All of these tools depend on the open data format GTFS (GTFS-rt). Monitoring Google Maps and checking the GTFS data set should be part of a regular routine to ensure that riders are able to utilize this tool to plan routes.

> ***Short-term recommendation**: Pursuing trip planning applications is recommended given the high value to riders, though dependent on the real-time vehicle arrival information for maximum value to riders.*

Dynamic Dispatch and App-Based Booking

Dynamic dispatch software allows rural transit agencies to efficiently manage on-demand and deviated fixed-route services by automatically matching ride requests with available vehicles in real time. These systems use algorithms to optimize routes, reduce empty mileage, and improve service responsiveness for riders across dispersed rural areas. When paired with app-based booking, riders can request, track, and manage trips through a smartphone or web interface—similar to commercial rideshare services—while still accommodating call-in or dispatcher-assisted scheduling for users without digital access. Together, these tools enhance flexibility, efficiency, and user convenience for rural transit systems.

> ***Long-term recommendation**: Dynamic dispatching and app-based booking has the potential to improve system efficiency and ease of use for riders, but requires further investments in software and technology that may be cost-prohibitive or difficult for users in rural areas who may not have smartphones or mobile data access.*

FUNDING SOURCES

Table 15 shows major funding sources and their eligibility to be used for operating services, capital improvement, facilities owned beyond a transit operator (in this case, the County both owns facilities and operates a transit system), marketing and outreach, or training for staff.

Table 15. Funding Sources

Funding Source	Description	Eligibility				
		Operating	Capital	City/County Facilities	Marketing/Outreach	Training
FTA Grants	§5310: Enhanced Mobility of Seniors & Individuals with Disabilities Program. Formula funding for the purpose of meeting the transportation needs of seniors and people with disabilities.	X	X		X	
	§5311: FTA Rural Area Formula Program. Formula funding to small cities and rural areas with populations of less than 50,000 for transit capital, planning, and operations, including job access and reverse commute projects. Funds are distributed to providers through NYSDOT. Additionally, no less than 15 percent of funds must be spent on the development and support of intercity bus transportation, unless the intercity bus needs of the state are being adequately met.	X	X		X	
	Rural Transportation Assistance Program (RTAP): The RTAP has a national and state component. The FTA manages the national side of the program to provide training and technical assistance materials.					X
	Other: The FTA periodically releases additional funding opportunities. For example, FTA's Enhancing Mobility Innovation program promotes technology projects that focus on the traveler experience and encourage people to get on board, such as integrated fare payment systems and user-friendly software for demand-response public transportation. Enhancing Mobility Innovation projects fall under two categories: • **Accelerate innovative mobility**: Concept development and/or demonstration projects that improve mobility and enhance the rider experience with a focus on innovative service delivery models, creative financing, novel partnerships, and integrated payment solutions. • **Software solutions**: Projects that develop software solutions that facilitate integrated demand-response public transportation that dispatches transit vehicles through riders' mobile devices or other technology.	X	X	X	X	X
Transit State Dedicated Fund (SDF) Program	Each year, NYSDOT identifies gaps in the transit network's funding needs. Eligible mass transit capital projects highlighted in this needs analysis go through the DOT's prioritization process. The SDF program's annual allocation is usually announced at the end of October or the beginning of November.		X			

State Operating Assistance (STOA) Program	NYSDOT distributes roughly $3 billion annually to around 130 transit operators state-wide. STOA's Payment Formula is: • $0.68/passenger • $1.15/vehicle mile statewide For eligibility, all participants must be public transit systems as defined by the rules and regulations part 975 section 18-6 in the Transportation Law.	X				
Zero-Emission Transit Transition Program (ZETT)	The Zero-Emission Transit Transition Program (ZETT) provides $100 million in funding to transit providers across New York State to support the transition of transit fleets to zero-emission propulsion (battery-electric and hydrogen-electric). The program funds projects including the acquisition of zero-emission transit vehicles, construction of facilities and utility infrastructure for charging and fueling, and the planning and design phases necessary for zero-emission capital projects. Entities affected by Executive Order No. 22 may request between $500,000 and $17,500,000, while all other eligible entities may request between $500,000 and $5,000,000.		X			
Non-MTA Downstate Suburban and Upstate Transit Capital Program	Funds allocated through the five-year State Transportation Plan to projects through a competitive grant application process. Eligible projects include public transit capital improvements.		X	X		
Transportation Alternatives Program (TAP)	Discretionary grant program with the goal of funding transportation projects focused on non-vehicle modes of travel and are environmentally friendly. In 2024, $97.7 million was awarded to 30 communities across the states with $57.8 million to improve active transportation infrastructure. These grants were awarded through the FTA's TAP and allocated by NYSDOT.	X		X		
Private/Public Sponsorships	Private/public sponsorships involve a private entity, such as a local business owner, working with the public agency to fund a project (e.g., bus stop shelter and sidewalk connection maintenance). In return for their investment in the community, these business owners often have recognition for their role, providing a marketing venue for the business.	X	X	X	X	

In addition to these, roadway facility owners (cities, Sullivan County, NYSDOT) can pursue walking and bicycling facility improvements through the following funds:

- Surface Transportation Block Grants
- State Highway Fund
- Highway Use Tax
- Vehicle Registration Fee
- Local-Option Fuel Tax
- Immediate Opportunity Funds
- General Fund

IMPLEMENTATION PLAN

This section summarizes the recommendations identified in the service plan, capital plan, management and partnership plan, and information and technology plans and provides an evaluation for the recommendations focused on the costs and benefits, ease of implementation, and group(s) served or needs met. These criteria are established at the following scales:

- Costs – High-level estimated costs considering the scale of implementation. Some recommendations, like the service plan items, have more refined cost estimates available, while others are represented by the typical costs of implementation and would need to be further refined.
  - $: Less than $100,000 annually
  - $$: $100,000 to $200,000 annually
  - $$$: Greater than $200,000 annually
- Benefits – Qualitative measure identifying expected outcome of the recommendation
  - +: Strategy enhances services slightly
  - ++: Strategy enhances services moderately
  - +++: Strategy enhances services substantially or is necessary to continue operations
- Difficulty of Implementation – Considers whether the strategy can be implemented quickly and with little complication, beyond costs to implement
  - Low: Infrastructure, staff, and other resources are already in place
  - Medium: Some infrastructure, staff, and other resources are in place, but more will need to be obtained
  - High: No infrastructure, staff, or other resources are in place
- Needs Met – Considers whether the strategy benefits many groups of people throughout the County or may be targeted for more niche or specific community groups.
  - ◑: Fewer groups served/needs met
  - ●: Many groups served/needs met

Using the above evaluation criteria, the strategies were evaluated and prioritized in Table 16. Short-term strategies are generally lower cost, provide greater benefits, are less difficult to implement, and serve the needs of more groups than lower-priority strategies. Table 17 describes the implementation partners and relevant funding sources for each strategy or set of strategies. These tables can help to communicate the benefits of the recommendations and key partners and funding to pursue in order to enact recommendations.

Table 16. Strategies and Recommendations

Strategy	Costs	Benefits	Difficulty of Implementation	Needs Met	Timeframe
Service Plan: Move Sullivan Routes and Services					
Monticello Loop					
Adjust Routing on Loop	$	++	Low	◑	Short-Term
Add Afternoon Service	$$	+++	Medium	◑	Mid-Term
Expand Earlier Morning and Later Evening Hours	$$$	+++	Medium	◑	Long-Term
Liberty Loop					
Adjust Routing on Loop	$	++	Low	◑	Short-Term
Add Afternoon Service	$$	+++	Medium	◑	Mid-Term
Expand Earlier Morning and Later Evening Hours	$$$	+++	Medium	◑	Long-Term
Intercommunity Routes					
Add Later Evening Service	$-$$$	+++	Medium	●	Mid-Term
Increase Frequencies	$$$	++	Medium	●	Long-Term
Demand-Response Services					
Add Additional Day(s) of Service for Demand-Response	$	++	Medium	◑	Mid-Term
Monitor Ridership Patterns and Demands to transition routes from Demand-Response to Fixed-Route	$-$$	++	Medium	◑	Long-Term
New Routes or Services					
Pilot out-of-County medical demand-response service	$-$$	+++	Medium	●	Short-Term
Provide intercommunity and/or demand-response service to Eldred, Callicoon, and Narrowsburg	$-$$	++	Medium	●	Short-Term
Provide intercommunity route service to Grahamsville	$-$$	++	Medium	◑	Mid-Term
Pilot on-demand services in larger communities without existing local service, such as Rock Hill/Bridgeville, Fallsburg/South Fallsburg, or Loch Sheldrake/Hurleyville/Woodbourne	$$ - $$$	++	Medium	◑	Mid-Term
Capital Plan					
Provide safe and accessible bus stops, including better amenities and comfortable walking and biking connections, especially at high-activity stops.	$$ - $$$	+++	High	●	Short through Long-Term
Establish capital replacement plan.	$	++	Low	●	Short-Term
Obtain low-floor vehicles and adjust fleet size and composition as the fleet is replaced.	$$	+++	Medium	●	Short through Long-Term
Pursue low-/zero-emission vehicles to stabilize fuel prices.	$$$	++	High	●	Long-Term
Ensure adequate storage and maintenance capabilities to meet future service needs.	$$$	+++	High	●	Long-Term

Strategy	Costs	Benefits	Difficulty of Implementation	Needs Met	Timeframe
Management and Partnership Plan					
Establish regular coordination meetings with connecting providers and partners to improve awareness and access to services.	$	++	Low	◑	Short-Term
Establish feedback and marketing program to engage with employers, education centers, specific communities, and more.	$	++	Low	●	Short-Term
Continue to leverage local funds and seek new partnerships to obtain state and federal funds.	$	+++	Low	●	Short-Term
Promote vanpools for employment.	$	++	Medium	◑	Mid-Term
Promote rideshares.	$$	+	Low	◑	Mid-Term
Partner with education and training centers to increase talent pool and communicate availability of positions.	$	++	Low	●	Mid-Term
Information and Technology Plan					
Provide real-time vehicle arrival information and trip-planning applications.	$$	++	Medium	◑	Short-Term
Improve fare payment options, including mobile ticketing.	$	+++	Medium	●	Mid-Term
Pursue technological advancements, such as app-based booking or dynamic routing software, that promote system use and increase efficiency.	$	++	Medium	◑	Long-Term

Table 17. Implementation Partner and Funding Source Summary

Improvement Type	Implementation Details	Partnerships	Major Funding Sources
Service Plan			
Monticello Loop	Adjust Routing	Improve facilities along routes and market services through: » NYSDOT » Communities along routes » Employers » Community organizations » Healthcare providers » Other County departments	» 5310 » 5311 » Enhancing Mobility Innovation » STOA » TAP
	Add Afternoon Service		
	Add Earlier Morning/Later Evening		
Liberty Loop	Adjust Routing on Loop		
	Add Afternoon Service		
	Add Earlier Morning/Later Evening		
Intercommunity Routes	Add Later Evening Service		
	Double Frequencies		
Demand Response Routes	Add Additional Day of Service for Demand-Response Routes		
	Monitor Ridership Patterns and Demands to transition routes from Demand-Response to Fixed-Route		
New Routes or Services	Provide intercommunity route service to Grahamsville		
	Provide intercommunity and/or demand-response service to Eldred, Callicoon, and Narrowsburg		
	Pilot on-demand services in larger communities without existing local service		
Capital Plan			
Bus Stop Connectivity	Provide safe and accessible bus stops, including better amenities and comfortable walking and biking connections, especially at high-activity stops.	Improve facilities along routes through: » NYSDOT » Local Municipalities » Private property and/ or business owners	» SDF » ZETT » Non-MTA Downstate Suburban and Upstate Transit Capital Program » Private/Public Sponsorships
Capital Replacement Plan	Establish capital replacement plan.	» Sullivan County » Service Contractor	» SDF » ZETT » Non-MTA Downstate Suburban and Upstate Transit Capital Program
Fleet Adjustments	Obtain low-floor vehicles and adjust fleet size and composition as the fleet is replaced.	» Sullivan County » Service Contractor	» SDF » ZETT

Improvement Type	Implementation Details	Partnerships	Major Funding Sources
Zero-Emission Vehicles	Pursue low-/zero-emission vehicles to stabilize fuel prices.	» Sullivan County » Service Contractor » Local Municipalities (charging/fueling infrastructure)	» ZETT
Storage and Maintenance	Ensure adequate storage and maintenance capabilities to meet future service needs.	» Sullivan County » Service Contractor	» SDF » ZETT » Non-MTA Downstate Suburban and Upstate Transit Capital Program
Management and Partnership Plan			
Increase Coordination	Establish regular coordination meetings with connecting providers and partners to improve awareness and access to services.	» Communities along routes » Employers » Community organizations » Healthcare providers » Other County departments	» 5310 » 5311 » Enhancing Mobility Innovation
Establish Feedback Program	Establish feedback and marketing program to engage with employers, education centers, specific communities, and more.	» Communities along routes » Employers » Community organizations » Healthcare providers » Other County departments	» 5310 » 5311 » Enhancing Mobility Innovation
Leverage Local Funds	Continue to leverage local funds and seek new partnerships to obtain state and federal funds.	» Communities along routes » Employers » Community organizations » Healthcare providers	» 5310 » 5311 » Enhancing Mobility Innovation » Public-Private Partnerships
Vanpools	Promote vanpools for employment.	» Employers » Chamber of Commerce	» Public-Private Partnership

Improvement Type	Implementation Details	Partnerships	Major Funding Sources
Rideshares	Promote rideshares.	» Public and Private Providers » Community organizations » Healthcare providers	» Public-Private Partnership
Partner with Education and Training Centers	Partner with education and training centers to increase talent pool and communicate availability of positions.	» SUNY Sullivan » Community organizations » Other County departments	» RTAP » Public-Private Partnerships
Information and Technology Plan			
Real-time Vehicle Arrival Information	Provide real-time vehicle arrival information and trip-planning applications.	» Sullivan County » Service Contractor	» 5310 » 5311 » Enhancing Mobility Innovation
Fare Payment Options	Improve fare payment options, including mobile ticketing.	» Public and Private Providers	
Technological Advancements	Pursue technological advancements, such as app-based booking or dynamic routing software, that promote system use and increase efficiency.	» Sullivan County » Service Contractor » Public and Private Providers	

Performance Monitoring

This section covers the performance measures to track the progress of the CTSP and is categorized by the strategies outlined throughout the plan. Tracking key performance measures helps to ensure the success of the implementation plan. Strategies should be monitored regularly to determine they are still relevant and contributing to the plan's goal. The performance measures in Table 18 are proposed to monitor plan implementation. Many of these measures are typically already monitored for National Transit Database (NTD) reporting purposes.

Table 18. Performance Measures

Performance Measure	Notes
Service Plan	
Annual Operating Costs	Annual operating costs for new or enhanced service and costs for services provided by Move Sullivan and other providers.
Population Served	Percentage and/or number of jobs within ¼ mile of transit stops and/or services.
Employment Served	Percentage and/or number of jobs within ¼ mile of transit stops and/or services.
Service Span & Frequency	Service span provided, including early morning/later evening service hours and weekend service.
Ridership	Annual rides by service type and route provided by Move Sullivan and other providers.
Capital Plan	
Bus Shelter Amenities	Number of stops with bus shelters, benches, and other amenities.
Walking and Biking Access	Percent of stops having a sidewalk/path, bicycle lane/path, and/or crossings connecting to the stop.
Low Floor Vehicles	Number of low floor vehicles and the percentage of the total fleet.
Management and Partnership Plan	
Vanpool and Rideshare Ridership	Annual count of vanpool and rideshare trips.
Information and Technology Plan	
System Ease of Use	Travel improvements between communities and transit, such as fare integration, technology improvements, and timed transfers.

LOOKING FORWARD

Transportation services play a key role in Sullivan, connecting residents and visitors to the places they need to go locally and regionally. This document can serve as preparation for funding cycles and grant applications that can help Sullivan County to implement recommendations and enhance transportation services. Beyond that, the recommendations are intended to provide conceptual guidance to be refined by Sullivan County and its partners as funding and partnership opportunities become available.

While this document provides prioritized strategies and examples of how these would specifically be implemented, the recommendations are a snapshot in time and may adjust to meet the changing needs of the region.