

MEMORANDUM

DATE: August 18, 2023
TO: Garry Ford and Lauren Simcic, City of New Braunfels
FROM: Alliance Transportation Group
RE: Transit Service Opportunities

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Introduction

Selecting a transit service model—continuing a demand-response style service like ART provides, implementing a fixed-route network, or opting for alternative solutions in between—will shape the delivery and structure of transit services in New Braunfels at least for the short to medium term. Additionally, the City of New Braunfels must decide on a transit management strategy to determine how transit services are operated. An important consideration will be whether the City elects to directly operate their transit system or pursue a purchased transportation model. In a directly operated management system, the city assumes full responsibility of day-to-day operations whereas a purchased transportation model contracts out varying degrees of management or operations to an external vendor or vendors. This memo introduces those options but primarily focuses on transit service models, which define the specific configurations and approaches employed to provide transportation options to the public.

Management Models

Deciding between a directly operated, publicly run transit system and a purchased transportation model has significant implications for the City of New Braunfels. The scale of the transit department's role can range from full operation and ownership that offers complete control over service delivery to a turnkey solution that provides minimal involvement in day-to-day operations. Each option presents unique challenges and opportunities. Striking the right balance between flexibility, cost-effectiveness, and meeting the evolving needs of the community will be paramount in building a sustainable and successful transit system.

Directly Operated

In a directly operated transit system, the City of New Braunfels takes full responsibility for managing and operating the transit service. The City procures and owns the fleet of vehicles and recruits, trains, and employs the operators and maintenance staff. In addition to these essential components of directly operating transit service, the City is also responsible for things like strategic planning, route and schedule planning, capital and facilities planning (bus stops, stations), public communications, and customer service. Large transit agencies have a variety of departments tasked with various aspects of operations, and even though a transit department in a small city does not have the same scale of operations to manage, personnel in existing departments will be necessary to fill roles and responsibilities in financial management, procurement, legal, and human resource capacities. However, being in control of the entire operation provides the City with the flexibility to make real-time adjustments to the transit service and ensures direct accountability to the public.

Purchased Transportation

The City may also decide to contract out the transit service operations by issuing a Request for Proposal (RFP) for an operations management contractor. The contractor takes over the day-to-day management and operation of the transit service. This often includes handling operators, scheduling, maintenance, and dispatch. It may also include some aspects of customer service response, such as maintaining an information desk, phone line, and/or email communications for the passengers and public. The RFP will determine precisely which facets

of transit service management the contractor will assume, its responsibilities to the City, and the aspects of transit management the City will provide with its own staff.

In addition to a Transit Manager (or equivalent position) that acts as the City’s point of contact for its transit system, the City may fill other capacities with its existing financial, procurement, and human resources staff. The City typically retains control over strategic decisions, such as setting fares, approving route changes, and overall service goals. The contractor operates under the City’s directives and may be required to adhere to certain performance metrics and service quality standards outlined in the RFP and ultimately, the service contract. The City must monitor the contractor’s performance, ensuring that the service meets not only established quality standards but also complies with Federal Transit Administration (FTA) regulations, where federal grant money is concerned. Some aspects of monitoring and compliance may too be contracted out, but the City is required by FTA to monitor all its contractors and assumes full responsibility for its system’s compliance with federal regulations.

Table 1: Potential Shared Responsibilities in a Purchased Transportation Model

	City's Transit Department	Transit Management Company
Route Planning and Design	Determines fixed-route and service expansion plans, considering public feedback and demographics	May assist in route planning, but final decisions often require city approval
Scheduling and Timetables	Sets policies and service standards	May develop schedules according to city policies and service standards
Vehicle Procurement and Maintenance	May procure the transit fleet with assistance of City’s procurement department or rely on contractor to provide “turnkey” service	May oversee fleet maintenance or rely on external contractors
Driver Recruitment and Training	May use City channels to promote driver recruitment; monitors contractor for compliance with FTA regulations	Often recruits, hires, and trains operators in collaboration with applicable City guidelines
Fare Collection and Ticketing Systems	May manage some fare collection or selling of passes on City property	May implement and manage all fare collection systems, reporting revenues to the city; option for 3 rd party vendor specifically for ticketing/passes as needed with input from City
Customer Service and Information	May field customer comments, questions, and complaints through general City channels and handle in-house or relay to contractor; Prepare relevant Title VI reporting to track complaints and resolutions	May maintain various avenues for customer service, including help desks, phone lines, and email addresses focusing on operational aspects and maintaining service quality, forwarding other matters to the City; Prepare relevant Title VI reporting to track complaints and resolution on behalf of City

Service Quality and Safety Assurance	Ensures adherence to safety protocols, monitors service quality, and addresses passenger feedback; Develops and implements public transportation agency safety plan (ASP)	Collaborates on service quality assessments, implementing city-defined safety standards; Implements public transportation agency safety plan (ASP) on behalf of City
Marketing and Public Outreach	Engages in marketing campaigns to promote transit services and reach out to potential riders	May contribute to marketing efforts, aligning with the city's strategic goals
Budgeting and Financial Management	Develops and manages the overall transit department budget, allocating necessary funds for operational expenses	Assists with financial management, providing operational cost estimates and financial reports to City
Data Collection and Performance Metrics	Collects and analyzes relevant transit data (including but not limited to NTD) to evaluate performance and inform future decisions	May support data collection and performance tracking, aiding the city in assessing service effectiveness or collect relevant transit data (for NTD and others) on behalf of the City for implementation as designed by the City

The specific responsibilities of a transit management company may vary based on the contractual agreement with the City. The level of involvement and authority delegated to the management company will depend on the terms outlined in the contract. Similarly, the City's transit department may have varying degrees of autonomy and resources, which can influence their roles in day-to-day transit operations and the overall efficiency, effectiveness, and other aspects of the service provided.

Comparison of Transit Management Models

Service efficiency refers to a transit system's ability to deliver services with optimal resource utilization, reported to FTA and the National Transit Database (NTD) as operating cost per hour. Service effectiveness, on the other hand, gauges how well the transit system achieves its intended objectives and meets the needs of passengers and the community, which NTD defines as passenger trips per hour. Cost effectiveness combines those two measures, evaluating the effectiveness of the transit system in relation to its operating costs, or cost per passenger trip. Neither management model necessarily performs better than the other in terms of these metrics inherently, but **Table 2** provides considerations for each regarding these and other aspects of transit service.

Table 2: Comparison of Transit Management Models

	Directly Operated Transit Services	Purchased Transportation Models
Service Efficiency	May offer greater service efficiency due to direct control, quick decision-making, and better integration with city services and departments	Service efficiency can be achieved through specialization, technology-driven solutions, and best practices gained from industry experience
Service Effectiveness	May offer greater potential for service effectiveness as transit may be regarded as a public good responding purely to local demands	May offer comparable service effectiveness with clear communication and performance metrics with the management company
Cost Effectiveness	City may have higher overhead costs if providing an in-house workforce, including dedicated operations and maintenance personnel, as well as the cost of maintaining vehicle fleets, including purchase of parts and products to support operations	Reduced administrative burden and access to specialized resources and technology may offer advantages
Decision-making control	Full control over operations and service decisions	City retains full control over service planning, delegating daily operational decisions to management company, City will provide general oversight and review of operations.
Innovation and expertise	Limited to City's capacity and resources	Can offer expertise, innovation, and best practices from managing multiple transit systems

Evaluation of Transit Service Opportunities

Transit Service Model Options

As the City of New Braunfels continues the process toward becoming a Direct Recipient of Federal Transit Administration (FTA) grant funding, this TDP will help guide the most suitable transit service model. The service model plays a pivotal role in meeting the diverse transportation needs of the city's residents while ensuring effectiveness and efficiency. This evaluation explores three primary service options: a traditional fixed-route system with complementary ADA paratransit, a full microtransit service model, and a hybrid combination of fixed-route and microtransit. Each option presents unique advantages and challenges, necessitating a data-driven evaluation to determine the best fit for the city's evolving transit landscape.

Traditional Fixed-Route with ADA Paratransit

Fixed-route systems provide a predictable service for commuters and regular passengers. High-capacity and predefined routes make them suitable for denser areas with consistent travel patterns. The ADA paratransit service ensures accessibility for individuals with disabilities, complying with federal regulations. However, fixed routes may not be the most cost-efficient option for areas with lower demand, leading to underutilized services. Limited flexibility can lead to inefficient routes and service gaps in underserved neighborhoods.

Full Microtransit

Like the existing demand-response transit system provided by AACOG in New Braunfels, microtransit is essentially another form of "flexible transit," as opposed to having fixed routes. In contrast to continuing the current, traditional demand-response system, a full microtransit model offers a highly flexible service catering to individual passenger needs and real-time demand. Whereas a traditional demand-response system typically requires scheduling rides at least 24 hours in advance, microtransit can operate "on-demand" as vehicle availability allows. While microtransit excels in adaptability, it may face capacity limitations during peak travel times, and the cost per passenger could be higher compared to fixed-route options. Extensive use of technology may require a learning curve for both riders and City staff managing or overseeing the program. Scaling up existing services could be viewed as an interim step towards a full microtransit system.

Hybrid Fixed-Route and Microtransit

A hybrid model combines the strengths of both fixed-route and microtransit systems. Fixed routes provide a backbone for higher capacity travel corridors while microtransit can efficiently serve lower demand areas, connect remote neighborhoods, and provide a solution for the first/last mile problem. Integrating different service models can be complex and require careful coordination with the provider (if purchased transportation) and the public to ensure they understand the transit services being offered. Balancing resources between fixed-route and on-demand services necessitates ongoing strategic planning to optimize cost-effectiveness and customer satisfaction and adapt to changing demographics and development. The table below offers a broad comparison of these transit service model options.

Table 3: Comparison of Transit Service Models

	Fixed-Route	Microtransit	Hybrid
Service Flexibility	Limited flexibility with predefined routes and schedules	More flexible, allowing on-demand pick-up and drop-off within a defined service area	Highly flexible and adaptive, optimizing routes in real-time based on demand
Cost Efficiency	Cost-efficient for high passenger volumes and established routes	Cost-efficient in low-demand areas or during off-peak hours	Improved cost efficiency due to optimized routes, but may still have higher costs per passenger
Passenger Capacity	High capacity due to larger buses and dependent on frequencies offered	Lower capacity compared to fixed-route, especially during peak demand periods	Moderate capacity due to use of smaller vehicles
Suitability for Different Areas	Ideal for urban areas and some suburban areas with higher density corridors	Beneficial for rural areas, areas with low demand, and areas lacking fixed routes	Well-suited for areas with variable demand, suburban areas with limited transit access
Accessibility	Accessible for individuals with mobility challenges but requires complementary paratransit for others	Can be made fully accessible to individuals with specific needs or refer riders to paratransit services	Can be made fully accessible to individuals with specific needs or refer riders to paratransit services
Reservation Requirement	No advanced booking required	Often requires prior reservations	May require reservations in advance for better coordination
Technological Integration	Less reliant on technology	Technology-driven, often leveraging mobile apps for bookings and tracking	Uses technology for route optimization and passenger communication

Each model offers distinct advantages, and the choice should be tailored to the city's specific needs and demographics. A traditional fixed-route system with ADA paratransit provides reliability but may not fully address evolving transportation demands. A full microtransit service offers flexibility but requires careful cost analysis and ongoing monitoring to ensure the public is provided the proper value. The hybrid option presents an enticing middle ground, but its successful implementation depends on seamless coordination between the fixed-route and microtransit components. Via's analysis will dive deeper into each service scenario, examining financial feasibility, potential ridership, and impact on community accessibility. By evaluating these options comprehensively, New Braunfels can build toward a robust and sustainable public transit system that serves as the backbone of the city's future mobility.