



# Lane Transit District Transit Fare System Roadmap Final Report

Prepared for: Lane Transit District (LTD)

Prepared by: Access Planning Ltd  
Amey Consulting Ltd.

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# Table of Content

1. Purpose of Report.....	3
2. Context: Assessment of Current Fare System.....	4
2.1 Current System Conditions.....	4
2.2 Stakeholder Engagement Findings .....	6
2.3 Current Practices in Fare System Policies, Structures and Technology .....	8
2.4 System Assessment .....	8
3. Proposed Objectives and Requirements for Future Fare System.....	10
3.1 System Objectives.....	10
3.2 System Requirements.....	11
4. Fare System Options .....	13
4.1 Options Summary .....	13
4.2 Options Evaluation.....	14
5. Recommendations and Roadmap Considerations .....	17
5.1 Preferred Option.....	17
5.2 Implementation Roadmap / Considerations.....	18
Appendices.....	25
Appendix 1 – Current LTD Fare System SWOT Analysis.....	26
Appendix 2 – Current Practices in Fare System Policies and Technologies .....	28

# 1. Purpose of Report

This report provides Lane Transit District (LTD) with a clear, actionable roadmap for modernizing its fare system. The findings will support LTD in shaping key strategic initiatives, such as the development of policy documents, and guiding upcoming procurement decisions, including contract extensions with fare collection vendors.

The goals of this report are to:

- a) Clarify LTD's fare system challenges and define the underlying problem statement.
- b) Identify objectives and desired functionalities, such as account-based architecture, multimodal integration or equitable fare policies.
- c) Assess the current fare system to identify gaps, risks and potential opportunities.
- d) Evaluate a strategic suite of options for system evolution and modernization.
- e) Deliver a phased action plan with recommendations across technology, policy, governance and procurement.

The content reflects discussion with internal LTD teams and community partners, aiming to bring a shared vision for the system that meet the needs of a diversity of user groups, align with agency priorities and leverages market opportunities.

While broad public engagement was not part of this process, LTD should commit to meaningful community input before proceeding with a formal procurement. Fare system priorities, including questions of payment access, equity, affordability, and the needs of rural and paratransit customers will be integrated into LTD's upcoming Long Range Mobility Plan (LRMP) outreach process, ensuring fare-related topics reach a broad cross-section of current riders, non-riders, and community members

## 2. Context: Assessment of Current Fare System

### 2.1 Current System Conditions

#### **Fare Collection Infrastructure: Aging Fare Technology Limits Payment Options and Boarding Speed**

LTD's fare collection system combines legacy cash-based equipment with electronic fare technology. Most fareboxes are Genfare Transview 100-series units, which are cash-only and no longer manufactured. Newer Genfare Fast Fare fareboxes are being installed on replacement vehicles but are used only for cash collection. LTD has 265 Umo validators installed on vehicles, with 35 in spare inventory. Validators support QR codes and smartcards but do not currently support contactless EMV or mobile wallet payments. QR code scanning has become less reliable, slowing boarding.

LTD operates approximately 70 Flowbird ticket vending machines (TVMs), primarily along the EmX corridor. These machines accept cash and credit/debit cards and issue paper tickets, which are not integrated with Umo. The TVM's have surpassed end-of-life and are no longer supported by the vendor. LTD's CAD/AVL system is provided by Trapeze/Vontas and can integrate with electronic fare collection systems. The Umo platform, introduced in 2019 and transitioned from TouchPass in 2021, provides account-based fare management, stored value, and fare capping. Customers can load value online or through retail partners for cash digitization. Umo validators support QR codes and smartcards, and select EmX stations use ScanRide for pre-payment. Integration with ERP and other systems remains limited.

Fare media options include cash, paper tickets, Umo mobile app, and Umo smartcards. Paper products remain in circulation for certain passes and programs, while electronic options support fare capping and account-based management.

#### **Fare Policy: Flat Fare Structure Masks Service-Level Differences and Limits Flexibility**

Lane Transit District (LTD) currently employ a flat fare structure for its core fixed-route network, including local bus and EmX BRT services, with a standard fare of \$1.75 per trip. Other LTD services operate under a separate fare structure:

- RideSource paratransit charges \$3.50 per trip;
- LTD Connector in Cottage Grove charges \$1.00 per trip (cash only);
- Rhody Express in Florence charges \$1.00 per trip or \$2.00 for a day pass;
- Diamond Express charges \$2.50 per trip or \$5.00 for a day pass, which is also valid on LTD's core network;

- LinkLane (operated by Lane Council of Governments) charges \$5.00 for a full-length trip or \$1.00 for intermediate stops.

PeaceHealth Rides bike share operates independently with time-based or membership pricing.

### **Fare Products: Limited Product Ranges and Uneven Access to Fare Capping**

Fare products on LTD's core network include:

- Cash
- Single-ride tickets;
- Day passes, and
- Monthly passes.

Fare capping is available through the Umo platform, which upgrades riders to a day pass after two paid rides in a day and to a monthly pass once the monthly equivalent is reached. Riders paying with cash or paper tickets do not receive fare capping benefits unless they purchase passes in advance. LTD introduced a rolling monthly passes in February 2026, letting the rider determine when the 31/92 days starts.

### **Discount Programs: Strong Equity Focus Through Income-Based and Student Passes**

Discount programs include:

- reduced fares for youth, seniors, and persons with disabilities;
- income-based programs such as the Honored Rider pass; and
- group pass programs for organizations.

Student Transit Passes provide free rides for K–12 students at participating schools, funded through the Statewide Transportation Improvement Fund (STIF). College pass programs are available at local institutions, with varying cost structures. Paper and digital fare products are also distributed through eligible nonprofits at a discounted rate.

### **Payment Options: Cash Dominates Despite Digital Options**

Payment options on LTD's core network include:

- cash onboard;
- paper tickets, and
- Umo smartcards/mobile app.

Umo supports stored value and fare capping. Other services primarily accept cash or paper tickets. LTD plans to expand Umo to Diamond Express, Rhody Express, the

Connector, and Rural Shuttle services in 2026. LTD does not have a formal transfer policy; each boarding requires a separate fare, except for riders with a Diamond Express day pass, which also covers LTD’s core network. If riders pay cash for Diamond Express, they receive a paper LTD daypass.

### **Fare Revenue – Fare Revenue Remains A Small Portion of LTD’s Overall Revenue**

In fiscal year 2024, LTD collected \$4.3 million in fare revenue, representing approximately 4% of general revenues. For fiscal year 2025–2026, fare revenue is projected at \$4.4 million, or 5.7% of operating requirements. Approximately 46% of fare revenue in 2024 came from the group pass program. Fare levels are approaching pre-pandemic amounts, but overall fare revenue remains a small share of LTD’s funding.

### **2.2 Stakeholder Engagement Findings**

The engagement conducted as part of this process was intentionally limited in scope, designed primarily to align LTD staff and key institutional partners around the challenges and opportunities facing the current fare system.

Virtual stakeholder engagement sessions were held with both internal and external groups in the fall of 2025 to gather insights into potential challenges faced by different system users (see Table 1 for list of groups and attendees). Surveys were provided to representatives of interested stakeholders who were not able to attend the virtual sessions.

*Table 1. Stakeholder groups engaged as part of this process*

<b>Groups</b>	<b>Representatives</b>
<i>LTD Staff</i>	Operations, IT, Finance, Customer Service, Marketing
<i>Municipal and Non-Profit Partners</i>	City of Eugene, Eugene and Springfield Transportation, St Vincent de Paul
<i>Schools</i>	Lane Community College, Bethel Eugene, Springfield School Districts
<i>University and Mobility Partners</i>	University of Oregon, Cascadia Mobility, Lane Council of Governments
<i>Other Groups Engaged via Survey</i>	Transponder Oregon; St. Vincent DePaul; Housing Our Veterans; Live Grow Share; Oregon Social Learning Center; Restored Connection

Group passes account for a significant share of LTD’s revenue, and it is essential that a future fare system meet the need of those who administer them. Likewise, municipal and non-profit partners administer critical programs for vulnerable communities, including unhoused individuals, and their participation was essential to

understand the challenges of navigating the system when folks may not have access to a phone or bank cards.

Many of the comments shared during these sessions reinforced challenges highlighted in the system assessment—such as a need to focus on customer experience, service integration, and technology/system efficiency. While there many common themes, the sessions also uncovered additional concerns, including the need to preserve non-digital payment options and ensure all users receive the same fare-capping benefits, regardless of how they handle payments. We also heard about challenges with managing group pass programs on the backend. School partners shared that the current system feels cumbersome, requiring significant staff time to set up individual accounts. They also noted difficulties in accessing rider data seamlessly.

During the sessions, the groups were asked to think through outcomes that they think would be important both from the rider and the agency’s perspective. This approach was meant to broaden insights and bring nuance to issues discussed. In closing, attendees provided insights into potential barriers to implementing some of these outcomes. Bullets below are a summary of what we heard:

#### **Rider-Focused:**

- **Ensure system is affordable and equitable:** riders should receive the most affordable fare regardless of payment method, special attention should be given to unbanked users and those with limited digital literacy.
- **Simplify and improve usability:** Fare products should be easy, fast and convenient – comparable to “buying a cup of coffee”. Avoid complex structures and processes and support uptake through education and marketing.

#### **Agency-Focused:**

- **Improve technology and system efficiency:** Streamline UMO backend processes for group discount fares through batching, automation, and customization.
- **Minimize fare enforcement conflicts:** Fare evasion is low priority; efforts should be focused on reducing driver-user confrontations and ensuring drivers’ safety.
- **Enhance data access:** Provide better tools for accurate data to improve service quality and efficiency across agencies.

#### **Potential Barriers:**

- **Technology limitations:** UMO system deficiencies, inconsistent retailer availability for pass reloads, and lack of user behavior data.
- **System fragmentation:** Multiple apps and fare systems create user confusion and hinder progress toward a unified system.

- **Resistance to change:** Challenges related to technology adoption and rider perceptions.

Broader public engagement is planned as part of the Long Range Mobility Plan (LRMP) outreach process, where fare system priorities will be an integrated component. Additionally, prior to the launch of any new fare system, LTD will develop and implement a targeted communications and marketing strategy to ensure that customers are well-informed about changes to payment options, fare products, and how to access the system.

## 2.3 Current Practices in Fare System Policies, Structures and Technology

A scan of recent initiatives in comparable jurisdictions highlighted that transit agencies are modernizing fare system to improve equity, simplify rider experience and leverage technology for flexibility and cost efficiency. Common practices include:

- **Customer-Centric Fare Design:** Simplified fare structures reduce confusion and improve access. They may include targeted programs to meet the needs of specific groups.
- **Modern Fare Products and Pricing:** Shift from traditional passes to usage-based models like fare capping; some agencies explore multi-modal pricing.
- **Open & Account-Based Payments:** Flexible payment options via cards, mobile wallets, and smart devices to reduce reliance on proprietary media.
- **Technology and Infrastructure Flexibility:** Open architecture and digital channels cut costs, reduce cash use and phase out ticket vending machines.
- **Integrated Multi-Modal Payments:** Seamless payments across transit and shared mobility are emerging, though full fare integration remains rare.
- **Replacing Legacy Fare Technology:** Agencies replace aging systems with modular, cloud-based platforms supporting mobile ticketing and open payments, often through staged modernization.
- **Fare Adjustment Strategies:** Post-pandemic, agencies favor incremental or inflation-linked increases, paired with equity measures and clear communication.

Reference to specific programs are included in Appendix 2.

## 2.4 System Assessment

Findings from the current fare system, insights from peer agency practices, and stakeholder engagement revealed a set of key challenges facing LTD's fare system:

- **Inconsistent and inequitable rider experience across services:** The current fare system creates an inconsistent and inequitable rider experience across services. Fare rules and benefits, such as fare capping, do not apply uniformly across Lane County–area services, and there is no time-based transfer window. Riders who pay with cash or paper tickets often miss out on the “best fare,” and station sales are not linked to rider accounts, further limiting convenience.
- **Aging and unreliable hardware:** Hardware and sales channels are aging and disconnected. On-board validators are outdated, and QR code scanning is unreliable, slowing boarding. Current devices do not support contactless bank cards or mobile wallets. Station ticket machines, available only at EmX stations, issue paper tickets and are not connected to rider accounts, creating a separate, manual process.
- **Limited data and system integration:** The fare system connects poorly with finance and other operational tools, requiring manual reconciliation and leaving rider data underutilized. Integration with partner mobility services and commonly used rider tools is either limited or slow.
- **Diffuse ownership and operational gaps:** Finally, ownership and operations are diffuse, leading to gaps in accountability. Responsibility for fares and systems is spread across multiple teams, and inspection and enforcement are inconsistent when staffing is tight. Cash handling and manual pass processing add workload and risk, while clear performance targets and centralized monitoring are not consistently in place.

A complete SWOT analysis can be found in Appendix 1.

## 3. Proposed Objectives and Requirements for Future Fare System

Using the information gathered through the system assessment, a set of objectives and requirements were developed to be used as a guide throughout the next stage of the project and to help refine what a future fare system for LTD should achieve.

### 3.1 System Objectives

A long list of objectives was originally created to engage with the different stakeholder groups. Through discussion, the list was eventually narrowed down to a concise set of four objectives for LTD's future fare system:

- a) **Best price for every rider, every time:** Riders should always pay the lowest possible fare, no matter where they start their trip or how they choose to pay; whether by cash, card, or app. This principle eliminates the fear of overpaying and makes transit more equitable, ensuring that riders don't have to figure out independently which option is cheapest. Key elements include:
  - fare capping, where rides become free after a certain spending threshold for the day or month;
  - equal benefits for non-digital payment options so riders without smartphones aren't disadvantaged; and
  - transparent pricing that builds trust in the system.
- b) **Simple and predictable fares:** As stated by many stakeholders during engagement "paying for transit should feel as easy as buying a coffee". In short, it should be quick, intuitive, and stress-free. Simple and predictable fares means reducing the number of products, multiple pass types, and guaranteeing a clear "best fare" promise so riders know they're always getting the best deal automatically. Passes should also start on any day, not just the first of the month, making them flexible for riders with irregular schedules.
- c) **One account for every way riders travel services:** Whether within the Eugene-Springfield Metro area or in rural Lane County, riders should be able to plan and pay for multiple modes (bus, BRT (EmX), bike share, and other partner services) through one account or linked accounts. Seamless integration encourages multimodal trips and improves customer experience. This requires a unified payment system or account linking, consistent language and benefits across services (such as discounts applying everywhere), and integrated trip planning tools so riders can see all options in one place.

- d) **Reliable and efficient:** The system must operate seamlessly for both riders and staff, combining reliability with efficiency to build trust and reduce operational costs. Hardware should function consistently across validators, kiosks, and other equipment to ensure fast boarding. Staff need intuitive tools that allow quick updates to fares and products without unnecessary complexity. Accurate, trustworthy data should support reporting and audits, and routine tasks such as pass renewals and fare capping should be automated to save time. Group pass programs for employers, schools, and other organizations should also be simple to manage and easy for participants to use, creating a system that feels effortless for everyone involved.

## 3.2 System Requirements

There are essential products and functionality that the fare system needs to deliver in order to achieve the identified objectives. A set of requirements has been developed to address these needs, spanning infrastructure, technology, policy, and governance processes. While this list may not capture every improvement necessary to fully meet the objectives, it provides a strong foundation for LTD to build the fare system it envisions. The following requirements are required to enable the proposed objectives:

- **Open, account-based payments** should enable flexible options such as credit/debit cards, mobile wallets, and accounts that support fare capping and rolling passes.
- **Validators** must be highly compatible, accepting smartcards, QR codes, contactless cards, and mobile wallets. They should be reliable and vendor-agnostic to ensure LTD retains flexibility as needs evolve.
- **Fare structures** should remain simple, using daily and monthly caps along with clear short-term options.
- **Programs and eligibility** should be managed seamlessly, supporting student and employer passes as well as reduced-fare categories.
- **LTD's data and mobility services** should be fully integrated, linking to enterprise resource planning, reporting tools, and other mobility platforms and apps such as trip planners.
- **Cash-to-digital solutions** should be easy to access at local retailers and stations.
- **The system** must be reliable and secure, enabling central monitoring, remote updates, strong privacy protections, and clear governance with defined roles and responsibilities across LTD and its partners.

Table 2 shows how requirements match to the four objectives.

Table 2. Mapping system requirements to objectives

	<b>Objective 1: Best price for every rider, every time</b>	<b>Objective 2: Simple and predictable</b>	<b>Objective 3: One connected journey across services</b>	<b>Objective 4: Reliable and efficient</b>
<b>Open, Account-Based Payments</b> <i>(supports 3 objectives)</i>	X	X	X	
<b>Validator Compatibility</b> <i>(supports all objectives)</i>	X	X	X	X
<b>Simple Fare Structure</b> <i>(supports 2 objectives)</i>	X	X		
<b>Program and Eligibility</b> <i>(supports 2 objectives)</i>	X		X	
<b>Data and Mobility Service Integration</b> <i>(supports 2 objectives)</i>			X	X
<b>Cash-to-Digital Solutions</b> <i>(supports 2 objectives)</i>	X	X		
<b>System reliability and Security</b> <i>(supports 2 objectives)</i>		X		X

## 4. Fare System Options

### 4.1 Options Summary

Lane Transit District (LTD) recently renewed its contract with Umo in May 2025 for a two-year term, with an option for an additional two-year extension beginning in May 2027. This timeline affects the longest LTD can stay with UMO without going to bid. Under the current contract, LTD has the ability to end the contract at any time for convenience.

The renewed contract also includes provisions for purchasing upgraded validators, which could help address some current challenges. LTD is already implementing improvements, such as expanding handheld validators for rural connector services and working with the current vendor to implement minor improvements to the K–12 student transit pass program.

Four primary options were identified for LTD’s future fare system and are summarized below.

1. Maintain Status Quo	2. Optimize Current System	3. Migrate to New Fare Platform	4. Join a Multi-Region Fare Collection System
Continue operating the existing account-based system with current hardware and configurations; minimal changes and investment.	Keep the current vendor but reconfigure products and discounts, expand retail/community reloads, refresh on-board devices as needed, and improve reporting and connections where available.	Run a competitive process to replace the platform and refresh devices; design for best-fare by default, modern interfaces, stronger data connections, and future payment methods.	Adopt a shared regional platform with standard tools, governance, and cost-sharing; leverage economies of scale and regional interoperability, e.g., NeoRide, HopPass, Cal-ITP.

- The first option is to maintain the status quo, continuing to operate the existing account-based system with current hardware and configurations, making only minimal changes and investments.
- The second option is to optimize the current system by retaining the existing vendor and reconfiguring fare products and discounts, expanding retail and

community reload options, refreshing on-board devices as needed, and improving reporting and system integrations where possible.

- The third option involves migrating to a new fare platform through a competitive procurement process, replacing the platform and refreshing devices to enable best-fare pricing by default, modern interfaces, stronger data connections, and support for future payment methods.
- The fourth option is to join a multi-region fare collection system, adopting a shared regional platform with standardized tools, governance, and cost-sharing. This approach would leverage economies of scale and regional interoperability, similar to systems like NeoRide, HopPass, or features of Cal-ITP.

A fifth option—adopting an open architecture—was considered but deemed infeasible due to high technical complexity, significant integration risks, and LTD’s limited capacity to act as a system integrator.

## 4.2 Options Evaluation

To evaluate these options, LTD applied five key criteria:

- financial and cost implications,
- risk management,
- control and oversight,
- system integration and scalability, and
- alignment with LTD’s requirements.

Financial considerations included upfront and ongoing costs, hardware investments, and training. Risk management focused on service continuity, reliability, and data integrity. Control and oversight assessed the ability to adjust products and pricing quickly and access data for audits. Integration and scalability examined connections to finance tools, regional interoperability, and readiness for growth. Finally, requirements alignment measured how well each option met LTD’s objectives and technical needs.

The preliminary assessment revealed clear trade-offs:

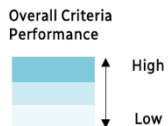
- Maintaining the status quo (Option 1) offers the lowest near-term cost but perpetuates technical debt and limits progress toward objectives, while posing high risks of boarding delays and constrained data access.
- Optimizing the current system (Option 2) provides the fastest path to visible improvements with manageable cost and risk, offering moderate gains in control and integration by remaining bounded by vendor limitations.

- Migrating to a new platform (Option 3) involves the highest upfront cost and change risk but delivers strong alignment with LTD’s objectives, modern integrations, and long-term flexibility.
- Joining a shared regional platform (Option 4) offers strong potential for regional integration and multimodal readiness but reduces local control and introduces governance complexity. While a regional approach has intuitive appeal, the only established model in Oregon is the TriMet HopCard system in the Portland/Vancouver metro area, which is owned and operated by TriMet and used by Portland Streetcar and C-Tran through intergovernmental agreements (IGA). Joining this system would require LTD to enter into a similar IGA with TriMet, an arrangement that introduces meaningful constraints. LTD would have limited ability to adjust fare products and policies independently, as changes would need to align with TriMet's system priorities and governance structure. Access to fare-based ridership data would be more limited, reducing LTD's ability to analyze travel patterns and make informed service decisions. Hardware procurement would also be subject to TriMet's purchasing processes, reducing LTD's flexibility and potentially increasing costs. For these reasons, Option 3 is the preferred path -- it delivers the modern, integrated platform that a regional approach would offer, while preserving LTD's ability

Table 3, on the following page, provides a summary of trade-offs across all options.

Table 3. Assessment of options

Criteria	Option 1 – Maintain Status Quo	Option 2 – Optimize current system	Option 3 – New platform	Option 4 – Shared platform
Financial & Cost	<b>Moderate</b> – Lowest near-term spend but growing technical debt and <b>missed efficiency gains over time.</b>	<b>High</b> - highest value per dollar if changes are mostly configuration + selective hardware refresh.	<b>High</b> upfront (procurement, migration, hardware, training, communications) - <b>potential lower operating cost and higher value over time.</b>	<b>Moderate</b> –high onboarding, then shared operations may lower unit costs; good for grant positioning.
Risk Management	<b>High</b> - ongoing risk of boarding delays and service friction from device limitations.	<b>Moderate</b> - risk; proven platform; changes can be phased.	<b>Higher</b> change risk; may be mitigated with pilots, phased rollout, and parallel running during transition.	<b>Lower</b> technical risk (mature platform); <b>governance risk</b> (regional change processes can be slower).
Control & Oversight	<b>Limited</b> agility to change products/prices quickly – constrained data access.	<b>Moderate</b> improvements (within platform limits).	<b>High</b> (faster product/price changes; better data ownership).	<b>Lower</b> local control (pricing cadence, feature timing, data standards subject to shared rules).
System Integration & Scalability	<b>Limited</b> - progress depends on vendor roadmap rather than local priorities.	<b>Moderate</b> (better than status quo; still bounded by vendor)	<b>High</b> - (modern connections; clearer partner pathways).	<b>Strong</b> - (regional reach, multimodal readiness).
Requirements Alignment	<b>Weak</b> overall.	<b>Good</b> overall with known limitations.	<b>Very strong</b> across all requirements once in place.	<b>Very strong</b> on integration and consistency; trade-offs in local autonomy.



## 5. Recommendations and Roadmap Considerations

### 5.1 Preferred Option

Option 3 is the preferred path for LTD's fare-collection modernization because it best aligns with LTD's objectives and expected outcomes for its fare system.

Option 3 enables an opportunity for an open-architecture platform with broader vendor flexibility, supports a phased, risk-managed transition, preserves the value of the current contract with UMO in the near-term, and establishes the foundation for a long-term, scalable fare-collection ecosystem. The approach is also consistent with near-term readiness to leverage ongoing hardware updates (including planned handheld validators in 2026) and positions LTD to pursue open procurement for ongoing operations while maintaining the ability to adapt to future requirements and vendor capabilities.

#### ***The Benefits of a Upgraded Fare System for Rural Services and Riders***

A unified fare system is not just an upgrade for urban riders. It is an equity commitment to customers across all of LTD's and other Lane County public transit provider's services. Today, riders on rural and intercommunity services like Diamond Express, Rhody Express, the Cottage Grove Connector, and LinkLane operate under separate fare structures and have access to a more limited set of fare products and programs than riders on the core fixed-route network. A modern, integrated fare platform would change that. Under Option 3, rural customers would benefit from a consistent and recognizable fare payment experience across all LTD services, making it easier to navigate the system regardless of where in Lane County they are traveling. Transfers between rural and urban services would be more seamless, and riders would have access to the full range of fare programs (including capping, discount programs, and future equity initiatives) that may currently be unavailable or inconsistently applied to their service. LTD's goal is a fare system where the quality of the customer experience does not depend on which route you ride.

## 5.2 Implementation Roadmap / Considerations

Figure 1 on the next page presents a high-level implementation roadmap for LTD to guide next steps in moving forward with Option 3. The road map it is intended to show potential interdependencies and the relative sequencing of key activities. The timeline provided is for illustrative purposes only and should be reviewed in light of LTD's internal capacity. Each implementation task is summarized below and detailed in subsequent sections.

- Near-Term Actions (2026-2027): During this period, LTD should focus on foundational activities that establish the parameters for a new fare system. This includes refining fare policy and confirming hardware and software needs. These activities will inform the development of an RFP to select a new fare system vendor. This will be a decision-intensive stage requiring more detailed analysis than was possible in this study. LTD would benefit from retaining a consultant team specializing in fare system transformation to support this work. During this period, LTD should continue deploying handheld validators across the fleet to integrate RideSource, LinkLane, Diamond Express, and Rhody Express into the Umo platform.
- Medium to Long Term Actions (2028-2029 and beyond): During this period, LTD should execute the migration to the new platform through an open competitive procurement to select a vendor responsible for ongoing fare-collection system operations.

Key considerations for each implementation task are outlined below in greater detail below.

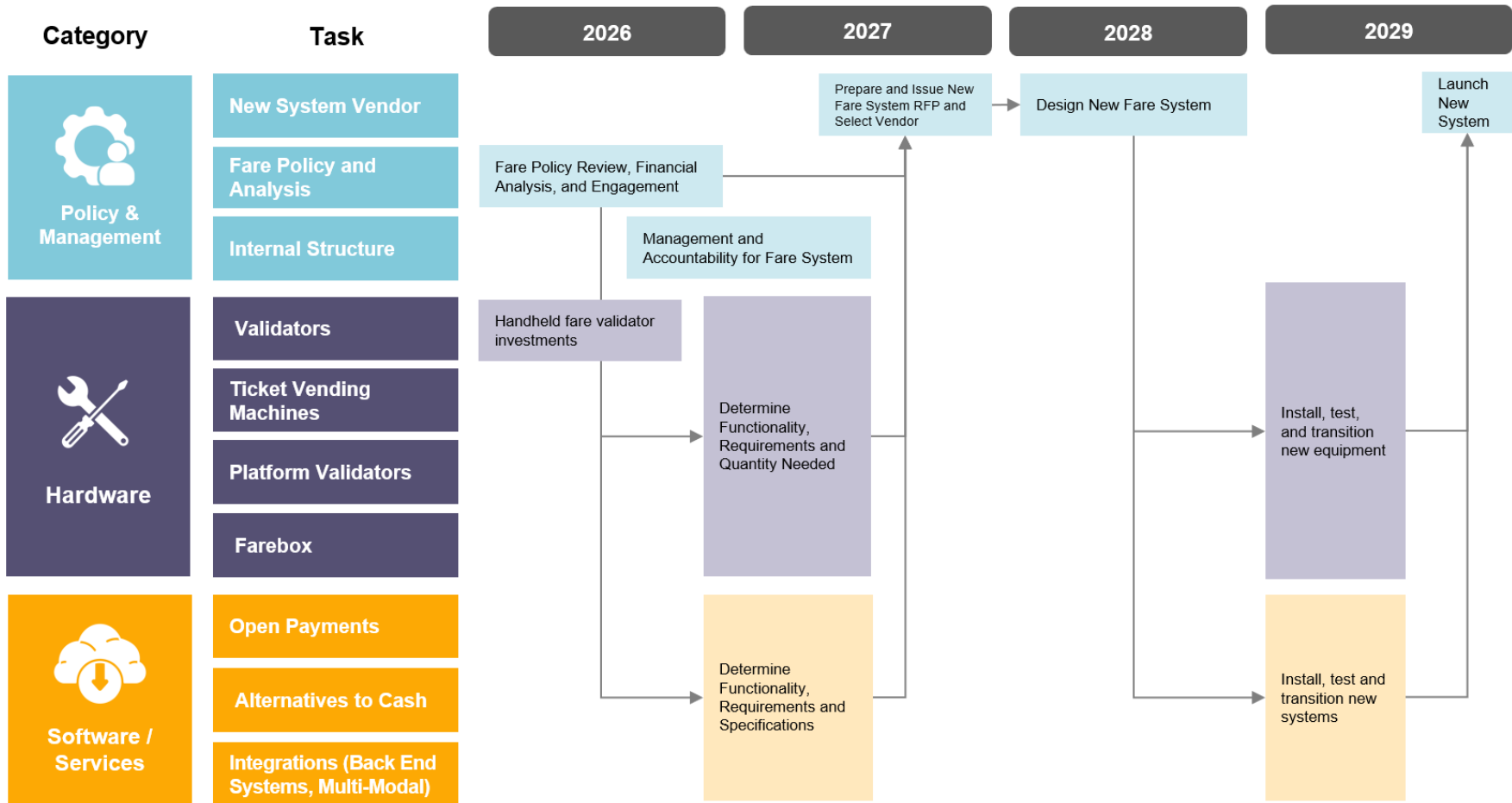


Figure 1. Roadmap to implementation

## Policy and System Management Actions

Near-term actions and steps in this category are focused on reviewing and defining the fare system policy framework that forms the basis for a future fare system. A key part of this is undertaking required engagement and consultation and financial analysis to understand key revenue and financial parameters that may influence the specific future fare system needs to adhere to or deliver. In the medium term, key actions involve designing an RFP to select a future fare system vendor, retaining a preferred vendor, and initiation of the future fare system.

### A. Public Engagement

LTD has not engaged customers or stakeholders on fare policy and pricing in over a decade. Near-term engagement opportunities include the Long Range Mobility Plan, which will incorporate fare system priorities. Before issuing an RFP for a new fare system vendor, LTD should ensure engagement findings are integrated into the procurement scope, functional requirements, and evaluation criteria. Prior to system launch, LTD should also prepare a comprehensive communications and marketing strategy to guide customer transition to the new system.

### B. Fare Revenue Financial Analysis

LTD's Planning and Finance teams should jointly conduct a formal financial fare analysis. The Capital Improvement Plan currently allocates \$6.1 million for the Fare Systems project (FY26–FY28), but several assumptions require validation, including:

- the number and type of TVMs required
- operational cost implications of Open Payments
- lifecycle costs of different hardware options

The analysis should update capital and operating forecasts, model fare revenue scenarios, and estimate ridership impacts informed by peer agency experience with Open Payments and regional fare integration. This work establishes realistic financial parameters for the future fare system and ensures the RFP includes requirements aligned with LTD's budget and revenue expectations.

### C. Fare Policy Review

LTD's current fare structure - base fare with daily and monthly capping - is attractive to customers and supported by most vendors. LTD should undertake a comprehensive fare policy review to identify policy changes that align with fare system objectives outlined in this report.

Potential improvements identified through this report development process include:

- Service-based fare tiers (circulator/microtransit, urban, rural/intercity), each contributing to distinct fare caps
- Replacing monthly caps with 31-day rolling caps, depending on vendor capabilities
- K–12 Student Pass improvements, including validation requirements for only some students, alternative durable fare media (wristbands, lanyards), or blank smartcards for institutional printing

This review should occur in parallel with the Financial Analysis outlined in (B) to inform future fare levels and adjustment mechanisms. The results will directly define functional requirements for the new fare system and must be reflected in the RFP.

#### D. Clarify Internal Accountability for Fare System

As identified in the SWOT analysis, LTD should establish clearer lines of management and accountability for fare strategy, fare policy and fare collection decision making. In larger organizations, this may be structured as a cross-functional team with representatives from groups such as Planning, Finance, Operations, Maintenance and IT. Smaller organizations may consider establishing a position (eg: Manager of Revenue Operations) that is responsible for day-to-day decisions, but coordinates ad-hoc, cross-functional teams as needed for larger decision making exercises (eg: selection of a fare collection vendor).

#### E. Prepare and Issue Competitive RFP for New Fare Collection System

LTD will likely need a competitive RFP to select a future vendor. This allows LTD to refine requirements and gain clarity on available system functionality and integration options across the industry. LTD may benefit from hiring a fare collection consultant to:

- develop a comprehensive system requirements list
- assist with drafting RFP specifications
- support evaluation and implementation planning

The full process – from requirements capture through Board approval and hardware procurement – may take upwards of 12–15 months. The current Umo contract provides flexibility: LTD can use some or all of the optional two-year extension (June 2027–May 2029) and terminate early once the new system is ready. Many of the other elements in the roadmap outlined below are intended to provide inputs and parameters to guide the design and development of the future fare system RFP.

## Hardware Actions

The actions in this category are aimed at defining the hardware requirements of the new fare system. A key input into the set of actions is the outcomes of pending fare review and financial analysis. The outcomes from this set of actions provide the parameters into a future fare system RFP.

### F. Handheld Validator Upgrades

LTD should continue to invest in installing handheld fare validators across all non-urban services in the network in 2026 – including: RideSource, LTD Connector, Diamond Express, Rhody Express, and LinkLane. These upgrades can be done with minimal costs and deliver benefits of the UMO system to more riders. UMO's handheld validators typically run on Samsung Galaxy ruggedized smartphone-type devices, which can often support non-UMO backend systems, meaning that LTD may be able to re-use later in the roadmap period.

### G. Ticket Vending Machines (TVM)

TVM replacement requires careful planning regarding quantity, placement, and functionality. Costs range from \$20,000–\$30,000 for small-footprint units upwards of \$50,000–\$80,000+ for large-footprint units<sup>1</sup>. As LTD develops technical specifications for the future system, TVM needs and functionality – such as cash-based account reloads - and number of machines needed should be evaluated. Replacing all 69 of LTD's TVM's may be quite costly, so the agency may want to consider investing in a smaller number of devices at higher utilization locations. Peer agency progress on TVM-fare collection vendor integration (e.g., CapMetro's exploration of Flowbird–Umo integration) should be monitored.

### H. Platform Validators

LTD should determine whether pre-payment and validation will be required on EmX platforms. If so, platform validators may be appropriate; otherwise, off-board payment with on-vehicle validation may be more cost-effective. Platform validators would require platform infrastructure modifications.

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<sup>1</sup> Hardware cost ranges were developed based on agency procurements, vendor data prior to the widescale implementation of tariffs. Hardware cost ranges may differ from those quoted.

## I. Fareboxes

LTD's fare system strategy should continue reducing cash transactions, given their high collection costs. While newer GenFare fareboxes support Open Payments, they are unlikely to offer the open architecture flexibility LTD seeks. As part of scoping the design, parameters, and requirements for the future fare system, LTD should determine whether to move towards eventual elimination of cash acceptance on board vehicles. LTD will want to ensure that open payments capabilities are included in the RFP to select a future fare collection vendor.

## **Software and Service Actions**

Similar to the Hardware actions above, actions in this category are aimed at defining the software requirements of the new fare system. A key input into this set of actions are the outcomes of the pending fare review and financial analysis. The outcomes from this set of actions provide the parameters into a future fare system RFP.

## J. Open Payment Acceptance

As part of defining the technical and system specifications for a new fare system, LTD should confirm whether Open Payment will be a requirement of the new fare system. The acceptance of Open Payments (paying with a contactless credit card, debit card or mobile wallet) will expand the range of payment options for LTD customers. While Open Payments may appeal to occasional customers including visitors and tourists, it also provides important benefits for cash reliant customers. By accepting prepaid debit cards, cash reliant customers are offered an additional payment option. Prepaid debit cards are also more widely available than the InComm/Vanilla Direct retail account reload network currently offered to LTD customers. Prepaid debit cards are also an important payment option for unbanked, underbanked and undocumented customers, as they do not require a banking relationship (which typically requires an SSN, ITIN or proof of residency) or credit check.

## K. Alternatives to Cash

Offering customers alternative methods of using cash to purchase digital fare media is an important cost efficiency strategy, and equity strategy. LTD's existing retail network coverage offered through InComm/Vanilla Direct is unlikely to be improved/expanded in the near term; consolidation in the retail, cash digitization space has resulted in InComm being one of the few remaining service providers. In the longer term, other fare collection vendors may be capable of providing alternative cash digitization solutions such as partnerships with CashApp or similar services. The acceptance of Open Payments will provide an additional purchase option for

cash-reliant customers. Over the long term, a portfolio of options may provide cash-reliant customers with a number of options to acquire fare media with cash. A retail, cash digitization network, acceptance of open payments, and account reload using cash at TVM's may provide a comprehensive range of solutions for LTD's cash-reliant customers.

#### L. System Integrations (Reporting Systems, Multi-Modal)

LTD will want to stay apprised of peer agencies that are exploring greater integration. For example, CapMetro in Austin, TX utilizes Umo's fare collection platform and has been exploring options for further payment integration between transit, microtransit and bike share services.

LTD will likely want to watch developments at TransitApp. TransitApp has been active in the integration of payment options directly into their application. Several fare collection vendors allow customers to purchase fares directly in TransitApp with valid QR-codes issued within TransitApp, whereas other vendors have provided deeplink integration whereby customers are redirected from TransitApp to the fare collection vendor payment app to purchase their fare. Through their existing contract with TransitApp, LTD customers using TransitApp now have a simplified payment option using the deeplink integration within TransitApp. TransitApp has also shown increasing interest in developing further integrations with microtransit and bike share operators. Developments in this space might provide a version of multi-modal payment integration through a single application without transit providers needing to facilitate those integrations.

LTD will want to develop a list of preferred or desired reporting, multi-modal and partner integrations (including integration with LTD's ERP systems) and associated functionality that is desired and can be included in the RFP scope of services for selection of a future vendor.

## Appendices

# Appendix 1 – Current LTD Fare System SWOT Analysis

	STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
<b>FARE PRICING, AND STRUCTURE</b>	<p><b>Affordable base fares and simple core structure:</b> Core pricing model is straightforward and low-cost, supporting transit affordability. Fare capping through Umo on core/fixed route network incentivizes frequent riders without requiring upfront purchase of passes.</p>	<p><b>Fragmented product integration across services:</b> Passes and fare caps do not apply to Diamond Express, LinkLane, Rhody Express or RideSource, limiting network cohesion. Riders face inconsistent experiences across both LTD-operated and non LTD-operated services.</p> <p><b>No time-based transfer policy:</b> Riders not utilizing Umo using single fares pay per boarding without a grace window, increasing cost and reducing convenience for multi-leg trips.</p>	<p><b>One fare:</b> Consolidating fare policies and products across all services (e.g., LTD, RideSource, Link Lane, Diamond Express) could streamline operations and improve clarity for riders.</p>	<p><b>Price sensitivities:</b> Adjusting fares after a long period without increases may face public or political resistance without clear value proposition.</p>
<b>SYSTEM TECHNOLOGY AND INFRASTRUCTURE</b>	<p><b>UMO platform adoption:</b> Supports stored value, mobile ticketing, contactless boarding, and fare capping. Provides a foundation for modernization and customer convenience. Supports multiple fare formats, including QR codes, NFC, and tap cards but full .</p>	<p><b>Outdated Technology:</b> Full functionality of UMO fare system is limited by current validator versions and TVM's which are dated. Validators and TVMs are aging, slow, and not user-friendly. QR code readers are unreliable and difficult to use for many riders.</p> <p><b>Lack of 'back-end' system integration:</b> UMO lacks real-time integration with ERP requiring manual workarounds for financial reporting.</p>	<p><b>Transition to open payments:</b> Industry trends support adoption of contactless EMV (credit/debit) and mobile wallet payments, which could reduce infrastructure needs and improve rider convenience.</p> <p><b>Unified fare infrastructure:</b> A single vendor or platform for both onboard and station-based fare systems would simplify operations and reduce vendor management complexity.</p>	<p><b>Technology fragmentation:</b> Without integration across systems (e.g., fare collection, ERP, customer service), LTD risks inefficiencies and limited scalability.</p>
<b>ADMINISTRATION, REVENUE, AND OPERATIONS</b>	<p><b>Lean fare infrastructure investment:</b> The current fare infrastructure is described as minimal, which may allow for more targeted and efficient upgrades without the burden of maintaining a large legacy system.</p>	<p><b>Inconsistent fare inspection practices:</b> Fare inspection duties are often reassigned when staffing is limited, reducing enforcement consistency and undermining deterrence.</p> <p><b>Manual fare media processes:</b> Day passes are still printed in bulk and distributed manually, creating inefficiencies and increasing the risk of misuse or loss.</p> <p><b>Ongoing reliance on cash handling:</b> Cash remains a significant component of fare collection, particularly for RideSource. This adds operational complexity and cost, especially in terms of counting, security, and reconciliation.</p>		<p><b>Revenue Sustainability:</b> Farebox recovery is low (less than 10%); O&amp;M costs may exceed fare revenue. Payroll tax increases end in 2025. Failure to pass statewide transportation funding package (and associated STIF increase) in summer of 2025.</p>

	STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
<b>POLICY AND GOVERNANCE</b>	<b>Agreement on strategic goals:</b> The desired outcomes for a future fare system are well articulated at staff level; simplicity and ease of use for riders and reduced admin burden for staff.	<b>Distributed accountability:</b> Fare management lacks a dedicated owner or team, resulting in fragmented efforts. Project management resources are limited, and fare system improvements are not prioritized within existing roles.		
<b>CUSTOMER EXPERIENCE AND DATA</b>	<b>Potential for data-driven insights:</b> The UMO system has the technical capability to track origin-destination data via QR codes, which could support service planning, equity analysis, and performance monitoring.	<p><b>Low rider engagement with UMO:</b> Despite its capabilities, the UMO platform has not seen strong uptake or interaction from riders, limiting its effectiveness as a fare and data tool.</p> <p><b>Limited Data Utilization:</b> UMO data is underused, and reporting/export capabilities are weak.</p> <p><b>Inadequate rider communication tools:</b> Push notifications are only functional on certain devices (e.g., Samsung), and there is no capability for real-time or emergency communication with riders.</p>		

# Appendix 2 – Current Practices in Fare System Policies and Technologies

## A. Customer-Centric Fare Design

Transit agencies are increasingly designing fare systems with the rider at the center—streamlining structures to reduce confusion, improving equity, and enhancing access. Simplified fare policies are easier to implement and communicate, and targeted programs offer new ways to meet the needs of key customer groups.

### Examples:

- Cincinnati SORTA – Redesigned its fare structure to reduce zones and simplify rules for clearer customer communication.
- Calgary Transit – Integrated fare simplification into its broader fare strategy refresh.
- Madison Metro (WI) – Offers employer-based and student-oriented programs; recently piloted a low-income fare program with community partners.

## B. Modern Fare Products and Pricing Models

Agencies are moving away from traditional fare products like time-limited passes and adopting more usage-based pricing structures. Fare capping is an increasingly common feature, allowing customers to earn the equivalent of a pass without paying the full cost up front. Some agencies are also exploring ways to integrate pricing across multiple modes and services.

### Examples:

- Winnipeg Transit – Evaluated fare capping and flexible pricing models as part of a recent fare strategy review.
- ARTM (Greater Montréal) – Exploring regionally harmonized fare structures across multiple transit modes.

## C. Open and Account-Based Payment Systems

Open and account-based systems allow greater payment flexibility while reducing agency costs tied to fare media. Riders can pay using contactless credit/debit cards, mobile wallets, or smart devices, and access fare products across multiple devices under a single account.

### Examples:

- Spokane Transit Authority (WA) – Deployed an account-based INIT platform with mobile access and fare capping.
- Durham Region Transit (ON) – Rolling out open-loop validators that accept credit and debit cards.
- TriMet (Portland, OR) – Offers a robust account-based payment system (Hop Fastpass) that includes mobile, smartcard, and open-loop payment options.

#### **D. Technology and Infrastructure Flexibility**

Agencies are investing in open-architecture hardware and digitizing fare channels to minimize costs, future-proof infrastructure, and reduce pressure on drivers and ticketing systems. There is also a growing focus on removing or replacing ticket vending machines and reducing cash transactions.

##### Examples:

- Edmonton Transit Service (AB) – Piloting digital tools to automate eligibility verification for discounted fare programs.
- King County Metro (WA) – Promoting digital payments and reducing reliance on cash and in-vehicle transactions as part of RapidRide upgrades.
- TriMet (Portland, OR) – Beginning in 2022, TriMet reduced 25-30% of their TVM's to improve efficiency and promote Hop adoption.

#### **E. Integrated Multi-Modal Payment Systems**

There is strong interest in enabling seamless payments across fixed-route transit and shared mobility services such as bikeshare, carshare, or scooters. However, full fare integration—including transfer discounts or unified fare capping—remains rare, due to technical and governance challenges. Most current efforts focus on shared accounts or app interfaces, not unified pricing.

##### Examples:

- Pittsburgh Regional Transit (Move PGH) – Single-app access to transit, bikeshare, scooters, and carshare (account-level integration, not fare integration).
- Toronto PRESTO x Bikeshare Pilot – Co-access to bikeshare and transit via PRESTO account; no integrated pricing or fare capping.
- TriMet (Portland, OR) – Integration with shared mobility services via its Hop Fastpass platform and third-party partnerships.

#### **F. Replacing and Upgrading Legacy Fare Technology**

Many transit agencies—particularly small to mid-sized systems—are grappling with aging fare collection infrastructure. Legacy systems often rely on proprietary hardware, closed-loop media, and outdated back-office platforms that are expensive to maintain and difficult to integrate with newer tools like mobile ticketing or open

payments. As these systems near end-of-life, agencies are prioritizing modular, vendor-flexible solutions that support account-based architecture, open APIs, and future scalability.

Replacement efforts often coincide with broader modernization strategies that include mobile fare products, contactless validators, and backend upgrades to cloud-based platforms. Agencies are also taking a more incremental, staged approach to modernization, reducing risk and aligning capital investment with internal capacity and evolving technology standards.

Examples:

- Spokane Transit Authority (WA) – Transitioned from a traditional farebox and paper pass model to a INIT account-based system with mobile ticketing and cloud-based backend.
- Durham Region Transit (ON) – Upgrading fare payment hardware to support open-loop payments and future integration with regional systems.
- Winnipeg Transit – Undertaking a phased modernization plan, including procurement of a new smart fare system to replace its legacy paper-based fare structure.

## **G. Fare Adjustment and Pricing Strategy**

Following years of fare freezes—particularly during and after the COVID-19 pandemic—many agencies are re-evaluating how and when to adjust fares. Rather than returning to blunt, across-the-board fare hikes, agencies are adopting more nuanced strategies that balance financial sustainability with equity and ridership goals.

Some agencies are introducing incremental or inflation-linked increases on an annual basis to avoid major one-time shocks. Others are applying increases selectively—raising base fares while maintaining discounts for priority groups, or raising pass prices but capping single-trip fares. Fare increases are increasingly accompanied by improvements in fare structure clarity, new pass options, or expanded access programs to help mitigate impacts on vulnerable riders.

Agencies are also embedding fare adjustments into broader communications and policy frameworks—emphasizing transparency, predictability, and alignment with service quality or cost recovery goals.

Examples:

- Calgary Transit – Moved toward regular, inflation-adjusted fare increases with a clear public-facing rationale and continued support for low-income fare programs.

- Spokane Transit Authority (WA) – Implemented modest fare increases tied to the introduction of new mobile and capped fare products, softening the impact with modernized offerings.
- Madison Metro (WI) – Paired its fare adjustment strategy with a system-wide fare structure overhaul, including simplification and expanded pass programs for targeted users.
- Winnipeg Transit – As part of its fare strategy refresh, evaluating long-term fare increase models that account for ridership recovery, equity, and cost-of-service factors.

