



Atlanta Regional Commission

Best Practices Research Report

COORDINATED HUMAN SERVICES

TRANSPORTATION PLAN 2025 UPDATE

Prepared for the Atlanta Regional Commission

October

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1. Introduction

Purpose

The previous CHST plan was last adopted in March 2017 and included a key goal to develop a menu of local and regional tactics that would work in a coordinated manner to improve mobility in the Atlanta region. This key goal was achieved with the development of the 2020 Demand Response Plan which focused on regional coordination strategies and recommendations for improving service efficiency and enhancing the user experience for both complementary paratransit (ADA) and county-run demand response transportation.

This Best Practices Report summarizes the research from peer regions and organizations related to the initial strategies, targeted improvements, and innovative pilot concepts identified during - Task 5 of the 2025 CHST Plan update. The purpose of the report is to document best practices that have been successfully implemented in other regions that are applicable and scalable to the Atlanta region for improving access to HST services, enhancing multimodal travel and regional connectivity, and providing a better customer experience to HST populations by streamlining trip planning and fare payment across various transportation systems in the region.

Context and Background

Collaborating with the project management team including staff from ARC, Atlanta-Region Transit Link Authority (ATL), Georgia Department of Transportation (GDOT), Department of Human Services (DHS), and other key stakeholders, the consultant team researched three of the top five strategies and targeted improvements identified through the planning process for potentially improving HST service delivery and the user experience to develop initial strategy recommendations and innovative pilot concepts for consideration in this plan update.

The best practices research includes various case studies for planning, designing, and implementing the following:

- Regional mobility hubs,
- Regional trip planners online and with mobile applications, and
- Regional/unified fare payment systems using a regional fare media product.

Since regional mobility hubs is the newest strategy being introduced as part of the plan update, the research for this concept is much more in depth. The Best Practices report also includes a brief description of how each of these strategies are currently being used in the Atlanta region. A list of the 10 case studies, project phases, and planning levels researched for the report is included in the table below.

| Case Studies | Phase | Scope |
|---|-------------------------|----------|
| Sacramento Area Council of Governments (SACOG) | Implementation & Design | Regional |
| San Francisco Bay Area Metropolitan Transportation Commission (MTC) | Implementation & Design | Regional |



| Case Studies | Phase | Scope |
|---|---|----------|
| North Carolina Centralina Regional Council (NCCRC) | Implementation & Design | Regional |
| Boston GoHub! | Pilot Complete, Implementation & Design | Local |
| San Diego Association of Governments (SANDAG) | Implementation & Design | Regional |
| TriMet Mobility on Demand Sandbox Project | Implementation | Regional |
| North Central Texas Region (NCTCOG MPO) – GoPass Expansion | Implementation | Regional |
| San Diego Association of Governments (SANDAG)-PRONTO | Implementation | Regional |
| Puget Sound’s Unified Fare Payment System | Implementation | Regional |
| California Integrated Travel Project and the Power of Regional Fare Integration | Implementation | Regional |

2. What is a Mobility Hub?

2.1 Definition of a Mobility Hub

A mobility hub is a centralized location that connects multiple modes of transportation, making it easier for people to transfer between services and complete their trips efficiently. These hubs typically integrate options such as public transit (bus, rail), bikeshare, rideshare, microtransit, and sometimes parking facilities, along with amenities like real-time information displays, secure bike storage, and wayfinding signage.

The goal of a mobility hub is to create a seamless, convenient experience for travelers by reducing transfer friction, improving first-mile/last-mile connectivity, and supporting multimodal travel in a single, accessible space.

2.2. Key Takeaways

Mobility hubs are designed as integrated, multimodal centers that connect transit, biking, walking, shared mobility, and on-demand services into a seamless travel experience. Their primary goals include improving connectivity, promoting sustainability, advancing access for all, and supporting economic development through transit-oriented design. Hubs also aim to enhance user experience with real-time information, intuitive wayfinding, and climate-responsive infrastructure.

Planning and implementation of mobility hubs requires community engagement, suitability analysis, and phased deployment aligned with regional transportation and land-use goals. Design principles emphasize multimodal integration, safety, comfort, cultural context, and technology, while incorporating amenities like EV charging, Wi-Fi, and green infrastructure. Operations and maintenance strategies focus on clear governance, preventive upkeep, and performance monitoring to ensure long-term success.



Mobility hub typologies vary by size and function from major transit-integrated hubs in urban cores to neighborhood nodes and seasonal hubs allowing regions to tailor solutions to local demand. This tiered approach ensures hubs serve diverse contexts, from high-density downtowns to rural connectors, while maintaining flexibility for future mobility trends.

2.2.1 Mobility Hub Goals

Mobility hubs are designed to serve as integrated, multimodal centers that enhance connectivity, promote sustainability, and ensure access to transportation for all. Across regions, the goals consistently emphasize:

- **Integrated Mobility:** Connecting various transportation modes—transit, biking, walking, shared mobility, and on-demand services—into seamless travel experiences.
- **Access for all People:** Prioritizing underserved communities, incorporating universal design, and engaging stakeholders to ensure inclusive planning and implementation.
- **User Experience and Innovation:** Enhancing comfort, safety, and usability through real-time information, intuitive wayfinding, and emerging technologies such as autonomous vehicles and digital fare systems.
- **Economic Development:** Supporting transit-oriented development (TOD), walkable communities, and public-private partnerships to stimulate local economies.
- **Sustainability and Climate Resilience:** Reducing single occupant vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions through low-emission transportation options and climate-adaptive infrastructure.
- **System Resiliency:** Building flexible infrastructure that can adapt to changing travel behaviors and future mobility trends.

2.3 Mobility Hub Planning, Design, Implementation

2.3.1 Planning and Implementation

Successful mobility hub development begins with strategic planning rooted in community engagement, data analysis, and alignment with regional transportation goals. Key steps include:

- Conducting suitability analyses to identify optimal hub locations based on transit access, population density, and employment centers.
- Engaging communities to incorporate local knowledge and priorities into hub design and placement.
- Phasing implementation to allow for pilot programs, iterative design, and scalability.
- Coordinating among public agencies, private partners, and community organizations to ensure effective governance and funding.
- Integrating hubs into broader land use and transit plans to support TOD and multimodal connectivity.



2.3.2 Design and Key Components

Mobility hubs are designed to reflect local character while offering consistent core features. Design principles include:

- **Multimodal Integration:** Infrastructure for buses, trains, bikeshare, scooter share, car share, and pedestrian pathways.
- **Safety and Comfort:** Features such as shaded seating, shelters, lighting, restrooms, and emergency call boxes.
- **Technology and Information:** Real-time transit data, digital trip planning tools, multilingual signage, and Wi-Fi access.
- **Cultural and Community Context:** Public art, placemaking elements, and community-driven design to foster identity and engagement.
- **Climate Responsiveness:** EV charging stations, green infrastructure, and low-emission transportation options.

2.3.3 Operations and Maintenance

Long-term success depends on robust operations and maintenance strategies, including:

- Clear governance frameworks and Memorandums of Understanding (MOUs) to define roles and responsibilities.
- Preventive and responsive maintenance protocols.
- Community involvement in upkeep and programming.
- Performance measurement systems to track access, mobility, climate impact, and user satisfaction.

2.3.4 Mobility Hub Typologies

Mobility hub typologies vary by region but generally fall into tiered frameworks based on size, location, and service offerings:

- **Major Transit-Integrated Hubs/Gateways/Regional Downtown Hubs:** Located in urban cores with high-capacity transit and comprehensive amenities. Serve as regional anchors.
- **Local Connector Hubs/Squares/Urban District Hubs:** Situated in moderately dense areas, linking neighborhoods to transit and offering community-focused amenities.
- **Commuter Hubs/Pulse Hubs/High Activity Centers:** Designed for peak-hour travel and located near employment centers, universities, or stadiums.
- **Neighborhood Hubs/Points/Neighborhood Nodes:** Small-scale hubs in residential or rural areas, focused on first/last mile connectivity.
- **Seasonal Hubs/Opportunity Hubs/Emerging Urban District Hubs:** Serve specific temporal or developmental needs, such as tourism, underserved communities, or growth areas.
- **Suburban and Rural Hubs/Optimized Bus Stops/Regional Connectors:** Connect auto-oriented or low-density areas to regional transit systems.



These typologies enable regions to deploy mobility hubs strategically, ensuring that each hub meets the specific mobility demands and community characteristics of its location.

2.4. Case Studies

2.4.1 Sacramento Area Council of Governments (SACOG)

SACOG Mobility Hub Definition

SACOG defines regional mobility hubs as strategically located centers that integrate multiple modes of transportation—such as buses, trains, bicycles, ride-shares, and pedestrian pathways—into a single, accessible location. These hubs are essential for enhancing connectivity, reducing greenhouse gas emissions, and promoting equitable access to transportation. As urban areas grow and transportation needs evolve, mobility hubs serve as critical infrastructure for sustainable and efficient regional transit systems.

SACOG Mobility Hub Goals

Mobility hubs are envisioned as integrated, people-centered spaces that connect various transportation modes—transit, biking, walking, shared mobility, and on-demand services—while fostering community engagement, sustainability, and equitable access.

To realize this vision, SACOG and its partners identified five strategic goals, each supported by targeted objectives:

1. Integrated Mobility

- Develop regionally consistent yet locally tailored hubs.
- Enhance first/last mile connectivity and multimodal trip chaining.
- Expand transportation choices and access to jobs, education, and services.
- Support seamless travel through integrated trip planning and real-time information.

2. Equitable Mobility

- Prioritize hub locations and services in disadvantaged communities.
- Uphold universal design standards for accessibility across all ages and abilities.
- Ensure inclusive decision-making through effective community engagement.

3. Economic Growth

- Catalyze public-private partnerships and support implementation-ready sites.
- Promote housing development and walkable communities near hubs.
- Enable temporary hubs to support tourism and seasonal demand.

4. Flexible and User-Friendly Design

- Co-locate hubs with community destinations and prioritize user experience.
- Adapt designs to local land uses, cultural contexts, and mobility ecosystems.
- Emphasize complete streets and low-stress multimodal connections.

5. Climate Adaptation

- Support alternative transportation modes and EV infrastructure.



- Provide climate-resilient infrastructure and emergency information.
- Integrate green infrastructure to mitigate environmental impacts.
- Advance regional goals for reducing VMT and GHG emissions.

These goals are grounded in SACOG’s broader regional strategies, including the Next Generation Transit Strategy and the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS). The mobility hub framework is designed to be adaptable across urban, suburban, and rural contexts, ensuring that each hub reflects the unique needs of its community while contributing to a resilient, equitable, and sustainable regional transportation system.

SACOG Planning, Design, and Implementation

Planning and Implementation

Implementing mobility hubs requires a strategic approach that considers local contexts, available resources, and community needs. Pathways to implementation include assessing opportunities and constraints, crafting a flexible implementation strategy, making informed decisions based on regional mobility goals and community input, integrating with existing infrastructure, considering phased implementation, securing funding from various sources (local, regional, state, federal), exploring public-private partnerships, and leveraging innovative financing strategies.

In order to plan a network of regional mobility hubs, goals and objects should be set to gain a better understanding of what the community needs. Goals and objectives can be developed using existing plans and policies along with public input. Once goals and objectives are set, a suitability analysis should be conducted to identify potential locations for regional mobility hubs. The analysis should serve as a starting point for further discussion instead of pinpointing specific hub locations. Once locations are identified, public outreach should be conducted to ensure that the data from the analysis is balanced with insights that bring local knowledge, strategic priorities, and future development plans into consideration. When the Sacramento Area Council of Governments (SACOG) conducted their suitability analysis, they concluded that areas with high potential had existing transit services, high population density, or employment centers. Areas of medium-high potential had moderately high population density, emerging transit centers, and growing employment centers.

Design and Key Components

The design principles for mobility hubs serve as a foundational framework that informs the selection and integration of various components. These principles include multimodal mobility, safety, amenities and comfort, cultural context, and climate-responsive strategies. Multimodal mobility focuses on integrating multiple transportation modes to offer sustainable and reliable choices. Safety is paramount, ensuring both personal and road safety through thoughtful design and operational strategies. Amenities and comfort enhance user experience by providing features such as shaded seating areas, shelters, drinking water fountains, restrooms, Wi-Fi access, and multifunctional public spaces. Cultural context integrates community identity into the hub design, making it a vibrant social space. Climate-responsive strategies promote low-emission transportation modes and incorporate adaptive measures to mitigate climate impacts.



Key components of mobility hubs include public transit options (rail, bus, BRT), shared micromobility services (bikeshare, scooter share), carpooling/vanpooling services, rideshare/taxi services, EV charging stations, security measures (CCTV cameras, emergency call boxes), pedestrian and bike infrastructure (low-stress bikeways, secure bike storage, bike repair stations), user amenities (real-time information screens, device charging stations), wayfinding systems (clear signage in multiple languages), and green infrastructure (rain gardens, urban greening).

Operations and Maintenance

Effective operations and maintenance are essential for the long-term success of mobility hubs. Key considerations include the following:

- Administration (program management, external communications)
- Field operations (supervision, dispatch)
- Remote support (customer support, emergency response)
- Asset management (tracking condition and maintenance needs)
- Preventive maintenance (regular inspections),
- Responsive maintenance (quickly addressing repairs)
- Community involvement in maintenance efforts.

SACOG Mobility Hub Typologies

Once locations are selected, there are five different hub typologies that can be considered:

- Major Transit-Integrated Hub
- Local Connector Hub
- Commuter Hub
- Neighborhood Hub
- Seasonal Hub

Major Transit-Integrated Hubs are located near mass transit stations or high-activity centers in urban cores. Local Connector Hubs link residential areas with essential services and main transit routes. Commuter Hubs facilitate daily commuting needs by providing alternatives to driving during peak hours. Neighborhood Hubs serve less densely populated areas with demand-responsive transport and last-mile connectivity options. Seasonal Hubs address transportation needs during specific times of the year in high visitation areas such as stadiums or fairgrounds. Figure 1 below shows an example of a Major-Transit Integrated Hub.

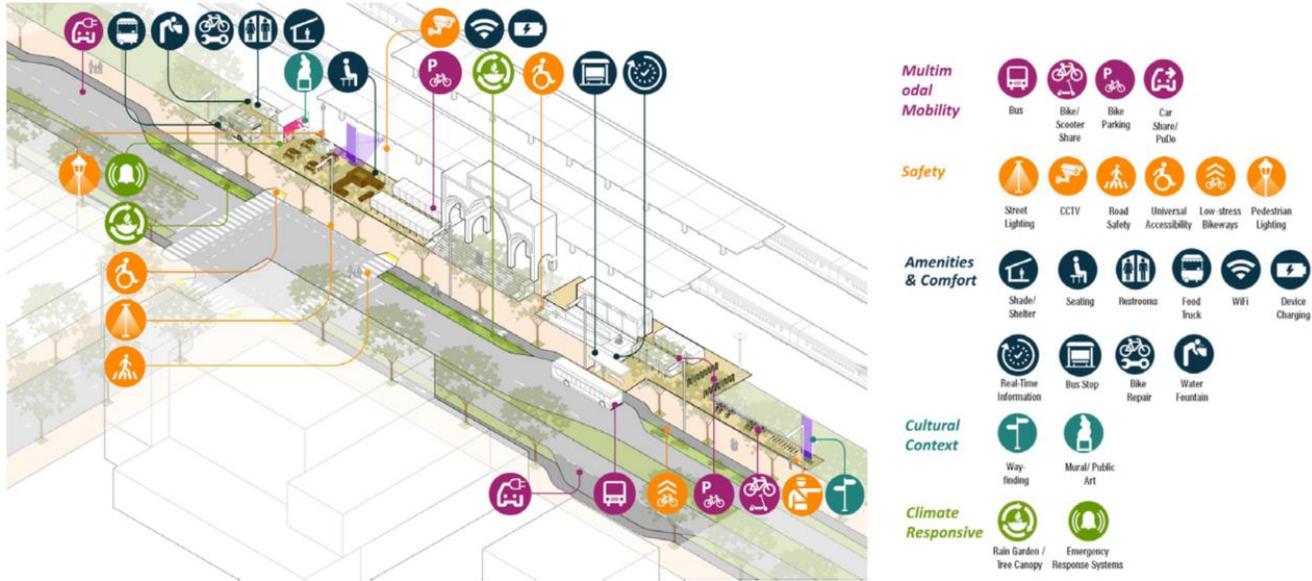


Figure 1: Major-Transit Integrated Hub
Source: SACOG Regional Mobility Hubs Design Guidance

2.4.2 San Francisco Bay Area Metropolitan Transportation Commission (MTC)

San Francisco Bay Area MTC Mobility Hub Definition

The MTC defines a mobility hub as “a welcoming environment that enables travelers of all backgrounds to access multiple transportation options and supportive amenities. Built on the backbone of frequent and high-capacity transit, mobility hubs offer a safe, comfortable, convenient, and accessible space to seamlessly transfer across different travel modes.”

San Francisco Bay Area MTC Mobility Hub Goals

The MTC Mobility Hub Program is a strategic initiative under Plan Bay Area 2040 aimed at transforming transportation infrastructure to support sustainable, equitable, and resilient mobility across the San Francisco Bay Area. Mobility hubs are designed as community anchors that integrate multiple transportation modes—public transit, micromobility, car share, and pedestrian infrastructure—within a safe, accessible, and user-friendly environment.

Primary Goals of the Program:

1. **Reduce Greenhouse Gas Emissions**
 - By decreasing VMT and promoting low-emission transportation options.
2. **Enhance Transit Access and Connectivity**
 - Improve first- and last-mile connections to regional transit systems.
 - Facilitate seamless transfers across modes.
3. **Support Transit-Oriented Development (TOD)**
 - Align mobility infrastructure with land-use planning to encourage compact, walkable communities.



4. **Advance Access and Community Enrichment**
 - Prioritize investments in Communities of Concern and areas with high displacement risk.
 - Ensure hubs reflect community needs through inclusive design and engagement.
5. **Improve Customer Experience**
 - Deliver intuitive wayfinding, real-time information, and accessible amenities.
 - Design hubs for diverse users, including those with disabilities and limited English proficiency.
6. **Increase Transportation System Resiliency**
 - Build redundancy and flexibility into the regional mobility network, especially in response to changing travel behaviors post-COVID-19.
7. **Foster Innovation and Future-Proofing**
 - Enable integration of emerging technologies and services, including autonomous vehicles and digital policy tools.
8. **Establish Governance and Management Frameworks**
 - Provide guidance for hub operations, maintenance, and performance measurement.
 - Encourage collaborative models involving public agencies, private partners, and community organizations.
9. **Unlock Sustainable Funding**
 - Identify and leverage diverse funding sources including local, regional, state, federal, and public-private partnerships.

San Francisco Bay Area MTC Planning, Design, and Implementation

Planning and Implementation

The planning and implementation of mobility hubs, as outlined in the MTC Mobility Hub Implementation Playbook, is a strategic, community-centered process designed to enhance regional connectivity, reduce greenhouse gas emissions, and promote equitable access to sustainable transportation. It begins with identifying mobility needs through public engagement and data analysis, followed by the configuration of hub elements tailored to local land use, transit networks, and community priorities. The Playbook introduces a phased approach through seven “plays” that guide stakeholders from concept to execution: assigning hub components, layering amenities over time, enriching the public realm, applying governance and management tools, informing users through wayfinding and digital systems, measuring performance, and unlocking funding. Each play is supported by technical guidance, toolkits, and best practices to ensure hubs are responsive, inclusive, and scalable.

Implementation is iterative and flexible, allowing hubs to evolve with changing technologies, travel behaviors, and community needs. Governance models vary based on hub complexity and geography, ranging from single-agency management to multi-partner collaborations. Funding strategies include leveraging local, regional, state, and federal sources, as well as public-private partnerships and integrated project delivery. Performance measurement is central to the process, with key indicators tracking mobility,



access, climate impact, and user experience. The Playbook emphasizes community engagement, access frameworks, and anti-displacement strategies to ensure hubs serve and reflect the communities they anchor. Ultimately, mobility hubs are positioned as dynamic, multimodal centers that foster sustainable, inclusive, and resilient transportation systems across the Bay Area.

Design and Key Components

The MTC Mobility Hub Implementation Playbook identifies four key components that define the structure and functionality of mobility hubs: Sustainable Access & Mobility, Public Realm, Customer Experience, and Information. These components are supported by a flexible “kit of parts” that can be tailored to each hub’s context and typology. Sustainable Access & Mobility includes features such as transit shelters, secure bike parking, micromobility stations, car share parking, EV charging infrastructure, and loading zones for ride-hailing and urban freight. These elements prioritize active and shared transportation modes, improve connectivity, and support mode shift away from single-occupancy vehicles.

The Public Realm component focuses on creating welcoming, culturally relevant spaces through amenities like street furniture, pedestrian-scale lighting, green space, community-driven design, and mobile vending. Customer Experience features include off-board transit payment systems, integrated trip planning and booking technologies, digital screens, and place programming to enhance comfort and usability. The Information component ensures users have access to real-time travel data, wayfinding signage, hub maps, and monitoring systems to support informed decision-making and seamless transfers. Together, these components enable mobility hubs to serve as multimodal, community-centered anchors that promote equitable, sustainable, and user-friendly transportation networks.

San Francisco Bay Area MTC Hub Typologies

The MTC Mobility Hub Implementation Playbook defines six distinct hub types, each tailored to specific land use, transit access, and community needs across the Bay Area.

- Regional Downtown Hubs are located in dense urban cores with high-capacity transit and multimodal access, serving as major economic and cultural centers. These hubs offer robust transit connectivity, shared mobility services, and pedestrian-friendly infrastructure.
- Urban District Hubs are situated in moderately dense areas with strong transit access and proximity to retail and employment centers. They support commuter flows and integrate car share and micromobility options within walkable environments.
- Emerging Urban District Hubs are positioned in areas targeted for future growth, often near job centers or shopping districts, and typically served by high-capacity transit. These hubs are designed to evolve with development and increasing mobility demand.
- Suburban and Rural Hubs connect auto-oriented communities to regional transit via park-and-ride facilities and limited shared mobility services.
- Pulse Hubs are anchored by large trip generators such as universities, stadiums, or corporate campuses, and feature peak-period demand and first-last mile services.



- Opportunity Hubs are located in underserved areas with mobility demand but limited infrastructure, often intersecting with Communities of Concern or high displacement risk zones. These hubs aim to fill critical service gaps and promote access for all communities to transportation.

Figure 2 below shows an example of a full build mobility hub concept that often is associated with capital projects tied into a new transit station or a major transit corridor program.



Figure 2: Full Build Mobility Hub Concept

Source: Bay Area Regional Mobility Hubs Mobility Hub Implementation Playbook

San Francisco Bay Area MTC Mobility Hub Lessons Learned

The Mobility Hubs Pilot Project, implemented across Oakland, San Jose, and Richmond, yielded a wealth of insights into the design, deployment, and sustainability of equitable transportation solutions in affordable housing communities. A central lesson was the importance of community-driven planning. Site-Level Teams (SLTs), composed of resident leaders, played a pivotal role in shaping outreach strategies, refining messaging, and ensuring cultural relevance. Their involvement fostered trust, increased participation, and strengthened long-term engagement. Equally critical was the need to compensate resident leaders fairly, provide language accessibility through translated materials and live interpretation, and offer logistical support such as childcare and food during meetings to reduce barriers to involvement.

The project underscored the necessity of flexible and adaptive outreach, particularly in response to external challenges like the COVID-19 pandemic. Outreach strategies evolved to include virtual engagement, small-scale events, and creative community gatherings, such as lemonade stands and yard sales, which naturally integrated mobility service sign-ups. Mobility fairs emerged as a cornerstone of engagement, successfully enrolling residents in programs like Lyft Essential Rides and AC Transit EasyPass while connecting them



to broader community services. Tailored outreach for seniors, including small-group trainings with live interpretation, proved especially effective in overcoming technological and linguistic barriers.

From a technical and operational standpoint, the project revealed that procurement and installation of mobility services in disadvantaged communities require significant planning and support. Infrastructure limitations, permitting delays, and vandalism—particularly in Richmond—highlighted the need for contingency budgeting, secure siting, and long-term maintenance plans. Vendor selection through rigorous RFP processes was essential to ensure both technical capability and a collaborative mindset. Additionally, the administrative burden on site partners was a recurring challenge. Providing direct support, clarifying roles, and streamlining payment processes were key to enabling successful implementation.

The pilot also illuminated the accessibility challenges of app-based mobility services. Many residents lacked smartphones, digital literacy, or banking access, which limited their ability to use services like Lyft and Envoy car share. SLT members often served as informal tech support, but this workaround was not sustainable. Future programs must advocate for multilingual app interfaces, alternative payment methods, and in-person tutorials to ensure inclusivity. Moreover, expanding eligibility to include caregivers was a critical adjustment that allowed residents with mobility limitations to benefit from the program.

Surveying and evaluation efforts demonstrated that community input must be both easy to provide and impactful. Paper surveys administered by trained residents were the most effective format, especially in communities with limited digital access. Incentives boosted participation, but ensuring data integrity required staff to review responses before distribution. Sharing survey results and showing how resident feedback influenced decisions helped build trust and encouraged continued engagement.

The Mobility Hubs Pilot affirmed that equitable transportation solutions are not only feasible but thrive when rooted in community leadership, cultural responsiveness, and sustained support. The lessons learned offer a blueprint for future initiatives, emphasizing the need for inclusive design, adaptive outreach, robust infrastructure planning, and meaningful resident engagement. These insights pave the way for scaling mobility hubs as essential infrastructure in affordable housing developments, advancing mobility justice and sustainability across underserved communities.

2.4.3 North Carolina Centralina Regional Council

North Carolina Centralina Regional Council Mobility Hub Definition

The Centralina Regional Council defines a Mobility Hub as “places of connectivity where people can conveniently access multiple travel options. A mobility hub is a focal connection point and can signify a downtown, major activity center, transit station, or stop location where multiple different mobility options meet up and allow a user to transfer from one mode to another. Mobility hubs offer a range of integrated mobility services and supporting amenities/technologies to facilitate efficient connections and make trip planning easier. Mobility hubs also strengthen the connection between rural and urban areas, improving commute times and better connecting people to resources.”



North Carolina Centralina Regional Council Mobility Hub Goals

The CONNECT Beyond regional mobility plan envisions a comprehensive network of mobility hubs as critical infrastructure to support a seamlessly connected, multimodal transportation system across a 12-county, bi-state region. These hubs are designed to serve as centralized connection points where various transportation modes converge, enabling efficient, equitable, and user-friendly travel for residents and visitors.

Primary Goals of Mobility Hubs:

- 1. Enhance Regional Connectivity**
 - Serve as focal points in the total mobility network, linking high-capacity transit corridors, emerging mobility corridors, and rural areas.
 - Facilitate seamless transfers between multiple transportation services (e.g., bus, rail, microtransit, bikeshare, rideshare).
- 2. Support Multimodal Integration**
 - Provide infrastructure and amenities that accommodate a range of mobility options including walking, biking, scooters, paratransit, and electric vehicles (EVs).
 - Enable first-mile/last-mile solutions to improve access to transit.
- 3. Promote Access and Accessibility**
 - Ensure fair and inclusive access to mobility services, especially for transit-dependent populations, including seniors, people with disabilities, and low-income communities.
 - Incorporate human-centered design and context-sensitive amenities.
- 4. Encourage Sustainable and Transit-Supportive Development**
 - Align with land-use strategies that promote compact, mixed-use, and walkable communities.
 - Act as catalysts for economic development and placemaking in urban, suburban, and rural settings.
- 5. Adapt to Local Contexts**
 - Implement a flexible Mobility Hub Framework with four levels (Neighborhood Node to Regional Connector) and eight hub types tailored to community character and demand.
 - Scale hub design and features based on density, demand, and geographic context.
- 6. Leverage Technology and Innovation**
 - Integrate real-time information systems, digital fare payment, and journey planning tools.
 - Support emerging mobility trends such as autonomous shuttles and EV infrastructure.
- 7. Advance Implementation Through Strategic Planning**
 - Identify 74 potential hub locations across the region.



- Recommend a phased implementation strategy including pilot programs, funding partnerships, and integration into local and regional transit plans.

North Carolina Centralina Regional Council Planning, Design, and Implementation

Planning and Implementation

The planning and implementation process for mobility hubs within the CONNECT Beyond regional mobility plan is a comprehensive, multi-phased effort aimed at transforming transportation across a diverse, 12-county region in North and South Carolina. Planning began with a deep analysis of existing transit systems, travel patterns, and access considerations, followed by extensive community engagement and stakeholder collaboration. Mobility hubs were conceptualized as focal points within a “total mobility network,” designed to integrate multiple transportation modes—such as bus, rail, microtransit, and shared mobility services—into seamless, user-friendly experiences. The framework includes 74 proposed hub locations, categorized into four levels (Neighborhood Nodes, Optimized Bus Stops, High Activity Centers, and Regional Connectors), each tailored to the unique geographic and demographic context of its area. These hubs are intended to improve connectivity, reduce automobile dependency, and support equitable access to jobs, education, and healthcare.

Implementation of mobility hubs is structured around near-, mid-, and long-term strategies. Near-term actions include developing a Regional Mobility Hub Implementation Strategy and launching pilot programs to test hub designs and operations. Mid-term efforts focus on integrating hub locations into local and regional transit plans, refining siting methodologies, and securing funding through partnerships and grants. The plan emphasizes flexibility, safety, and context-sensitive design, ensuring hubs are adaptable to evolving community needs. A key recommendation is to align mobility hub development with land-use planning and transit-supportive development to maximize ridership and sustainability. The plan also calls for coordination among transit agencies, local governments, and regional planning bodies to ensure successful implementation and long-term viability of the mobility hub network.

Design and Key Components

Each mobility hub is designed to reflect the unique needs and characteristics of its surrounding community. While there is no one-size-fits-all model, all hubs are expected to include essential features such as access to at least two transportation services, pedestrian and bicycle infrastructure, human-centered design elements, and amenities that promote safety, comfort, and accessibility. These hubs are also intended to be adaptable, allowing for the integration of emerging transportation technologies and evolving user needs over time. Importantly, mobility hubs are envisioned as equitable spaces that provide fair access to all users, including those with disabilities or limited mobility.

Strategically, mobility hubs are positioned to support the region’s high-capacity transit corridors, emerging mobility corridors, and mobility solution areas. They play a critical role in bridging rural and urban transit services, improving first- and last-mile access, and encouraging TOD. By fostering multimodal travel and reducing reliance on private vehicles, mobility hubs contribute to broader goals of sustainability, access, and economic competitiveness.



North Carolina Centralina Regional Council Hub Typologies

The CONNECT Beyond plan introduces a four-tiered framework for mobility hubs, ranging from small-scale neighborhood nodes to large regional connectors.

- Level 0 hubs, known as Neighborhood Nodes, are suited for rural or low-density areas and focus on first- and last-mile connections.
- Level 1 hubs, or Optimized Bus Stops, are designed for areas with moderate demand and include enhanced amenities.
- Level 2 hubs, called High Activity Centers, serve more densely populated areas and offer a broader range of services and amenities.
- Level 3 hubs, or Regional Connectors, are the largest and most comprehensive, typically located along high-capacity transit corridors and equipped with extensive facilities such as indoor waiting areas, long-term parking, and real-time transit information systems.

Figure 3 below shows an example of a high activity center concept.



Figure 3: High Activity Center

Source: Connect Beyond Mobility Hub Framework

2.4.4 Boston GoHubs!

Boston GoHubs! Mobility Hub Definition

“GoHubs! collocate transportation options such as bikeshare, car share, passenger pick-up and drop-off, and bike parking alongside bus stops and subway stations. Information on how to access these transportation modes help make it easier to complete a multimodal journey. This allows the user to make the best transportation choices that work for them.”



Boston GoHubs! Mobility Hub Goals

GoHubs! are Boston’s innovative response to bridging transportation gaps and enhancing neighborhood connectivity. Developed under the city’s Go Boston 2030 transportation plan, GoHubs! serve as Neighborhood Mobility Hubs that integrate multiple transportation modes, public amenities, and placemaking features into accessible, community-centered locations.

Core Objectives include:

- 1. Improve Access and Mobility**
 - Expand transportation options in underserved areas
 - Strengthen first/last mile connections to transit
 - Prioritize walking, biking, transit, and shared mobility
- 2. Enhance Public Spaces**
 - Create welcoming, safe, and functional environments
 - Support community events and local identity
 - Improve pedestrian and cyclist infrastructure
- 3. Provide Real-Time Information**
 - Offer transit arrival updates and wayfinding
 - Share local news, events, and neighborhood resources
 - Promote multimodal trip planning and safe routes

Boston GoHubs! Planning, Design, and Implementation

Planning and Implementation

Designing and creating successful GoHubs! involves a thoughtful integration of transportation infrastructure, community engagement, and placemaking to enhance mobility and connectivity within Boston’s neighborhoods. These mobility hubs are conceived not only as transit access points but also as community spaces that reflect local identity and meet specific needs. A successful GoHub! is intuitive, safe, and inviting, offering amenities such as benches, Wi-Fi, device charging stations, and shelters to promote comfort and usability. The design must foster a sense of place, calm traffic, and encourage walking and biking, thereby improving the overall user experience. Public art, community information, and placemaking elements help reinforce the GoHub!’s role as a neighborhood waypoint and gathering space.

The creation of GoHubs! is deeply rooted in partnerships and collaboration. Effective implementation requires coordination among city departments, transportation agencies, private mobility providers, developers, and community organizations. These partnerships are essential for planning, installation, and ongoing maintenance. Maintenance responsibilities are often shared between the city, community groups, and private operators, with the potential for a centralized contractor to ensure consistency across locations. Memorandums of Understanding (MOUs) help clarify roles and responsibilities, ensuring that each GoHub! remains functional and well-maintained over time.



Identifying the right locations for GoHubs! begins with a comprehensive analysis of existing transportation assets and neighborhood amenities. This includes mapping bus stops, subway stations, bikeshare docks, car share locations, and EV charging stations, as well as schools, parks, health centers, and commercial areas. The goal is to pinpoint gaps in the transportation network and strategically place GoHubs! to fill those voids. Additionally, walking and biking corridors—such as safe routes to schools and low-stress bike streets—are prioritized to ensure accessibility and connectivity.

Community needs are central to the site selection process. Engaging with residents and stakeholders helps uncover transportation barriers and other concerns that GoHubs! can address. This might involve relocating transportation options to safer, more visible areas, adding trash receptacles, improving pedestrian infrastructure, or using public art to activate underutilized spaces. The process is iterative and inclusive, with multilingual outreach and opportunities for feedback guiding the final design and location decisions. Ultimately, GoHubs! are most effective when they are shaped by and for the communities they serve, ensuring relevance, usability, and long-term success.

Design and Key Components

The GoHubs! Kit of Parts is a foundational framework within Boston’s Neighborhood Mobility Hubs initiative, designed to support the development of multimodal transportation access points tailored to the unique needs of each community. This modular approach allows for flexibility and adaptability, enabling stakeholders—including residents, community organizations, developers, private service providers, and city agencies—to collaboratively design and implement GoHubs! that reflect local priorities and conditions.

At its core, the Kit of Parts comprises a curated set of components that were piloted in East Boston and serve as a baseline for future expansion. These components include essential transportation services such as bikeshare, car share, ride-hail pick-up and drop-off zones, EV stations, and bike parking. Each element is supported by detailed installation requirements and considerations to ensure accessibility, safety, and integration with existing infrastructure. For example, bikeshare stations must be coordinated with the Boston Transportation Department and placed near bike lanes, while EV charging stations require coordination with utilities and must meet specific spatial and electrical standards.

Beyond transportation, the Kit of Parts emphasizes placemaking and public realm enhancements. Features like parklets, public art, and smart benches with Wi-Fi and device charging contribute to the comfort and usability of GoHubs!, transforming them into vibrant community spaces. Branding and informational signage play a critical role in wayfinding and identity, using consistent visual elements such as the Boston “B” beacon and multilingual panels to communicate available services and neighborhood context.

Importantly, the Kit of Parts is not static. It is designed to evolve alongside changing technologies, community habits, and transportation trends. The City of Boston encourages ongoing innovation and community input to expand the components and ensure GoHubs! remain relevant and responsive. This approach aligns with Boston’s broader goals of equitable access, climate resilience, and sustainable urban mobility, as outlined in the Go Boston 2030 plan and the City’s Curb Zone Guidelines.



Boston GoHubs! Mobility Hub Typologies

The GoHubs! Gateways, Squares, and Points framework is a strategic classification system used to organize Boston’s Neighborhood Mobility Hubs based on their size, location, and the range of services they offer. This tiered structure enables the City of Boston to deploy mobility hubs in a way that reflects the unique transportation needs and urban characteristics of different neighborhoods, while maintaining consistency and connectivity across the broader network.

- Gateways are the largest and most comprehensive type of GoHub!, typically located near high-frequency transit stops or major bus stations. These hubs serve as regional connectors, offering the widest array of transportation modes and amenities, including bikeshare, car share, pick-up/drop-off zones, EV charging, and real-time transit information. Gateways are designed to encourage exploration into surrounding neighborhoods and act as anchors for multimodal travel. Their placement near commercial, cultural, and civic centers makes them highly visible and accessible, reinforcing their role as major mobility nodes.
- Squares function as intermediate hubs within the GoHubs! network. They are often situated near key bus routes and serve as community waystations where people can gather, rest, and access essential services. Squares typically include seating, Wi-Fi, device charging, and placemaking elements such as public art and greenery. These hubs are designed to enhance the pedestrian experience and often incorporate traffic calming measures and infrastructure improvements for cyclists and walkers. Squares help foster a sense of neighborhood identity and are instrumental in bridging the gap between Gateways and more localized Points.
- Points are the smallest and most localized GoHubs!, embedded deep within residential neighborhoods or near community amenities like parks, schools, and libraries. These hubs are critical for first- and last-mile connections, often featuring just one or two transportation modes such as bikeshare or bike parking. While they offer fewer amenities than Gateways or Squares, Points play a vital role in expanding access to mobility services in areas that are less connected to the broader transit network. Their strategic placement ensures that even residents in more remote or underserved areas can benefit from multimodal transportation options.

Figure 4 below shows an example of a Square mobility hub typology.



- ① **CAR SHARE**
Well-established alternative to owning a car. Requires dedicated parking spaces.
- ② **BIKE SHARE**
Maintain existing bike share for convenient, affordable, on-demand bike access for short trips through
- ③ **HUB BEACON SIGN**
Prominent, distinctive signage to point users to hub mobility options available at this location.
- ④ **WIFI, POWER + INFORMATION**
The solar bench provides wifi charging outlets, information on the GoHubs! project, and space for local event announcements
- ⑤ **MBTA BUS CONNECTIONS**
Bus stops on Meridian at north and south ends of Central Square for routes 114, 116, 117, 120, 121

Figure 4: Central Square Concept

Source: *City of Boston GoHubs! Neighborhood Mobility Hubs Guidebook*

Boston GoHubs! Lessons Learned

The GoHubs! pilot in East Boston provided valuable insights into the implementation and impact of neighborhood mobility hubs. One of the key lessons learned is that placemaking features—such as parklets, public art, and shaded seating—are more popular among residents than traditional transportation amenities like car share or EV charging. This suggests that mobility hubs should prioritize creating welcoming, community-centered spaces that enhance the pedestrian experience. Additionally, the pilot revealed that Point GoHubs! located in residential areas far from rapid transit saw the highest increases in Bluebikes ridership and car share usage, indicating a strong demand for mobility services in transit-poor neighborhoods. However, challenges such as limited bike infrastructure, faded signage, and lack of multilingual support for mobility services were also identified. These barriers highlight the need for improved wayfinding, better integration with existing transit networks, and inclusive outreach strategies.

Recommendations for future expansion include enhancing the Kit of Parts with more placemaking elements, improving signage design and placement, and incorporating green infrastructure to address urban heat and low tree canopy coverage. The city should also pursue partnerships with local institutions like libraries and arts organizations to support programming and public engagement. Furthermore, integrating GoHubs! into broader transportation and development plans—such as MBTA’s Bus Network Redesign and BPDA’s neighborhood planning—will ensure that mobility hubs are strategically placed and well-supported. Technological improvements, including reliable smart benches and EV charging stations, should be revisited with more robust infrastructure. Finally, expanding the GoHubs! network should follow a phased approach, beginning with baseline amenities and evolving through community-driven



programming and advanced mobility features, ensuring that each hub meets the unique needs of its neighborhood while advancing the goals of Go Boston 2030.

2.4.5 San Diego Association of Governments (SANDAG)

SANDAG Mobility Hub Definition

SANDAG defines mobility hubs as “communities with a high concentration of people, destinations, and travel choices. They offer on-demand travel options and support infrastructure that enhance connections to high-quality Transit Leap services while helping people make short trips around the community on Flexible Fleets. Mobility Hubs can span one, two, or a few miles based on community characteristics and are uniquely designed to fulfill a variety of travel needs while strengthening sense of place.”

SANDAG Mobility Hub Goals

The overarching goal of mobility hubs is to create integrated, multimodal transportation centers that reduce reliance on single-occupancy vehicles and enhance access to transit. These hubs aim to provide seamless connections between various mobility services—public transit, shared mobility, active transportation, and emerging technologies—through strategic planning, partnerships, and infrastructure investments.

SANDAG Planning, Design, and Implementation

Planning and Implementation

The implementation of mobility hubs is best approached through phased development. Some features can be introduced quickly with minimal investment, while others require long-term planning, policy reform, and technological readiness. Cities are encouraged to reimagine curb space to accommodate shared mobility services, mobile retail, and pedestrian-friendly infrastructure. As on-demand services grow, the need for safe and efficient pick-up and drop-off zones becomes increasingly important.

Public-private partnerships are central to the success of mobility hubs. Public agencies are urged to collaborate with developers, employers, and transportation service providers to share costs and responsibilities. These partnerships can facilitate pilot programs and innovative service models that enhance access to transit and reduce car dependency. Additionally, the integration of big data is critical. Agencies must establish open data policies and data-sharing agreements with private providers to enable real-time trip planning, scheduling, and payment systems.

Planning for future mobility technologies, including autonomous vehicles, is another key consideration. Infrastructure must be upgraded to support wireless connectivity and charging networks, enabling vehicles to communicate with traffic systems and optimize routing. Agencies should leverage designations such as the USDOT Autonomous Vehicle Proving Ground to pilot advanced mobility solutions.

Mobility hubs can be implemented in both existing and new developments. In existing communities, outreach to property owners and managers is essential to secure space and support for hub features. Even minor contributions, such as easements for bikeshare stations or designated car share parking, can yield mutual benefits. In new developments, local governments can require or incentivize the inclusion of mobility hub elements through zoning, development agreements, and transportation demand management strategies. These measures ensure that mobility hubs are integrated from the earliest stages of planning.



The memo also emphasizes the importance of leveraging partnerships with mobility service providers, special assessment districts, corporate sponsors, and technology companies. Examples from across North America illustrate successful collaborations that have expanded access to shared mobility, reduced parking demand, and improved transit connectivity. Wi-Fi investments at hubs are highlighted as a way to enhance rider experience and increase transit use.

Local plans and policies play a vital role in supporting mobility hub development. Cities are encouraged to incorporate mobility hub concepts into general plans, transportation studies, and climate action strategies. These documents can guide the inclusion of specific features such as EV chargers, bike lockers, and pedestrian improvements, while also promoting land-use patterns that support TOD.

Access is a foundational principle in mobility hub implementation. Agencies must ensure that hubs serve low-income, minority, and senior populations who are more likely to rely on transit. Outreach programs, subsidized services, and alternative payment options are recommended to make mobility hubs accessible to all. Examples include car share programs for low-income residents, senior-focused ride-hailing services, and partnerships with financial institutions to provide prepaid cards.

Design and Key Components

Mobility hubs are envisioned as dynamic spaces where walking, biking, transit, and shared mobility services converge to offer seamless travel options and reduce reliance on single-occupancy vehicles. SANDAG categorizes mobility hub features into five key domains:

- Transit amenities,
- Pedestrian amenities,
- Bike amenities,
- Motorized services,
- Support services.

Transit amenities focus on enhancing the rider experience at transit stations. Features such as improved waiting areas with seating, shade, lighting, Wi-Fi, and real-time travel information make transit more comfortable and accessible. Dedicated transit lanes and transit signal priority systems improve service reliability and efficiency. Passenger loading zones are designed to accommodate various shared mobility services, including taxis, shuttles, and ride-hailing, while minimizing traffic disruptions.

Pedestrian amenities aim to create safe, attractive, and accessible environments for walking. Wide sidewalks, enhanced landscaping, pedestrian bridges and underpasses, improved lighting, and street furniture contribute to a pleasant walking experience. Crossings are designed with safety in mind, incorporating features such as bulb-outs, refuge islands, raised crossings, and pedestrian detection technologies to ensure visibility and reduce conflicts with vehicles.

Bike amenities support cycling as a viable mode of transportation within mobility hubs. Bikeways, including bike paths, lanes, routes, and cycle tracks, are designed to provide safe and efficient connections to transit and local destinations. Bike signals, counters, footrests, and channels enhance safety and convenience. Secure bike parking options range from racks and lockers to group facilities and valet services. Bikeshare



systems, whether station-based or dockless, offer flexible access to bikes and are often integrated with transit stops to extend the reach of the mobility network.

Motorized services encompass a range of shared and EV options. Car share programs provide access to vehicles for short-term use and are supported by dedicated parking and real-time availability information. On-demand rideshare services, including dynamic carpooling and ride-hailing, offer flexible travel options and require designated curb space for efficient passenger loading. Microtransit services use smaller vehicles to fill gaps in traditional transit networks, particularly during peak hours or in underserved areas. Neighborhood electric vehicles (NEVs) offer low-speed, zero-emission travel for short trips in planned communities or campuses. EV charging stations support the growing adoption of plug-in EVs and are tailored to different vehicle types and charging needs. Smart parking technologies streamline the parking experience through real-time availability, dynamic pricing, and integrated payment systems. Flexible curb space allows for dynamic allocation of street space based on time-specific demands, supporting a variety of mobility services and urban activities.

Support services and amenities enhance the overall functionality and user experience of mobility hubs. Wayfinding systems, both static and interactive, help users navigate the hub and access transit and shared mobility options. Package delivery stations offer secure lockers for online orders, reducing the need for separate car trips. Mobile retail services, such as food trucks and mobile salons, bring goods and services directly to users, increasing the convenience of using transit. The concept of a Universal Transportation Account (UTA) envisions a single platform for accessing and paying for all mobility services, including transit, parking, rideshare, bikeshare, and EV charging. UTAs can also administer incentives to encourage multimodal travel and reduce car dependency.

Figure 5 below shows an example of a mobility hub concept for SANDAG.



Figure 5: Mobility Hub Concept

Source: SANDAG

SANDAG Mobility Hub Typologies

The 2021 Regional Plan developed by SANDAG outlines a transformative vision for mobility in the San Diego region, with Mobility Hubs serving as a central organizing concept. These hubs are designed to be vibrant centers of activity where multiple transportation modes converge, offering seamless connections between transit services, on-demand travel options, and community destinations. The plan identifies five distinct types of Mobility Hubs, each tailored to the unique characteristics and needs of different areas across the region.

- Coastal Mobility Hubs are located in popular seaside and recreational destinations. While these areas may not experience the same scale of future development as other hub types, they are critical for improving multimodal access to neighborhoods that border the region’s coastal resources. Enhancing connections in these areas supports both residents and visitors in accessing transit and active transportation options without relying on personal vehicles.
- Gateway Mobility Hubs serve as key entry points into the regional transportation network. A prominent example is the U.S.–Mexico Border Mobility Hub, which is strategically positioned to



facilitate the movement of people and goods across the international border. These hubs are essential for managing high volumes of cross-border travel and trade, and they offer opportunities to improve regional connectivity and economic integration.

- Major Employment Center Mobility Hubs are situated in areas that currently serve as top commute destinations. These hubs are designed to support mixed-use development and accommodate future growth in jobs and housing. By concentrating mobility investments in these areas, the plan aims to reduce commute times, increase transit ridership, and support economic development.
- Urban Core Mobility Hubs encompass high-density, mixed-use neighborhoods such as Downtown San Diego, Mid-City, and Barrio Logan. These hubs are characterized by their proximity to a wide range of destinations and their potential to serve as anchor points for the regional transit network. The Central Mobility Hub, for example, is envisioned as a major transit station that integrates multiple Transit Leap and Flexible Fleet services, creating a seamless transfer experience and fostering a live-work-play environment.
- Suburban Mobility Hubs are located in moderately dense residential neighborhoods that include some commercial destinations and are situated near high-quality transit routes. These hubs are designed to provide convenient access to transit and other mobility services, helping residents make short trips within their communities and connect to the broader transportation network.

Each Mobility Hub type is supported by complementary land-use strategies, safe street designs, and a suite of amenities such as interactive trip-planning kiosks, EV charging stations, and secure parking for bikes and rideables. Together, these hubs form a regional network that enhances mobility, supports sustainable growth, and improves access to jobs, education, healthcare, and recreation. The classification of Mobility Hubs into distinct types allows for targeted planning and investment, ensuring that transportation solutions are responsive to the diverse needs of communities across the San Diego region.

SANDAG Mobility Hub Lessons Learned

One of the most significant lessons from SANDAG’s approach is the importance of aligning mobility hub development with broader regional goals. SANDAG’s strategy integrates transportation planning with public health, environmental sustainability, and social access objectives. This alignment ensures that mobility hubs are not just transit nodes but also catalysts for community development and improved quality of life. The agency’s emphasis on data-driven site selection—using land use, employment, travel patterns, and demographic indicators—demonstrates a commitment to evidence-based planning that supports equitable access to mobility services.

SANDAG also highlights the value of flexibility in hub design and implementation. Recognizing that mobility hubs must evolve with technological advancements and changing user needs, the agency advocates for adaptable infrastructure and modular features. This includes flexible curb space, smart parking technologies, and the integration of digital platforms for trip planning and service coordination. The concept of a “Mobility Sandbox” proposed by SANDAG encourages innovation by allowing private mobility providers to pilot new services and technologies within hub environments.



Community engagement is another cornerstone of SANDAG’s mobility hub planning. The agency has employed a variety of outreach methods, including pop-up events, online surveys, and designathons, to involve residents, students, and stakeholders in the planning process. This participatory approach ensures that mobility hubs reflect the needs and preferences of the communities they serve, fostering a sense of ownership and support for the projects.

SANDAG’s experience also underscores the importance of strategic partnerships. The agency has collaborated with local governments, transit operators, developers, and advocacy groups to advance mobility hub initiatives. These partnerships are essential for securing funding, coordinating land use and transportation policies, and integrating hub features into new developments. SANDAG’s efforts to engage real estate developers and provide toolkits for incorporating mobility hub elements into private projects exemplify proactive leadership in fostering public-private collaboration.

Finally, SANDAG’s planning documents emphasize the need for sustainable and locally sourced funding mechanisms. While initial planning efforts have been supported by state and federal grants, the agency recognizes that long-term success depends on reliable funding streams such as development impact fees, Enhanced Infrastructure Financing Districts (EIFDs), and revenues from parking benefit districts and High-Occupancy Toll (HOT) lanes.

In summary, SANDAG’s mobility hub planning offers a model of integrated, flexible, and community-centered transportation development. Its lessons highlight the importance of aligning mobility initiatives with regional goals, engaging stakeholders throughout the process, fostering innovation through partnerships, and securing sustainable funding for long-term success.

2.4 Mobility Hubs in Metro Atlanta

Mobility hubs are organically emerging across the Atlanta region as public transportation providers expand multimodal services to meet growing demand, enhance customer experience, and improve regional connectivity. These hubs are defined as dedicated areas where two or more transportation modes intersect, or where multiple providers offer transfer opportunities or operate in close proximity of each other.

Historically, locations such as MARTA’s Arts Center Station, Doraville Station, and CobbLinc’s Marietta Transfer Center functioned as mobility hubs long before the term gained popularity to facilitate ADA paratransit transfers between MARTA Mobility, CobbLinc, and Ride Gwinnett.

Since the adoption of the 2017 Managing Mobility (HST) Plan, several new hubs have been established. CobbLinc launched the Cumberland Transfer Center in March 2017 to support the Cumberland Circulator and connect riders to Truist Park. In July 2020, MARTA opened Phase I of the Clayton County Justice Center Transit Hub, marking a significant expansion of transit services and a commitment to elevating the rider experience. The final phase of this hub is expected to open in 2026. Existing park-and-ride facilities such as Panola Station, Indian Trail Station, and Snellville Station already serve as informal mobility hubs, reinforcing their role in the region’s transportation ecosystem.



Looking ahead, agencies including CobbLinc, Connect Douglas, MARTA, and Ride Gwinnett have strategic plans for additional mobility hubs to support service growth. ATL is also in the early stages of exploring the role of mobility hubs in enhancing job access and reverse commutes through its Xpress services. As mobility hubs continue to gain traction as a viable solution to regional mobility challenges, it is essential to apply best practices in planning, design, and implementation. These practices must be context-sensitive, reflecting the diverse needs of Atlanta’s communities and ensuring that each hub is tailored to its local environment.

3. Regional Trip Planner

3.1 What is a Regional Trip Planner?

A regional trip planner is tool that centralizes and integrates multiple transportation services and options into a single accessible platform typically online or via a mobile application to assist individuals with planning a trip including various modes and systems within a geographic region. A more robust or enhanced regional trip planner also includes the user’s ability to plan, book, and pay for their trip within the same unified platform. Benefits of regional trip planners include independence and convenience for the user, improved access, and a more streamlined experience.

3.2 Regional Trip Planner Case Study

For the 2024 CHST Plan Update, the best practice case study for regional trip planning will focus on TriMet’s Sandbox Project funded through the Federal Transit Administration (FTA) Mobility on Demand (MOD) 2017-2019 Sandbox Program. TriMet was one of 11 recipients and was awarded \$678,000 from FTA’s MOD grant with an in-kind match of \$324,000. FTA’s MOD Sandbox Demonstration Program is an avenue through which integrated MOD concepts and solutions, supported by local partnerships, are demonstrated in real-world settings. In 2016, FTA identified and funded project teams to innovate, explore partnerships, develop new business models, integrate transit and MOD solutions, and investigate new, enabling technical capabilities such as integrated payment systems, decision support, and incentives for traveler choices.

TriMet is a leader in developing and implementing regional trip planners, releasing its first trip planner, the OpenTripPlanner (OTP) as an open-source project in 2009 to introduce multiple modes in one trip. TriMet’s original focus was to incorporate biking and walking networks with transit. Since this time, the adoption of OTP has been strong, with implementation in many cities in the United States and other countries including the Vermont Department of Transportation (VTrans) Open Trip Planner, previously highlighted in ARC’s 2020 Demand Response Plan as a best practice. VTrans was also funded through FTA’s MOD Sandbox Project and in 2019 expanded OTP to support demand responsive transit service by consuming the GTFS-flex specification, which facilitated the ability to create itineraries involving “flexible” public transit modes such as hail-and-ride and deviated-fixed services.



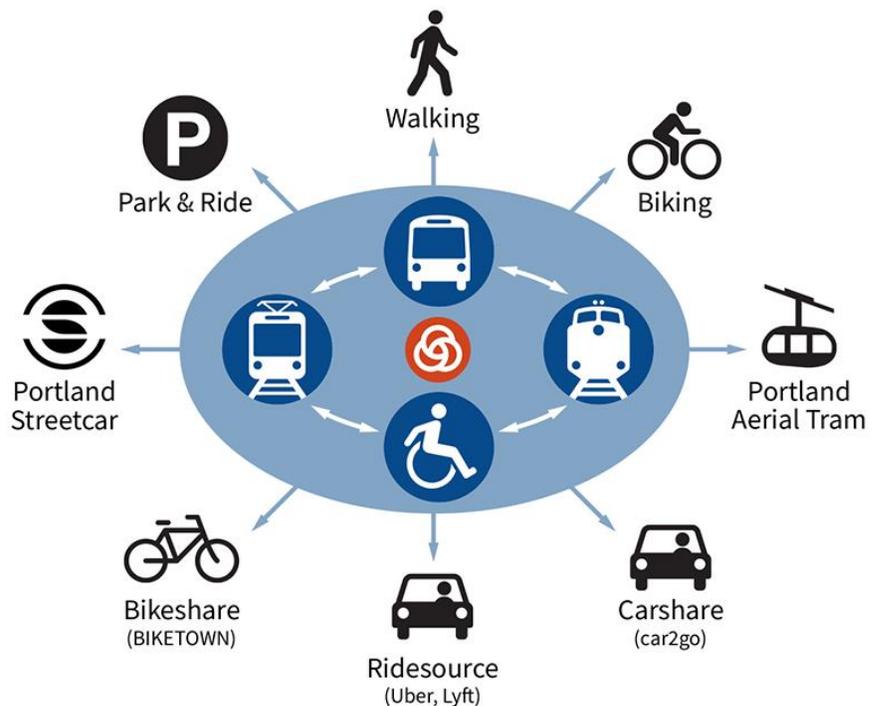
Leveraging the FTA demonstration grant funding, TriMet was able to evolve their initial OTP into the “Next Generation Trip Planner,” by integrating transit with other shared-use modes in one complete door-to-door itinerary, with a robust geocoder and rich, open, up-to-date data for point of interest locations, sidewalk coverage, and more. TriMet was the first transit agency in the United States to release a multimodal trip planner that incorporated shared-use mobility service providers, including BIKETOWN, car2go, Lyft (pilot only participation), Uber, and Zipcar using OTP software.

As ARC moves the region toward a Mobility as a Service (MaaS) approach to address existing and future mobility demand, TriMet is a good peer example of successful coordination with 38 public and private partners including five transit agencies, software developers, and other for-profit companies to achieve a common goal. TriMet was truly an innovator and not only built the foundation for designing regional trip planners but also created a successful roadmap for coordinating public and private transportation services across various modes and providers within a large geographic region.

3.2.1 TriMet’s MOD Sandbox Project Goals and Objectives

TriMet’s MOD Sandbox Project consisted of four main goals and objectives to improve OTP trip planning functionality in support MOD in an open-source environment and to lay the groundwork and foundation for MaaS. TriMet’s MOD Sandbox project goals were as follows:

- OpenTripPlanner (OTP) – Extend code to incorporate shared-use mobility (SUM) modes, real-time information, and enhanced accessibility narrative.
- Pelias geocoder – Extend functionality for government agencies and improve match rate and accuracy of locations.
- OpenStreetMap and OpenAddresses – Improve data to support new and enhance existing features for comprehensive trip planning and geocoding.
- Integrated Payment Plan – develop for a future





one-click payment feature in the application.

TriMet’s strategy was to leverage open-source software, open data, and open standards to facilitate widespread adoption. TriMet’s MOD project objects were to:

- Allow users to get information about and compare transit trips in combination with SUM options in addition to the biking and walking options previously available in OTP.
- Provide users with a more accurate and robust matching of addresses and points of interest when using OTP.
- Improve the usability and design of the web-based OTP interface.
- Provide users with real-time information regarding their trip plans and optimize trips based on current vehicle locations.

3.2.2 TriMet’s MOD Sandbox Project Management Approach

TriMet understood that a project of this scope, size, and complexity would require a broad and diverse spectrum of expertise. With this understanding TriMet organized its project team into two main subgroups and allocated task and responsibilities as appropriate across both groups to ensure the successful completion of project. The team was primarily structured around the main software development tasks (for OTP and the Pelias geocoder). In addition to being the client agency and lead on the grant, TriMet was responsible for integration of OTP SUM and the Pelias geocoder with existing systems at the agency, including the TriMet.org website. The IBI Group provided project management support, stakeholder outreach, and overall technical coordination between the development teams. TriMet’s project team used a distributed approach to deliver the project scope as follows:

- **TriMet and IBI Group** – Project management, development coordination, and outreach to other OTP and MOD Sandbox stakeholders
- **Conveyal LLC**– Software development for OpenTripPlanner enhancements
- **Mapzen/Cleared for Takeoff** – Software development for Pelias geocoder
- **Fehr and Peers** – Testing and evaluation of Pelias geocoder
- **TriMet and Oregon Metro** – Data improvements to OpenStreetMap and Oregon Metro master address file



- **moovel** – Development of integrated payment plan

With a large project team, the distributed responsibilities across groups were mapped to project tasks and milestones, allowing for effective and efficient tracking and accountability. With key partners and other project stakeholders located across the US (and internationally), the project team leveraged various innovative collaboration tools to facilitate open and frequent communication and coordination among project partners and stakeholders, including:

- **InVision** – User interface design collaboration and feedback
- **GoToMeeting** – Teleconferencing, webinars, and screen sharing
- **Trello** – Schedule, task, and milestone tracking
- **GitHub** – Code change management and issue tracking
- **Slack** – Weekly development team stand-up meetings, text-based team communication

Using the technical approach described above, the project team was able to meet all four project objectives and complete all tasks on time and within budget including testing and implementation.

3.2.3 TriMet’s MOD Sandbox Project Key Lessons Learned

TriMet for the MOD Sandbox Project recorded many lessons learned throughout the entire process and at the completion of each major milestone. Included below is a list of the overall key lessons learned for the project that were documented in TriMet’s final report to FTA (Report No. 0197) in June 2021.

- Unlike automobiles, public transit alone cannot provide door-to-door service, and other modes, such as Transportation Network Companies (TNCs) such as Lyft and Uber, may not be affordable to everyone. Combining modes can reduce travel time from transit alone, solve the first/last mile problem, and offer more affordable trip options than ride-sourced trips alone.
- The Pelias geocoder is now even more robust and much easier for agencies to implement and customize.





- Open application program interfaces (APIs) are critical to development of multimodal trip planners. It is appropriate, and may be necessary, for cities and other regulating agencies to require such APIs from private mobility providers as a condition of operation.
- The current OTP application provides partial book and pay functionality; after a trip is planned, customers can click “Book Ride” and their ridesourcing app will open with all needed details pre-entered, greatly decreasing the friction of multimodal booking.
- A MaaS platform is necessary to support multimodal plan-book-pay applications. This platform includes strategic plans and implementations considering a range of factors including big data, technology, and a Mobility Management Plan as part of a larger Smart Cities plan.
- Public-private partnerships need to be established.
- Policy and regulations need to be established and negotiated for access to private mobility provider data and open APIs.
- A requirement for the success of MaaS is for transit agencies to move from transit providers into the role of a regional Mobility Management Center, which requires a complete reconstruction of identity.
- Approaches that contributed to the success of this project include transparency (all project documentation made available on a shared drive), inclusiveness, public-private partnerships, communication tools, weekly meetings, kick-off workshop and prototype release workshop, and surveys, feedback, and analysis.
- The OTP Shared-Use Mobility (SUM) Team employed a multipronged, iterative testing strategy to enable continuous improvement of the applications. Key evaluation methods and projects included regular, informal testing of application prototypes by the core team throughout the two-year project, which allowed for rapid enhancements and bug fixes.
- Two heuristic usability studies.
- An independent evaluation survey conducted by the UC Berkeley Transportation Sustainability Research Center.
- Testing by external project partners and an expanded group of TriMet employees.
- In depth, one-on-one, field shadowing.



The team’s collaboration and engagement with various stakeholders and users during testing allowed the project team to incorporate essential feedback to make iterative improvements to the user interface design and core functionality prior to the second beta launch of TriMet’s “Next Generation Trip Planner,” in August 2019. Since this time, the “Next Generation Trip Planner” has been fully integrated into TriMet’s website where you can plan, book, and track your trip.

3.3 Atlanta Transit Link Authority Trip Planner

The ATL Trip Planner, known as ATL RIDES, is a regional tool designed to make trip planning easier across the 13-county Atlanta area. It brings together multiple transit providers—including MARTA, Xpress, CobbLinc, Ride Gwinnett, Connect Douglas, and CATS—into one platform, helping riders navigate a complex network more efficiently and with greater convenience.

The planner offers real-time transit information, route options, and fare estimates for trips that may involve multiple agencies. Riders can access it through a mobile app or web interface to check schedules, plan transfers, and view arrival times. It uses standardized data feeds from participating agencies to provide accurate routing and timing and includes features to support accessibility for all riders.

While the trip planner is a valuable resource, there are areas where enhancements could further improve the rider experience. Transfers between different systems can sometimes be challenging due to timing and coordination, and the platform does not yet include on-demand services such as microtransit or rideshare options. Expanding these capabilities would help create a more seamless and flexible regional mobility solution.

4. Regional Fare Payment System

4.1 What is a Regional Fare Payment System?

A regional fare payment system is a unified platform that allows riders to pay for transit services across multiple agencies and jurisdictions using a single method—such as a smart card, mobile app, or account-based system. These systems simplify fare collection, improve rider experience, and promote seamless travel across a region.

Rather than managing separate fare structures and payment methods for each transit provider, a regional system integrates these into one cohesive framework, often with shared technology, fare policies, and customer service standards.

4.2 Benefits of a Regional Fare Payment System

Implementing a regional fare payment system can significantly enhance the effectiveness and access of transit services within a MPO area. By unifying fare structures and payment technologies across multiple transit agencies, MPOs can create a more seamless and intuitive experience for riders. This simplification



reduces confusion, especially for new or occasional users, and encourages greater use of public transportation by making trip planning and fare payment more straightforward.

From an operational standpoint, a regional fare system streamlines fare collection processes and reduces administrative overhead. Agencies within the MPO can benefit from shared infrastructure and coordinated data systems, which improve planning and performance monitoring. This integration allows for more accurate insights into rider behavior, service demand, and fare equality, enabling MPOs to make data-driven decisions that enhance regional mobility.

Access and accessibility are central to the value of a regional fare system. Features such as fare capping and targeted discounts ensure that low-income riders are not overcharged and can access transit affordably. Additionally, reducing reliance on cash transactions and physical tickets helps bridge the digital divide, particularly for unbanked or underbanked populations. MPOs can use these tools to support inclusive transportation policies and expand access to essential services.

A unified fare system also supports increased ridership by facilitating multimodal and cross-agency travel. When riders can move easily between buses, trains, and microtransit services without navigating separate fare systems, transit becomes a more attractive and competitive alternative to driving. This convenience can lead to greater adoption of public transportation, contributing to reduced congestion, improved air quality, and more sustainable urban development.

Finally, regional fare systems are scalable and support innovation. MPOs can integrate emerging mobility services such as bikeshare, on-demand shuttles, and Maas platforms into the fare ecosystem. These systems can evolve to include loyalty programs, bundled trip packages, and real-time fare adjustments, positioning the MPO as a leader in modern, equitable, and responsive transportation planning.

4.3 Steps to a Regional Fare Payment System

As public transit providers in the region consider implementing a regional fare system, several strategic recommendations can guide the process to ensure equitable, efficient, and scalable outcomes. One key area of focus is enhancing fare payment systems by expanding contactless and open-loop payment options. Transitioning to account-based ticketing across all participating agencies allows riders to manage their fares digitally, improving convenience and enabling real-time updates. Ensuring interoperability across systems is essential to create a seamless experience for riders navigating multiple transit providers.

Implementing fare capping is another critical strategy. Fare capping ensures that riders are automatically charged the lowest possible fare based on their usage, eliminating the need to pre-purchase passes and reducing financial barriers for frequent users. Weekly and monthly caps can be particularly beneficial for low-income and transit-dependent populations, promoting access and affordability.

Integrating microtransit services into the regional fare system can significantly enhance mobility in underserved areas. By incorporating dynamic routing and real-time booking capabilities into the fare platform, MPAs can offer flexible, demand-responsive transit options that complement fixed-route



services. This integration supports first-mile/last-mile connectivity and expands access to essential destinations.

Developing standardized business partnerships is another opportunity for transit providers to strengthen regional fare systems. By aligning employer-sponsored transit benefit programs and promotional fare structures across agencies, transit agencies can streamline administration and increase participation. Leveraging the fare platform to manage these programs also improves data tracking and reporting.

Safety and accessibility must be prioritized in fare system design. Enhancing fare enforcement and station safety through thoughtful design, staffing, and behavioral health strategies ensures a secure and welcoming environment for all riders. Addressing homelessness and behavioral challenges with coordinated service models further supports vulnerable populations and improves the overall rider experience.

Finally, parking and access strategies can complement fare system improvements. Transit agencies can leverage underutilized parking assets to support transit access, particularly in suburban and park-and-ride locations. Implementing paid parking at high-demand sites can generate revenue and manage demand, while promoting transit use as a viable alternative to driving.

4.4 Regional Fare Payment Case Studies

To illustrate the practical impact and scalability of regional fare payment systems, this section presents a series of case studies from diverse metropolitan regions across the United States. Each example highlights how transit agencies and planning organizations have approached fare integration, addressed operational and access challenges, and implemented innovative solutions to improve rider experience and system efficiency.

These case studies spanning North Central Texas, San Diego, Puget Sound, and California demonstrate a range of strategies including mobile fare platforms, account-based systems, fare capping, and cross-agency coordination. They provide valuable insights into the benefits of unified fare systems, such as increased ridership, reduced administrative costs, and enhanced accessibility for underserved populations.

By examining these real-world implementations, MPOs and transit agencies can better understand the pathways to successful fare integration and identify best practices that can be adapted to their own regional contexts.

4.4.1 North Central Texas Region (NCTCOG MPO) – GoPass Expansion

The GoPass platform serves as the primary mobile fare payment system across the Dallas-Fort Worth (DFW) region, supporting Dallas Area Rapid Transit (DART), Trinity Metro, and Denton County Transportation Authority (DCTA). Under the leadership of the North Central Texas Council of Governments (NCTCOG), the Regional Transit 2.0 initiative has prioritized fare integration, rider experience enhancement, and revenue optimization through strategic GoPass expansion.



Despite the widespread use of GoPass, several challenges hinder its full regional integration. Fare products remain fragmented, with each agency maintaining distinct fare structures that complicate cross-agency travel. Interoperability is limited due to parallel systems, and approximately 40% of DART riders still rely on cash, highlighting barriers for unbanked and transit-dependent populations. Additionally, access gaps persist across geographic, socioeconomic, and demographic lines, affecting access to fare discounts and digital tools.



Source: GoPass.org

Strategic Recommendations

To address these challenges, NCTCOG's Task 7 Report outlines a comprehensive set of recommendations aimed at enhancing regional fare coordination:

- Expand contactless and open-loop payment systems to create a seamless and unified regional payment ecosystem.
- Fully integrate account-based ticketing across all agencies to support interoperability and equality-centered fare policies.
- Implement regional fare capping to ensure riders are charged the lowest possible fare based on usage, with weekly and monthly caps.
- Incorporate microtransit services into GoPass to bridge gaps between fixed-route systems and underserved areas, enabling dynamic routing and real-time booking.
- Develop standardized corporate programs and use GoPass to manage employer-sponsored transit benefits and promotional fares.



- Enhance fare enforcement and station safety through design, staffing, and behavioral health strategies, addressing homelessness and behavioral challenges.
- Leverage underutilized parking assets to support transit access and explore paid parking at high-demand locations to generate revenue.

The expansion of GoPass offers numerous benefits for the DFW region. It enables seamless regional travel across DART, Trinity Metro, and DCTA, eliminating the need for multiple fare media. Fare capping and digital wallets improve access by supporting low-income and unbanked populations. Operational efficiency is enhanced through streamlined fare collection and data analytics, which inform planning and service delivery. Simplified fare structures and incentives encourage more frequent and cross-agency transit use, contributing to ridership growth and long-term sustainability.

4.4.2 San Diego Association of Governments (SANDAG) - PRONTO

In September 2021, SANDAG, in partnership with the Metropolitan Transit System (MTS) and the North County Transit District (NCTD), launched PRONTO, a modern regional fare payment system designed to replace the aging Compass Card. This initiative aimed to streamline fare collection, improve rider experience, and promote equitable access to public transit across San Diego County.

PRONTO introduced an account-based fare platform that supports both reloadable smart cards and a mobile app, giving riders flexibility in how they pay for transit. The system was designed with user convenience and affordability in mind, offering features that automatically ensure riders get the best possible fare without needing to pre-select passes.



Key Features

Source: San Diego Metropolitan Transit System

- **Earn-As-You-Go (Best Fare)**
Riders tap or scan their PRONTO card or mobile app each time they board. The system deducts a one-way fare and tracks spending. Once a rider reaches the cost of a Day Pass or Month Pass, no additional charges are applied for the rest of the period. This fare capping model guarantees that riders always receive the lowest possible fare.



- **Free Transfers**
Transfers are free within a two-hour window from the first ride, making multi-leg trips more affordable.
- **Mobile and Smart Card Options**
Riders can choose between using the PRONTO mobile app or a reloadable smart card. Cards are widely available at ticket machines, retail outlets, and transit stores.
- **Account Management**
Riders can create a PRONTO account to:
 - Protect their balance if the card is lost or stolen.
 - Track trips and fare spending.
 - Manage multiple cards (e.g., for family members).
- **Reduced Fare Options**
Seniors (65+), individuals with disabilities, Medicare recipients, and youth (ages 6–18) are eligible for discounted fares. Additionally, youth riders benefit from the Youth Opportunity Pass pilot program, which provides free transit access.

PRONTO has brought significant improvements to San Diego’s transit system by enhancing affordability, convenience, and accessibility. Its fare capping model ensures equitable pricing for all riders, especially those unable to afford upfront pass purchases. The system simplifies travel by removing the need to choose passes in advance and supports both mobile and physical fare media for added flexibility. With reduced fare programs and youth initiatives, PRONTO expands access for historically underserved populations. Additionally, it streamlines fare collection and provides valuable data for transit planning, making operations more efficient for agencies.

4.4.3 Puget Sound’s Unified Fare Payment System

The original ORCA system, launched in 2009, unified fare payment across seven major transit agencies in the Puget Sound region: Community Transit, Everett Transit, King County Metro, Kitsap Transit, Pierce Transit, Sound Transit, and Washington State Ferries. By 2019, ORCA had become a cornerstone of regional mobility, accounting for 68% of all transit trips and generating \$275 million in fare revenue. However, as infrastructure aged and rider expectations evolved, the need for a more flexible, modern solution led to the development of the Next Generation ORCA system, which began rolling out in 2022.

The new ORCA system introduced a suite of digital tools and enhancements designed to improve usability, accessibility, and access. Riders now benefit from a mobile app and website (myORCA) that allow for real-time account management, fare payments, and value loading. The system supports tap-to-pay functionality using NFC-enabled phones and contactless bank cards and offers an expanded retail network with more locations to purchase and reload cards, including cash-friendly options.



Source: Puget Sound transit- ORCA

Key Features of ORCA Next Gen

- **Mobile App & Website:** Manage accounts, load value, and pay fares via myORCA.
- **Real-Time Account Updates:** Instant availability of purchased value and passes.
- **Expanded Retail Network:** More locations, including cash-friendly options.
- **Tap-to-Pay with Phone:** Use virtual ORCA cards or contactless bank cards.
- **Account-Based System:** Track usage, manage multiple cards, and view fare history.
- **Legacy Compatibility:** Original ORCA cards remain valid and usable.

Access for all People were central to the system’s redesign. Programs like ORCA LIFT offer up to 50% fare discounts for income-qualified riders, while Youth ORCA cards are provided free of charge to support school and youth mobility programs. The system also includes Regional Reduced Fare Permits for seniors and riders with disabilities. To reach underserved communities, mobile ORCA-to-Go units distribute cards at festivals, fairs, and outreach events.

HST Support and All Access

- **ORCA LIFT:** Up to 50% discount for income-qualified riders.
- **Youth ORCA Cards:** First card free; supports youth mobility.
- **Reduced Fare Permits:** For seniors and riders with disabilities.
- **Community Outreach:** Mobile units distribute cards at public events.



The implementation strategy focused on minimizing disruption and maximizing user input. The rollout was phased, beginning with mobile and web features, followed by hardware upgrades and expanded retail access. The system was redesigned based on rider feedback, preserving popular features while addressing pain points. Importantly, the transition was planned to maintain legacy card compatibility, ensuring continuity for existing users.

The Next Generation ORCA system has introduced a range of benefits that significantly enhance regional transit in the Puget Sound area. It enables seamless travel across buses, light rail, ferries, and streetcars through a unified fare platform, while improving accessibility with mobile and retail options that cater to all rider types, including those who are unbanked or prefer cash. The system also offers fare flexibility through real-time fare capping, discounts, and employer benefit programs, making transit more affordable and user-friendly. Designed with scalability in mind, ORCA Next Gen is built to support future transit expansions and technology upgrades. Overall, it represents a major leap forward in regional fare integration, combining innovation with a strong commitment to access and rider experience, and serves as a model for other regions seeking to modernize their transit payment infrastructure.

4.4.4 California Integrated Travel Project and the Power of Regional Fare Integration

The California Integrated Travel Project (Cal-ITP) is a transformative statewide initiative led by the California State Transportation Agency (CalSTA) and Caltrans, aimed at revolutionizing how residents and visitors navigate public transportation across the state. With over 200 transit agencies operating independently, Cal-ITP seeks to unify the rider experience by introducing modern, interoperable fare systems and real-time transit data. At its core, the project promotes simplicity, access, and efficiency through innovations that make transit more accessible and user-friendly.

Key features of Cal-ITP include:

- **Contactless Payments:** Riders can pay using credit/debit cards or mobile wallets.
- **Automated Discounts:** Eligibility for seniors, students, and veterans is verified digitally.
- **Real-Time Information:** Standardized GTFS feeds improve trip planning accuracy.
- **Mobility Wallets:** Prepaid debit cards support transit use, especially for underserved communities.
- **Statewide Procurement Support:** Agencies can access pre-negotiated contracts for fare systems and hardware.



One of the most impactful components of Cal-ITP is its support for regional fare integration. By enabling seamless transfers and unified fare structures across multiple transit agencies, regional fare systems significantly enhance rider convenience and accessibility. Studies have shown that integrated fare systems can lead to substantial increases in ridership, with examples like Seattle demonstrating that regional passes can account for up to 40% of total ridership and 50% of revenue. In California, full fare integration has the potential to reduce vehicle miles traveled by up to 850,000 per day—equivalent to removing five freeway lanes—thereby contributing to the state’s climate and sustainability goals.

Moreover, regional fare systems promote access by reducing financial barriers for low-income riders and simplifying access to discounts for seniors, students, and veterans. Programs like Clipper START in the Bay Area exemplify how targeted fare policies can support vulnerable populations while encouraging transit use. Operationally, agencies benefit from reduced costs through bank card-based fare collection, which is up to 60% more cost-effective than traditional cash-based systems.

Cal-ITP’s approach also includes mobility wallets and statewide procurement support, allowing agencies to adopt advanced fare technologies without the burden of individual contracting. These innovations not only streamline operations but also ensure that transit remains a viable and attractive option for all Californians.

In summary, Cal-ITP and regional fare integration represent a forward-thinking model for public transportation—one that prioritizes user experience, operational efficiency, and environmental responsibility. As California continues to lead in sustainable mobility, these efforts serve as a blueprint for other regions seeking to modernize and unify their transit systems.

4.5 Regional Fare System in Metro Atlanta

Working towards implementing a regional fare product and unified payment system in Metro Atlanta offers a significant opportunity to simplify travel and modernize the region’s public transportation network. Currently, riders navigate multiple transit systems with different fare structures and payment technologies, which can make trips across two or more systems challenging. A fully unified and regional fare payment system would remove these barriers, creating a seamless and user-friendly experience across county and jurisdictional lines as well as transit systems and modes making it easier for both residents and visitors to explore the region.

The Atlanta region currently uses the BreezeCard as its primary fare payment system, owned and operated by MARTA, and accepted by Xpress, CobbLinc, and Ride Gwinnett, providing a strong foundation for regional fare coordination. Building on best practices from other regions, Atlanta could enhance this system by introducing a regional fare media product that would enable riders to purchase one fare and seamlessly travel across two or more transit systems. Other innovations gleaned from best practices for consideration include mobile integration that combines ticket purchasing, trip planning, and real-time vehicle tracking, as well as future mobility integration to incorporate bikeshare, carshare, and ride-hailing services into a unified payment experience. These strategies reduce barriers, encourage frequent transit use, and support a more connected, multimodal transportation network.



Automated Fare Collection 2.0 (AFC 2.0) marks a significant advancement in building a unified regional fare payment system for Metro Atlanta. Its open architecture supports account-based fare management and multiple payment options, including contactless credit/debit cards and mobile wallets like Apple Pay and Google Pay, alongside smart cards, smartphones, and wearables. Riders benefit from managing all travel through a single account, while agencies gain operational efficiencies through enhanced digital tools, robust reporting, and expanded retail reload networks for unbanked customers. Cloud-based infrastructure simplifies maintenance and scalability, reducing costs and complexity. Regional implementation, led by MARTA and ATL for agencies such as Xpress, CobbLinc, Ride Gwinnett, and Connect Douglas, is estimated at \$6.78 million¹, funded through federal and local sources. Beyond technology, AFC 2.0 strengthens coordination among transit providers, streamlines fare collection, improves procurement, and delivers better data for regional service planning. These efficiencies will enable more responsive service and make transit more convenient and attractive for residents and visitors alike, advancing mobility, sustainability, and access for all users across the region.

5. Conclusion

In conclusion, these top three recommendations are essential for planning and coordinating the efficient delivery of HST services in the Atlanta region now and in the future. As the region’s population continues to grow, with older adults 60+ being the largest demographic group, identifying and implementing more mobility options to meet demand is critical, including more on-demand services, strategic locations for cross-jurisdictional travel, and simplified payment options. These recommendations will be vetted with key stakeholders for incorporation into the CHST 2025 Plan update and to identify potential lead agencies, actions steps and timelines for moving forward.

¹ Based off 2025 cost estimate