Existing Conditions Report

Commerce in Motion

City of Commerce

DRAFT

July 2020

NELSON
NYGAARD

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1 INTRODUCTION

This Existing Conditions Report is the first element of the *Commerce in Motion* Comprehensive Operational Analysis (COA) for the City of Commerce Municipal Bus Lines, also known as City of Commerce Transit. The purpose of this report is to summarize the background conditions in which the City's transit system operates and provide a comprehensive evaluation of existing service characteristics and system performance. This report is intended to serve as the foundation for developing recommendations in later phases of *Commerce in Motion*.

PROJECT OBJECTIVES

Commerce in Motion is intended to provide practical and sustainable recommendations to improve the productivity and reliability of the City's transit system. Specific goals and objectives established at the outset of the process are summarized as follows:

- **Evaluate the effectiveness of the current route patterns.** Route patterns and frequencies in the City of Commerce have been unchanged for a number of years. *Commerce in Motion* will evaluate these patterns and identify more effective ways to provide service.
- **Develop priorities related to coverage, frequency, and travel time.** Many routes in the City of Commerce Transit system provide low-frequency, circulator service within neighborhoods. Identifying tradeoffs and priorities in terms of coverage area, frequency, and scheduling to improve travel time will all be considered.
- **Emphasize convenience and system accessibility.** Create a system that is easier to understand and has a low barrier to entry for existing customers and the broader community. The City of Commerce Transit system should be a system that works for everyone.
- **Provide a roadmap for the future.** While *Commerce in Motion* will present a cost-neutral service plan, identifying future unfunded priorities and a vision for moving forward will be a key component of the plan.

COVID-19 IMPACTS

The scope of *Commerce in Motion* was developed prior to the COVID-19 pandemic. This report is based almost entirely on 2019 data and is meant to describe the characteristics and performance of City of Commerce Transit as it operated under "typical" conditions. The adjustments that City of Commerce Transit made in response to decreases in transit usage in the Spring of 2020 are not included in this analysis. However, later phases of this study will consider the manner in which travel patterns shifted or endured during times of "essential" travel to inform service design and implementation recommendations.

REPORT ORGANIZATION

This report assesses the operating context in the City of Commerce as well as operating characteristics of the regional transit network, including Los Angeles County Metropolitan Transportation Authority (Metro), Montebello Bus Lines (MBL), and other services that operate within or adjacent to the City of Commerce. This Existing Conditions Report assesses the demographic and socioeconomic characteristics of the service area, and transit system characteristics and performance. The remainder of this document consists of the following:

- **Chapter 2 – Document Review** considers a variety of local planning efforts and new developments in the City of Commerce.
- **Chapter 3 – Market Analysis** evaluates socioeconomic and demographic conditions within the City of Commerce Transit service area to better understand transit demand and service gaps.
- **Chapter 4 – System Overview** provides an overview of trends and characteristics for the City of Commerce Transit fixed-route and Dial-A-Ride service, including recent operational and performance data.
- **Chapter 5 – Local and Regional Context** identifies how City of Commerce Transit fits into the larger picture of regional transit service by assessing other transit agencies and key transit facilities in the region.
- **Chapter 6 – Public Involvement** summarizes the activities and key findings from *Commerce in Motion*'s first phase of public engagement and stakeholder outreach.
- **Appendix A – Ridership Maps** provides route maps for every route in the system which show the alignment, bus stop locations, and the average daily weekday boardings and alightings.
- **Appendix B – Route Profiles** provides route summary tables and charts that give insight into passenger loads, boardings, and alightings.
- **Appendix C –Survey Comment Log** includes the comments received through the online survey conducted as a part of Phase I public outreach.
- **Appendix D – Demographic Maps** includes detailed maps showing the demographic characteristics of the City of Commerce.
- **Appendix E – Route Analysis** provides a detailed assessment of the operating challenges and opportunities for each existing City of Commerce Transit route.

Appendices A, B, and E are currently in development at this time and are forthcoming prior to the final version of the draft report.

2 DOCUMENT REVIEW

This chapter summarizes content from existing plans that discuss transit service improvements and policies affecting transit in the City of Commerce. This review includes a diverse cross-section of plans and studies conducted by City of Commerce, City of Montebello, Metro, and Metrolink.

KEY FINDINGS

- The Washington Boulevard and Atlantic Boulevard Specific Plans represent a concerted effort by the City of Commerce to diversify land uses in the city and encourage more retail and mixed-use development.
- The decision by the LA Metro Board to pursue the Washington Alternative for the Metro L Line extension will bring light rail service to the City of Commerce with a planned opening in 2035.

CITY OF COMMERCE

Multiple studies and new construction that will affect transit are occurring in the City of Commerce. In addition to the 2040 General Plan Update, two specific plans and two major developments (Modelo Project and the expansion of Citadel Outlets) are underway. Figure 2-1 displays the general study areas and project locations.

Figure 2-1 Planned Development Areas

2040 General Plan Update (2020)

The 2040 General Plan update, *Reimagine Commerce*, is a policy document that will guide future growth and development in the City of Commerce. The Plan is currently being drafted and was not yet available for review during the preparation of this report.

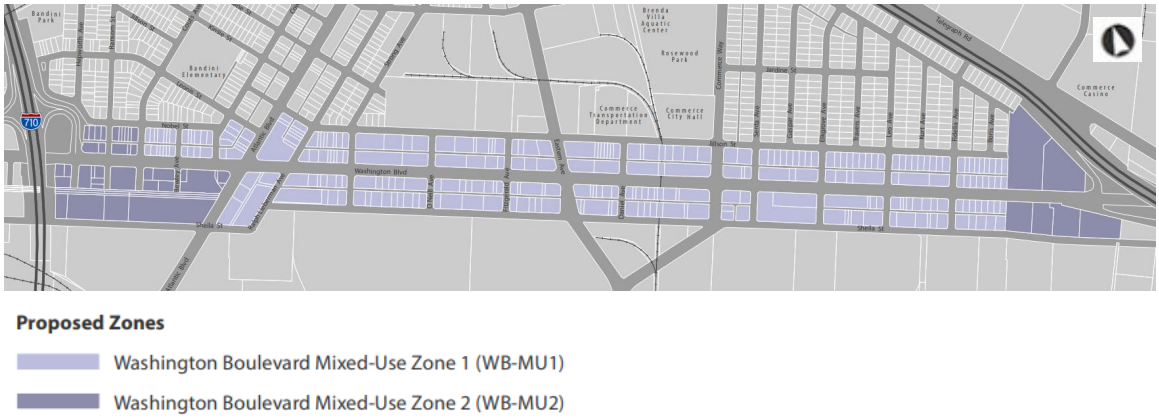
Washington Boulevard Specific Plan

Plans for Washington Boulevard are being developed concurrently with the 2040 General Plan Update. The City of Commerce is considering allowing a broader range of commercial uses, facilitating mixed-use development, and re-evaluating parking standards to enhance the street's economic vitality. Policy ideas for Mixed-Use Zone 1 include the repurposing of alleys to allow for greater flexibility and to maximize access to businesses. Reduced parking standards are also being considered for desired uses such as creative office and food halls. Catalytic development will be encouraged in Zone 2. For example, larger parcels along eastern Washington Boulevard could see

entertainment uses and hotels to complement activities associated with the Commerce Casino and Citadel Outlets. The City of Commerce Transit Red and Green routes, as well as the Citadel Outlets Express stop along Washington Boulevard. The study area and proposed mixed-use zones are identified in Figure 2-2.

Two planned residential developments are located adjacent to the Washington Boulevard Study Area, in the Rosewood Park neighborhood. These developments are the result of a partnership between the City of Commerce and City Ventures and will add 116 homes to the city.

Figure 2-2 Washington Boulevard Study Area



Source: City of Commerce, Los Angeles County Assessor and MIG (2019)

Atlantic Boulevard Specific Plan

Together with the Washington Boulevard Specific Plan, the Atlantic Boulevard Specific Plan is being developed with the 2040 General Plan update. Atlantic Boulevard is a key economic area and transportation corridor in the City of Commerce. It has the potential to become a hub for small businesses and a destination for Commerce residents. The City of Commerce Transit Blue and Red routes, as well as the Shopper Special Route (Sunday service only), stop along Atlantic Boulevard.

Plans for Atlantic Boulevard include redesigning the street, adding landscaping and greenery, and allowing higher density residential than is currently permitted. The city is also considering a broader range of commercial uses and eliminating industrial businesses, which will result in a welcoming commercial area for residents and enhanced prospects for small businesses.

Figure 2-3 Atlantic Boulevard Study Area

Source: City of Commerce, Los Angeles County Assessor and MIG (2019)

Modelo Project Initial Study (2019)

Comstock Realty Partners is proposing to develop the Modelo Project, a mixed-use development that includes parks and open space, residential, and commercial uses. The Project is located west of the Interstate 5 freeway, south of Zindell Avenue, east of a single-family residential neighborhood near Avenida Aguascalientes, and north of the Rio Hondo River and Path (Figure 2-4).

The Modelo Project will involve the reconstruction of Veterans Memorial Park and an adjacent vacant parcel into 825 residential units and approximately 165,000 square feet of entertainment retail uses. The project site will encompass approximately 17 acres. The reconstruction of Veterans Memorial Park will include new structures, a playground, soccer and baseball youth sports complex, library, an amphitheater, and additional outdoor green space. The new residential units will comprise a mixture of 25 to 50 townhomes and additional for-rent apartment units. The Project will also include approximately 165,000 square feet of entertainment retail, including a multi-screen Cineplex, a gaming/bowling/family venue, and restaurant. Construction is slated to begin in May 2020 with completion by April 2023.

Multiple City of Commerce Transit routes stop within a half-mile of the Project site, including the Orange Route at Eastern Avenue and Washington Boulevard, the Green Route at Kuhl Drive and Zindell Avenue, and the Yellow Route at Greenwood Avenue and Gage Avenue. The Project proposes to add a bus stop at Veterans Park on the eastern portion of the Project site, along with additional shade, seating, and signage at existing bus stops at Slauson and Gage avenues.

Figure 2-4 Modelo Project Site

Source: Dudek

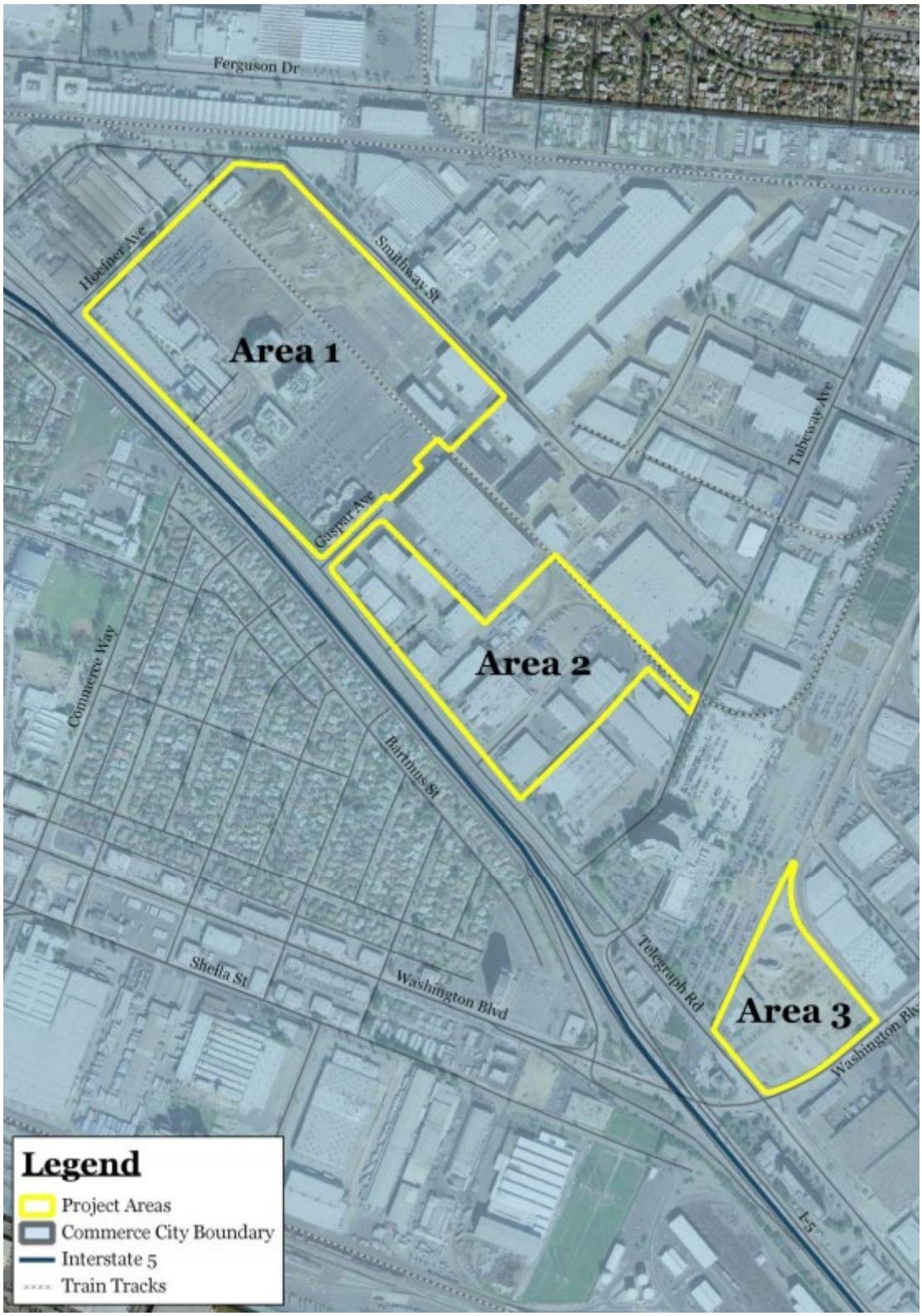
Final Environmental Impact Report (EIR) for Citadel Outlets Expansion (2019)

A final EIR was submitted in June 2019 for the expansion of the Citadel shopping center and a 10-acre development site. The project area is located along the northern side of Telegraph Road between Hoefner Avenue and Washington Boulevard. It is served by City of Commerce Transit Blue, Red, Green, Orange, and Yellow routes in addition to Metro and Montebello Bus Line (MBL) routes. The expansion would include the development of numerous underutilized properties with new retail uses, hotels, entertainment uses, and offices, among other uses.

The proposed development is divided into three areas (Figure 2-5). Area 1 encompasses the existing Citadel outlets and the majority of new improvements, including a new Grand Fountain Plaza, pedestrian paths, lighting, landscaping, and a transit hub. Additionally, a monorail will be constructed to connect the Citadel Outlets with Area 2. Area 3 includes ten acres of land on the northwest corner of Washington Boulevard and Telegraph Road. Improvements in Area 3 include multiple restaurants, one office building, one industrial building with loading docks, landscaping, internal roadways, and parking.

Several mitigation impacts related to transit are highlighted in the EIR. For example, incentives such as reduced rate transit passes, employee carpooling and vanpooling services, and preferential parking, must be provided to encourage employees to explore alternate transportation. Additionally, kiosks displaying transit arrival times, locations of bicycle racks, and the locations and times of the shuttles must be placed in visible locations within each project area. Lastly, Citadel owners must meet with Metro and the City of Commerce Public Works to improve bus stops serving the project area. These improvements may include shaded benches, increased bus frequencies, and additional security measures.

Figure 2-5 Citadel Outlets Expansion Project Area



Source: Blodgett Baylosis Environmental Planning

REGIONAL TRANSIT PROVIDERS

LA Metro DRAFT NextGen Bus Plan (2020)

The NextGen Bus Plan is the outcome of a two-year study that began in 2018. After thorough analysis of technical data and extensive public engagement efforts, LA Metro released the Draft NextGen Bus Plan in January 2020. The Plan strives to achieve the following outcomes:

- Provide 81% of current bus riders with 10-minute or better frequency
- Double the number of frequent Metro bus lines
- Improve and expand midday, evening, and weekend service
- Ensure a quarter mile walk to a bus stop for 99% of current riders
- Utilize stop consolidation and streamlined service to create short walks, shorter waits, and faster travel

Available through an interactive format on the web, the Plan offers recommendations for each Metro bus line. Lines 62, 108, 258, 260, and 762 operate within the City of Commerce. Service recommendations are presented in detail below.[1]

[1] Peak service refers to service between 6-9a.m. and 3-6p.m. Midday service is from 9 a.m.-3 p.m., evening service is from 7-9 p.m., and owl service is from 12 a.m.-4 a.m.

Line 62 (Telegraph Road)

There are no proposed routing changes within Commerce city limits. Other recommendations include:

- New name (Line 262)
- Discontinuing Line 62 between downtown Los Angeles and Hawaiian Gardens via Telegraph Road, Norwalk Boulevard, and Pioneer Boulevard.
- New connection to East L.A. College
- Discontinuing service on Imperial Highway/Bloomfield Avenue at Norwalk Boulevard
- Discontinuing existing service south of Los Cerritos Center

Figure 2-6 Proposed Service Changes to Metro Line 62

		Peak	Midday	Evening	Owl
NextGen Line 262	Weekday	20 min	20 min	30 min	--
	Saturday	45 min	30 min	60 min	--
	Sunday	45 min	30 min	60 min	--
Existing Line 62	Weekday	27 min	32 min	58 min	--
	Saturday	56 min	40 min	59 min	--
	Sunday	57 min	52 min	58 min	--

Source: LA Metro (2020)

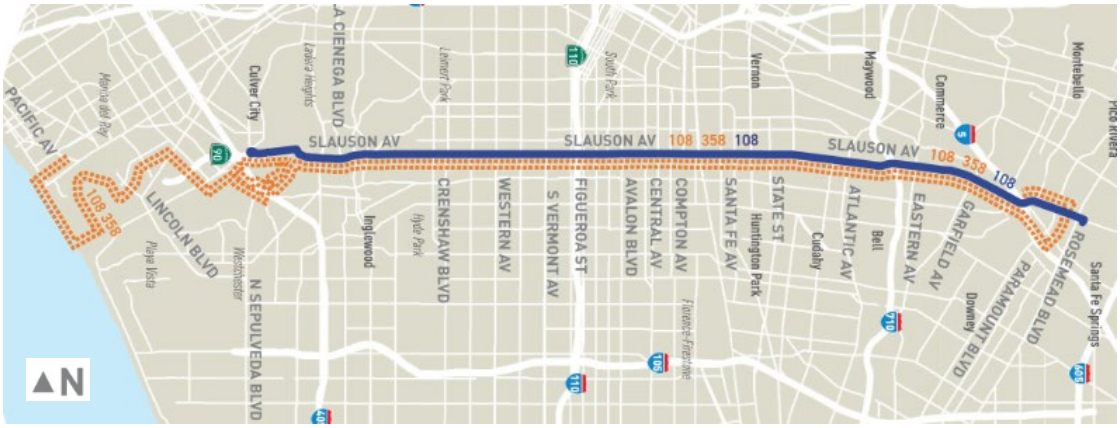
Line 108 (Slauson)

There are no proposed routing changes within Commerce city limits. Other recommendations to Line 108 include:

- New owl service
- Extending east to Slauson Avenue/Rosemead Boulevard
- Increased frequency at all bus stops on Slauson Avenue
- Consolidation of underutilized bus stops (no specifics are given at this time)

Figure 2-7 Proposed Service Changes to Metro Line 108

		Peak	Midday	Evening	Owl
NextGen Line 108	Weekday	7.5 min	7.5 min	15 min	60 min
	Saturday	15 min	15 min	30 min	60 min
	Sunday	15 min	15 min	30 min	60 min
Existing Line 108	Weekday	10 min	15 min	58 min	--
	Saturday	19 min	16 min	54 min	--
	Sunday	32 min	23 min	59 min	--



Source: LA Metro (2020)

Line 256 (Eastern)

Proposed changes to Line 256 include subdividing the existing route into three separate bus lines with more frequent service. The City of Commerce would operate the segment between Commerce and the Cal State L.A. Station. No routing changes are proposed for this segment. Metro would operate the segment between the Cal State L.A. and Metro L Line stations, while Pasadena Transit would operate the route between Highland Park and Pasadena. A new Line 662 would serve Lake Avenue between Pasadena and Altadena.

Figure 2-8 Proposed Service Changes to Metro Line 256

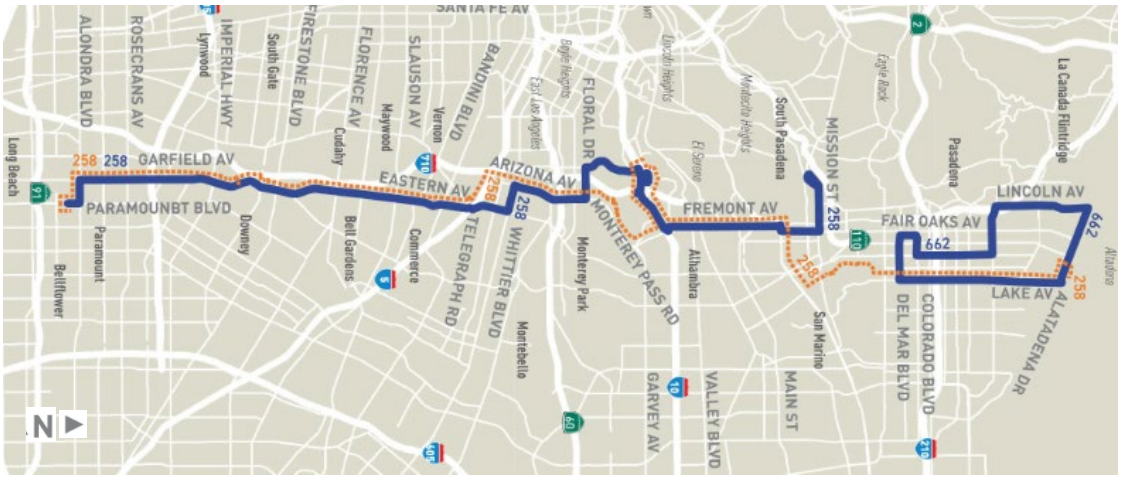
		Peak	Midday	Evening	Owl
NextGen Line 256	Weekday	30 min	30 min	30 min	--
	Saturday	40 min	40 min	40 min	--
	Sunday	40 min	40 min	40 min	--
Existing Line 256	Weekday	50 min	50 min	60 min	--
	Saturday	60 min	60 min	60 min	--
	Sunday	60 min	60 min	60 min	--

Line 258 (Altadena – Paramount)

The Plan proposes that Line 258 travel on Whittier Boulevard instead of Telegraph Road between Eastern and Arizona avenues. Other recommendations include the addition of weekend service.

Figure 2-9 Proposed Service Changes to Metro Line 258

		Peak	Midday	Evening	Owl
NextGen Line 258	Weekday	40 min	40 min	40 min	--
	Saturday	60 min	60 min	60 min	--
	Sunday	60 min	60 min	60 min	--
Existing Line 258	Weekday	45 min	45 min	50 min	--
	Saturday	--	--	--	--
	Sunday	--	--	--	--



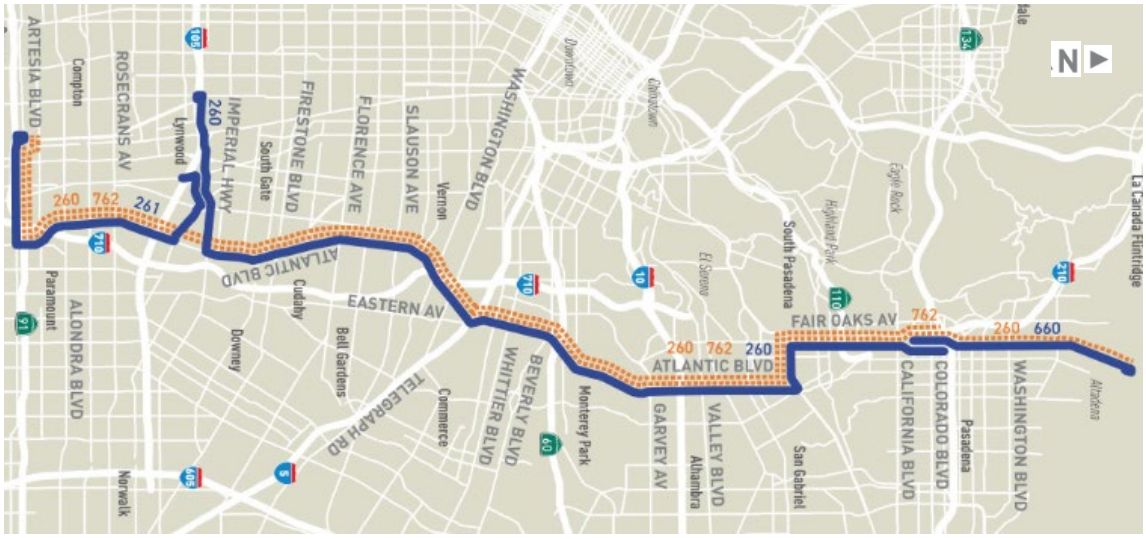
Source: LA Metro (2020)

Lines 260 and 762 (Atlantic Boulevard – Fair Oaks Avenue)

The Plan recommends merging existing Lines 260 and 762, which do not result in routing changes within Commerce city limits. Other recommendations include: Increased frequencies, new owl service, and shifting the southern terminus to the Willowbrook/Rosa Parks Station, served by the Metro A and C lines.

Figure 2-10 Proposed Service Changes to Metro Lines 260 and 762

		Peak	Midday	Evening	Owl
NextGen Line 260	Weekday	12 min	12 min	15 min	30-60 min
	Saturday	20 min	20 min	30 min	30-60 min
	Sunday	20 min	20 min	30 min	30-60 min
Existing Line 260	Weekday	17 min	21 min	40 min	--
	Saturday	22 min	21 min	40 min	--
	Sunday	29 min	22 min	40 min	--
Existing Line 762	Weekday	29 min	32 min	60 min	--
	Saturday	--	--	--	--
	Sunday	--	--	--	--



Source: LA Metro (2020)

Eastside Transit Corridor Phase 2

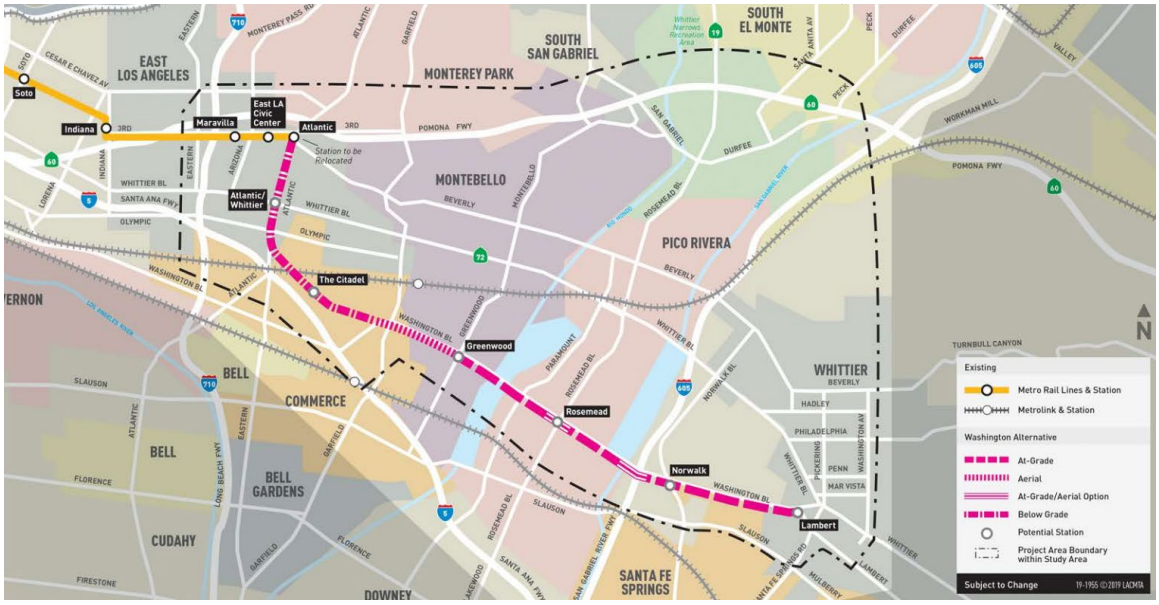
Metro is evaluating an eastern extension of the Metro L Line (Gold) from its current terminus at Pomona and Atlantic boulevards in East Los Angeles potentially through the cities of Commerce, Montebello, Pico Rivera, Santa Fe Springs, and Whittier. The project has identified $6 billion from the Measure M sales tax to be programmed in two cycles. Cycle 1 identifies $3 billion for one alignment with construction beginning in 2029 and opening in 2035. Cycle 2 identifies $3 billion for construction beginning in 2053 and opening in 2057.

In May 2017, a technical study for the Eastside Transit Corridor Phase 2 Project was completed, in which three build alternatives were introduced: (1) State Route (SR) 60 Alternative, (2) Washington Alternative, and (3) Combined Alternative (builds both SR 60 and Washington alternatives). In February 2020, the Metro Board of Directors withdrew the SR 60 and Combined Alternatives from consideration, based on technical study findings and public input during scoping. As a result, the EIR will proceed with the Washington Alternative and a reasonable range of alternatives as required by the California Environmental Quality Act.

In the Washington Alternative, the proposed extension would travel south along Atlantic Boulevard underground from the current Metro L Line terminus to the Citadel Outlets (Figure 2-11) The route would then proceed east along Washington Boulevard via aerial and/or at-grade configurations ending at Lambert Road in Whittier. Stations being considered along this route include the Citadel Station in Commerce, among others outside of Commerce city limits.

Upon Metro Board approval, a scope of work will be developed immediately for technical work and community engagement. The project is also one of four pillar projects and is a high priority for acceleration. If funding can be secured prior to the 2029 funding cycle, it could potentially be built in time for the 2028 Summer Olympic and Paralympic Games.

Figure 2-11 Eastside Transit Corridor Phase 2 – Washington Alternative

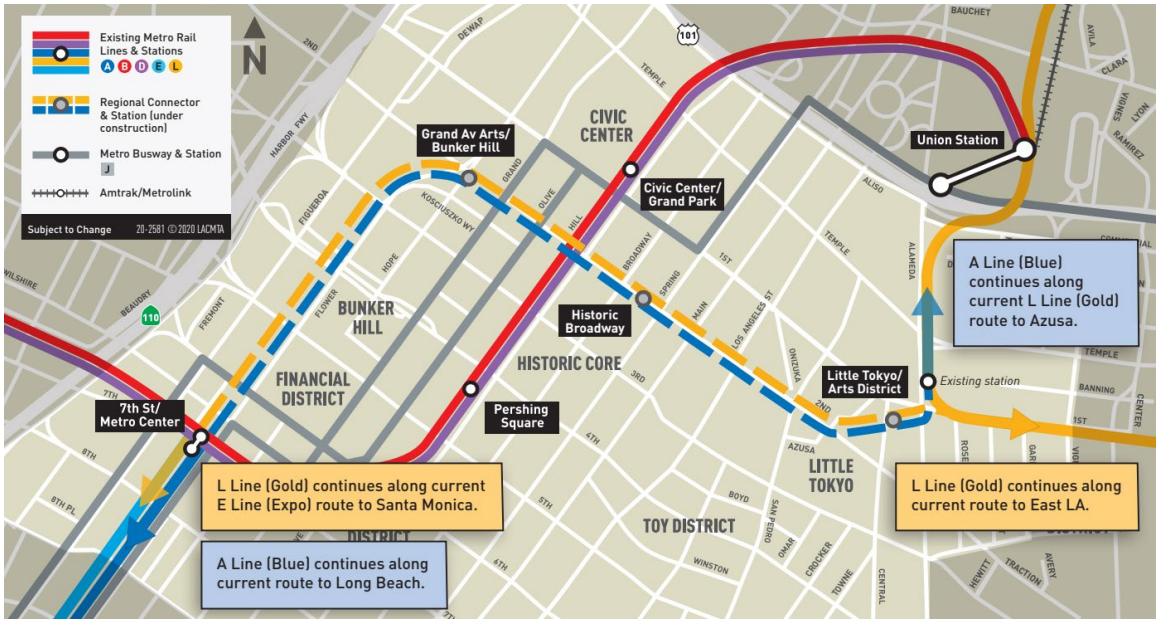


Source: LA Metro (2019)

Regional Connector Transit Project

Metro is constructing a 1.9-mile underground light rail system in downtown Los Angeles that will connect the L Line (previously Gold Line) to the 7th Street/Metro Center Station. Traveling between East Los Angeles and Santa Monica currently requires two transfers: one at Union Station and another at 7th Street/Metro Center. In addition to creating three stations, the new Regional Connector will allow riders to travel between East Los Angeles and Santa Monica without needing to transfer lines. Instead of traveling north to Azusa, the L Line will continue through Little Tokyo, Civic Center, Financial District, and along the current E Line (Expo) route to Santa Monica. The future Commerce L Line Station will also benefit from this one-seat ride. The Regional Connector is scheduled to begin operating in 2022.

Figure 2-12 LA Metro Regional Connector



Metrolink 10-Year Strategic Plan (2015-2025)

Metrolink's 10-Year Strategic Plan focuses on how to strengthen the core of the Metrolink organization and system and presents a roadmap for how the system may grow. The following agency goals are identified in the plan:

- Goal 1: Ensure a Safe Operating Environment
- Goal 2: Maintain Fiscal Sustainability
- Goal 3: Invest in People and Assets
- Goal 4: Retain and Grow Ridership
- Goal 5: Increase Regional Mobility
- Goal 6: Improve Communications to Customers and Stakeholders
- Goal 7: Improve Organizational Efficiency

The Strategic Plan presents four service growth scenarios: No Service Growth, Scenario 1: Enhancement of Existing Network, Scenario 2: Overlay of Additional Service Patterns, and

Scenario 3: High-Speed Rail Service Integration. Depending on the scenario, the Orange County Line, which serves the Commerce station, could see as many as 46 trains during the weekday and 12 trains on the weekend. The Riverside Line, which serves the Montebello/Commerce station just outside Commerce city limits, could see 22 trains in all three scenarios (up from 12 trains). These scenarios are intended to be exploratory and are used to estimate ridership, capital, and operating costs for future growth. Thus, no single scenario has been selected as a preferred scenario.

Figure 2-13 Potential 2025 Growth by Scenario (Total Trains)

Metrolink Line	2015 Base Conditions (No Growth)	Scenario 1: Enhancement of Existing Network	Scenario 2: Overlay of Additional Service Patterns	Scenario 3: High-Speed Rail Service Integration
Weekday Growth				
Orange County	29	35	41	46
Riverside	12	22	22	22
Weekend Growth				
Orange County	8	10	10	12
Riverside	No weekend service			

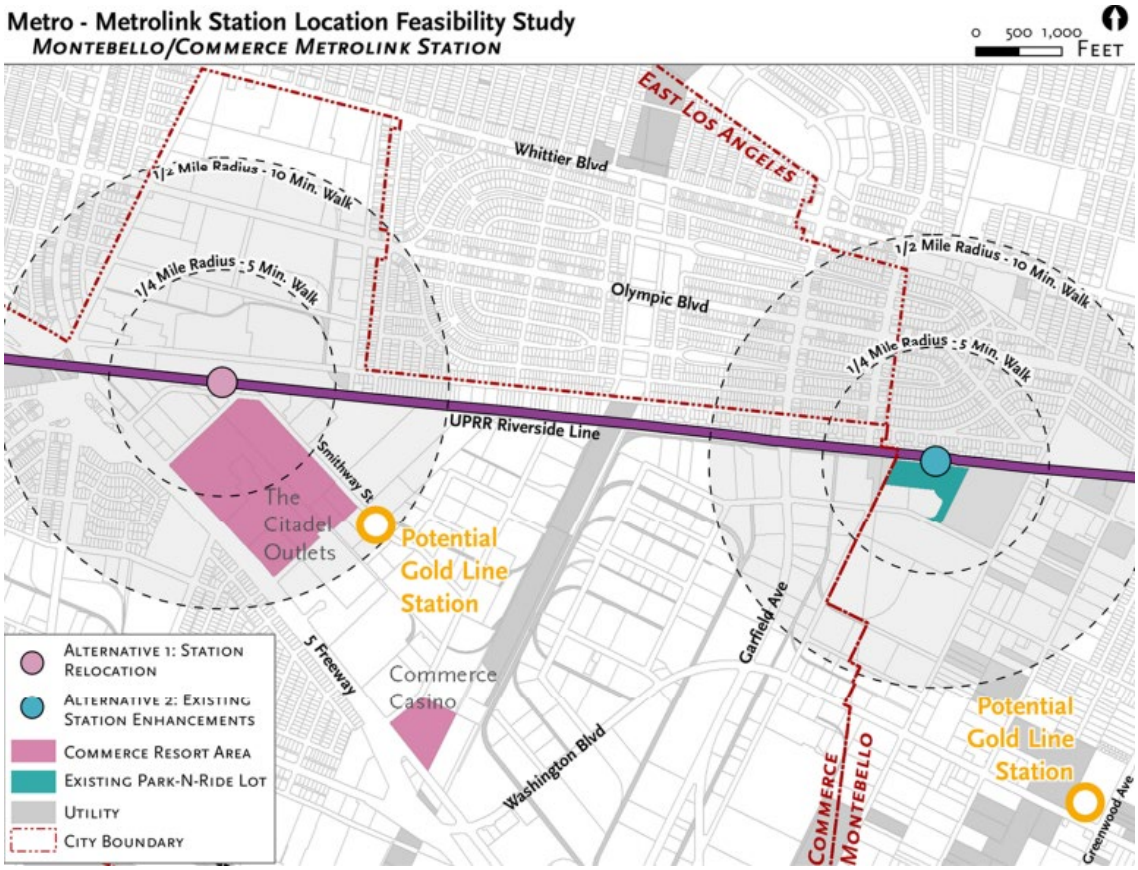
Metrolink Station Relocation Feasibility Studies (2017)

Metro conducted a Station Location Feasibility Study for the Montebello/Commerce Metrolink Station to examine a possible relocation of the station closer to the Commerce Resort area and to identify opportunities to improve the existing station. This station sits slightly to the east of Commerce city boundaries along the Union Pacific Railroad and Metrolink Riverside Line (Figure 2-14). Consolidating and enhancing stations across the Metrolink system would improve regional mobility, attract ridership, and mitigate traffic-induced pollution.

The Commerce Resort area, which includes Citadel Outlets and Commerce Casino, along with multiple hotels, is expected to draw 40% more visitors each year. This level of growth cannot solely be accommodated by private automobile travel. Thus, relocating the station would allow for a multimodal hub that enhances local and regional connectivity. The proposed relocation site is served by multiple bus routes, including City of Commerce Transit Blue and Orange routes, as well as Metro Line 62. These routes do not serve the existing Montebello/Commerce Metrolink Station.

Two alternatives were analyzed: Alternative 1 relocates the station to the Commerce Resort area and Alternative 2 enhances the existing Montebello/Commerce station. Station relocation would require approval from Union Pacific Railroad (UPRR) and additional railroad enhancements. Ultimately, it was decided that neither alternatives should move forward due to lack of funding and the absence of an agreement with UPRR.

Figure 2-14 Potential Montebello/Commerce Metrolink Station Relocation



Source: LA Metro (August 2017)

3 MARKET ANALYSIS

This market analysis presents demographic characteristics associated with the market for transit ridership in the city of Commerce and the surrounding area. The purpose of this analysis is to understand the distribution of populations that tend to use transit within the City of Commerce and the surrounding area and to identify the travel patterns that might be served by transit. This evaluation includes:

- Residential Characteristics
  - Seniors
  - People with disabilities
  - Zero-vehicle households
  - Rental households
  - Poverty
- Population and Employment Density
- Home and work locations of Commerce residents and employees

KEY FINDINGS

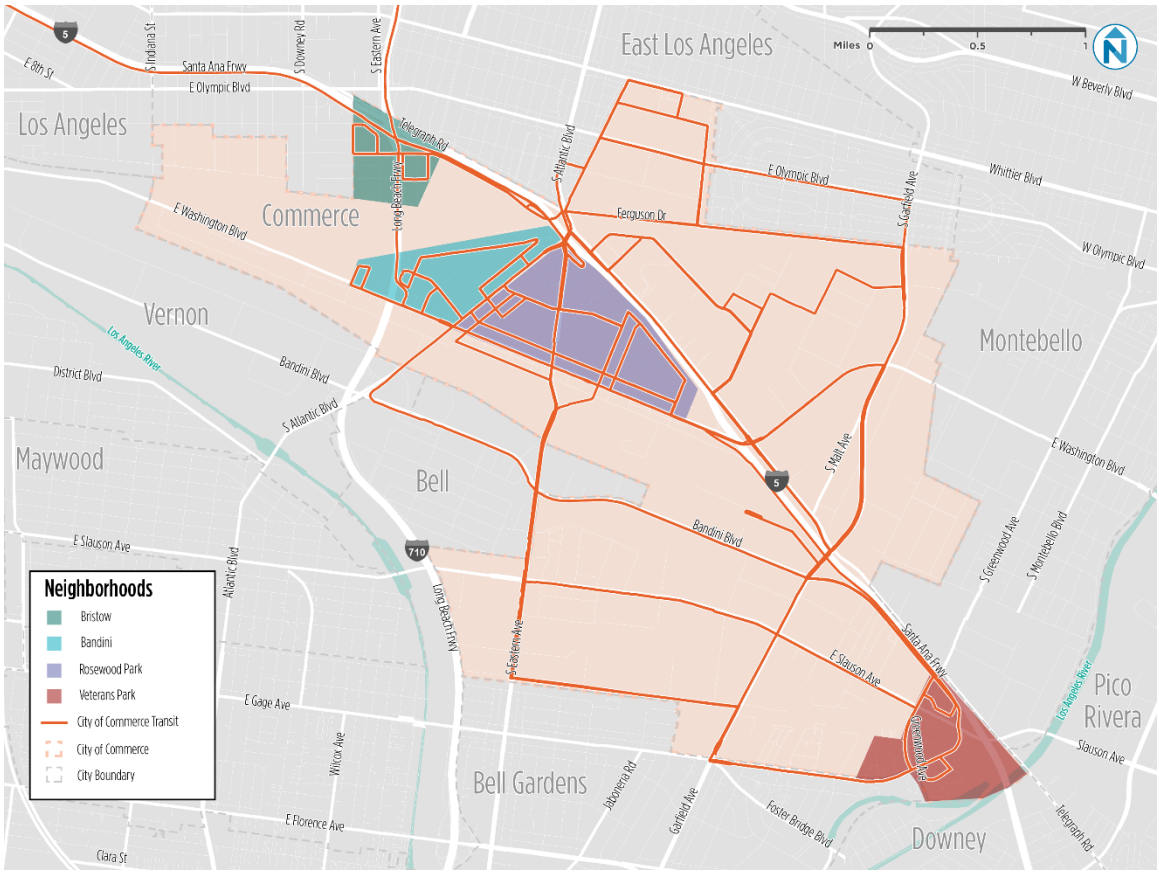
- The City of Commerce consists primarily of warehouse/logistics and light manufacturing/industrial land use, with relatively low population density throughout the city. There is higher population density in the areas immediately surrounding the City of Commerce.
- There are four residential neighborhoods in the City of Commerce: Bandini, Bristow, Rosewood Park, and Veterans Park.
- Approximately 13,500 people live in the City of Commerce, including 1,800 seniors (13%), 2,500 people below the poverty level (19%), 1,000 people with disabilities (7%). Additionally, approximately 53% of households are renters and 9% of households do not have access to a vehicle.
- Approximately 4,500 (83%) of City of Commerce residents commute outside of the city for work, mostly to Downtown Los Angeles, Vernon, and Montebello.
- Approximately 56,400 employees commute into the City of Commerce from elsewhere in the region, primarily from neighboring cities.
- With higher population densities surrounding Commerce, and large job centers within Commerce, there may be an opportunity for City of Commerce Transit to play a role in connecting people living outside the city to jobs in Commerce.

RESIDENTIAL CHARACTERISTICS

Population density is one of the key metrics used to measure transit demand. Commerce is largely made up of freight/logistics, warehousing, and industrial areas, with large swaths of the city that have no residential populations. There are four distinct residential neighborhoods in Commerce, as shown in Figure 3-1, that are disconnected and divided by interstate highways and rail lines:

- Bandini
- Bristow
- Rosewood Park
- Veterans Park

Figure 3-1 City of Commerce Residential Neighborhoods



Population characteristics related to transit usage are described below. Detailed maps of individual demographic characteristics are shown in Appendix D of this report.

Seniors

Seniors ages 65 or older often choose to ride transit when they no longer have the ability or desire to drive. In the City of Commerce, there are approximately 1,800 residents ages 65 or older, about 13% of the city's population. The concentration of senior populations is greatest in two neighborhoods:

- The Rosewood Park neighborhood, which includes the Commerce Senior Center and Rosewood Park Senior Apartments.
- The Veterans Park neighborhood which is home to a hospice care facility called Telacu Gardens.

People with Disabilities

People with disabilities are more likely to use transit because they are unable or do not want to operate a personal vehicle. People with disabilities may qualify for paratransit services, and may use one or a combination of fixed-route bus services and demand-response service. In the City of Commerce, there are nearly 1,000 people with disabilities, about 7% of the city's population. The highest density of people with disabilities is in the Bandini neighborhood.

Zero-Vehicle Households

Households without access to a vehicle are more likely to depend on transit as their primary form of transportation. In the City of Commerce, there are approximately 300 zero-vehicle households, representing about 9% of all households in the city. The highest density of households without access to a vehicle is in the Veterans Park neighborhood.

Rental Households

There is also a relationship between rental households and transit ridership, with higher concentrations of rental units correlating with higher transit ridership. There are approximately 1,900 rental households in the City of Commerce, accounting for 53% of households in the city. The highest densities of rental households in Commerce are in the Bandini and Veterans Park neighborhoods.

Poverty

People living below the Census poverty threshold are more likely to rely on transit for their transportation needs. In the City of Commerce, approximately 2,500 people live below this poverty threshold, about 19% of the city's population. the highest densities of population below the poverty threshold are in the Bandini neighborhood.

POPULATION DENSITY

Approximately 13,500 people live in the City of Commerce. However, population density in the city is very low (Figure 3-2) particularly compared to the surrounding areas. The highest density residential area is the Bandini Park neighborhood. Separately, the Veterans Park neighborhood, in the southeastern area of Commerce near the Los Angeles River and Veteran's Memorial Park, is characterized by duplex-style and multi-family residences, which are supportive of transit service but are still relatively low in density.

Figure 3-2 Population Density

EMPLOYMENT DENSITY

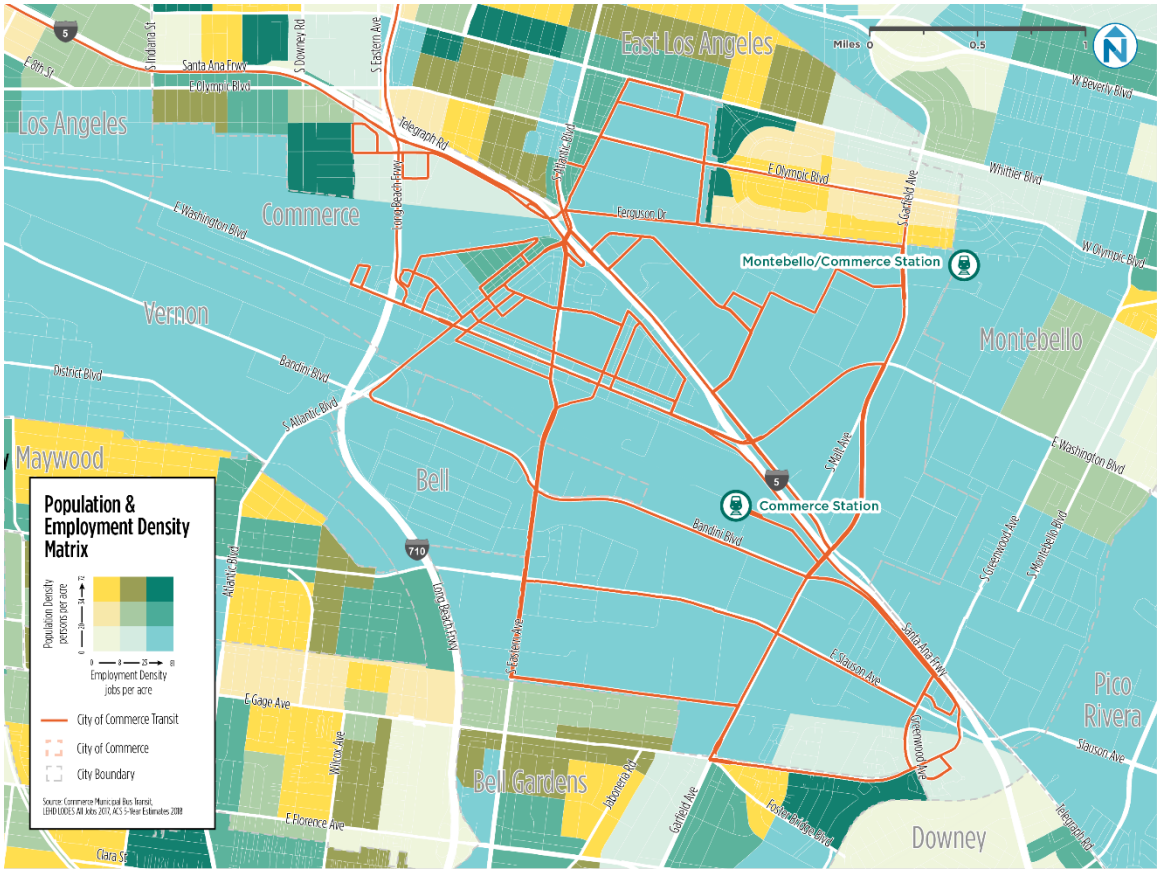
Employment density can indicate key destinations and large trip generators. Areas with a higher density of jobs are generally more popular destinations and have a higher demand for transit trips. Commerce has a higher employment density than its surrounding cities. Areas in between the E Washington Blvd and Bandini Blvd are generally warehousing, freight, and heavy industrial land use.

Figure 3-3 Employment Density

COMBINED DENSITY

A combined population and employment density map is shown in Figure 3-4. Few areas in the City of Commerce have high concentrations of both population and employment. Most of the city is dominated by employment, with clusters of population in the Bristow, Bandini, Veterans Park, and Rosewood Park neighborhoods. Because the four residential neighborhoods are relatively small and isolated, population density appears low in this demographic analysis. Despite the low population density, these four neighborhoods represent the primary population markets for transit in the city. Areas adjacent to the City of Commerce have generally higher population density and more areas with a combination of population and employment, including in East Los Angeles, Montebello, Maywood, and Bell Gardens.

Figure 3-4 Combined Population and Employment Density



WHERE DO COMMERCE RESIDENTS WORK?

There are approximately 900 people who both live and work in Commerce, according to Longitudinal Employer-Household Dynamics (LEHD) Workplace Area Characteristics (WAC) 2018 datasets. As shown in Figure 3-5, the highest concentrations of these employment locations within the city are near the Commerce Casino, Commerce City Hall, and the industrial area in the southern portion of the city. Approximately 4,500 Commerce residents commute outside of the city for work, about 83% of all home/work pairs for residents. These employment locations are generally dispersed throughout the region with the highest concentrations in Downtown Los Angeles, Vernon, and Montebello.

Low-wage employment (less than $15,000 per year) locations for City of Commerce residents, as shown in Figure 3-6, follow a similar pattern as all employment. Approximately 300 low-wage employees both live and work in Commerce, while approximately 1,000 low-wage Commerce residents work outside of the city. Low-wage employment locations are relatively dispersed outside of the City of Commerce.

Figure 3-5 Employment Locations for Commerce Residents

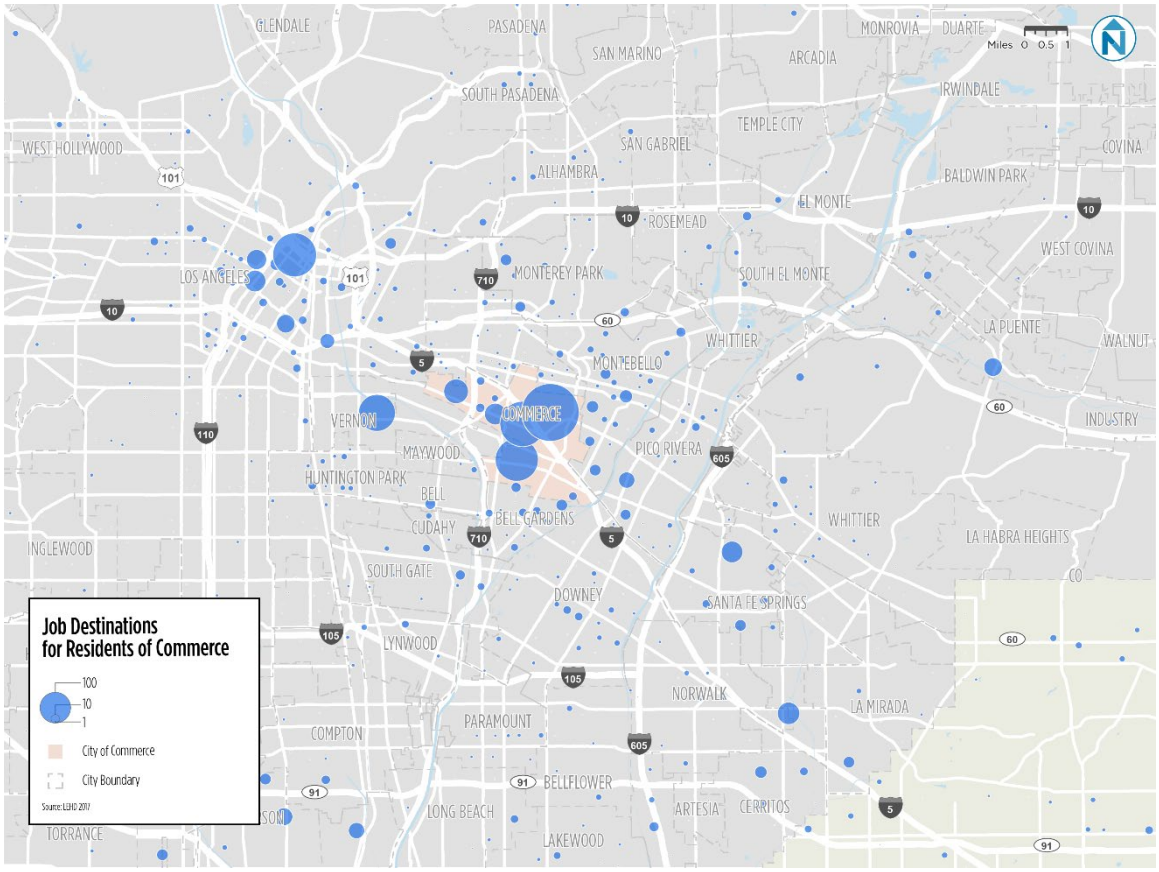
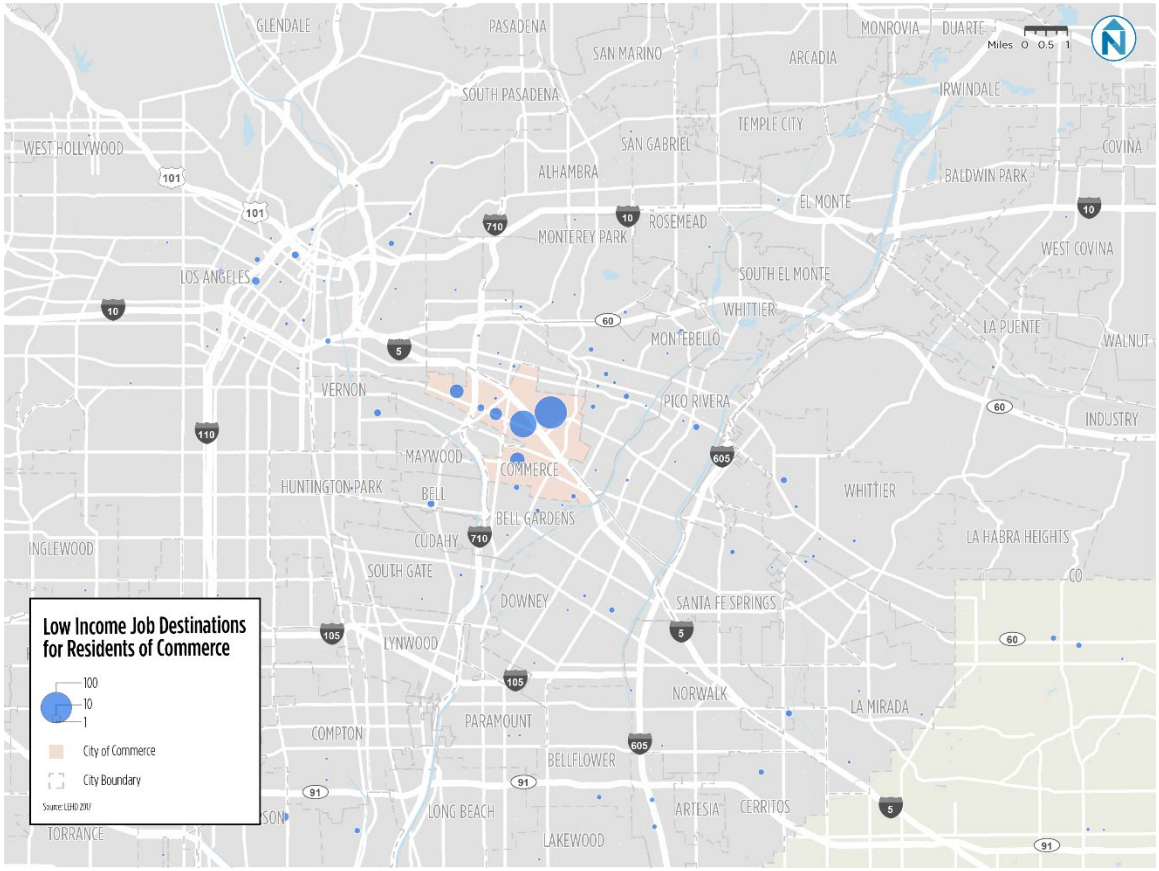


Figure 3-6 Low-Wage Employment Locations for Commerce Residents



WHERE DO COMMERCE WORKERS LIVE?

Approximately 56,400 people commute into the City of Commerce for work from other locations, as shown in Figure 3-7. The home locations for these commuters are dispersed throughout the region, but are most highly concentrated in neighboring communities, including East Los Angeles, Montebello, Pico Rivera, Bell Gardens, Maywood, Bell, and Huntington Park.

Approximately 9,700 low-wage employees (less than $15,000 per year) commute into the City of Commerce, as shown in Figure 3-8. These residence locations are similarly dispersed throughout the region, and continue to be most heavily concentrated in the neighboring cities.

Figure 3-7 Home Locations for Workers in Commerce

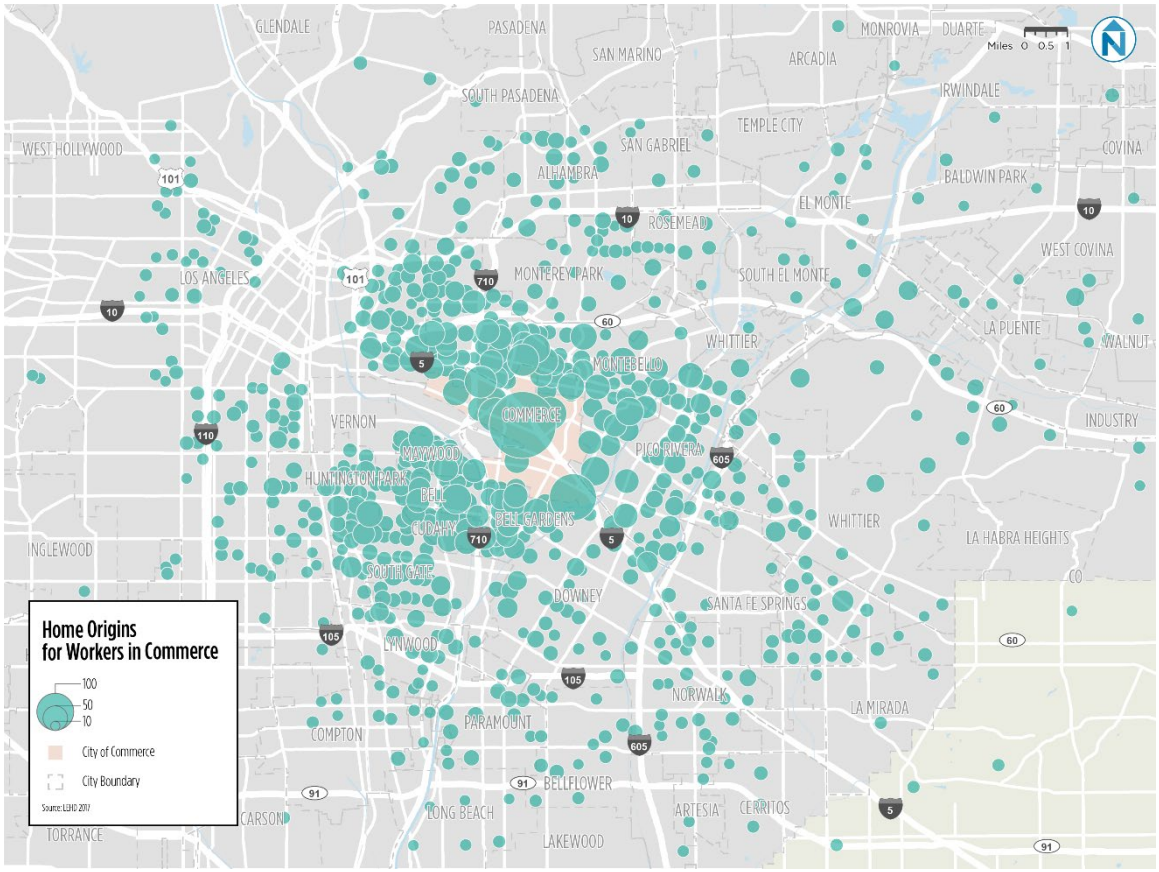
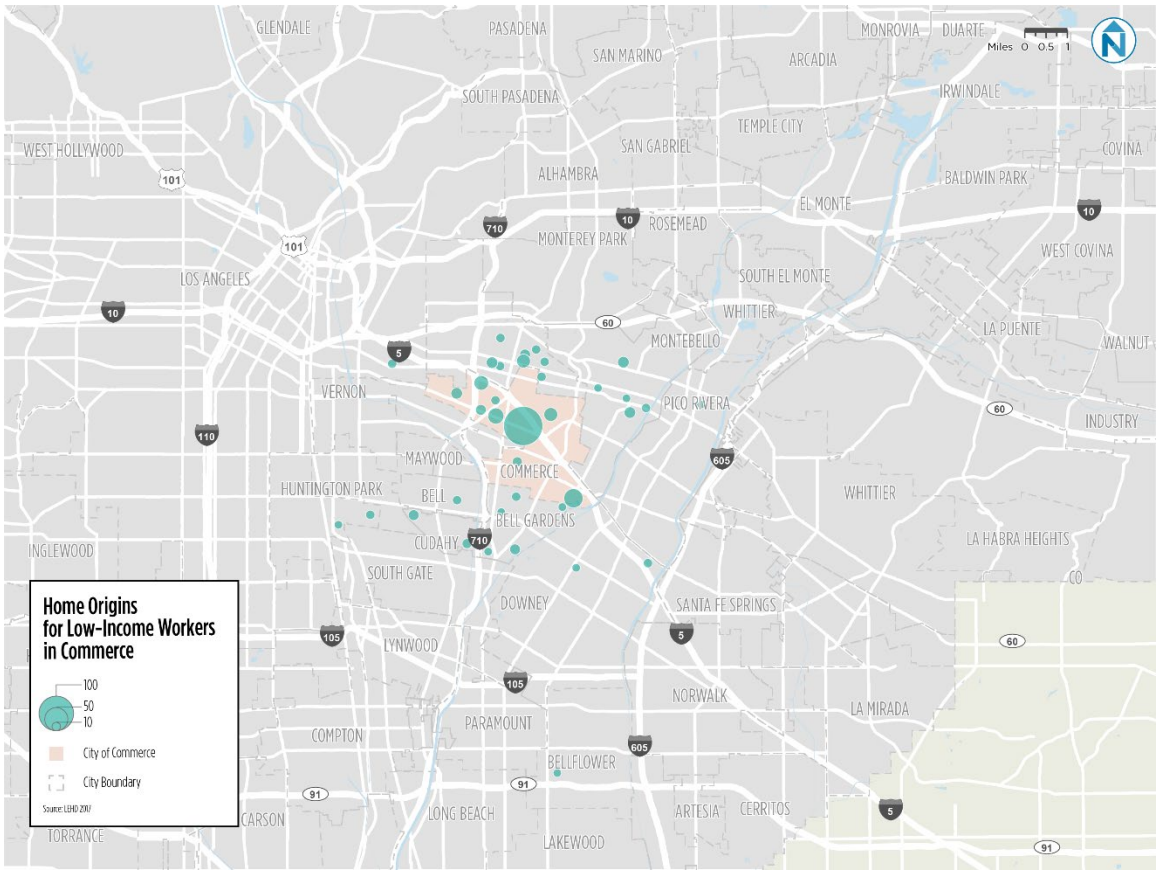


Figure 3-8 Home Locations for Low-Wage Workers in Commerce



4 SYSTEM OVERVIEW

City of Commerce Transit operates fare free fixed-route and on-demand transit service seven days per week. This chapter provides an overview of fixed-route and on-demand policies, services, and performance. This chapter also includes a trend analysis comparing current and past performance of City of Commerce Transit between 2016 and 2019.

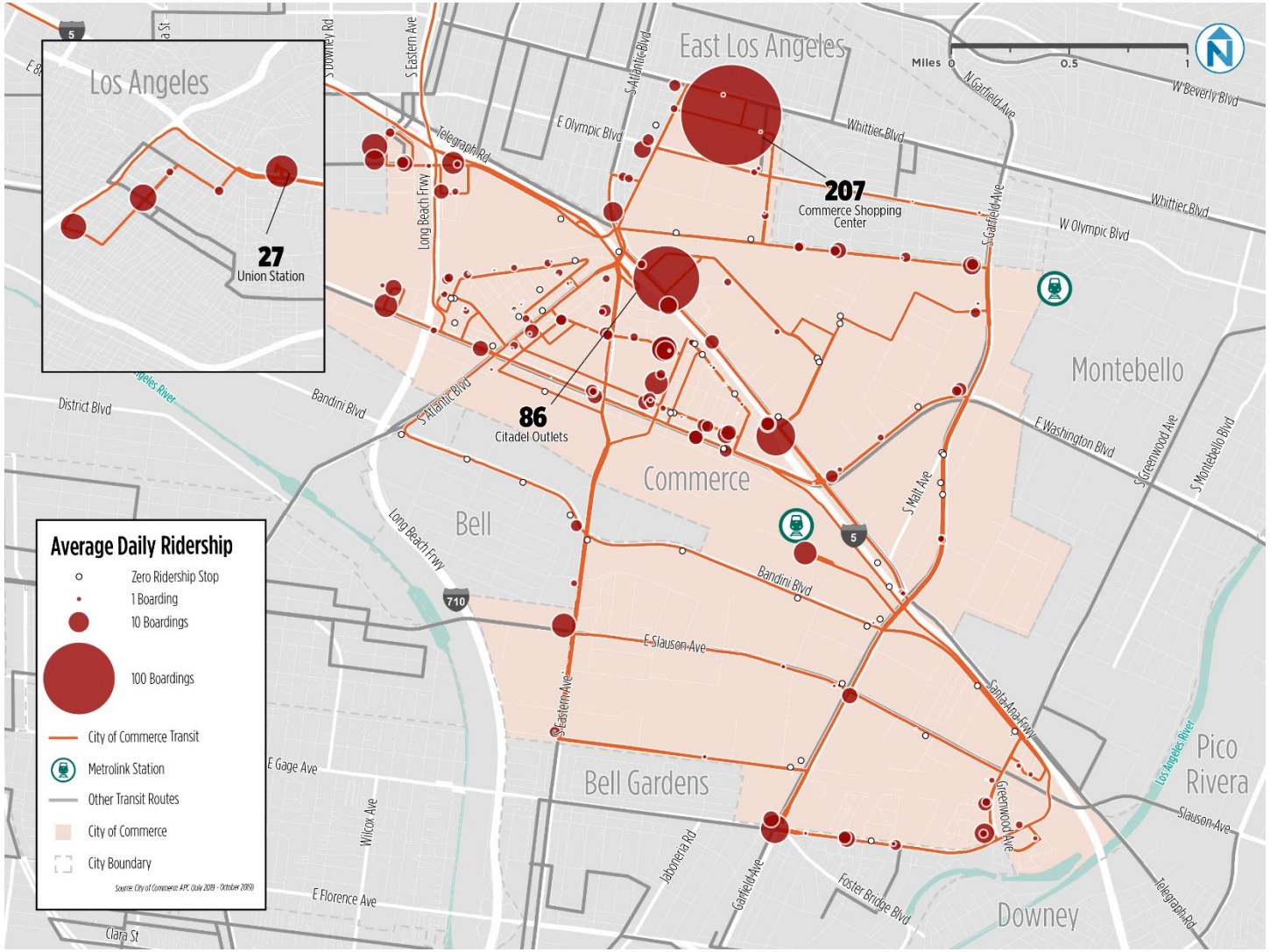
KEY FINDINGS

- Several routes struggle with on-time performance, most notably the Citadel Express. The weekday system on-time average of 66% highlights significant issues with reliability that customers face. Many routes have more early-running than late-running, indicating a need to adjust schedules, particularly to align weekend schedules with actual run times.
- Following a 2017 policy change to expand Dial-A-Ride service to allow trips outside of the city limits for non-medical purposes, Dial-A-Ride ridership increased by 80% over a two-year period. Prior to this policy change, Dial-A-Ride ridership had been steadily decreasing.
- Approximately 68% of Dial-A-Ride trips either began or ended outside of the City of Commerce, indicating there may be significant demand for transit service outside of the city.
- Since 2013, the City of Commerce Transit has generally continued increasing fixed-route service levels in terms of annual revenue hours; however, annual passenger trips have been decreasing over this time period. Despite providing more service, City of Commerce Transit has been unsuccessful in generating new ridership.
- Operating cost per passenger for fixed-route service has generally been increasing since 2013. Operating cost per passenger for Dial-A-Ride service increased from 2013 to 2017 before decreasing in 2018 and 2019. This decrease in cost per Dial-A-Ride passenger is due to the increased ridership following the 2017 eligibility policy change.

FIXED-ROUTE

Systemwide ridership, as shown in Figure 4-1, is relatively low throughout much of the service area. The highest ridership stops in the system are the Commerce Shopping Center, the Citadel Outlets, and LA Union Station. Ridership activity is also concentrated in downtown Los Angeles, the area near Bristow Park, and the neighborhood surrounding Rosewood Park and the City of Commerce Civic Center.

Figure 4-1 Weekday Systemwide Ridership by Stop (July 2019 – October 2019)



Service Summary

The City of Commerce operates fare free, local fixed-route service seven days a week. Routes operate a range of frequencies depending on the route, time of day, and day of week, with most routes providing service less frequently than every hour. The Citadel Express and 26th Street Shuttle operate the most frequently. Clock-face headways are those that arrive every 30 or 60 minutes, making it easy for customers to remember a specific timepoint, and facilitate transfers between routes where they meet. City of Commerce Transit routes tend to be "off-clockface." Span of service also varies by route; with the earliest service beginning at 5:30 a.m. and the latest service ending at 10:20 p.m. All routes operate as one-way loops. Figure 4-2 shows the frequency and span of each fixed-route service.

Figure 4-2 Frequency and Span of Fixed-Route Service

Route	Service Span	Service Frequency	Days in Service
100 Green	5:45 a.m. – 9:30 p.m.	65 – 90 minutes	Mon – Sat
200 Orange	5:30 a.m. – 6:15 p.m.	85 – 100 minutes	Mon – Fri
300 Yellow	5:45 a.m. – 9:00 p.m.	70 – 80 minutes	Mon – Fri
400 Red	6:15 a.m. – 9:00 p.m.	70 – 90 minutes	Mon – Sat
500 Blue	9:00 a.m. – 9:00 p.m.	85 – 100 minutes	Mon – Sat
600 Citadel Outlets Express	7:00 a.m. – 10:20 p.m. (M-F) 9:20 a.m. – 10:20 p.m. (S-S)	35 – 90 minutes	Mon – Sun
700 26th Street Shuttle	7:00 a.m. – 9:30 a.m. 2:45 p.m. – 5:30 p.m.	30 – 60 minutes	Mon – Fri
800 Church Special	8:50 a.m. – 12:30 p.m.	75 – 85 minutes	Sun
900 Shopper Special	12:40 p.m. – 6:30 p.m.	90 minutes	Sun
2000 Purple	10:30 a.m. – 6:00 p.m.	75 – 90 minutes	Mon – Fri

Fixed-Route Ridership Performance

Ridership performance for all City of Commerce routes is shown in Figure 4-3. Systemwide, there are on average 1,582 daily riders on weekdays, 799 riders on Saturdays, and 425 riders on Sundays based on October 2019 data. Weekday productivity averages 13.9 boardings per revenue hour, ranging from 19.5 boardings per revenue hour on the Green Route to 8.2 boardings per revenue hour on the 26th Street Shuttle, shown in Figure 4-3.

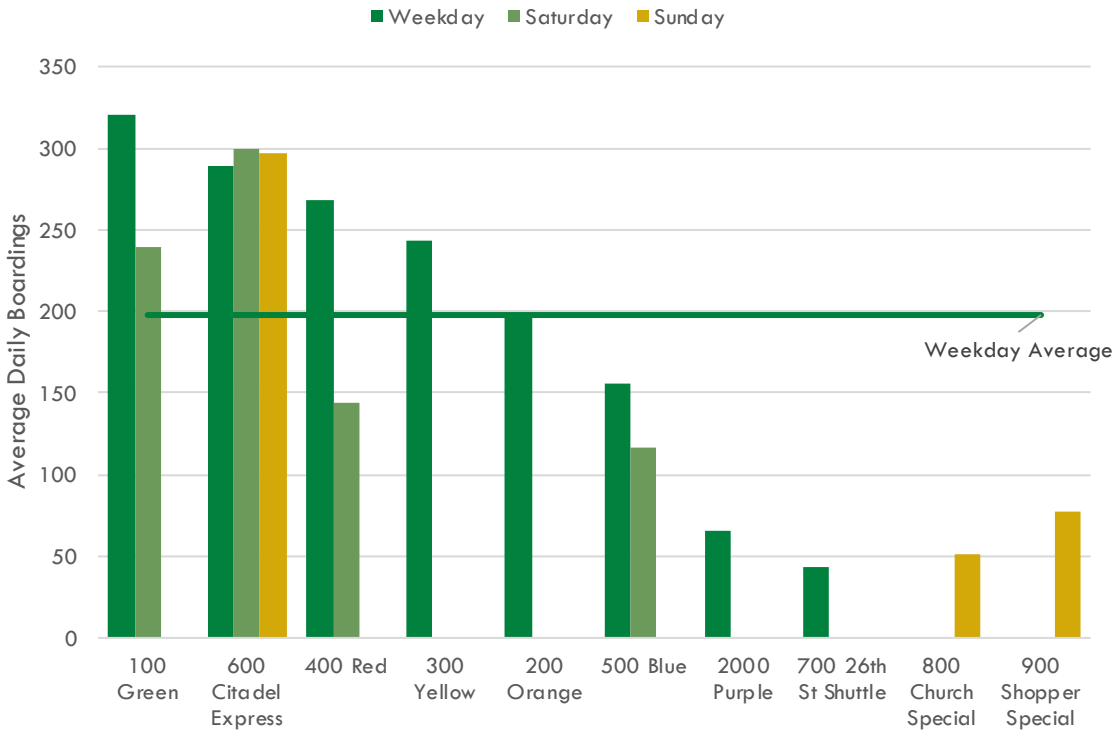
Figure 4-3 Performance Characteristics by Route and Day Type (October 2019)

Route	Average Daily Boardings	Average Daily Revenue Hours	Boardings per Revenue Hour
Weekday			
100 Green*	321	15.8	19.5
200 Orange	197	12.7	15.5
300 Yellow*	243	15.2	15.0
400 Red	268	14.7	18.3
500 Blue	155	12.0	12.9
600 Citadel Outlets Express	289	28.8	10.0
700 26th Street Shuttle	43	5.5	8.2
2000 Purple	66	7.6	8.7
Weekday System Total	*1,582*	*114.0*	*13.9*
Saturday			
100 Green	239	15.8	15.2
400 Red	144	14.7	9.8
500 Blue	117	12.0	9.7
600 Citadel Outlets Express	299	24.3	12.3
Saturday System Total	*799*	*66.8*	*12.0*
Sunday			
800 Church Special	51	3.7	13.9
900 Shopper Special	77	5.9	13.1
600 Citadel Outlets Express	297	24.0	12.4
Sunday System Total	*425*	*33.6*	*12.6*

*The Green and Yellow Routes include the AM Tripper and PM Tripper services

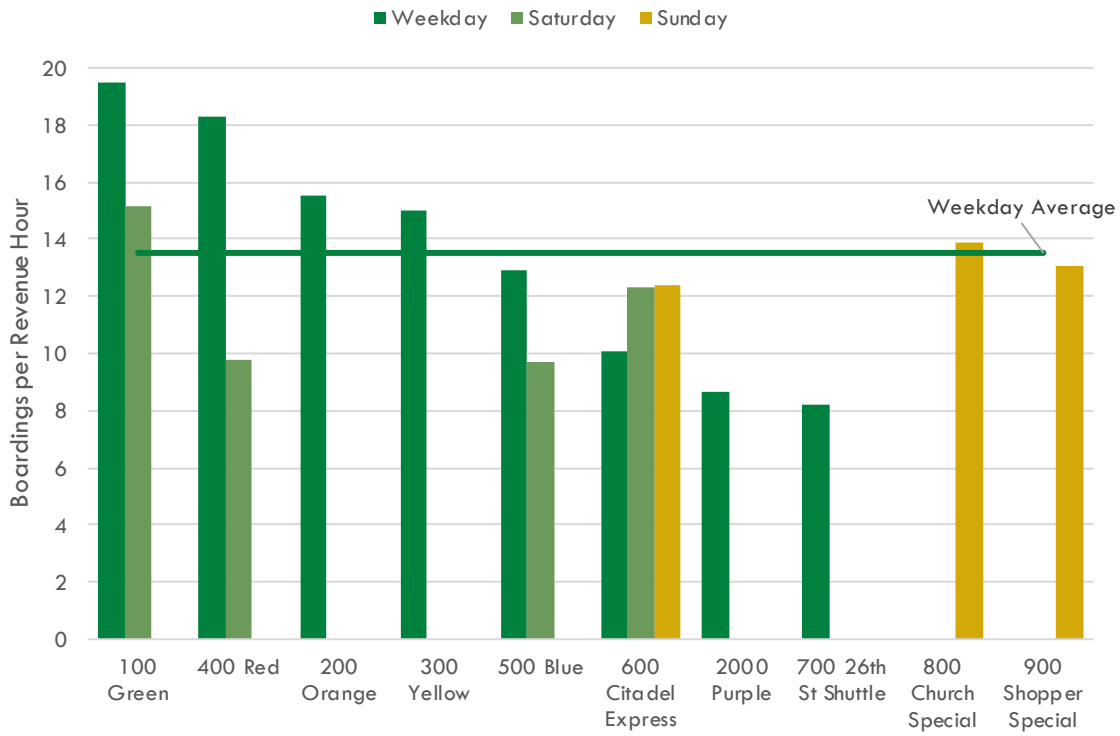
The average daily ridership and productivity for all routes are shown in Figure 4-4 and Figure 4-5, respectively. The Green Route is the highest weekday ridership route in the system, followed by the Citadel Outlets Express, Red, Yellow, and Orange Routes. The Citadel Outlets Express also has higher average ridership on Saturdays and Sundays than on Weekdays, likely due to the popularity of weekend trips to shop at the outlets. Ridership on the Blue Route, Purple Route, and 26th Street Shuttle are below the systemwide weekday average. The Sunday only Shopper Special and Church Routes have relatively low ridership compared to other routes in the system.

Figure 4-4 Average Daily Boardings by Route (October 2019)



Weekday productivity closely mirrors ridership for most routes in the system. The Green Route has the highest productivity, followed by the Red, Orange, Yellow, and Blue Routes. Despite having the second highest average ridership, the Citadel Outlets Express is the third least productive route in the system, ahead of only the Purple Route and the 26th Street Shuttle. The Citadel Outlets Express likely has lower productivity due to the long portions of the route that operates on freeways, and thus is not picking up passengers. The 26th Street Shuttle and Purple Routes are again below average in terms of productivity. Routes that operate on Saturdays generally have higher ridership than the special routes that operate on Sundays, however the Sunday-only routes are more productive. This indicates that there may be latent demand for additional Sunday service.

Figure 4-5 Average Boardings per Revenue Hour by Route (October 2019)



On-Time Performance

The percent of trips arriving on time for each route in the system is shown in Figure 4-6. On-time performance data is based on Automatic Vehicle Location (AVL) data from July 2019 – October 2019. A trip is considered early if it arrives at a scheduled timepoint one or more minutes early, and it is considered late if it arrives 6 or more minutes late; otherwise it is considered on-time.

Overall, on-time performance is poor, with a weekday average of 67% and a Saturday average of 60% arriving on-time. The Citadel Outlets Express Route arrives on-time for 31% of trips on weekdays and only 22% of trips on Sundays. However, many of these trips are running early, indicating that there may be too much time in the schedule, causing operators to arrive at and depart timepoints early. All other weekday routes arrive on-time over 60% of the time with the Red Route arriving on-time for 84% of trips. A table of on-time performance by route is shown in Figure 4-7.

Figure 4-6 Percent On-Time by Route (July 2019 – October 2019)

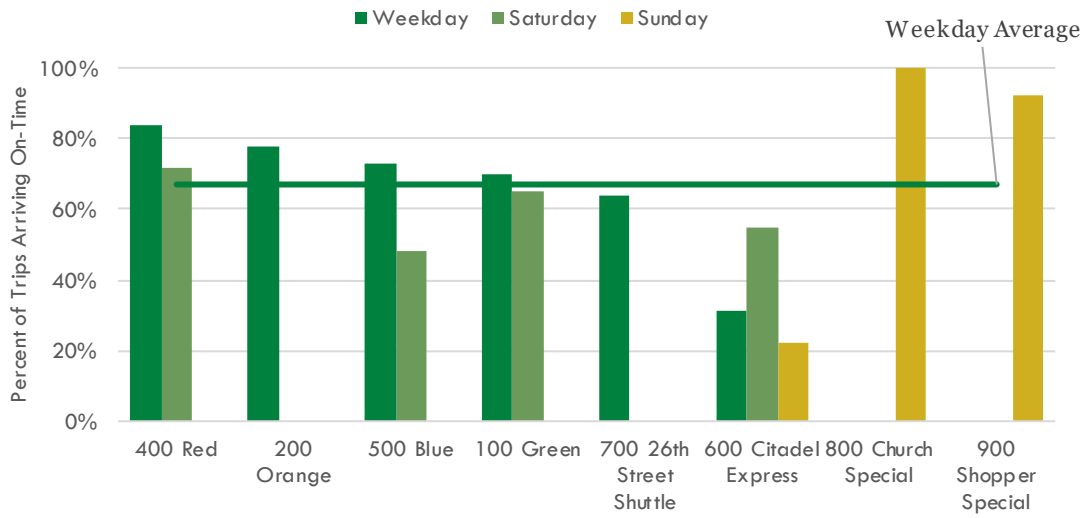


Figure 4-7 On-Time Performance by Route (July 2019 – October 2019)

Route	Percent On-Time	Percent Early	Percent Late
Weekday			
100 Green	70%	11%	19%
200 Orange	78%	11%	11%
400 Red	84%	8%	8%
500 Blue	73%	27%	0%
600 Citadel Outlets Express	31%	56%	13%
700 26th Street Shuttle	64%	23%	14%
Weekday System Average	*67%*	*22%*	*11%*
Saturday			
100 Green	65%	14%	21%
400 Red	72%	26%	2%
500 Blue	48%	52%	0%
600 Citadel Outlets Express	55%	38%	8%
Saturday System Average	*60%*	*32%*	*8%*
Sunday			
800 Church Special	100%	0%	0%
900 Shopper Special	92%	8%	0%
600 Citadel Outlets Express	22%	68%	10%
Sunday System Average	*72%*	*25%*	*3%*

DIAL-A-RIDE

Service Summary

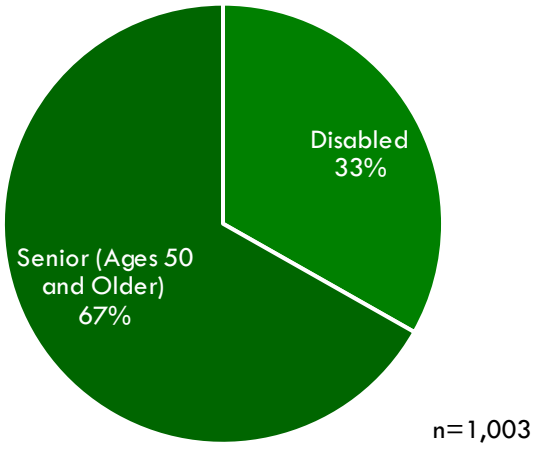
The City of Commerce provides fare-free curb-to-curb paratransit service for qualified elderly residents or residents with special needs. Dial-A-Ride service is available to all City of Commerce residents that are age 50 or older and to residents of any age with a qualifying disability. Qualifying disabilities require a doctor's note stating the need for transportation assistance.

Dial-A-Ride service is provided within a 12-mile radius of City Hall and operates Monday – Friday from 7:00 a.m. – 5:00 p.m. Dial-A-Ride service does not operate on weekends or holidays. Trip reservations can be made online or over the phone and are offered on a first come, first served basis. Same day trip requests are accepted as space allows.

Ridership Patterns

A sample of Dial-A-Ride trips from October 2019 was used to identify trends in ridership categories and common origins and destinations. The sample of over 1,000 one-way trips suggested that Dial-A-Ride service averages 44.3 passengers per day, and that approximately 67% of Dial-A-Ride trips were taken by passengers without a qualifying disability, while the remaining 33% of trips were taken by passengers with a qualifying disability (Figure 4-8).

Figure 4-8 Dial-A-Ride Ridership by Eligibility Type (October 2019)



The travel patterns for Dial-A-Ride trips within the City of Commerce and outside the City of Commerce are shown in Figure 4-9 and Figure 4-10, respectively. Approximately 320 trips were within the City of Commerce, while nearly 700 trips either began or ended outside of the city limits. The 12-mile radius from Commerce City Hall allows for a wide range of destinations outside of Commerce.

The primary origins and destinations within Commerce are the three senior facilities in the city: the Senior Citizens Center, Rosewood Senior Apartments, and Telacu Manor. The most significant Dial-A-Ride trip flows within the city are between the Rosewood neighborhood (containing both

the Senior Citizens Center and Rosewood Senior Apartments) and the Veterans Park neighborhood (containing Telacu Manor).

Trips outside of the City of Commerce are primarily to healthcare facilities and dialysis centers, including:

- White Memorial Hospital
- East Los Angeles Healthcare Partners
- Kaiser – Orchard
- Whittier Presbyterian Dialysis
- East LA Dialysis Center

Other key destinations include a Nifty after Fifty fitness center and East Los Angeles College. The most common trip flows outside of the City of Commerce are connecting from the Rosewood neighborhood north to Nifty after Fifty, East Los Angeles College, and White Memorial Hospital as well as connecting east to Davita Dialysis. Other common connections are between the Veterans Park neighborhood east to Whittier Presbyterian Dialysis and to the City of Santa Fe Springs.

Figure 4-9 Dial-A-Ride Origins and Destinations within the City of Commerce (October 2019)

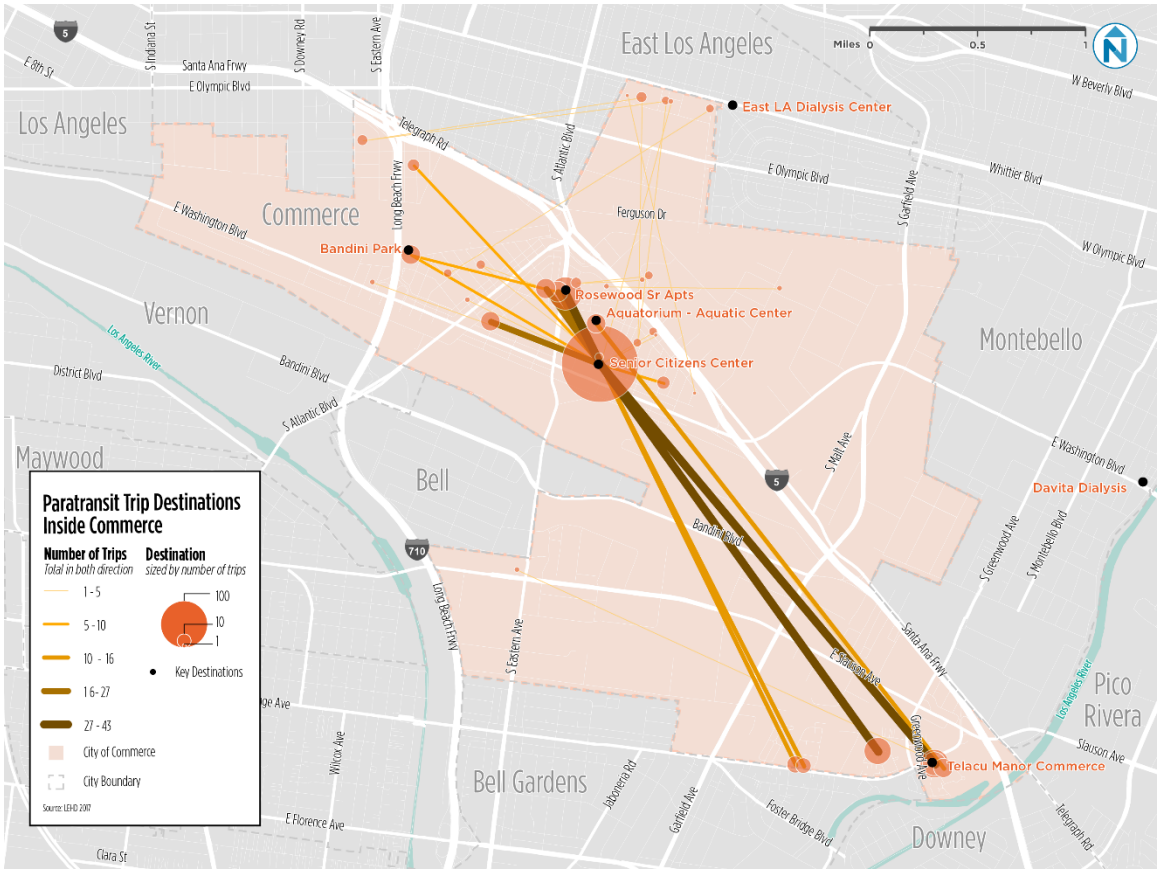
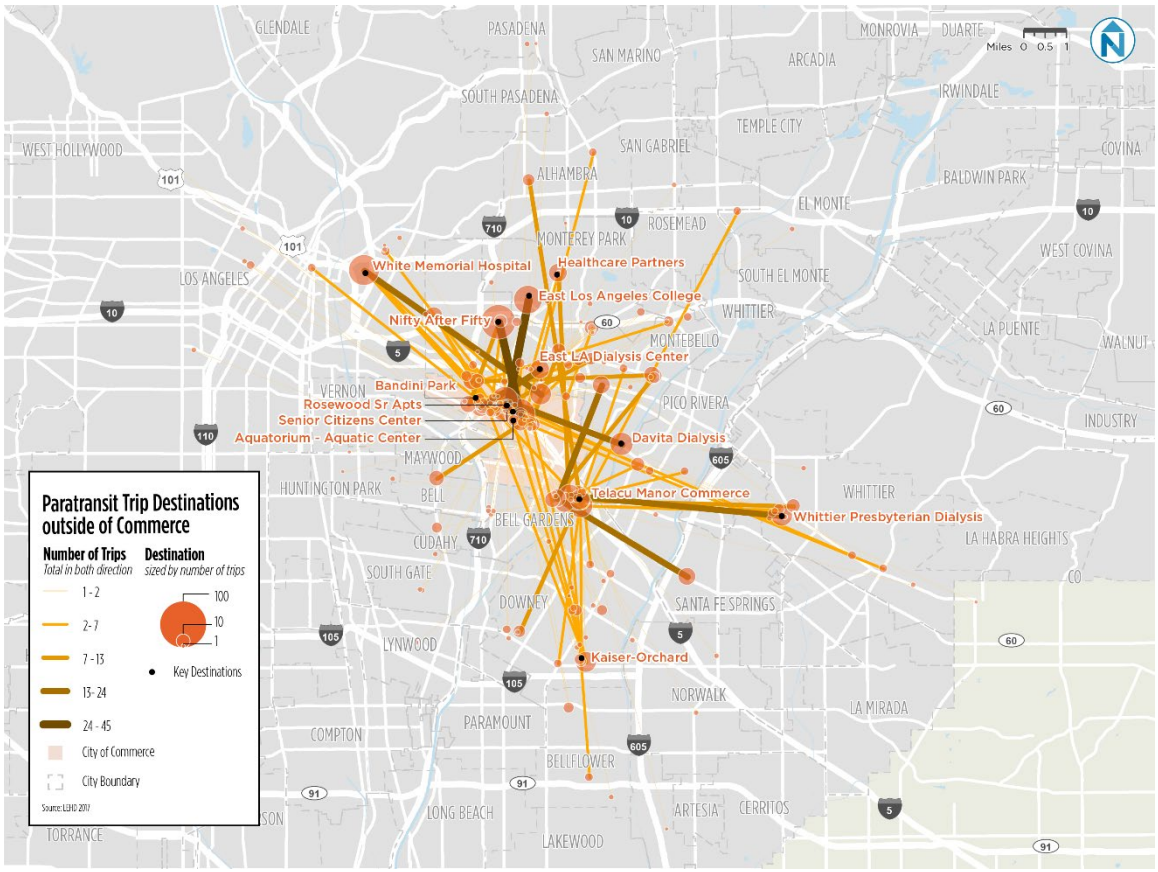


Figure 4-10 Dial-A-Ride Origins and Destinations outside the City of Commerce (October 2019)



SYSTEM TREND ANALYSIS

This trend analysis compares the City of Commerce Transit's current performance with past performance. The trends in this section paint a data-driven picture of performance relative to previous years, which in turn helps to shape recommendations for future service improvements.

This section assesses six performance indicators for fixed-route and Dial-A-Ride service over the seven-year period from 2013 through 2019. The six indicators are:

- Annual passenger trips
- Annual revenue hours
- Passengers per revenue hour
- Total annual operating expenses
- Operating expense per passenger
- Operating expense per revenue hour

A summary of the annual trends for ridership, revenue hours, and operating costs for fixed-route and Dial-A-Ride service are shown in Figure 4-11 and Figure 4-12, respectively.

Figure 4-11 Fixed-Route Performance Metrics (2013-2019)

	2013	2014	2015	2016	2017	2018	2019	% Change 2013 to 2019
Operating Data								
Boardings	673,854	639,847	612,131	606,622	529,835	500,498	445,353	-34%
Vehicle Revenue Hours	23,106	26,137	26,298	29,939	30,466	31,853	33,907	47%
Operating Costs	$2,594,119	$2,721,605	$2,936,165	$3,036,885	$3,692,764	$4,062,643	$3,735,370	44%
Performance Indicators								
Cost Efficiency								
Operating Cost per Revenue Hour	$112.27	$104.13	$111.65	$101.44	$121.21	$127.54	$110.17	-2%
Cost Effectiveness								
Operating Cost per Boarding	$3.85	$4.25	$4.80	$5.01	$6.97	$8.12	$8.39	118%
Service Efficiency								
Boardings per Revenue Hour	29.2	24.5	23.3	20.3	17.4	15.7	13.1	-55%

Source: iNTD City of Commerce Municipal Buslines, 2013 – 2018; City of Commerce, 2019

Figure 4-12 Dial-A-Ride Performance Metrics (2013-2019)

	2013	2014	2015	2016	2017	2018	2019	% Change 2013 to 2019
Operating Data								
Boardings	10,024	9,017	8,562	7,258	5,886	9,086	10,608	6%
Vehicle Revenue Hours	6,723	4,587	5,050	4,567	4,575	6,250	7,660	14%
Operating Costs	$592,313	$533,462	$666,714	$732,021	$639,886	$682,732	$788,262	33%
Performance Indicators								
Cost Efficiency								
Operating Cost per Revenue Hour	$88.10	$116.30	$132.02	$160.28	$139.87	$109.24	$102.91	17%
Cost Effectiveness								
Operating Cost per Boarding	$59.09	$59.16	$77.87	$100.86	$108.71	$75.14	$74.31	26%
Service Efficiency								
Boardings per Revenue Hour	1.5	2.0	1.7	1.6	1.3	1.5	1.4	-7%

Source: iNTD City of Commerce Municipal Buslines, 2013 – 2018; City of Commerce, 2019

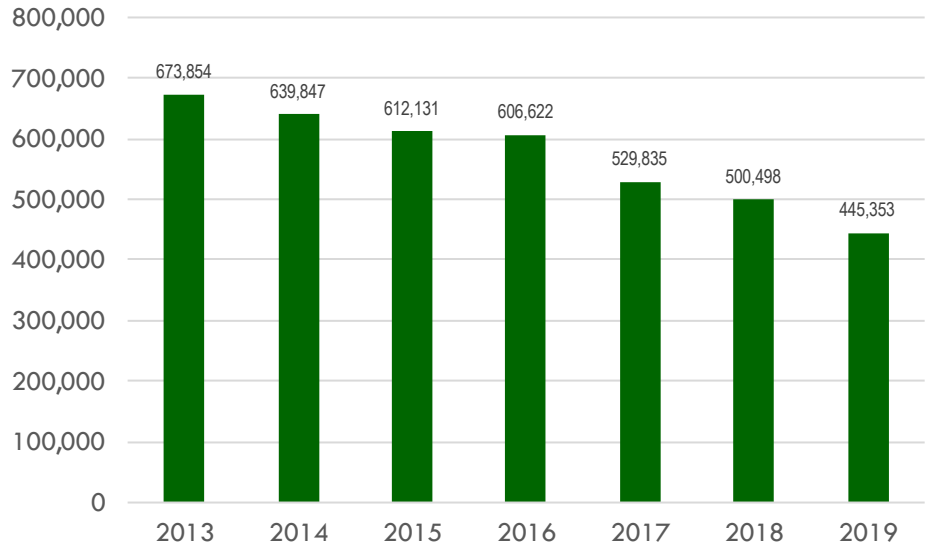
Recent Trends

Ridership on City of Commerce fixed-route transit service (Figure 4-13) decreased steadily between 2013 and 2019. Annual passenger trips declined from a high of 673,854 trips in 2013 to a low of 445,353 trips in 2019, a 34% decrease over the seven-year period. Decreasing ridership has occurred despite annual increases in service hours, leading productivity to decline by more than half, from 29 to 13 passengers per hour systemwide. Following this trend, operating cost per passenger has more than doubled from $3.85 to $8.39.

Dial-A-Ride ridership (Figure 4-14) also decreased steadily from 10,024 trips in 2013 to a low of 5,886 trips in 2017, a 41% decrease. Following this steady decline, the city changed the Dial-A-Ride policy to allow trips outside of the city for non-medical purposes. After this policy change, Dial-A-Ride ridership increased significantly in 2018 and 2019. Dial-A-Ride passenger trips increased by 80% between 2017 and 2019, with a high of 10,608 passenger trips in 2019. Despite ridership recovery, Dial-A-Ride service remains costly, around $75 per trip, which is higher than industry standards.

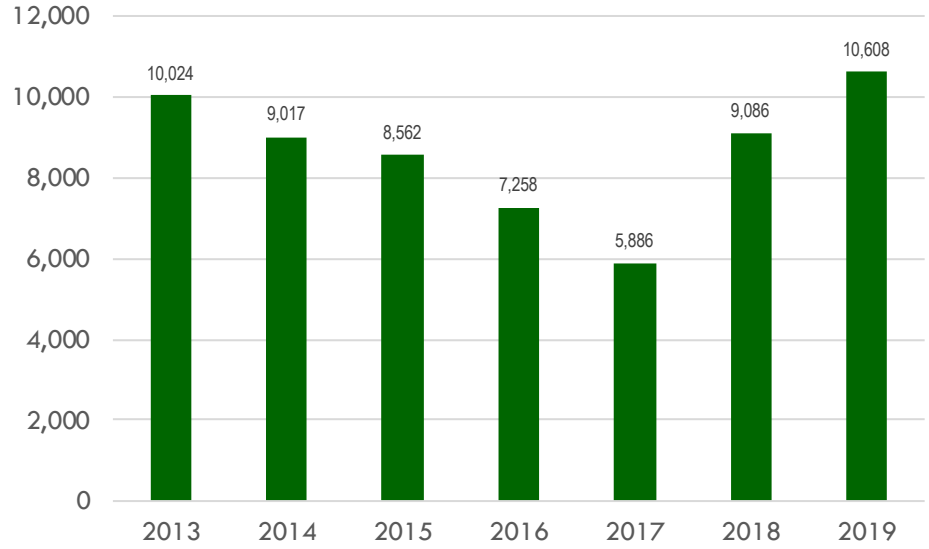
The growth in Dial-A-Ride ridership following the policy change allowing more trips outside of the city indicates there may be additional demand for service connecting outside of the city. Expanding fixed-route service to more destinations outside of the City of Commerce may meet some of this demand and help address the trend of declining ridership. In addition to ridership trends, revenue hours and operating costs have also increased for both fixed-route and Dial-A-Ride service.

Figure 4-13 Annual Passenger Trips – Fixed-Route Service



Source: iNTD City of Commerce Municipal Buslines, 2013 – 2018; City of Commerce, 2019

Figure 4-14 Annual Passenger Trips – Dial-A-Ride Service

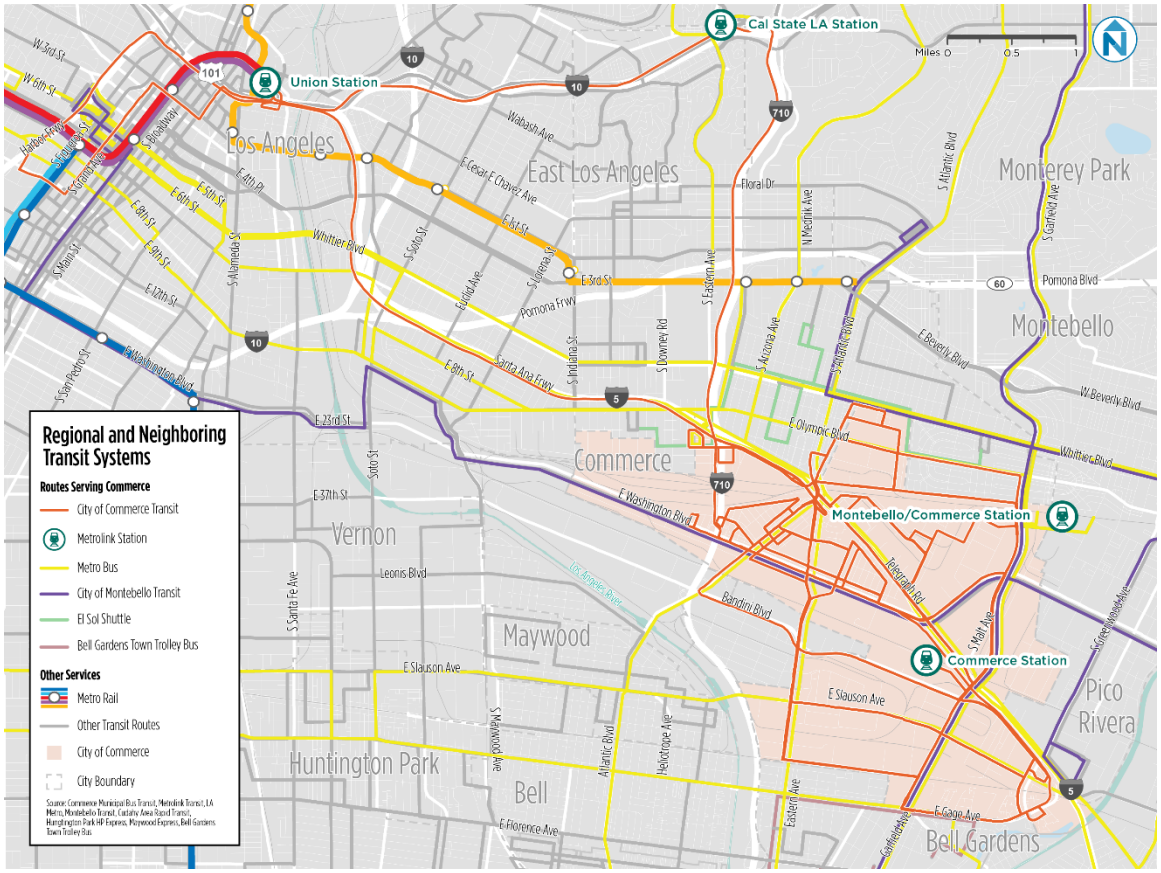


Source: iNTD City of Commerce Municipal Buslines, 2013 – 2018; City of Commerce, 2019

5 LOCAL AND REGIONAL CONTEXT

While the City of Commerce provides transit service within the city limits, City of Commerce Transit does not operate in a vacuum. Numerous regional and local transit agencies provide service near and through the City of Commerce. Regional and neighboring transit systems are shown in Figure 5-1.

Figure 5-1 Regional and Neighboring Transit Services



KEY FINDINGS

- There are numerous regional transit connections in the City of Commerce and the surrounding areas, including Metrolink commuter rail, LA Metro light rail, LA Metro bus service, and City of Montebello bus service.
- Many neighboring cities and unincorporated East Los Angeles operate their own local transit systems, primarily characterized as circulator routes.
- Commerce's prevalent industrial land uses, large block sizes, and pedestrian/traffic impediments (e.g. the Mixmaster Intersection and freight railways), create barriers for accessing transit service in the city.

REGIONAL TRANSIT SERVICE

Regional service providers include Metrolink commuter rail, LA Metro rail and bus service, and Montebello Bus Lines (MBL) local and regional bus service.

Metrolink

The City of Commerce is served by two Metrolink stations, Commerce Station and Montebello/Commerce Station. At both stations, service is available on weekdays only, and is "peak directional" with morning trains operating "inbound" to downtown Los Angeles and afternoon trains operating "outbound" in the reverse direction.

Commerce Station

Commerce Station is located on E 26th St west of Garfield Ave in the City of Commerce and is served by the Metrolink Orange County Line. Commerce Station contains 135 free parking spots and is accessible by multiple transit services. Commerce Station is served by four Orange County Line inbound trains in the morning and four outbound trains in the afternoon on weekdays and is not served on weekends. Commerce Station is directly served by the City of Commerce Transit Orange Route and the 26th Street Shuttle and indirectly served by several LA Metro and MBL routes.

Ridership patterns on commuter rail, like Metrolink, are generally directional, with most people traveling into the City of Commerce in the morning and leaving the City of Commerce in the afternoon. Scheduled transfers between Metrolink and City of Commerce Transit requires scheduling service to pick passengers up from Commerce Station in the morning without requiring long wait times and drop passengers off at Commerce Station in the afternoon without missing their connection. The scheduled arrival and departure times for Metrolink service to Commerce Station and City of Commerce Transit 26th Street Shuttle and Orange Routes are shown in Figure 5-2.

During the morning, Metrolink passengers are able to transfer directly to a City of Commerce Transit route with a wait time between zero and seven minutes after their scheduled arrival. However, transfer windows for the 7:00 a.m., 8:19 a.m., and 9:08 a.m. arrival times appear to be small, between zero and one minute. Minor delays to Metrolink service may result in missed transfers to local bus routes for these trips. During the afternoon, City of Commerce Transit routes are scheduled to drop passengers off at Commerce Station between 8 and 16 minutes before the scheduled train departure. The flexibility in this schedule allows for potential delays on City of Commerce service without risking a missed connection.

Figure 5-2 Scheduled Metrolink Arrivals and City of Commerce Transfer Opportunities

Scheduled Metrolink Arrival at Commerce Station	Scheduled 26th Street Shuttle Arrival	Scheduled 26th Street Shuttle Departure	Scheduled Orange Route Arrival and Departure
7:00 a.m.	--	7:00 a.m.	6:19 a.m.
7:26 a.m.	7:32 a.m.	7:33 a.m.	7:44 a.m.
8:19 a.m.	8:05 a.m.	8:20 a.m.	--
9:08 a.m.	8:52 a.m.	9:02 a.m.	9:09 p.m.
3:33 p.m.	3:17 p.m.	3:18 p.m.	2:46 p.m.
4:01 p.m.	3:50 p.m.	3:57 p.m.	--
4:44 p.m.	4:30 p.m.	5:00 p.m.	4:21 p.m.
5:54 p.m.	5:35 p.m.	--	5:46 p.m.

Montebello/Commerce Station

Montebello/Commerce Station is located on Flotilla St between Yates Ave and S Vail Ave in the City of Montebello, adjacent to the City of Commerce, and is served by the Metrolink Riverside Line. Montebello/Commerce Station contains 267 free parking spaces and is directly served by the MBL Metrolink Shuttle route and indirectly served by several Metro and MBL routes. The City of Commerce Transit Green, Yellow, and Purple Route stop at Garfield Ave & Flotilla St is approximately ½ mile from Montebello/Commerce Station.

Montebello/Commerce Station is served by five Riverside Line inbound trains in the morning, five outbound trains in the afternoon on weekdays, and is not served on weekends.

LA Metro Rail

The City of Commerce is not directly served by any Metro Rail stations. Three stations on the Metro L Line (previously Gold Line) are located north of the City of Commerce in East Los Angeles, including Maravilla Station, East LA Civic Center Station, and Atlantic Station.

LA Metro Bus Routes Serving Commerce

LA Metro is the regional transit operator for Los Angeles County and directly serves the City of Commerce with six routes (Routes 62, 108, 256, 258, 260, and 762). Route lines and ridership at each stop for the routes are shown in Figure 5-3 and route characteristics including peak frequency and service span are shown in Figure 5-4. Ridership on these regional transit routes is significantly higher than on the smaller, local systems. These routes provide regional accessibility to and from the City of Commerce with connections to local transit systems.

Figure 5-3 LA Metro Ridership

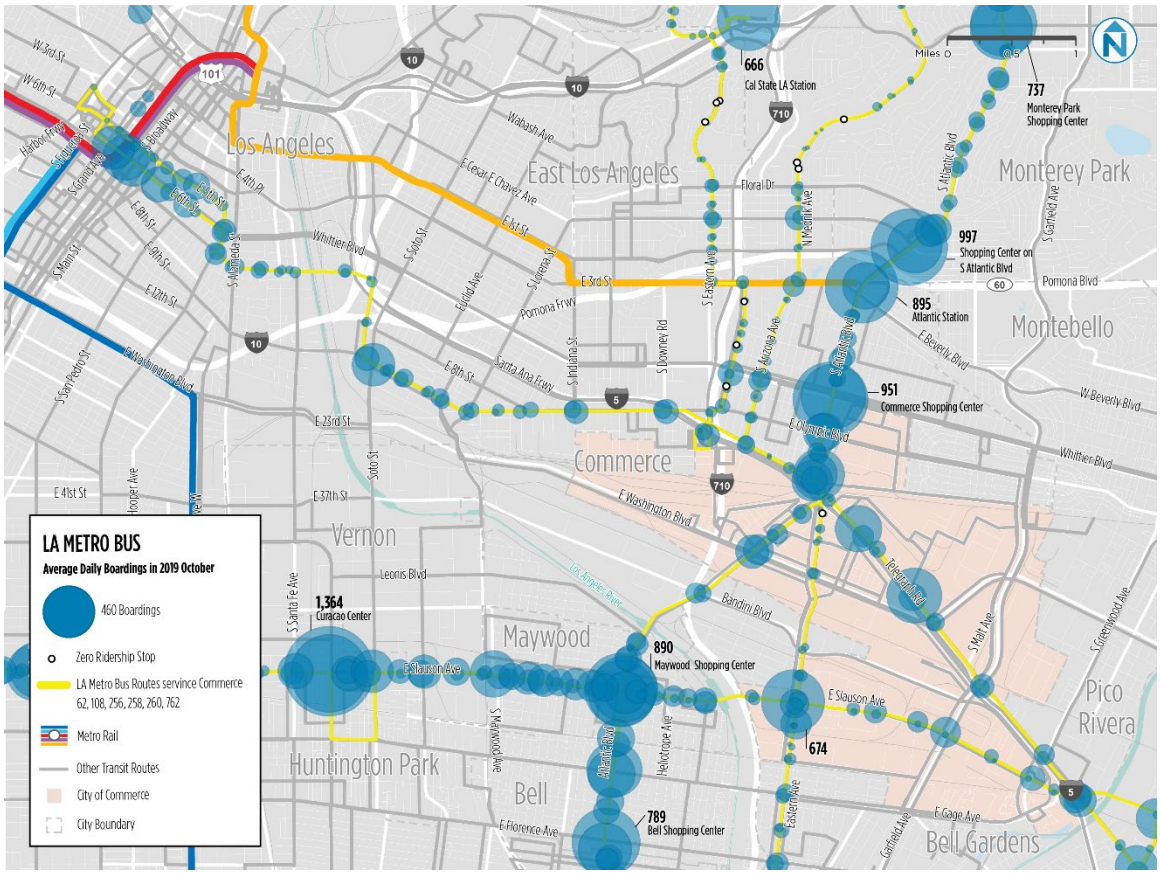


Figure 5-4 Summary of LA Metro Routes Serving the City of Commerce

LA Metro Route	Peak Frequency	Service Span
62	30 minutes	4:30 a.m. – 12:30 a.m. Monday – Sunday
108	20 minutes	5:00 a.m. – 11:00 p.m. Monday – Sunday
256	60 minutes	5:45 a.m. – 8:15 p.m. Monday – Sunday
258	60 minutes	5:30 a.m. – 11:30 p.m. Monday – Friday
260	20 minutes	6:00 a.m. – 1:30 a.m. Monday – Sunday
762	20 minutes	4:30 a.m. – 9:30 p.m. Monday – Friday

Line 62

LA Metro Line 62 provides service between downtown Los Angeles and Long Beach, operating along the Telegraph Rd, Norwalk Blvd, and Pioneer Blvd corridors. Line 62 operates every 30-60

minutes, seven days per week between 4:30 a.m. and 12:30 a.m. The route provides direct connections to the City of Commerce Transit Green, Orange, Yellow, Red, Blue, and Purple routes along the Telegraph Rd corridor.

Line 108

LA Metro Line 108 provides east-west service between Pico Rivera and Culver City along the Slauson Ave corridor. The route operates seven days per week between 5:00 a.m. and 11:00 p.m. every 20 minutes during peak periods and every 60 minutes during off-peak periods. The route provides direct connections to the City of Commerce Transit Green, Yellow, and Orange routes along the Slauson Ave corridor.

Line 256

LA Metro Line 256 provides service between Altadena, Pasadena, Highland Park, El Sereno, East Los Angeles, and Commerce, with north-south service primarily operating along the Eastern Ave corridor. The route operates every 60 minutes between 5:45 a.m. and 8:15 p.m. seven days per week. The route provides direct connections to City of Commerce Transit Red and Blue routes at the route's southern terminus on Marianna Ave and Eastern Ave between Union Pacific Ave and Triggs St.

Under the LA Metro NextGen Bus Plan, Line 256 would be separated into three separate bus routes with improved frequency. The segment of Line 256 between the City of Commerce and East Los Angeles College would be operated by City of Commerce Transit while the segment between East Los Angeles College and the Metro Rail L Line Highland Park Station would continue to be operated by LA Metro, and the segment between Highland Park Station and Pasadena would be operated by Pasadena Transit.

Line 258

LA Metro Line 258 provides north-south service between Altadena, Pasadena, San Marino, East Los Angeles, Commerce, Bell Gardens, and Paramount, operating on Telegraph Rd and Eastern Ave within the City of Commerce. The route provides hourly service on weekdays only between 5:30 a.m. and 11:30 p.m. Line 258 provides direct connections to City of Commerce Transit Green, Orange, Yellow, Red, Blue, and Purple routes along the Eastern Ave corridor and at the intersection of Eastern Ave & Harbor St.

Line 260 and 762

LA Metro Lines 260 and 762 operate similar alignments between Pasadena, South Pasadena, Commerce, North Long Beach, and Compton with Line 260 providing local service and Line 762 providing express service. Line 260 also operates further north into Altadena. Line 260 operates seven days per week, providing service every 20-30 minutes between 6:00 a.m. and 1:30 a.m. Line 762 operates on weekdays only, providing service every 20-40 minutes between 4:30 a.m. and 9:30 p.m.

Lines 260 and 762 provide direct connections to City of Commerce Transit Orange, Red, Blue, and Purple routes along Atlantic Blvd.

Montebello Routes Serving Commerce

The City of Montebello is located to the northeast of the City of Commerce and operates both local and regional fixed-route transit service. MBL operates eight fixed-routes, four of which (Routes 10, 20, 30, and 50) directly serve the City of Commerce, shown above in Figure 5-1. A summary of route characteristics including peak frequency and service span are shown in Figure 5-5.

Figure 5-5 Summary of MBL Routes Serving the City of Commerce

MBL Route	Peak Frequency	Service Span
10	10 – 12 minutes	3:30 a.m. – 11:30 p.m. Monday – Sunday
20	13 minutes	5:30 a.m. – 11:00 p.m. Monday – Sunday
30	45 minutes	4:45 a.m. – 10:30 p.m. Monday – Sunday
50	30 minutes	4:00 a.m. – 11:00 p.m. Monday – Saturday

Line 10

MBL Line 10 provides east-west service along the Whittier Blvd corridor between East Los Angeles College and the Whittwood Town Center. The route operates seven days per week from 3:30 a.m. to 11:30 p.m. with peak headways varying between 10 – 12 minutes. Line 10 provides a direct transfer opportunity with all City of Commerce Transit routes at Commerce Shopping Center.

Line 20

MBL Line 20 provides north-south service along the Greenwood Ave, Montebello Blvd, and San Gabriel Blvd corridors, providing direct service to multiple shopping centers including Walmart, Montebello Townsquare, and the Shops and Montebello. Line 20 operates from 5:30 a.m. to 11:00 p.m. seven days per week, providing service every 13 minutes Monday through Friday and every 18 minutes on Saturdays and Sundays.

The southern terminus of Line 20 is adjacent to the City of Commerce on the north side of I-5 at Gage Rd & Union St. This terminus is approximately ½ mile from the nearest City of Commerce Transit stop at Todd Ave & Wellman St that is served by the Green and Yellow routes. This represents a potential transfer opportunity.

Line 30

MBL Line 30 provides north-south service along the Garfield Ave corridor, serving the Alhambra Civic Center, Garfield Medical Center, LA County Department of Social Services, Commerce Metrolink Station, Bell Gardens Civic Center, and South Gate Town Center. The route operates seven days per week from 4:45 a.m. to 10:30 p.m. and provides service every 45 minutes on weekdays and every 60 minutes on weekends.

Line 30 provides direct connections to City of Commerce Transit Purple, Yellow, Green, and Orange routes along the length of the Garfield Ave corridor.

Line 50

MBL Line 50 provides east-west service along the Washington Blvd corridor between downtown Los Angeles and La Mirada Town Center with direct service to Commerce City Hall, Pico Rivera Town Center, Santa Fe Springs Town Center, Presbyterian Inter-Community Hospital, and La Mirada City Hall. The route operates Monday through Saturday from 4:00 a.m. to 11:15 p.m. and provides service every 30 minutes on weekdays and every 60 minutes on Saturdays.

Line 50 provides direct connections to all City of Commerce Transit routes along the Washington Blvd Corridor, including the Green, Orange, Yellow, Red, Blue, and Purple routes.

NEIGHBORING TRANSIT SERVICE

Several neighboring communities have fixed-route service focused on local circulation. With the exception of El Sol Shuttle in East Los Angeles, these services do not connect to City of Commerce Transit but may present an opportunity for integration with Commerce services. This section describes neighboring services and identifies potential connection points that may be explored further in the service development phase of *Commerce in Motion*.

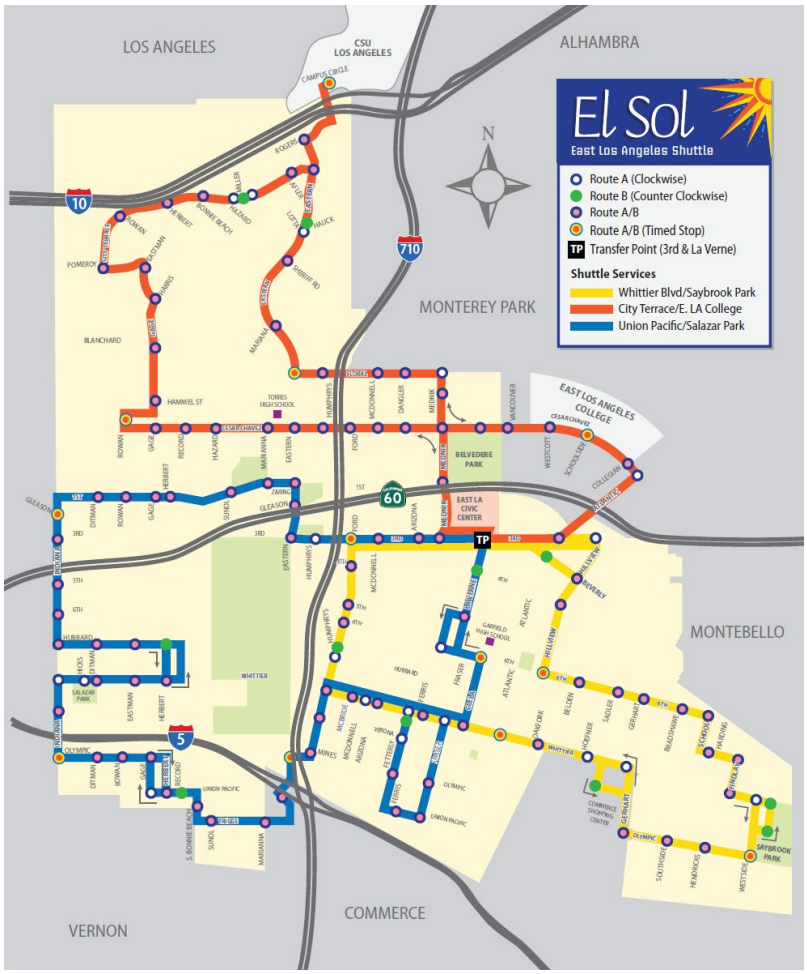
Los Angeles County El Sol Shuttle

The El Sol Shuttle service is comprised of three different lines covering the unincorporated community of East Los Angeles, located north of the City of Commerce. The service has a timed transfer point at the East Los Angeles Civic Center and provides transfer opportunities with multiple regional bus and rail services, as well as City of Commerce Transit.

The El Sol Shuttle operates hourly service seven days per week, from 6:00 a.m. – 9:00 p.m. Monday – Thursday, 6:00 a.m. – 11:00 p.m. Friday, 9:00 a.m. – 11:00 p.m. Saturday, and 9:00 a.m. – 5:00 p.m. Sunday. The El Sol Shuttle costs $0.25 per trip. Senior citizens (60 and older), persons with disabilities, and children under five years old ride for free. A map of the three routes in the El Sol Shuttle system is shown in Figure 5-6.

The Whittier Blvd/Saybrook Park Route directly connects to all City of Commerce Transit Routes at the Commerce Shopping Center. The Union Pacific/Salazar Park Route does not directly connect to City of Commerce Transit. However, the stop located at Union Pacific Ave & Fraser Ave is roughly ½ mile from the City of Commerce Transit Red, Blue, and Orange Route stop at Union Pacific Ave & Goodrich Blvd. The El Sol Shuttle operates every 60 minutes, while City of Commerce Transit routes operate on varying, generally low-frequency schedules throughout the day. This irregular, low-frequency service makes transferring between the two systems less convenient for passengers.

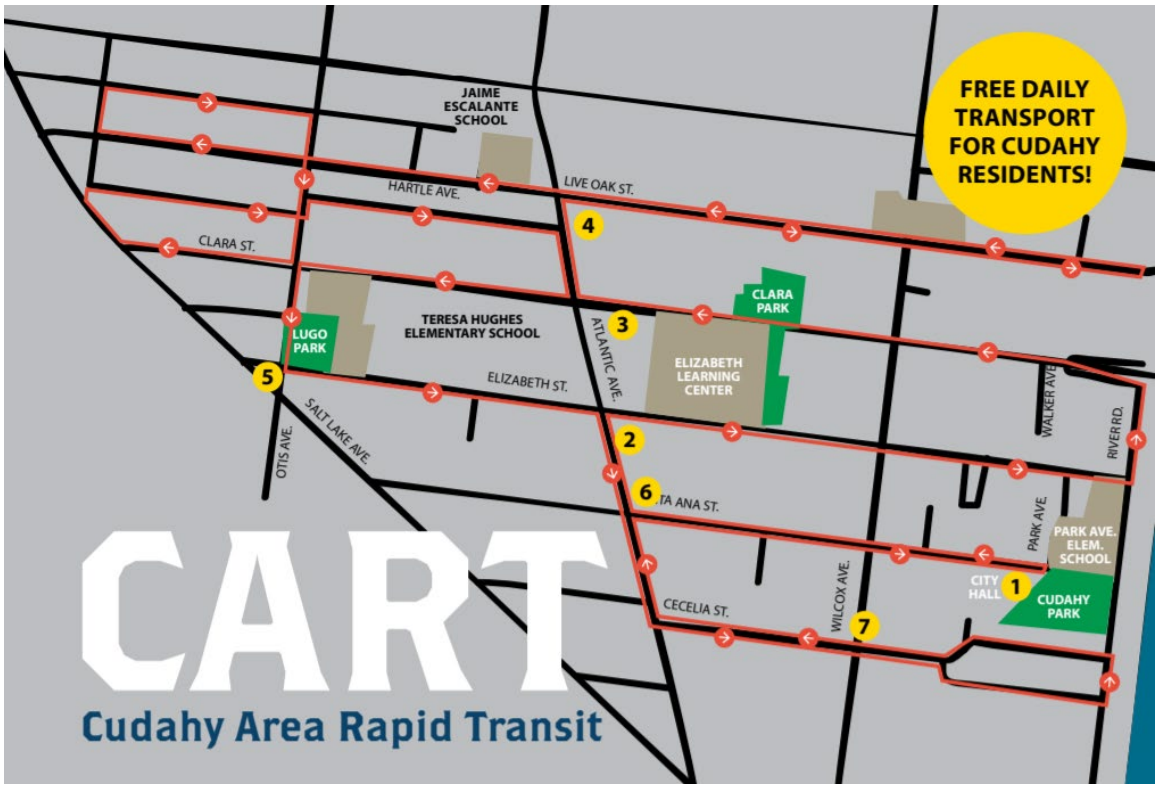
Figure 5-6 El Sol Shuttle System Map



Cudahy Area Rapid Transit

The City of Cudahy is located southwest of the City of Commerce, across the Los Angeles River and operates a fixed-route transit system called Cudahy Area Rapid Transit (CART). CART operates as a fare free circulator shuttle route, providing service every hour from 7:00 a.m. – 5:45 p.m. Monday – Sunday. A map of CART service is shown in Figure 5-7. CART service does not provide a direct connection to City of Commerce Transit, with the nearest stops located approximately 1.5 miles apart, from River Rd & Live Oak St in Cudahy to Eastern Ave & Randolph St in Commerce. This distance is too far for many people to comfortably walk and transfer between services. This presents an opportunity to extend service closer to Cudahy, enabling transfers between the two services and improving mobility options for residents of both cities.

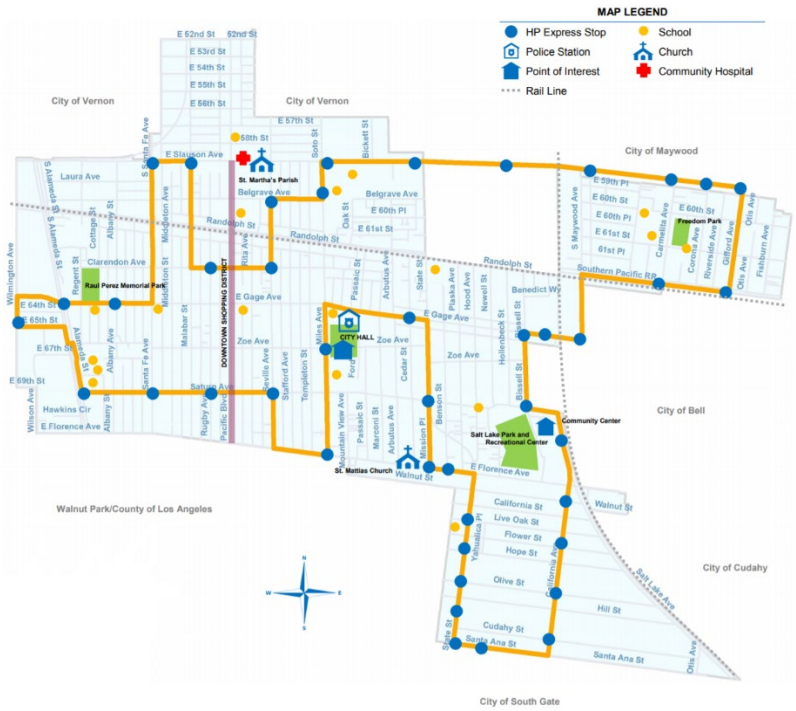
Figure 5-7 CART Service Map



Huntington Park HP Express

The City of Huntington Park is located west of the City of Commerce and operates a fixed-route transit service called HP Express. HP Express service is a circulator shuttle that operates every 25 minutes from 6:00 a.m. – 6:30 p.m. on weekdays, 8:00 a.m. – 5:30 p.m. on Saturdays, and does not operate on Sundays. HP Express costs $0.75 per trip. Seniors (62 and older), persons with disabilities, Medicare cardholders, and children under five years old ride for free. The shuttle map for the HP Express service is shown in Figure 5-8. HP Express does not directly connect to City of Commerce Transit. The HP Express stop located at Gifford Ave & Slauson Ave is approximately 1.5 miles from the City of Commerce Transit Orange Route stop located at Bandini Blvd & Atlantic Blvd.

Figure 5-8 HP Express Shuttle Map



Maywood Express

The City of Maywood is located southwest of the City of Commerce, across the Los Angeles River and operates a fixed-route transit system called the Maywood Express. The Maywood Express operates every 35 minutes between 10:30 a.m. and 5:30 p.m. with additional peak period trips from 7:00 a.m. – 8:00 a.m. and from 2:00 p.m. – 4:00 p.m. on weekdays and from 9:00 a.m. – 3:00 p.m. on Saturdays.

Maywood Express does not directly connect to any City of Commerce Transit routes but is within walking distance. The Riverfront Park stop on the Maywood Express is approximately ½ mile from the City of Commerce Green and Orange route stops at Eastern Ave & Slauson Ave. Additionally, the Maywood Express stop at Atlantic Blvd & 57th St is approximately 1 mile from the City of Commerce Transit Orange route stop at Bandini Blvd & Atlantic Blvd. While passengers are able to walk these distances to transfer between systems, extending service to provide a direct connection or shorter walk would improve the passenger experience.

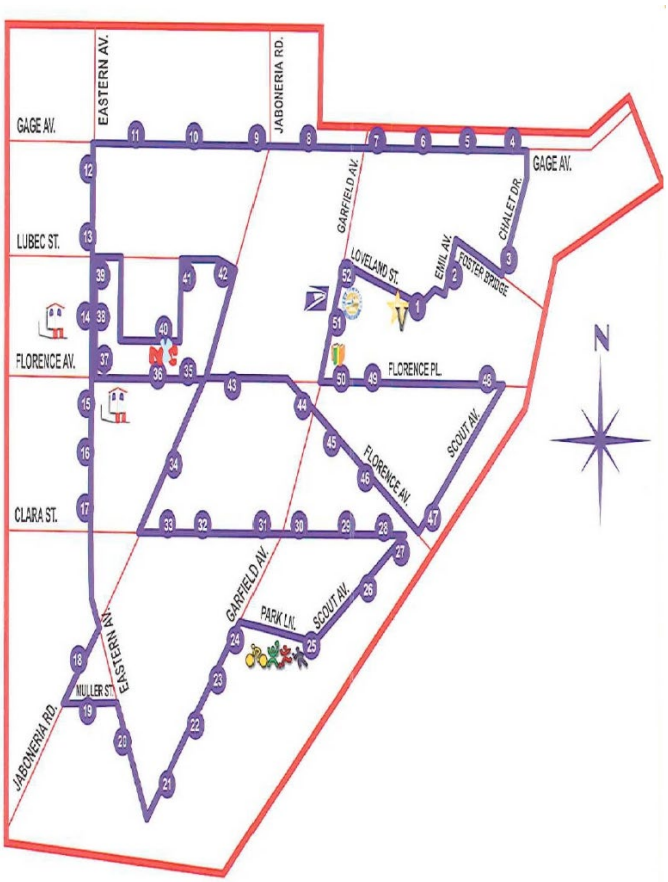
Bell Gardens Town Trolley Bus

The City of Bell Gardens is located directly south of the City of Commerce and operates a fixed-route trolley service called the Bell Gardens Town Trolley Bus. The Bell Gardens Town Trolley Bus operates hourly service from 6:30 a.m. – 5:30 p.m. Monday – Saturday. The Town Trolley Bus costs $0.50 per trip for general public and offers a discounted fare of $0.25 for seniors (55 and older) and persons with disabilities. The Bell Gardens Town Trolley Bus map is shown in Figure 5-9.

The Town Trolley Bus provides a direct connection to City of Commerce Transit Green, Orange, and Yellow routes along Gage Ave between Garfield Ave and Chalet Dr. This transfer may provide

connections to destinations in Bell Gardens, including the Food 4 Less grocery store located at Florence Ave & Eastern Ave, which cannot be accessed directly using City of Commerce Transit.

Figure 5-9 Bell Gardens Town Trolley Bus Map



TRANSPORTATION SYSTEM

Apart from neighboring transit systems, the existing development and land use patterns, street grid, and transportation facilities in the City of Commerce play a significant role in transit operations and system accessibility.

Local Street Network

The transportation system in and around the City of Commerce is much more industrial compared to other cities in the region. Large portions of the city south of Washington Blvd and west of I-710 are occupied by freight facilities including the H & M International Transportation facility and the Union Pacific and BNSF rail yards. The city is also bisected by an east-west freight and passenger railroad right-of-way. Rail yards and industrial facilities are non-traversable and present significant pedestrian and transportation barriers. Only major arterials like Garfield Ave, Telegraph Ave, Eastern Ave, and Atlantic Blvd provide opportunities to cross the rail lines, while the local street network is circuitous and does not connect to other neighborhoods in the city.

Additionally, manufacturing, warehousing, and distribution centers are present throughout the city. These developments are sited on large blocks with limited through streets. This type of land use requires people to walk long distances, often traveling out of direction, to reach their destination. The industrial land uses and large manufacturing facilities present in the city limit walkability and create significant accessibility barriers for pedestrians. These pedestrian barriers may discourage people from walking further to make a transfer to another transit system.

Mixmaster Intersection

The Mixmaster Intersection (Figure 5-10) is a complex series of intersections located at the northern edge of the City of Commerce and incorporates the intersections of:

- S Atlantic Blvd
- S Eastern Ave
- Telegraph Rd
- Triggs St
- Stevens Pl
- Ferguson Dr
- Goodrich Blvd
- Multiple I-5 on and off ramps
- A rail underpass

Figure 5-10 Mixmaster Intersection

Three of the largest arterials in the City of Commerce and East Los Angeles converge in the Mixmaster, which uses a series of four traffic signals to orchestrate vehicle movements through the area. The Mixmaster is generally congested, causing slow travel times for all vehicles. In addition, there are few ways to get across town without crossing the Mixmaster, meaning the congestion and delays are felt throughout the transit system. The intersection creates unpredictability in travel times, which makes scheduling transit routes challenging.

6 PUBLIC INVOLVEMENT

This chapter provides an overview of the key findings from the first phase of *Commerce in Motion* public involvement efforts, including a virtual public open house, stakeholder interviews, and a community survey. The goal of the first phase of outreach was intended to introduce the public and key stakeholders to the project and identify aspects of the City of Commerce Transit system that are working well, that are not working well, and priorities for service improvements.

KEY FINDINGS

- The highest priority service improvements identified include more frequent service, faster and more direct service, improved weekend service, and enhanced amenities at bus stops.
- The majority of trips taken on City of Commerce Transit are to access services, like shopping and medical appointments.
- According to both the stakeholder interviews and community survey, most of the people riding transit in the City of Commerce do not have access to a vehicle.
- Respondents to the community survey were primarily ages 65 or older (40%), retired (40%), and/or Hispanic or Lantinx (78%).

VIRTUAL PUBLIC OPEN HOUSE

An online public open house was held on Wednesday June 17, 2020 at 6:30 p.m. Generally, this kind of public open house would be held as an in-person event in the City of Commerce. However, due to the impacts of COVID-19 and public health recommendations, the open house was held as an online forum. The open house was advertised on the *Commerce in Motion* project website, the City of Commerce website and social media accounts, the CCTransit mobile app, through paper flyer advertisements onboard City of Commerce Transit vehicles, and through established stakeholder networks.

Virtual public open house attendees were required to register for the event online and indicate whether they required translation services in order to receive a link to the Zoom meeting. For those who did not or were unable to register, the presentation was broadcast live on the City of Commerce Facebook page and local cable channel. A recording of the meeting was uploaded to the *Commerce in Motion* project website.

The virtual public open house received 11 registrations and had seven attendees present in the official Zoom meeting. Attendees were given a brief introduction to the project background followed by a presentation on the preliminary findings of the existing conditions analysis. The open house then posed several discussion questions and encouraged attendees to respond to the questions and ask additional questions regarding transit service in the City of Commerce. Major themes from the discussion include:

- Providing service later in the evening
- Improving amenities at bus stops and onboard vehicles
- Providing faster, more direct service

STAKEHOLDER INTERVIEWS

During the first phase of outreach, the project team contacted 29 individuals representing 16 organizations, agencies, or municipal departments that were identified as project stakeholders. Stakeholders were presented with five schedule options to join a conference call to discuss the *Commerce in Motion* project, their perceptions of and experience with public transportation in the City of Commerce, and considerations for how service may be improved as a result of this process. Ten of the contacted stakeholders representing ten organizations, agencies, or municipal departments participated in the stakeholder interviews, as shown in Figure 6-1.

Figure 6-1 Contacted Stakeholders and Participants

Organization	Participated
Alta Med	
Caltrans District 7	X
City of Commerce: Library Services	X
City of Commerce: Public Works	X
City of Commerce: Social Services	X
City of Commerce: Public Information Office	X
City of Commerce: Senior Center	X
City of Commerce: Parks and Recreation	X
City of Commerce: Teen Center	X
City of Commerce: Veterans Park	X
City of Commerce: Traffic Commission	
Citadel Outlets	X
Commerce Casino	
East Yard Communities for Environmental Justice	
Industrial Council	
Los Angeles Regional Foodbank	

Major themes expressed by those interviewed include:

- Fare free service is a key strength of the system.
- Priority improvements include faster, more frequent service and service that leaves the city, particularly to access grocery stores.
- City of Commerce Transit service is mostly used to connect residents between the four neighborhoods in the city. Veterans Park is geographically disconnected from the rest of the city and would benefit from service to retail in neighboring cities that is closer than Commerce Shopping Center.
- Transit service is predominantly used by people without access to a vehicle, including low-income residents, seniors, and youth traveling to school.
- The Citadel Outlets Express is a strong route that provides an important connection for residents to downtown Los Angeles and brings people into the city.

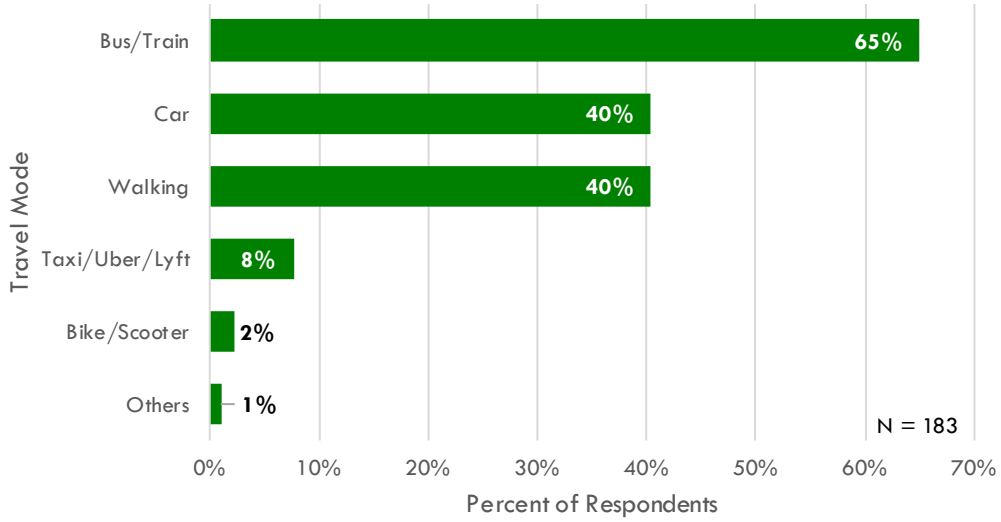
COMMUNITY SURVEY

The *Commerce in Motion* survey was open for public comment from May 27, 2020 until July 3, 2020. One hundred and eight responses were collected through an online survey, as well as 80 additional responses collected through paper versions of the survey distributed at the City of Commerce Senior Center, Library, and Veterans Park. This survey was not designed to collect a statistically valid representation of City of Commerce Transit riders or the Commerce Community, however the feedback provides insights into the travel patterns and attitudes toward transit in the community. Paper and online surveys were available in English and Spanish. Of the 188 surveys collected, 84% were completed in English and 16% were completed in Spanish. The open-ended comments from the survey are shown in Appendix C of this report.

Travel Characteristics

Respondents were asked to identify the mode(s) they typically use to travel. The majority of respondents travel around Commerce using buses or trains (65%). Additionally, 40% of respondents identified using cars and walking to get around in Commerce (Figure 6-13). About 8% of respondents use Taxi, Uber, or Lyft and 2% use bikes or scooters. Respondents choosing "other," indicated that they generally get rides from friends and family.

Figure 6-2 How Respondents Typically Get Around Commerce



The vast majority of survey respondents (93%) indicated that they have previously ridden City of Commerce Transit service (Figure 6-8). Survey respondents also indicated that they commonly use transit provided by other agencies. Besides City of Commerce Transit, respondents most often use LA Metro Bus (59%), Montebello Bus Lines (44%), and LA Metro Rail (31%), as shown in Figure 6-2.

Figure 6-3 Respondents Who Have Ridden City of Commerce Transit

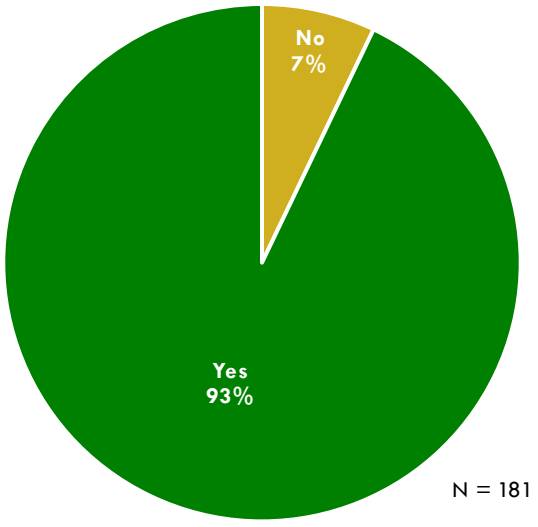
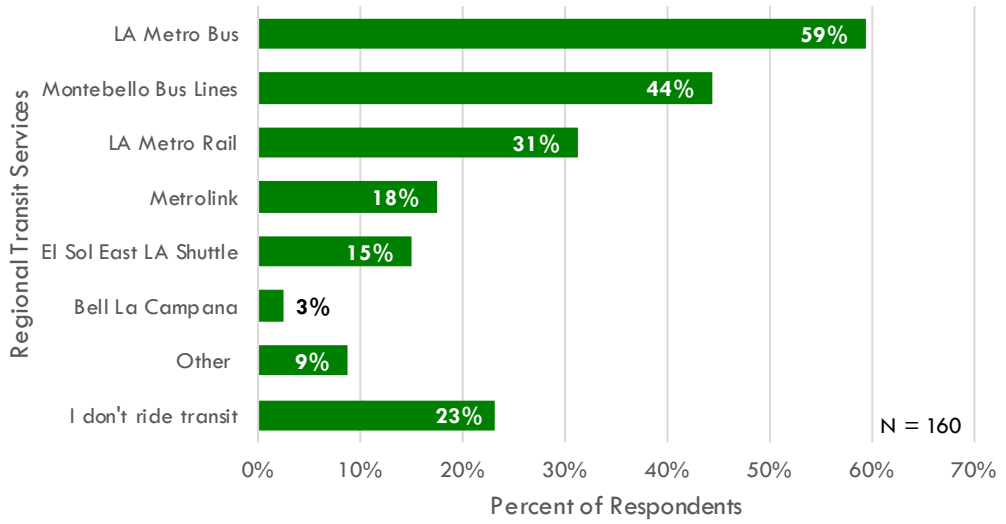
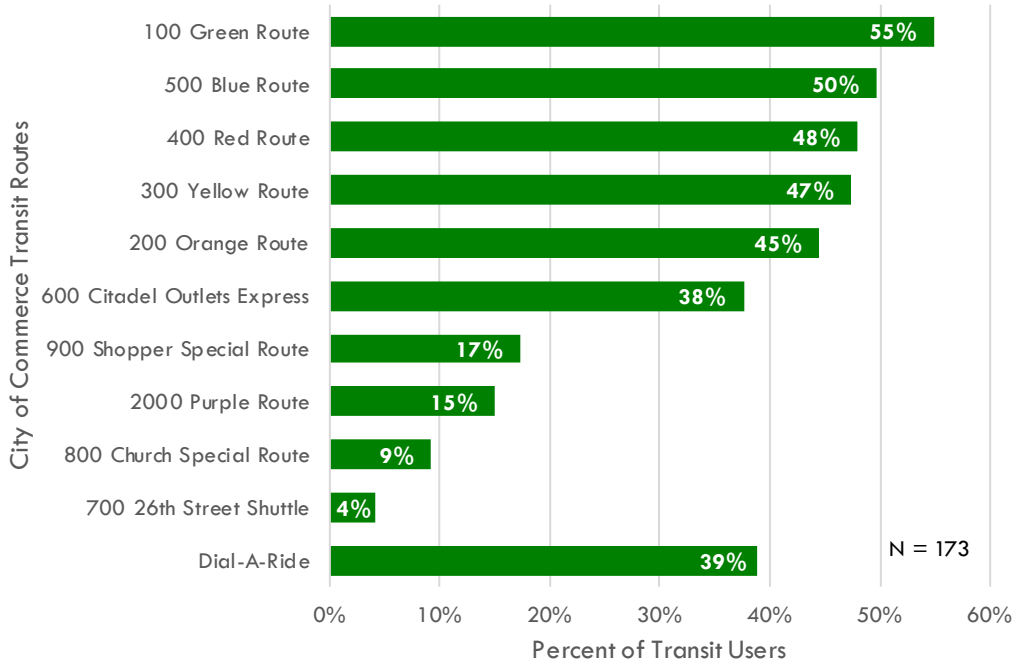


Figure 6-4 Other Transit Services Used by Respondents



Respondents who indicated that they have ridden City of Commerce Transit were asked to identify which transit routes they use or have used in the past (Figure 6-1). The four most commonly selected routes were the Green Route (55%), Blue Route (50%), Red Route (48%), and Yellow Route (47%). Additionally, 39% of survey respondents use Dial-A-Ride service. The high proportion of Dial-A-Ride customers may be due to the distribution of paper surveys at the Commerce Senior Center and through meal delivery programs.

Figure 6-5 Commerce Transit Routes Used by Survey Respondents



The COVID-19 pandemic has altered travel patterns significantly on all modes. To understand how respondents "typically" use City of Commerce transit, they were asked how frequently they rode City of Commerce transit before the pandemic (Figure 6-9). Most respondents who use City of Commerce Transit ride between two and five days per week, with 27% riding four to five days and 25% riding two to three days. Additionally, 20% ride transit less than once per month and 13% ride once or twice per month. Only 5% indicated that they ride transit six or seven days per week.

Respondents also indicated that behavior has changed as a result of the ongoing public health crisis. In the past three months, 62% of respondents have used City of Commerce Transit less than usual (Figure 6-10). As a result of the COVID-19 pandemic, local stay at home orders, and temporary suspension of services, people are taking fewer trips on transit.

Figure 6-6 Frequency of Transit Use

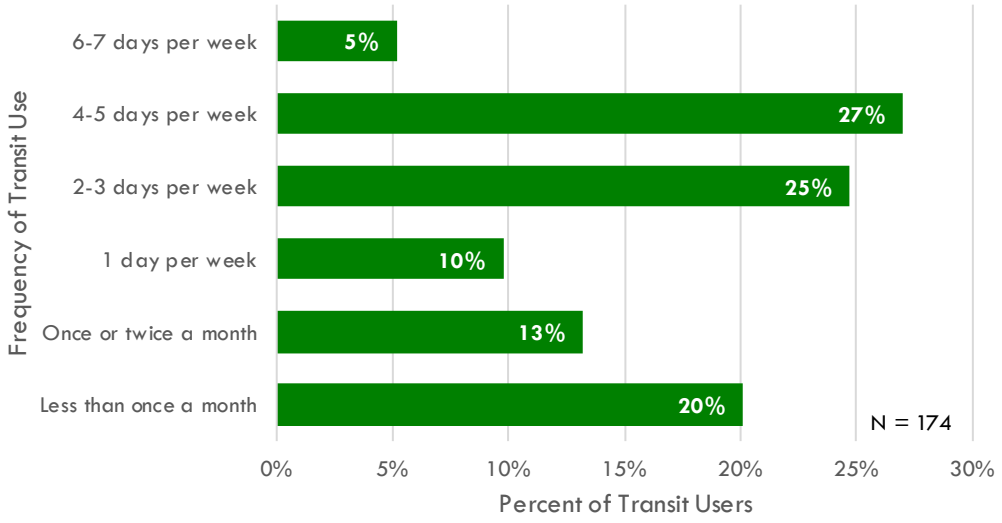
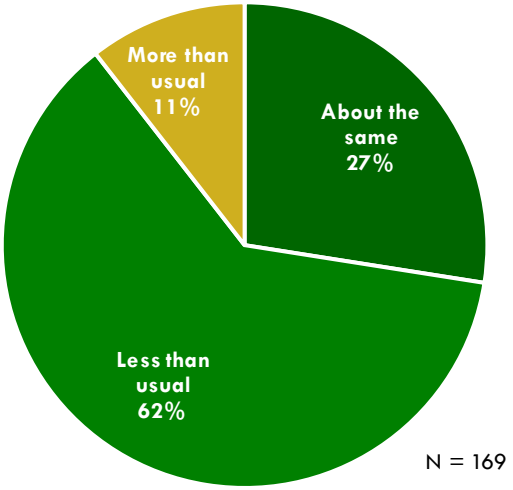


Figure 6-7 Change in Transit Ridership Following COVID-19 Pandemic



Frequent and Occasional Transit Riders

Respondents who indicated that they ride transit at least once per week were asked a series of questions related to their travel patterns and attitudes toward transit. The primary reasons respondents use transit is because they do not have access to a car or cannot drive themselves (64%) and because the service is convenient (53%), as shown in Figure 6-3. Of the "other" reasons listed, many included positive experiences with bur operators. Most respondents use transit to go shopping or to access grocery stores (75%) and for medical or dental appointments (60%). Only 29% of respondents use transit for work and 16% for school or college. This suggests that City of Commerce Transit service is primarily used to connect people to services and provides mobility to people without access to a vehicle.

Figure 6-8 Reasons Survey Respondents Ride Transit

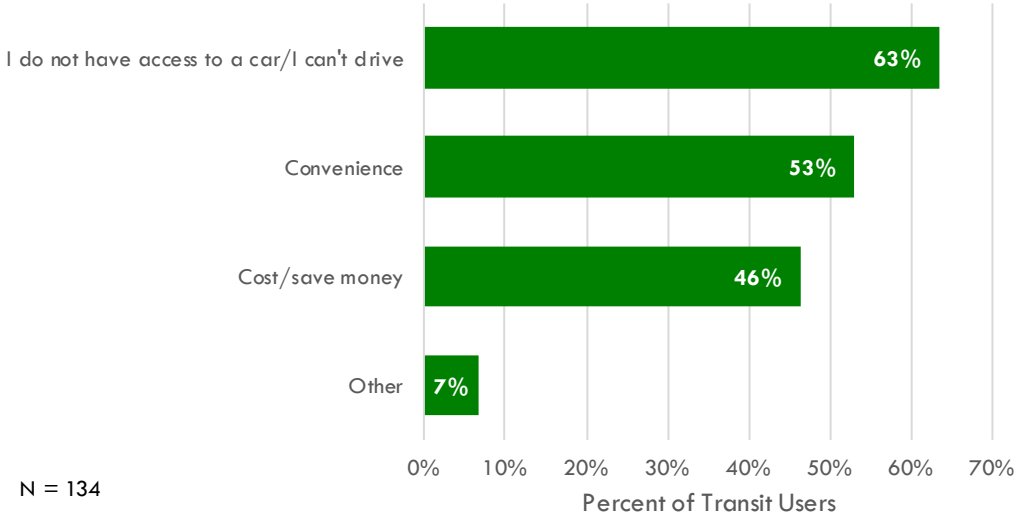
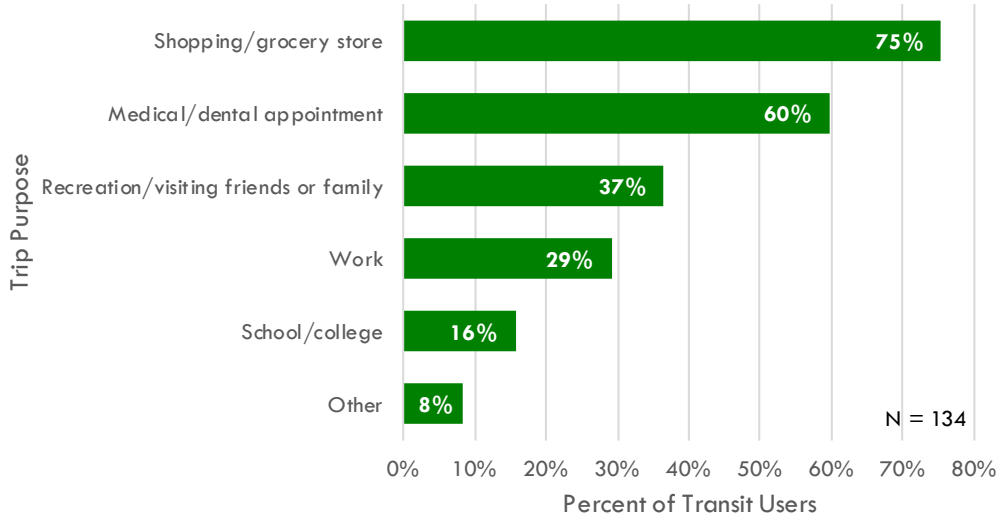
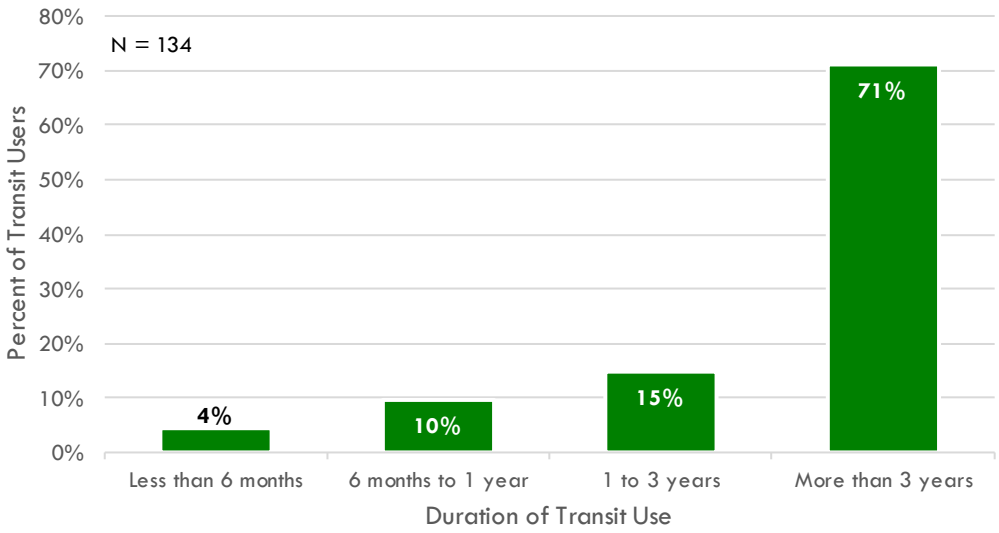


Figure 6-9 Survey Respondents Trip Purposes



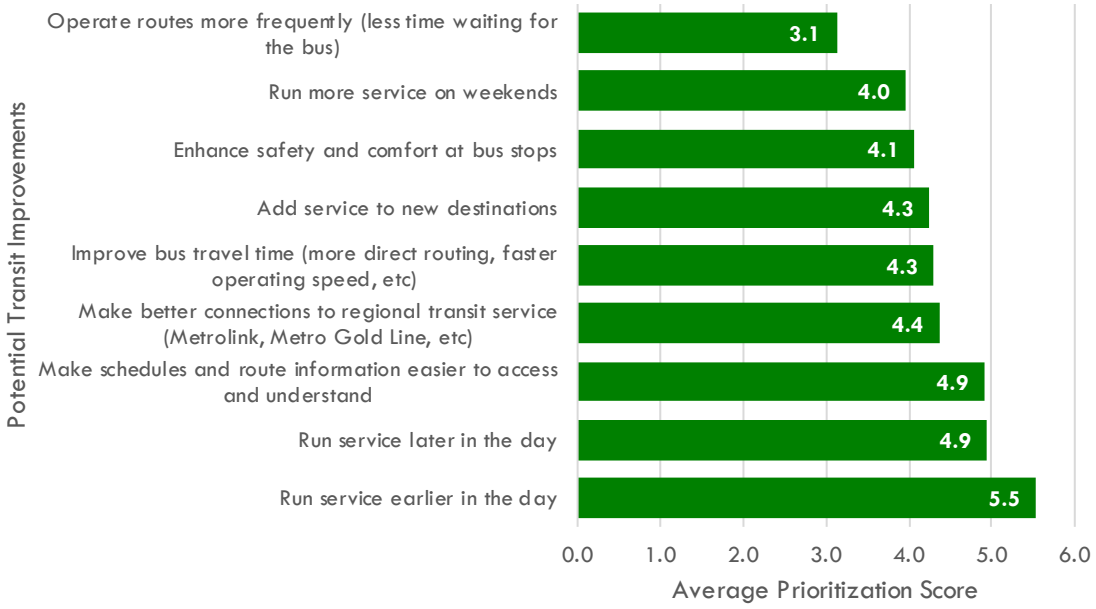
The majority of frequent and occasional transit riders (71%) are long-time customers who have ridden for more than three years. About 14% of respondents are newer riders who have been riding City of Commerce Transit for less than a year.

Figure 6-10 Duration of Transit Use



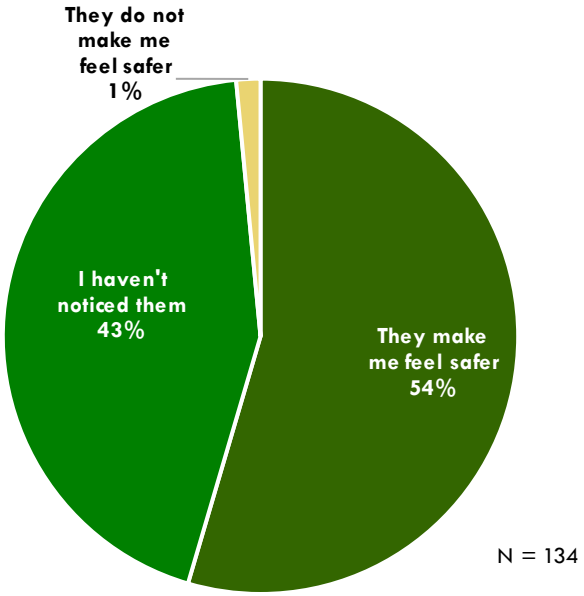
When asked to rank potential improvements on a scale of 1-9 in order from most important (1) to least important (9), respondents indicated a high priority for routes to operate more frequently, expand weekend services, and improve safety and comfort of bus stops. Figure 6-6 shows the average ranking for each potential improvement. Lower numbers indicate a higher priority for an improvement, while higher numbers indicate a lower priority. The least important improvements identified by respondents include earlier and later service in the day and making existing schedules and route information easier to understand.

Figure 6-11 Average Score For Potential Improvements



The City of Commerce recently installed new lighting at several bus stops. When asked about their perceptions of these new lighting improvements the majority of respondents stated that they felt safer waiting at the stops (54%) but a large percentage have not noticed them (43%), as shown in Figure 6-7.

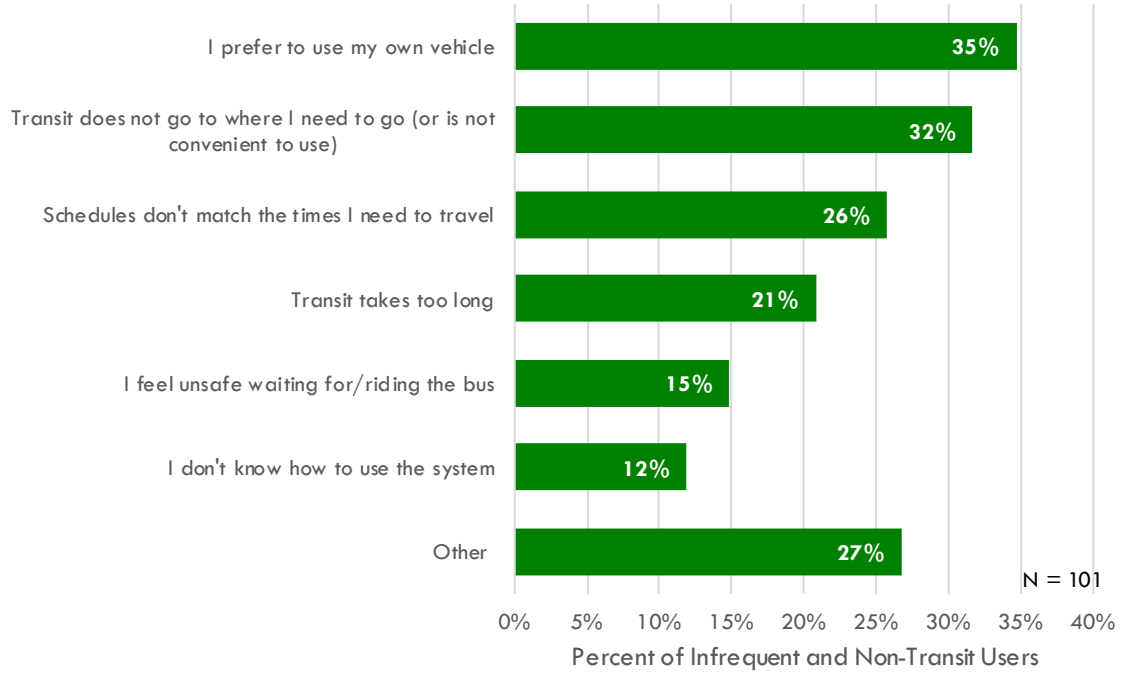
Figure 6-12 Perceptions of New Lighting Improvements in the City of Commerce



Infrequent and Non-Riders

Respondents who indicated that they don't ride transit or ride transit less than once per week were asked why they don't ride transit more often. The two most common responses include prefering to use their own vehicle and that transit does not go where they need it go (Figure 6-5). People responding with "other" generally have not been riding transit because they don't live in Commerce or due to COVID-19 related impacts.

Figure 6-13 Reasons Survey Respondents Don't Ride Transit



Open-Ended Comments

All respondents, regardless of their transit usage characteristics, were asked to provide general feedback on transit in Commerce as well as identify desired new destinations that transit does not currently serve. Commonly identified new destinations for City of Commerce Transit service include the neighboring cities of Montebello, Downey, Whittier, and Pico Rivera. Respondents also identified specific destinations, including connections to the LA Metro Rail L Line, East Los Angeles College, the Shops at Montebello, and the Los Angeles County Regional Food Bank. When asked to provide general feedback, most open-ended comments expressed gratitude to the City of Commerce Transit for providing the service and complimented vehicle operators' professionalism and demeanor. Comments requesting specific service changes include providing more service outside of the City of Commerce that connects with other neighboring transit agencies and serving more cultural destinations with restaurants and shopping. Other comments requested improvements to bus stop amenities, including more benches, shade, trash cans, and improved signage.

Respondent Demographics

Survey respondents were asked a series of demographic questions. Ninety-two percent indicated that they live and/or work in commerce (Figure 6-13). Of the 15% of respondents who work in Commerce but live somewhere else, 63% get around Commerce using transit and 83% have used City of Commerce Transit before. Respondents selecting "other" either previously lived in the City of Commerce or live in a nearby city. The majority of survey respondents (74%) live in the 90040 zip code which contains the City of Commerce, as shown in Figure 6-15. An additional 10% live in the East Los Angeles zip codes of 90022 and 90201. Respondents identified living in 21 additional zip codes throughout the region, including zip codes within the cities of Los Angeles, Downey, Montebello, Rosemead, Maywood, Whittier, Bellflower, and Long Beach.

When asked about occupational status, 40% of respondents identified as a retiree. Only 35% of respondents are employed, including both full time and part time employment. The mixed occupations of respondents indicates that City of Commerce Transit serves people with unique trip patterns and balances peak period commute trips with off-peak service related trips.

The largest age group of survey respondents (40%) were people ages 65 or older (Figure 6-22). This corresponds with the high number of respondents who indicated they are retired. The large representation of senior populations may be a result of targeted outreach at the City of Commerce Senior Center and may not be representative of system ridership.

The majority of respondents (78%) identified as being Hispanic or Latinx. There were also 11% of respondents who identified as White or Caucasian (Figure 6-16). When asked what language is typically spoken in the respondent's home, 57% of reported speaking English, while 41% reported speaking Spanish (Figure 6-17). Others included bilingual, Cantonese, and Chinese speaking households.

One-third of respondents have an annual household income of less than $15,000. More than 71% of respondents have annual household incomes less than the median household income in Commerce, which the US Census reported as $47,083 as of 2018 (Figure 6-20).

Almost two-thirds of respondents live in households with three or fewer people (Figure 6-21). However, approximately 11% of respondents live in households with 6 or more people.

Figure 6-14 Relationship to the City of Commerce

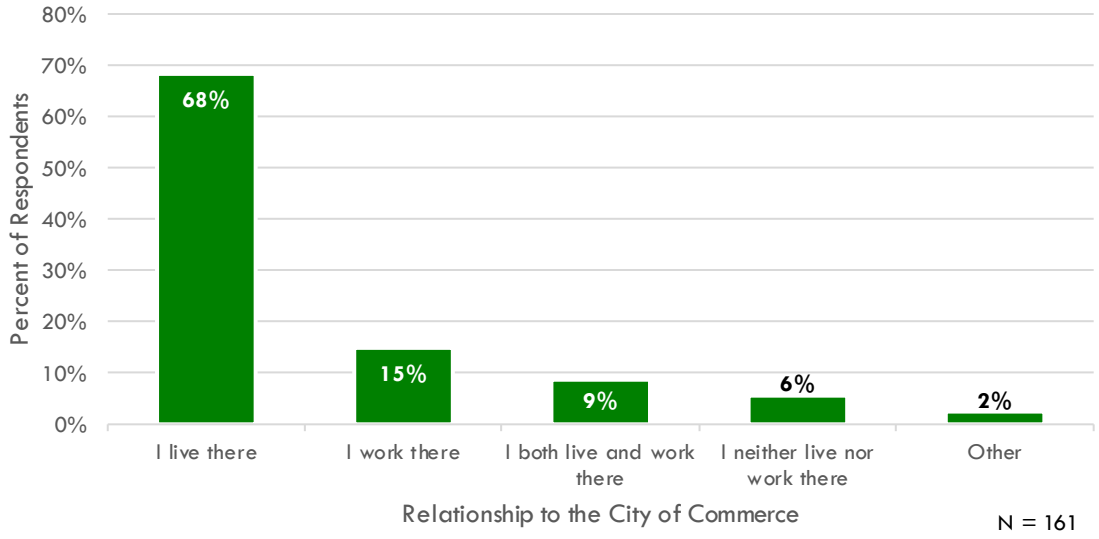


Figure 6-15 Home Zip Code

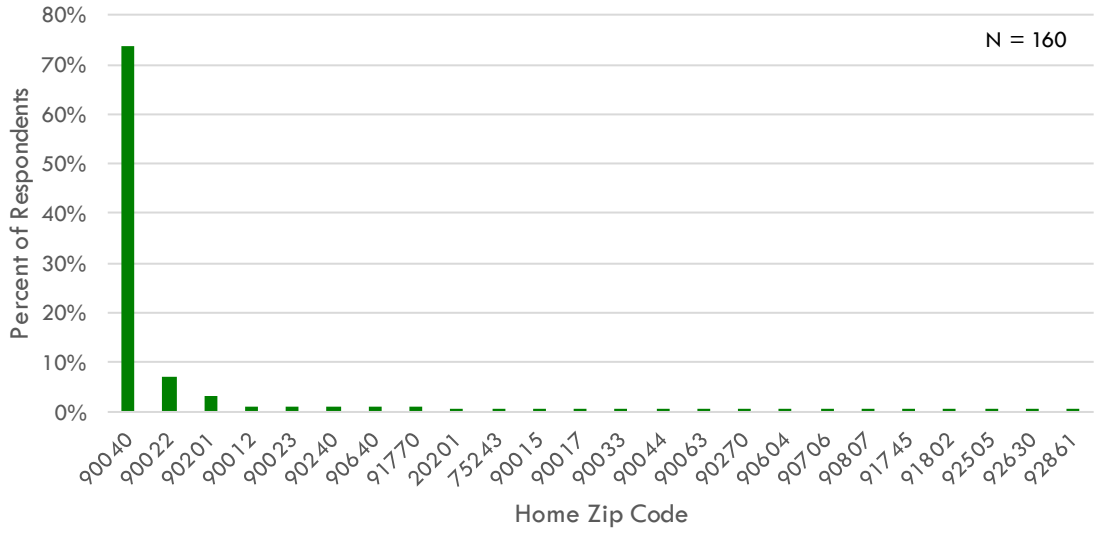


Figure 6-16 Occupation Status

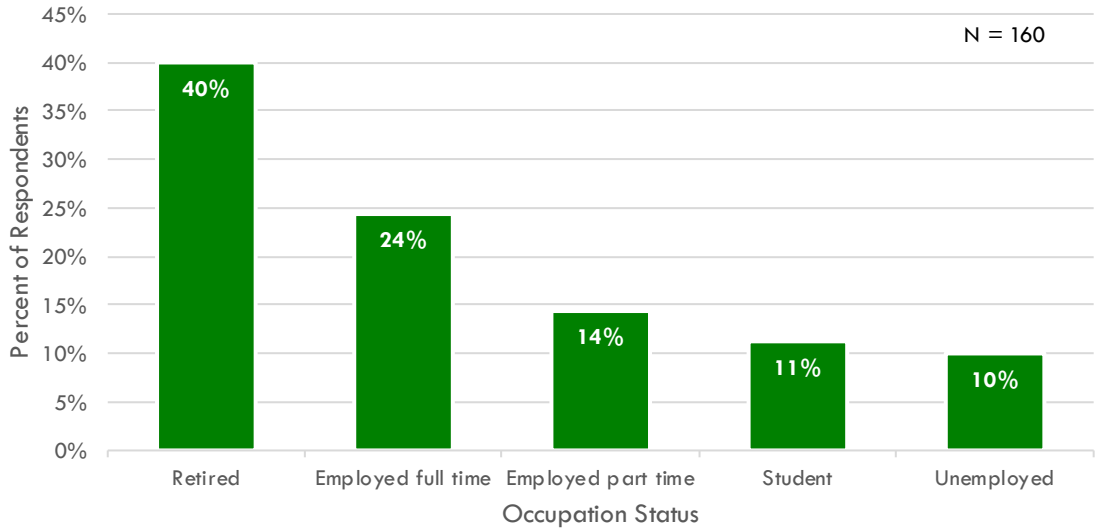


Figure 6-17 Age

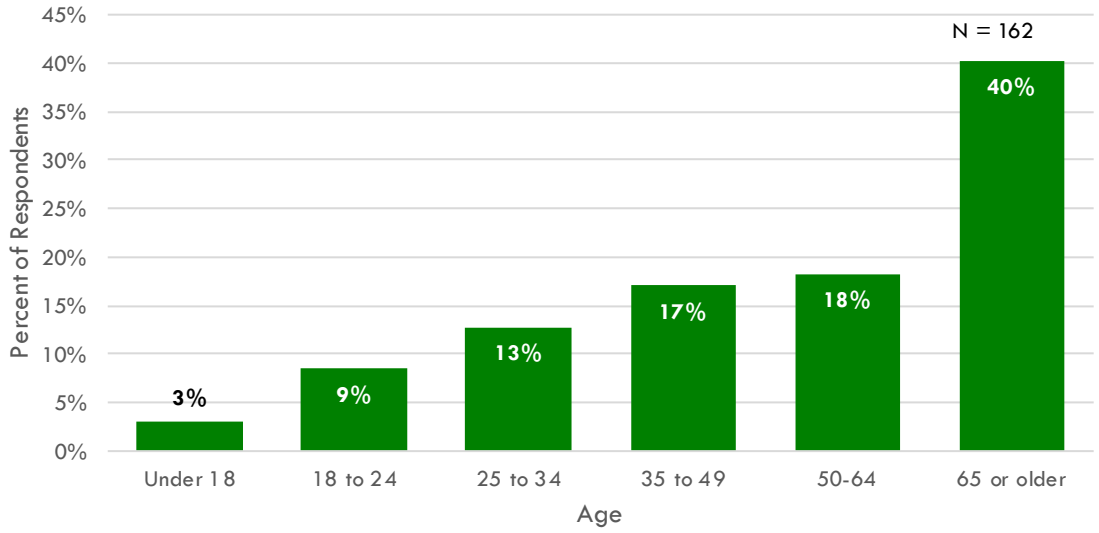


Figure 6-18 Race and Ethnicity

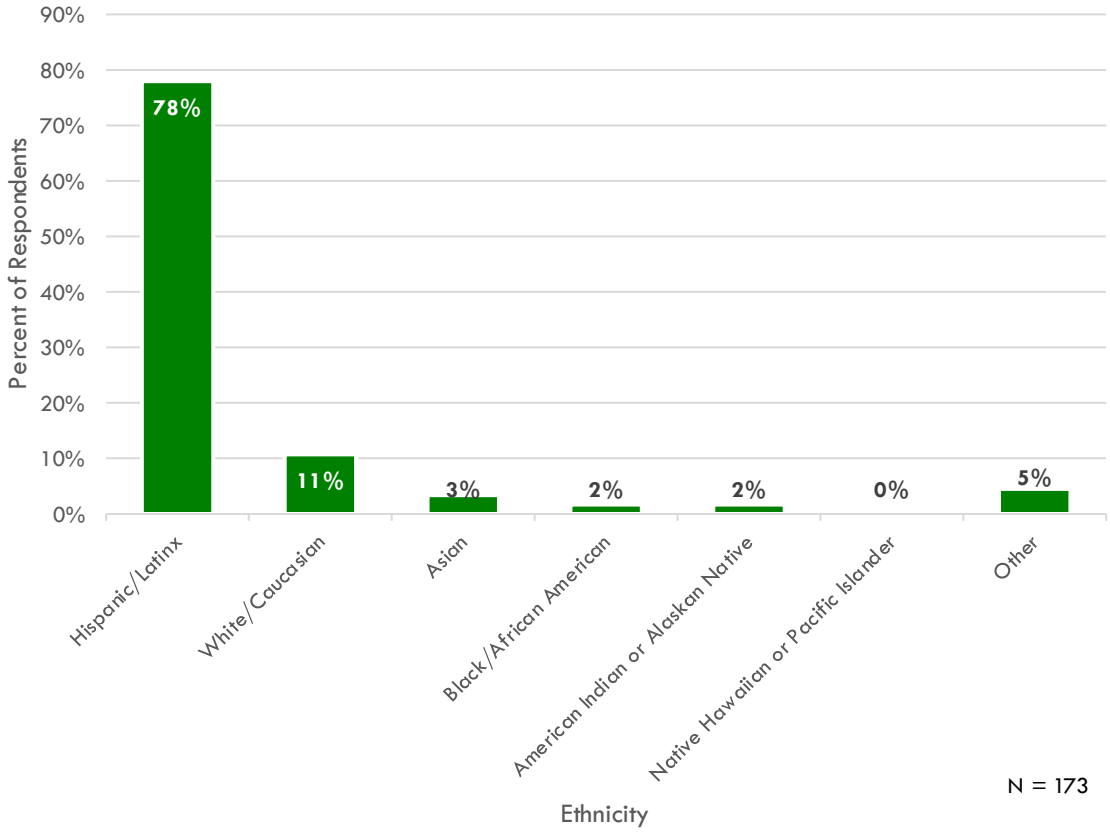


Figure 6-19 Language Spoken at Home

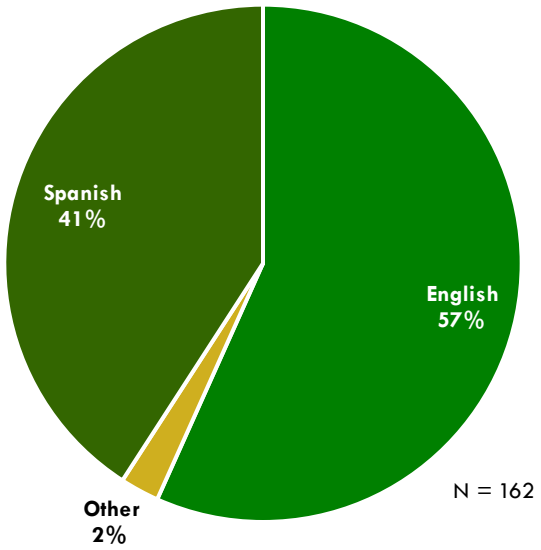


Figure 6-20 Survey Respondents' Household Income

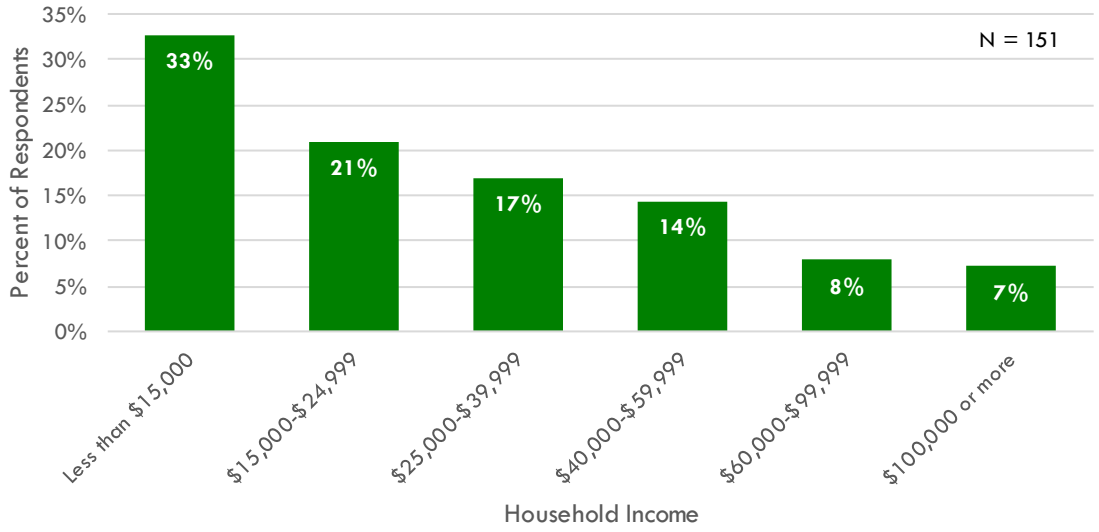
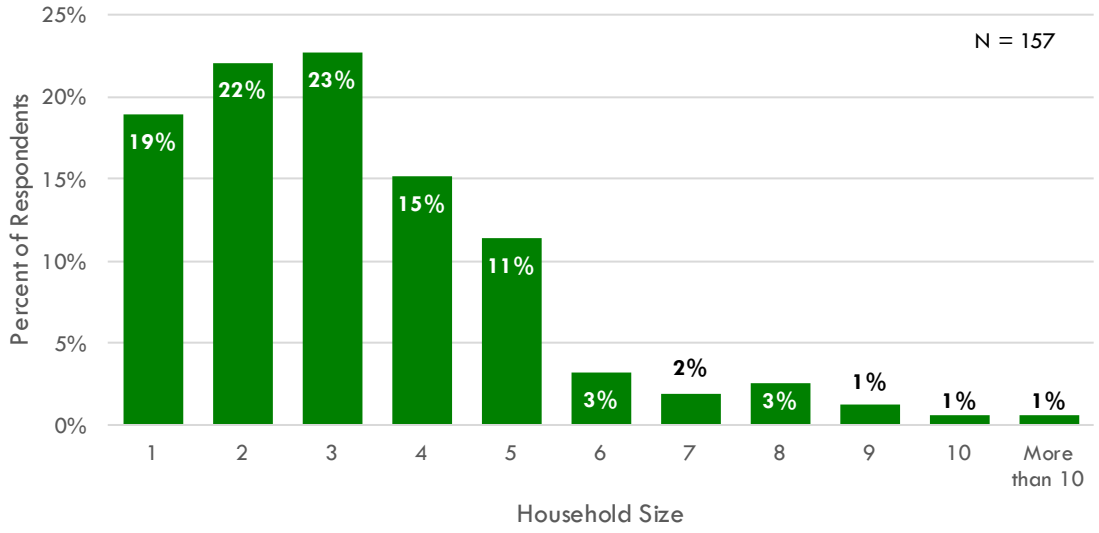
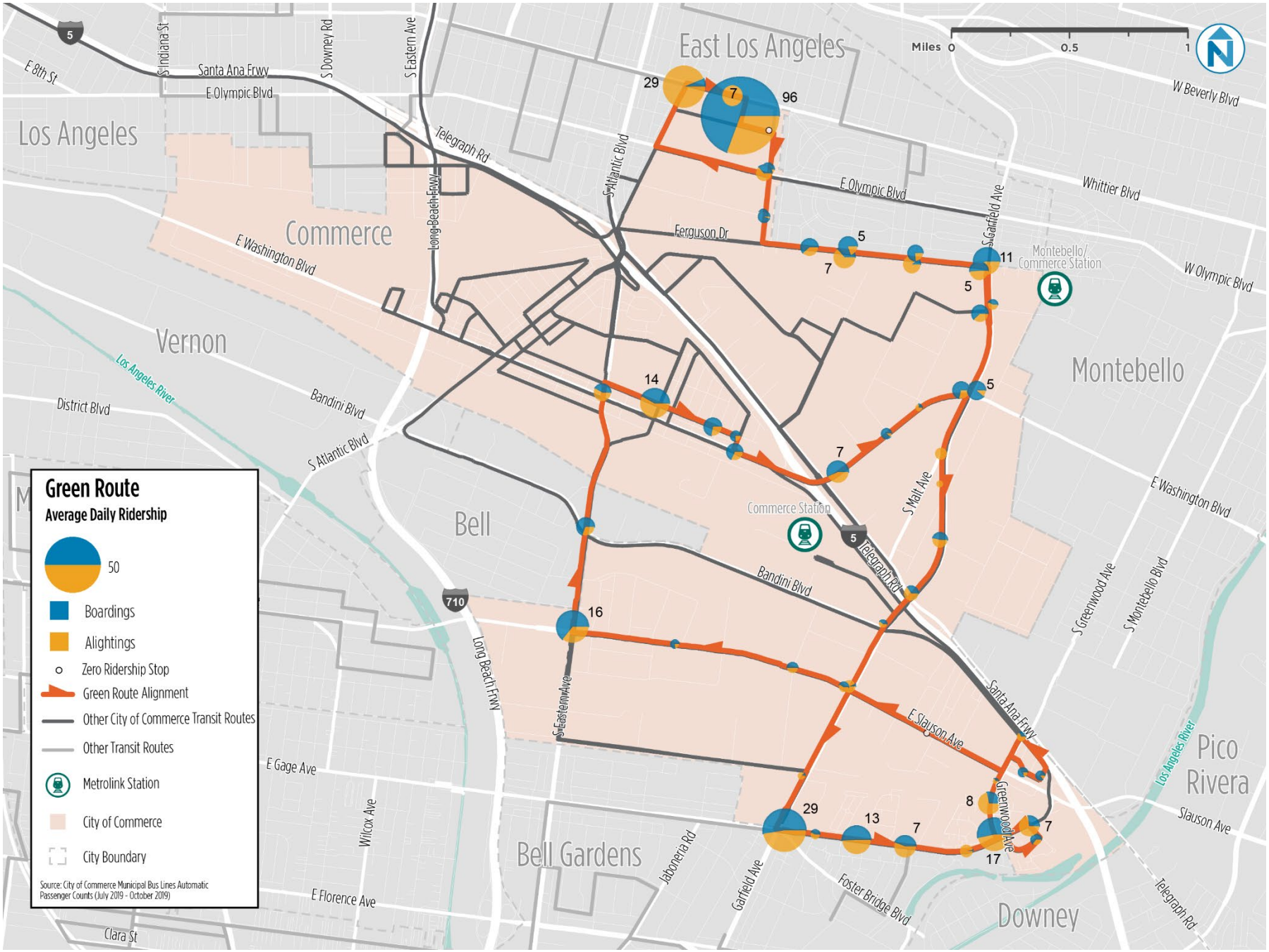


Figure 6-21 Household Size



Appendix A Ridership Maps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S Garfield Ave
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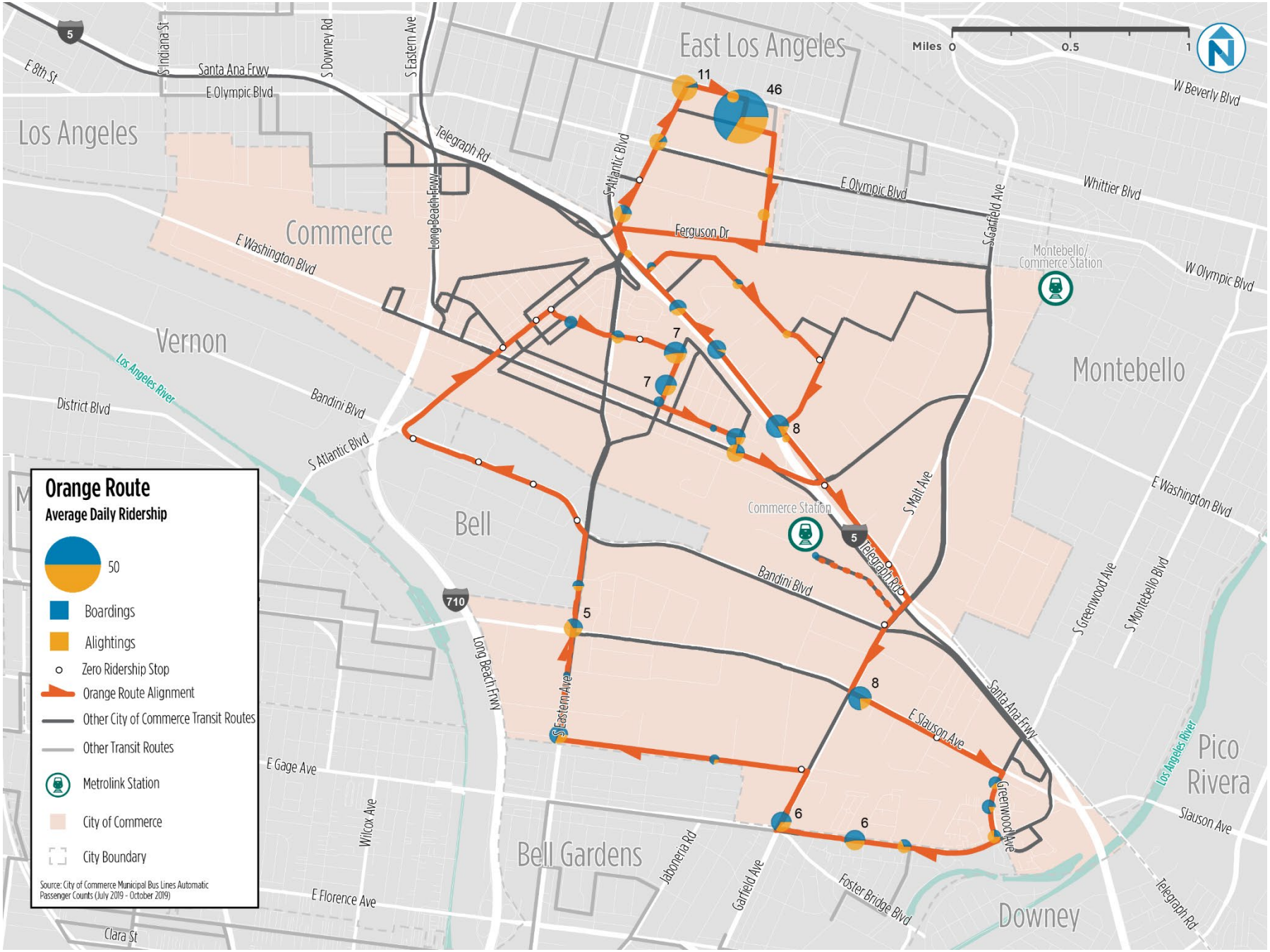
S Greenwood Ave
S Montebello Blvd
S Eastern Ave
E Slauson Ave
Greenwood Ave
Slauson Ave
E Gage Ave
Wilcox Ave
Jaboneria Rd
Foster Bridge Blvd
E Florence Ave
Clara St
Green Route
Average Daily Ridership
50
Boardings
Alightings
Zero Ridership Stop
Green Route Alignment
Other City of Commerce Transit Routes
Other Transit Routes
Metrolink Station
City of Commerce
City Boundary
Source: City of Commerce Municipal Bus Lines Automatic Passenger Counts (July 2019 - October 2019)


Orange Route
Average Daily Ridership
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Zero Ridership Stop
Orange Route Alignment
Other City of Commerce Transit Routes
Other Transit Routes
Metrolink Station
City of Commerce
City Boundary
Source: City of Commerce Municipal Bus Lines Automatic Passenger Counts (July 2019 - October 2019)
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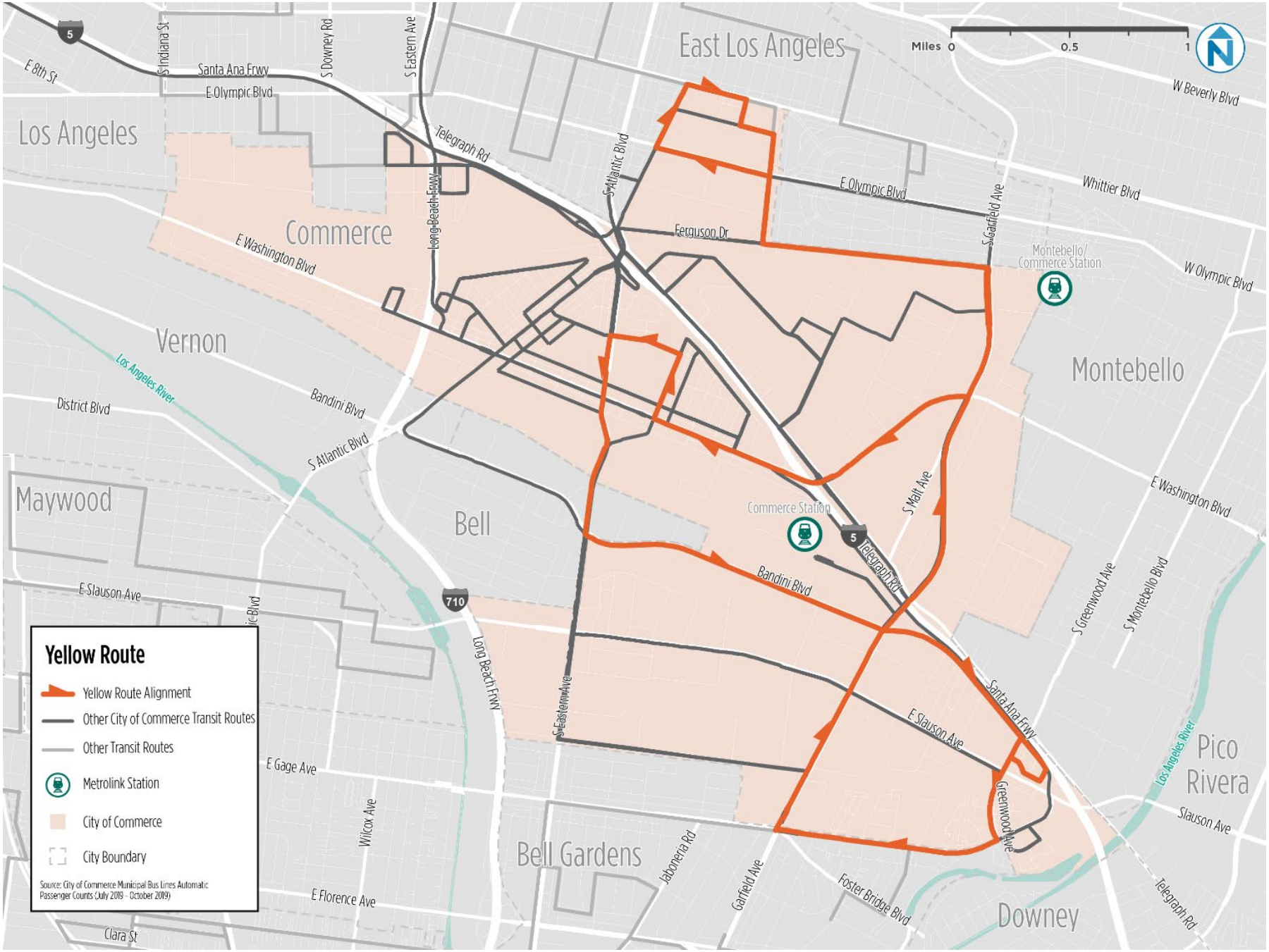
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Greenwood Ave
Los Angeles River
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E Gage Ave
Wilcox Ave
Jabonería Rd
Garfield Ave
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Telegraph Rd
E Florence Ave
Clara St
Yellow Route
Yellow Route Alignment
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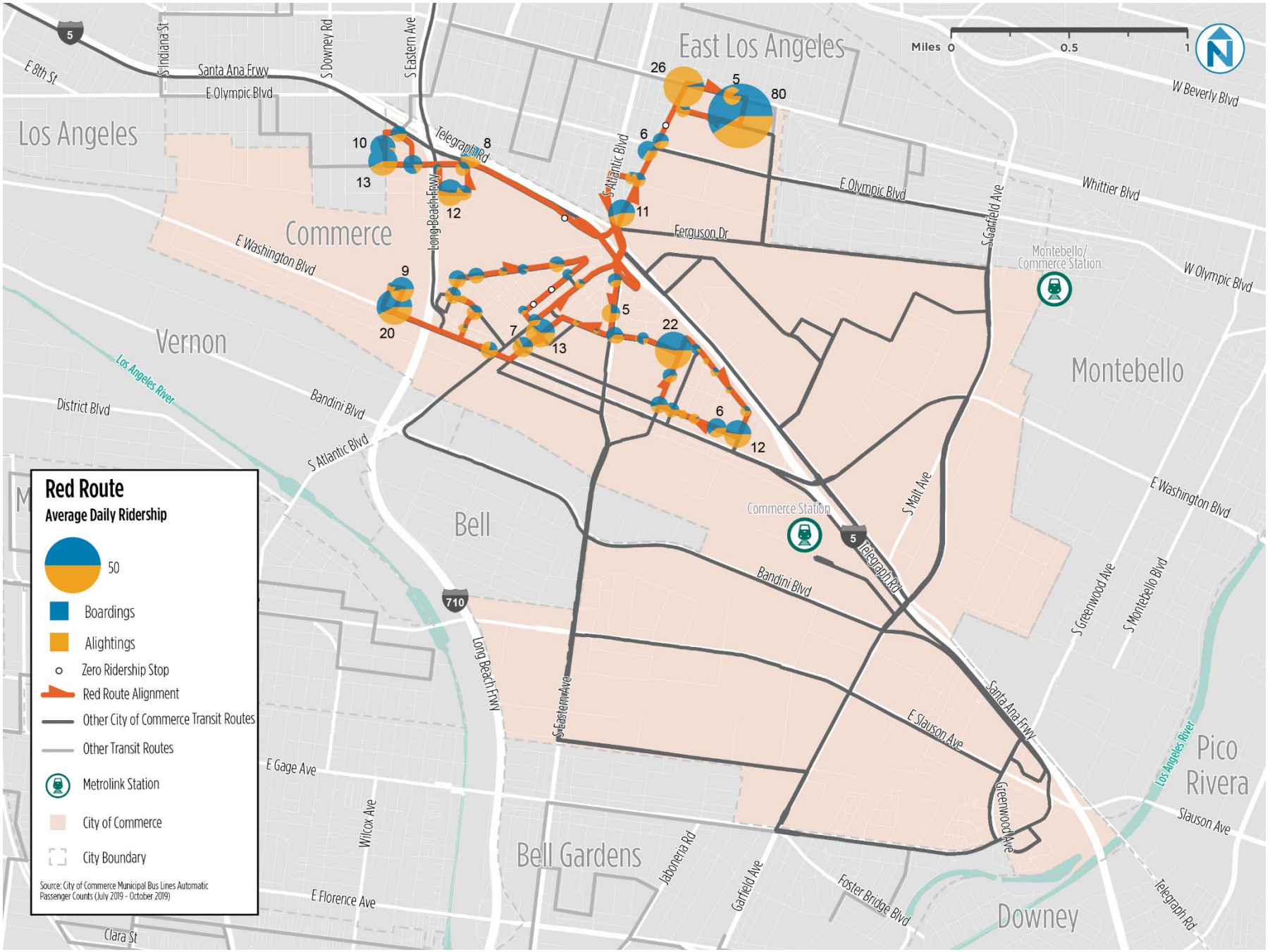
Other Transit Routes
Metrolink Station
City of Commerce
City Boundary
Source: City of Commerce Municipal Bus Lines Automatic Passenger Counts (July 2019 - October 2019)


Red Route
Average Daily Ridership
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Boardings
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Zero Ridership Stop
Red Route Alignment
Other City of Commerce Transit Routes
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Metrolink Station
City of Commerce
City Boundary
Source: City of Commerce Municipal Bus Lines Automatic Passenger Counts (July 2019 - October 2019)
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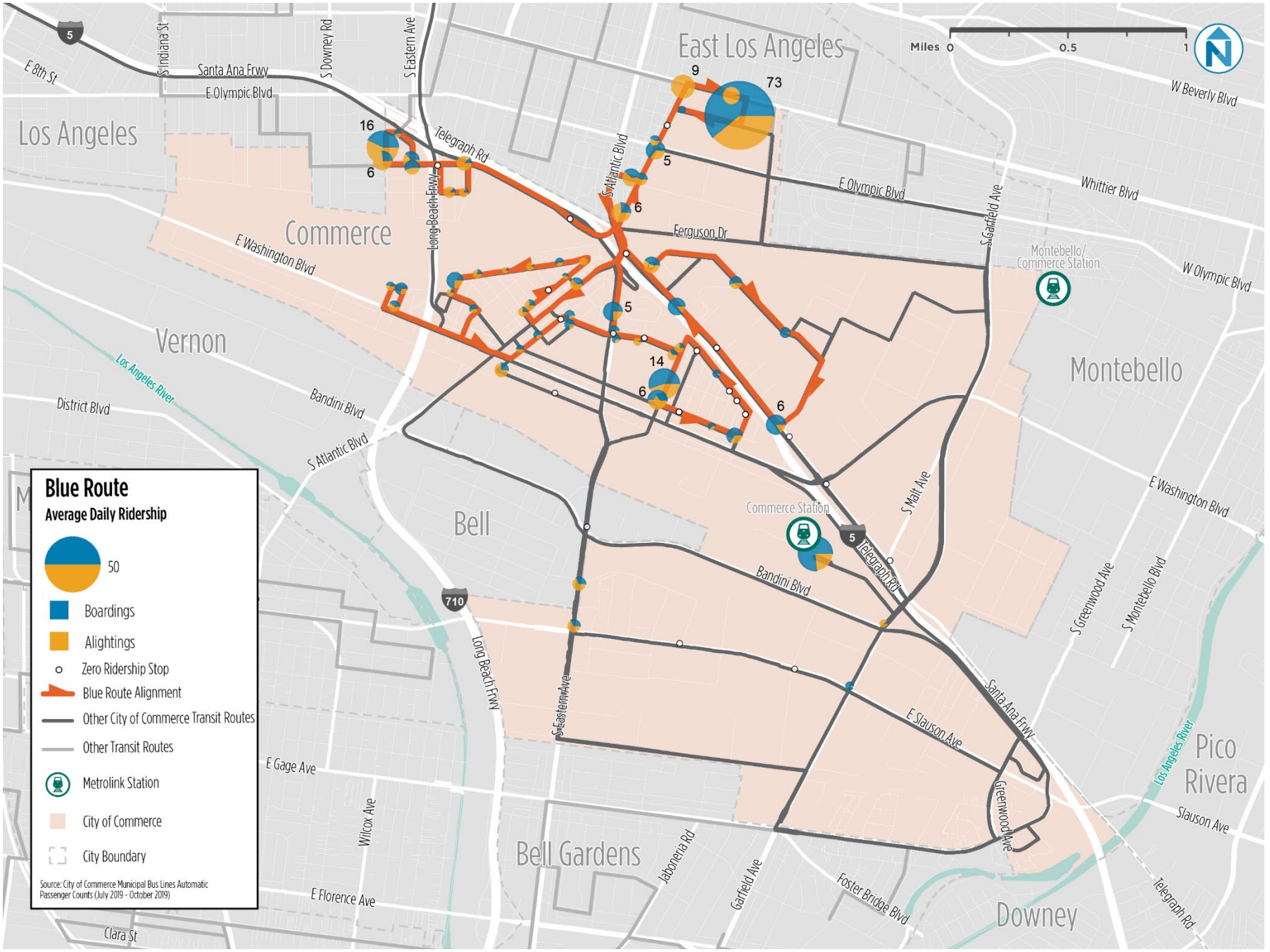
Blue Route
Average Daily Ridership
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Alightings
Zero Ridership Stop
Blue Route Alignment
Other City of Commerce Transit Routes
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City Boundary
Source: City of Commerce Municipal Bus Lines Automatic Passenger Counts (July 2019 - October 2019)
Miles 0 0.5 1
East Los Angeles
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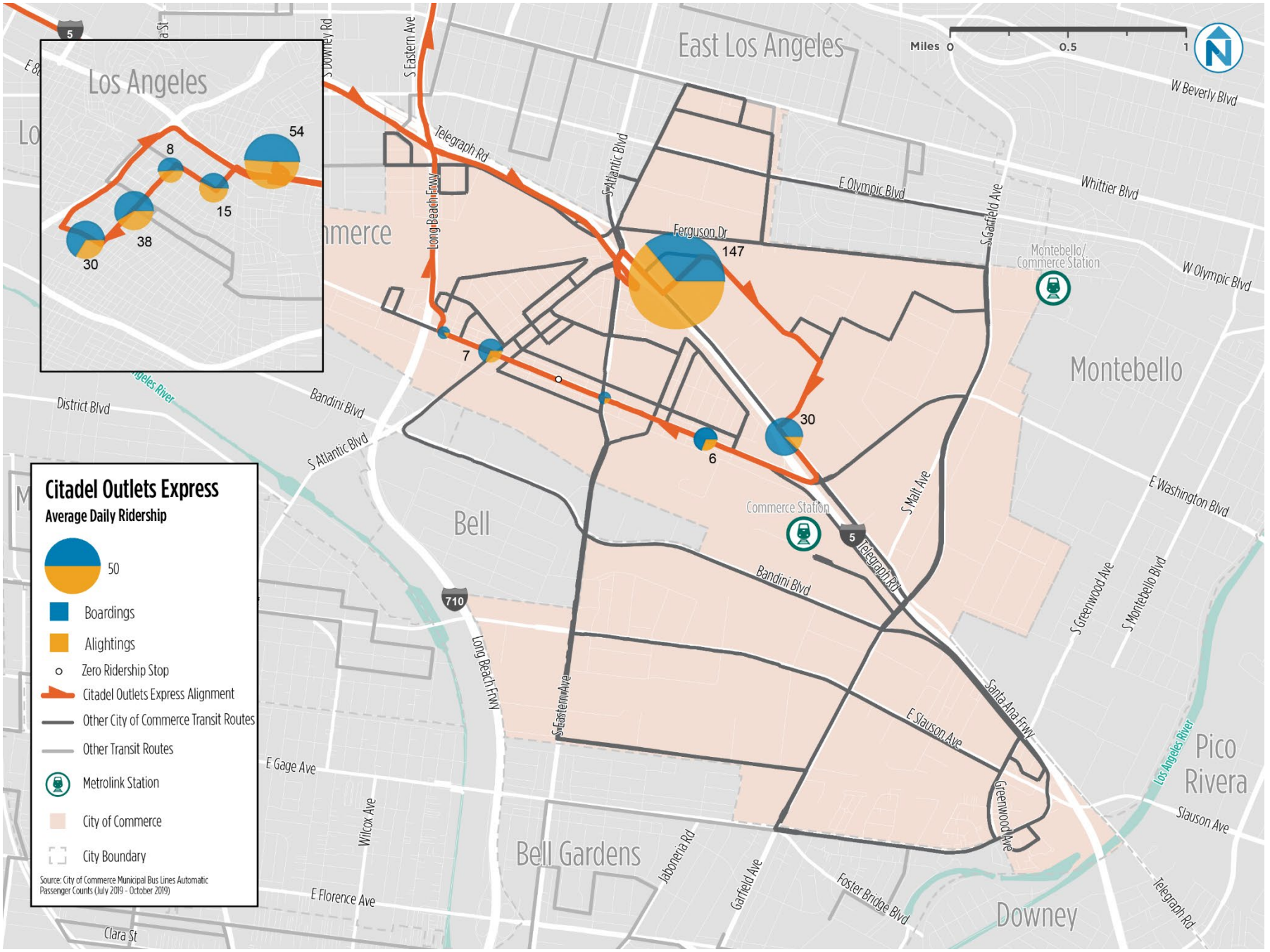
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Citadel Outlets Express
Average Daily Ridership
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Zero Ridership Stop
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Other City of Commerce Transit Routes
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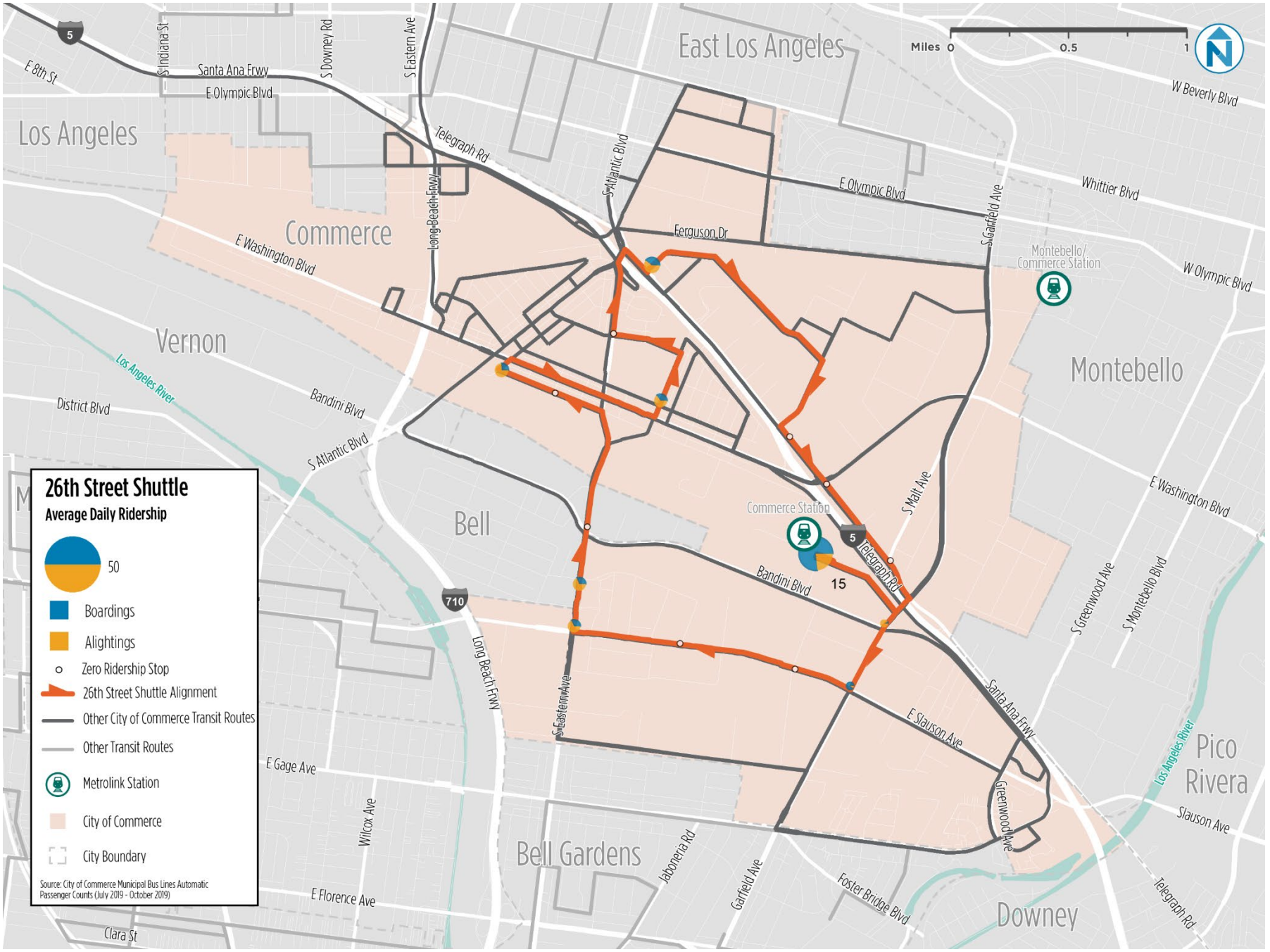
Metrolink Station
City of Commerce
City Boundary
Source: City of Commerce Municipal Bus Lines Automatic Passenger Counts (July 2019 - October 2019)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Average Daily Ridership
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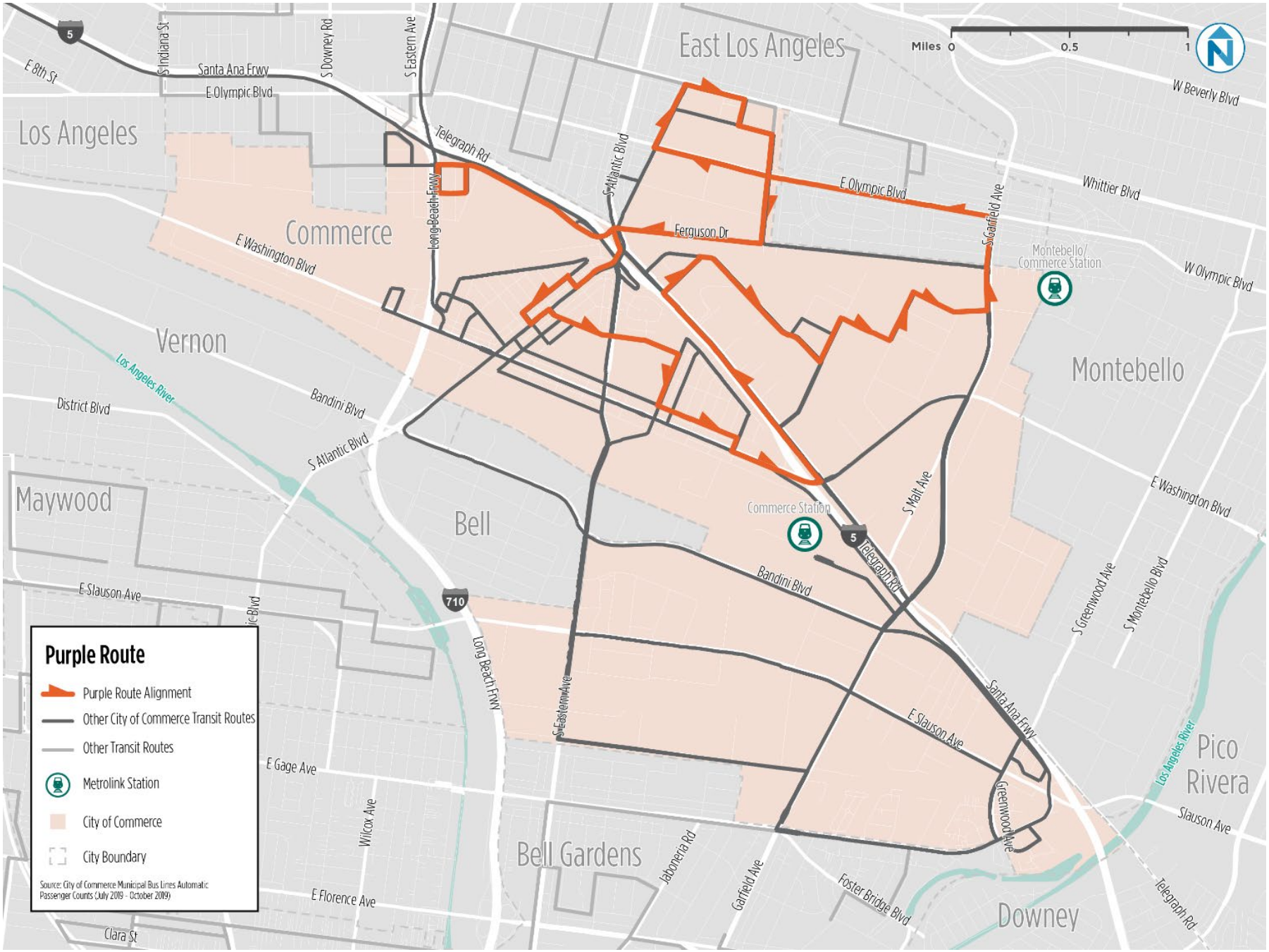
Zero Ridership Stop
26th Street Shuttle Alignment
Other City of Commerce Transit Routes
Other Transit Routes
Metrolink Station
City of Commerce
City Boundary
Source: City of Commerce Municipal Bus Lines Automatic Passenger Counts (July 2019 - October 2019)


Purple Route
Purple Route Alignment
Other City of Commerce Transit Routes
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Metrolink Station
City of Commerce
City Boundary
Source: City of Commerce Municipal Bus Lines Automatic Passenger Counts (July 2019 - October 2019)
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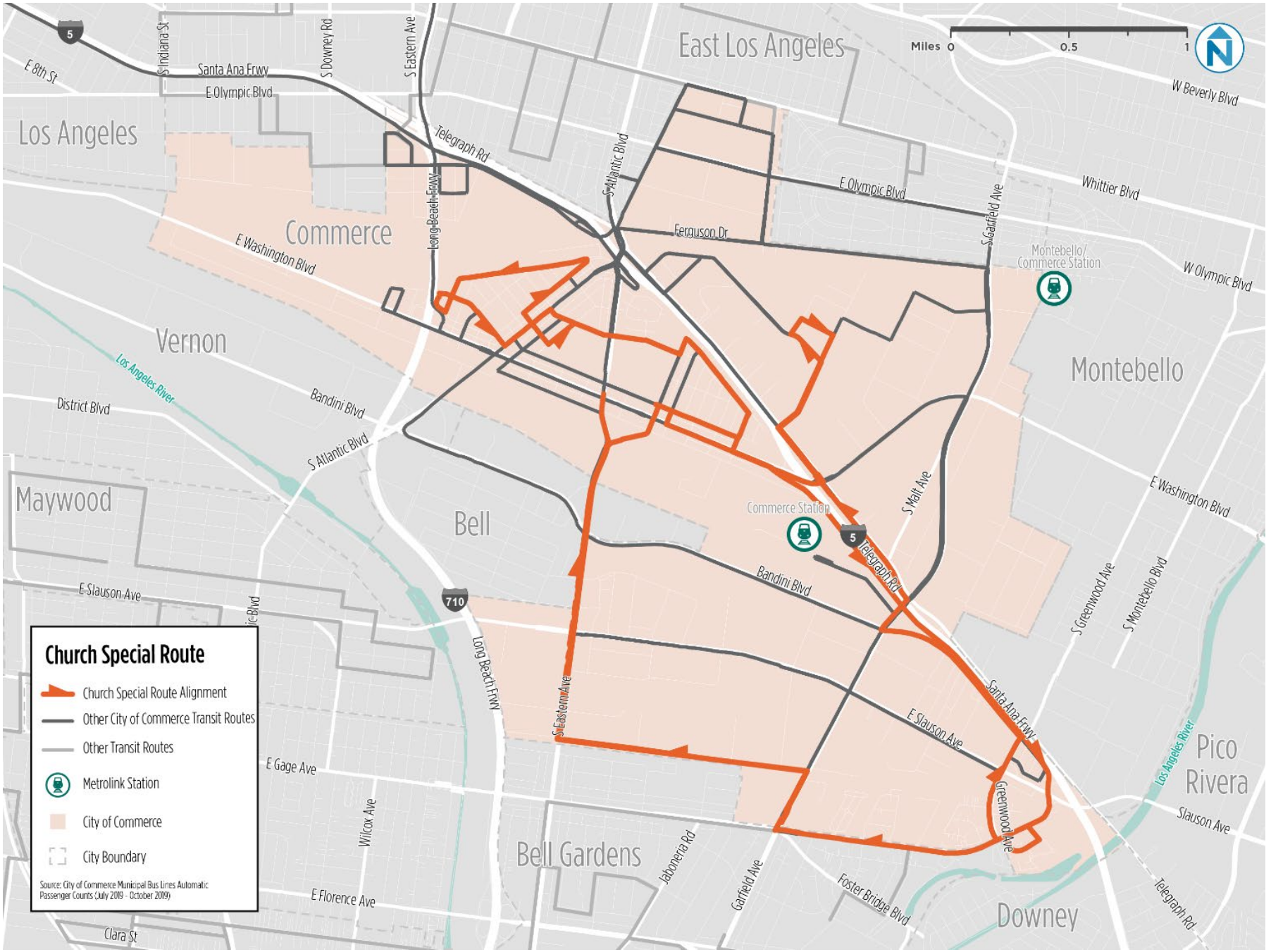
Los Angeles River


Church Special Route
Church Special Route Alignment
Other City of Commerce Transit Routes
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City of Commerce
City Boundary
Source: City of Commerce Municipal Bus Lines Automatic Passenger Counts (July 2019 - October 2019)
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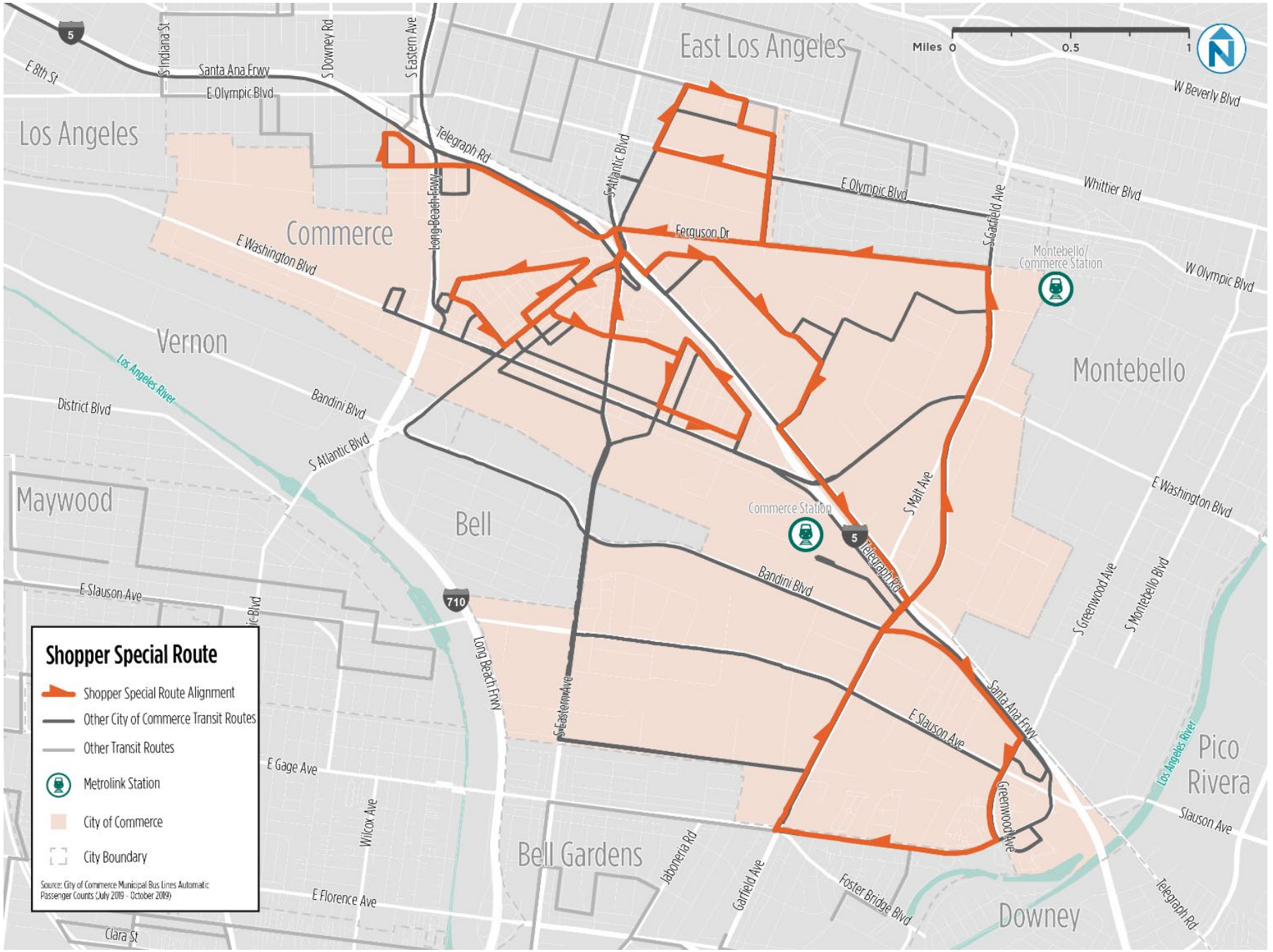
710
5

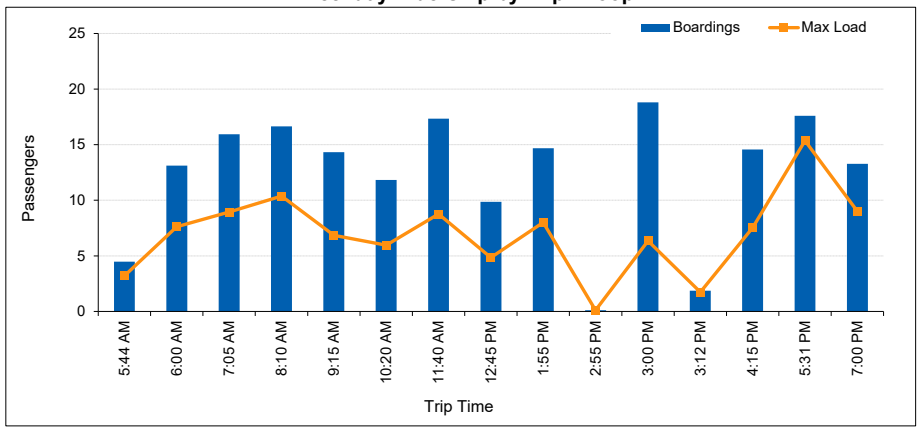

Miles 0
0.5
1
East Los Angeles
Los Angeles
Commerce
Vernon
Montebello
Maywood
Bell
Bell Gardens
Pico Rivera
Downey
Santa Ana Frwy
E Olympic Blvd
E 8th St
S Indiana St
S Downey Rd
S Eastern Ave
Telegraph Rd
Long Beach Frwy
S Atlantic Blvd
E Washington Blvd
Ferguson Dr
S Garfield Ave
Whittier Blvd
W Olympic Blvd
Montebello/
Commerce Station
Commerce Station
Los Angeles River
District Blvd
Bandini Blvd
S Maiff Ave
E Washington Blvd
S Greenwood Ave
S Montebello Blvd
E Slauson Ave
Slauson Ave
Greenwood Ave
E Gage Ave
Wilcox Ave
Jaboneria Rd
Garfield Ave
Foster Bridge Blvd
E Florence Ave
Clara St
Telegraph Rd
W Beverly Blvd
710
5
Shopper Special Route
Shopper Special Route Alignment
Other City of Commerce Transit Routes
Other Transit Routes
Metrolink Station
City of Commerce
City Boundary
Source: City of Commerce Municipal Bus Lines Automatic Passenger Counts (July 2019 - October 2019)

Appendix B Route Profiles

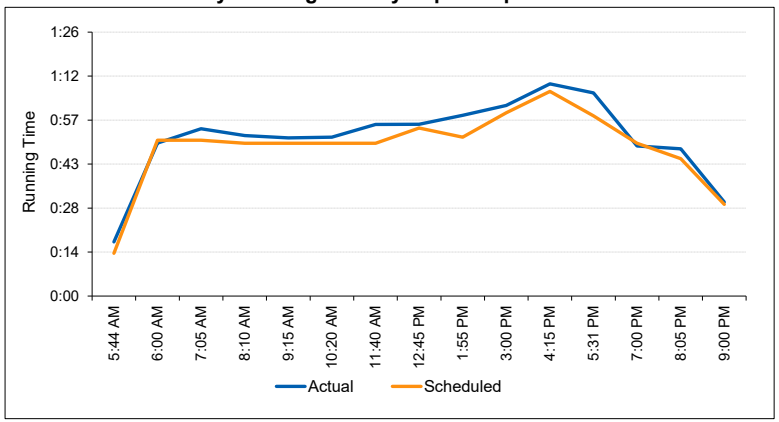
WEEKDAY

Route 100 Green Weekday		Route Productivity Summary				Route Operations Summary				
		Activity		Service Hours	Productivity	On-Time Performance			On-Board Load	
		Boardings	Alightings	Service Hours	Boardings per Service Hour	% On-Time	% Early	% Late	Max Passengers On Board	Max Load Location
	Total	191	179	12.6	15.1				84	Gerhart Ave & Union Pacific Ave (NB)
	Loop	191	179	12.6	15.1	70%	11%	19%	84	Gerhart Ave & Union Pacific Ave (NB)
	By Segment									
1	Commerce Shopping Center to Gage Ave & Garfield Ave	87	32	4.3	20.4	71%	29%	0%		
2	Gage Ave & Garfield Ave to Jillson St & Commerce Way	62	62	3.3	18.9	53%	0%	47%		
3	Jillson St & Commerce Way to Commerce Shopping Center	41	86	4.7	8.9	71%	0%	29%		
	By Time Period									
	AM	50	39	2.8	18.1				22	Ferguson Dr & Elton Ave (WB)
	Midday	68	57	4.4	15.5				28	Garfield Ave & Bandini Blvd
	PM	35	38	2.4	14.8				14	Ferguson Dr & Saybrook Ave (WB)
	Eve	37	45	3.1	12.2				30	Grace Pl & Gerhart Ave

Weekday Ridership by Trip - Loop

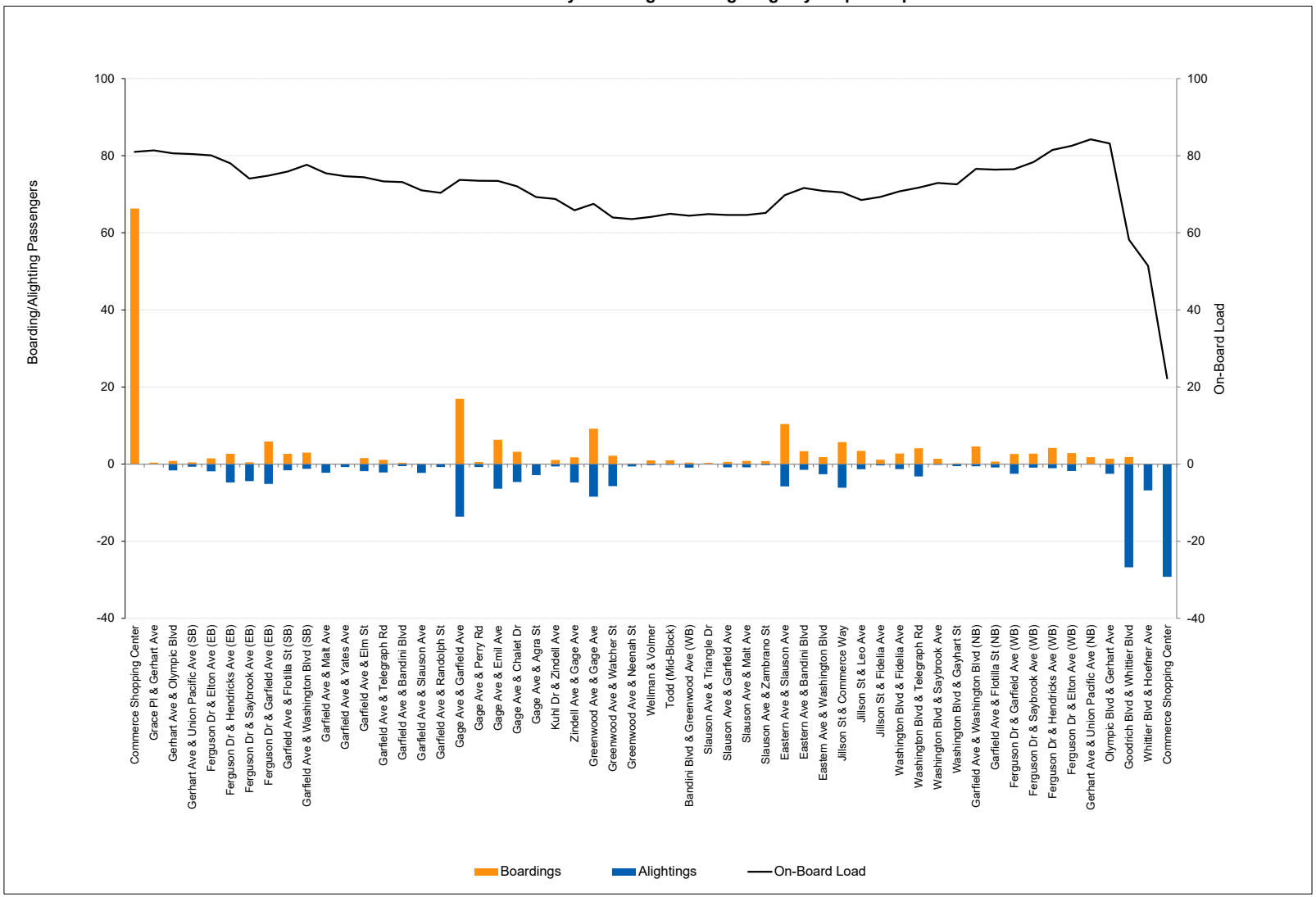


Weekday Running Time by Trip - Loop



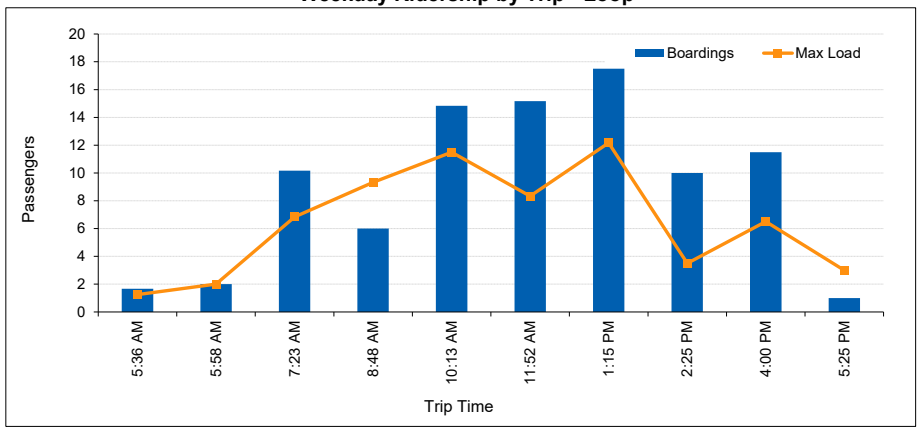
NELSON NYGAARD

Weekday Boardings and Alightings by Stop - Loop

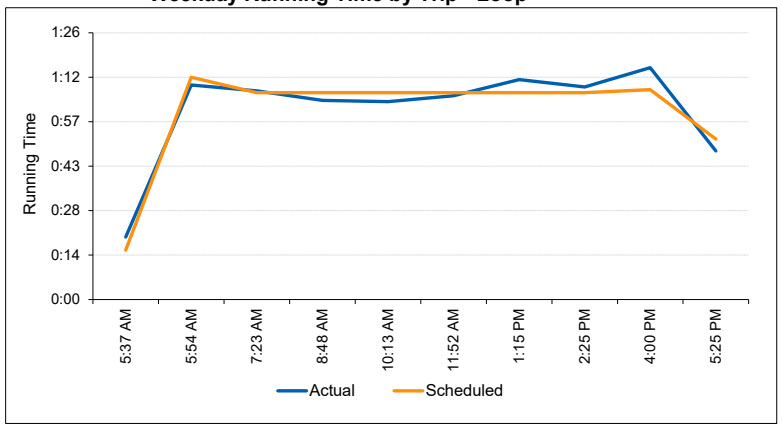


Route 200 Orange Weekday		Route Productivity Summary				Route Operations Summary				
		Activity		Service Hours	Productivity	On-Time Performance			On-Board Load	
		Boardings	Alightings	Service Hours	Boardings per Service Hour	% On-Time	% Early	% Late	Max Passengers On Board	Max Load Location
	Total	90	76	10.1	8.9				56	Telegraph Rd (Citadel)
	Loop	90	76	10.1	8.9	78%	11%	11%	56	Telegraph Rd (Citadel)
	By Segment									
1	Commerce Shopping Center to Gage Ave & Garfield Ave	45	16	4.8	9.4	100%	0%	0%		
2	Gage Ave & Garfield Ave to Commerce City Hall	18	14	3.0	5.9	70%	20%	10%		
3	Commerce City Hall to Commerce Shopping Center	27	46	2.4	11.3	44%	22%	33%		
	By Time Period									
	AM	14	12	2.5	5.5				9	Telegraph Rd & Tubeway Ave
	Midday	63	54	5.6	11.4				40	Telegraph Rd (Citadel)
	PM	13	11	2.0	6.3				8	Greenwood Ave & Neenah St

Weekday Ridership by Trip - Loop

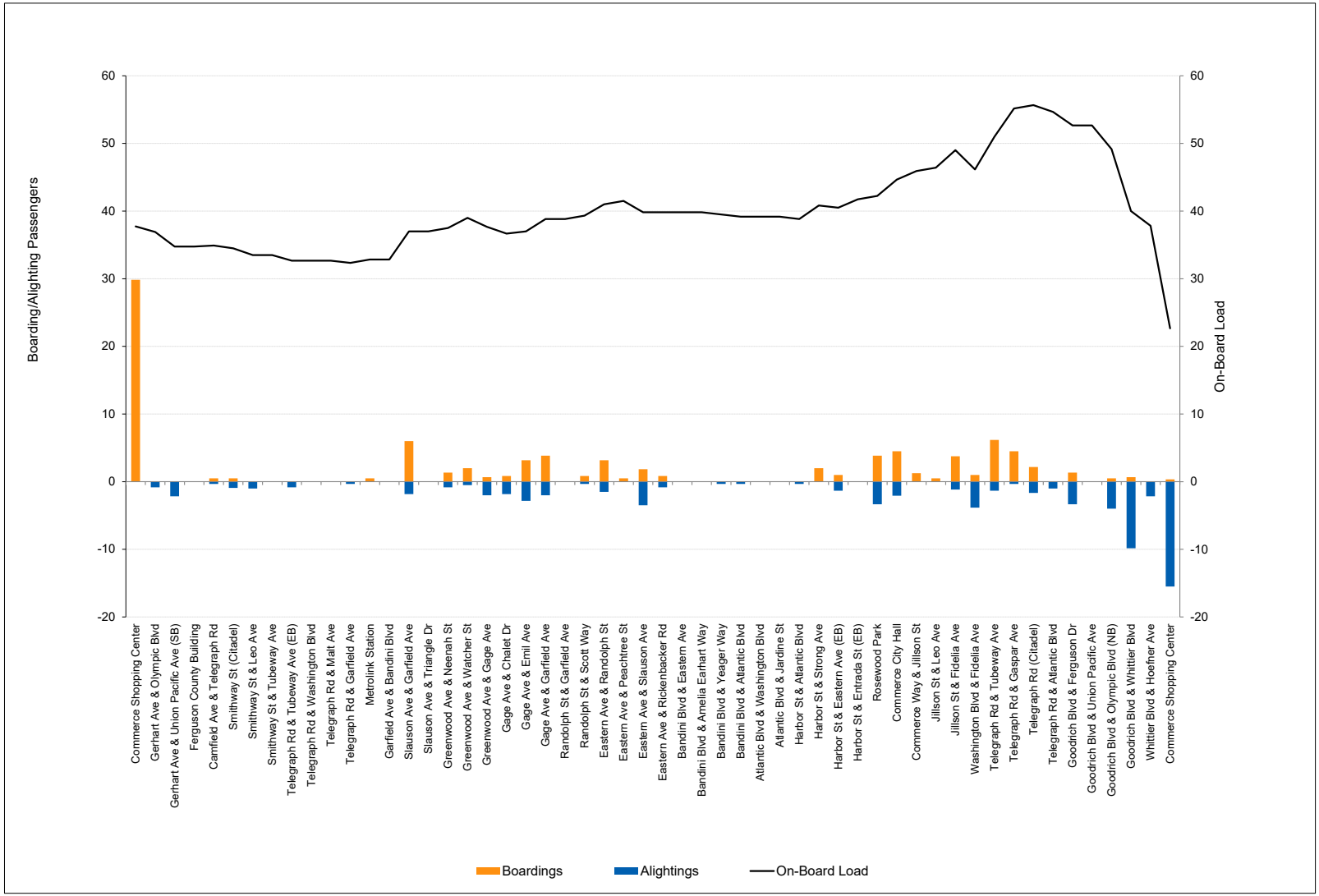


Weekday Running Time by Trip - Loop



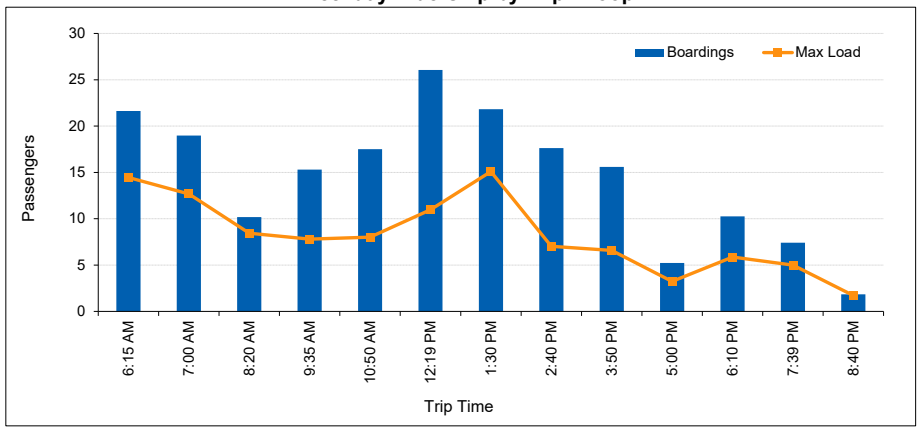
NELSON NYGAARD

Weekday On-Board by Stop and Time Period - Loop

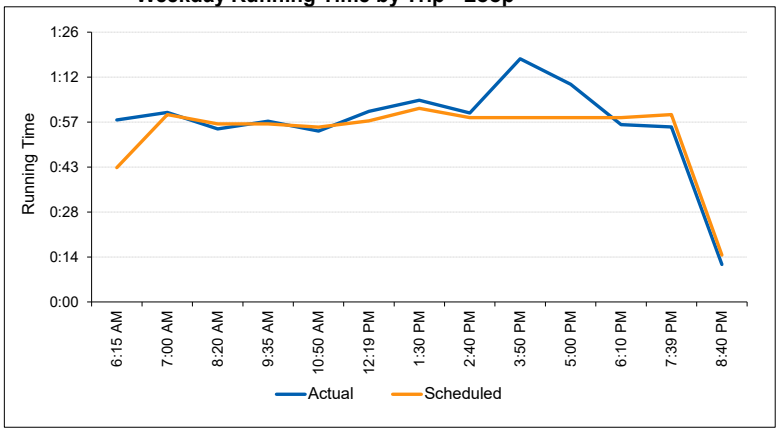


Route 400 Red Weekday		Route Productivity Summary				Route Operations Summary				
		Activity		Service Hours	Productivity	On-Time Performance			On-Board Load	
		Boardings	Alightings	Service Hours	Boardings per Service Hour	% On-Time	% Early	% Late	Max Passengers On Board	Max Load Location
	Total	189	193	11.7	16.1				71	Goodrich Blvd & Olympic Blvd (SB)
	Loop	189	193	11.7	16.1	84%	8%	8%	71	Goodrich Blvd & Olympic Blvd (SB)
	By Segment									
1	Commerce Shopping Center to Rosewood Park	64	14	1.9	34.3	77%	8%	15%		
2	Rosewood Park to Fidelia Ave & Jillson St	6	8	1.1	5.2	92%	8%	0%		
3	Fidelia Ave & Jillson St to Bedessen Ave & Washington Blvd	38	48	2.1	17.9	83%	17%	0%		
4	Bedessen Ave & Washington Blvd to Goodrich Blvd & Olympic Blvd (NB	77	65	6.1	12.7	83%	8%	8%		
5	Goodrich Blvd & Olympic Blvd (NB) to Commerce Shopping Center &	4	59	0.5	8.3	67%	8%	25%		
	By Time Period									
	AM	51	49	2.7	19.1				28	Triggs St & Eastern Ave (EB)
	Midday	81	86	3.9	20.8				33	Goodrich Blvd & Olympic Blvd (SB)
	PM	38	39	3.0	13.0				17	Rosewood Park
	Eve	19	19	2.2	8.7				13	Commerce Shopping Center

Weekday Ridership by Trip - Loop

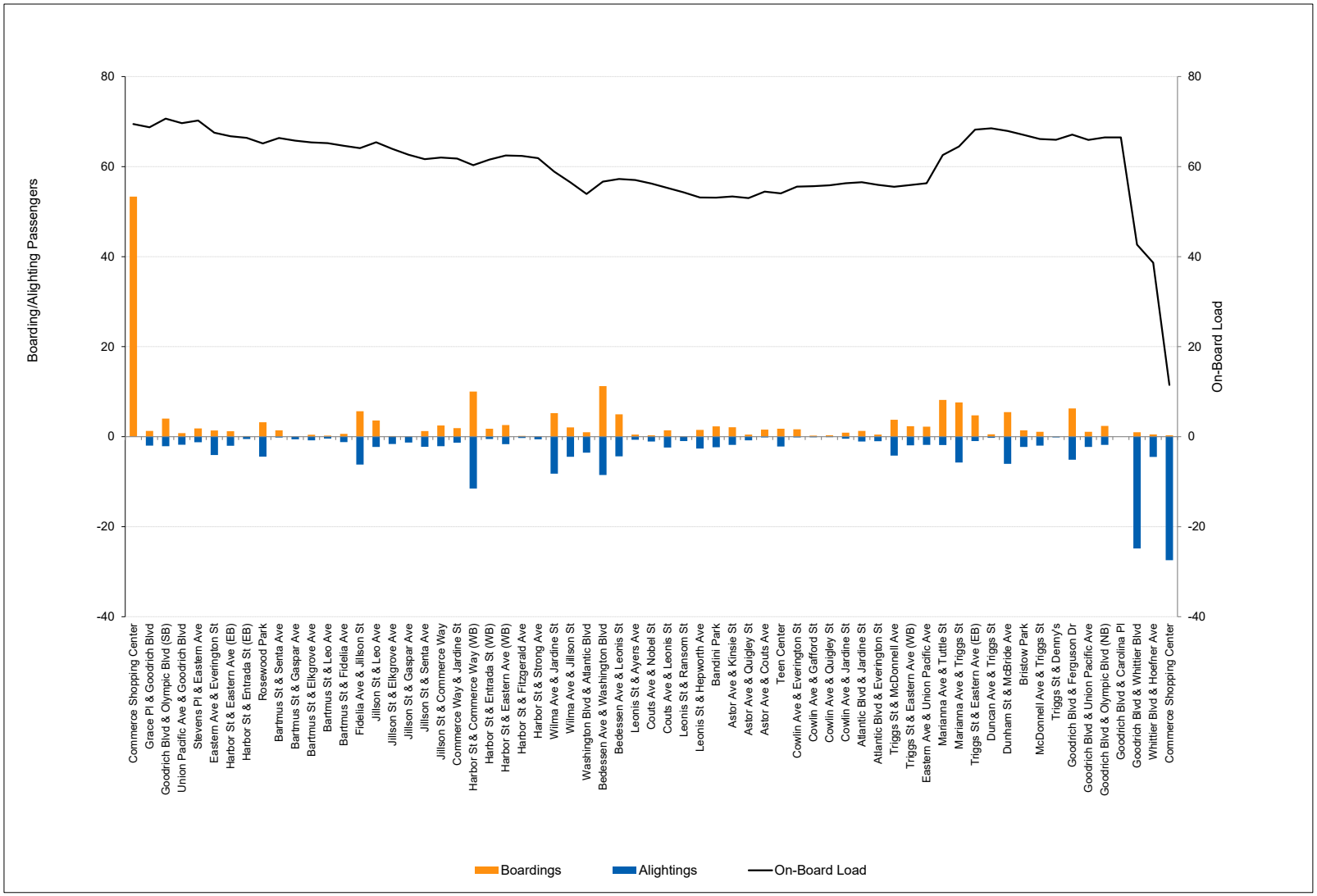


Weekday Running Time by Trip - Loop



NELSON NYGAARD

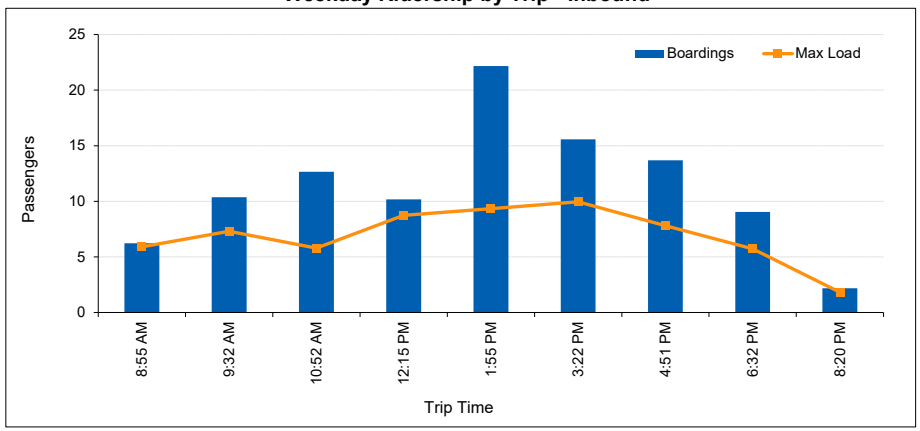
Weekday Boardings and Alightings by Stop - Loop



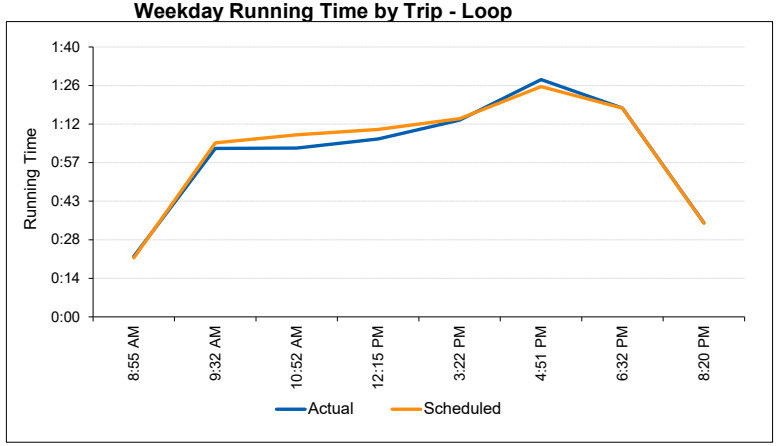
NELSON NYGAARD

Route 500 Blue Weekday		Route Productivity Summary				Route Operations Summary				
		Activity		Service Hours	Productivity	On-Time Performance			On-Board Load	
		Boardings	Alightings	Service Hours	Boardings per Service Hour	% On-Time	% Early	% Late	Max Passengers On Board	Max Load Location
	Total	102	101	9.5	10.7				53	Telegraph Rd (Citadel)
	Loop	102	101	9.5	10.7	73%	27%	0%	53	Telegraph Rd (Citadel)
	By Segment									
1	Commerce Shopping Center to Commerce City Hall	69	37	5.2	13.3	75%	25%	0%		
2	Commerce City Hall to Commerce Shopping Center	33	63	3.1	10.6	57%	43%	0%		
	By Time Period									
	Midday	62	66	5.0	12.4				33	Telegraph Rd (Citadel)
	PM	29	26	2.7	11.0				17	Goodrich Blvd & Olympic Blvd (SB)
	Eve	11	9	1.9	6.0				8	Goodrich Blvd & Olympic Blvd (SB)

Weekday Ridership by Trip - Inbound

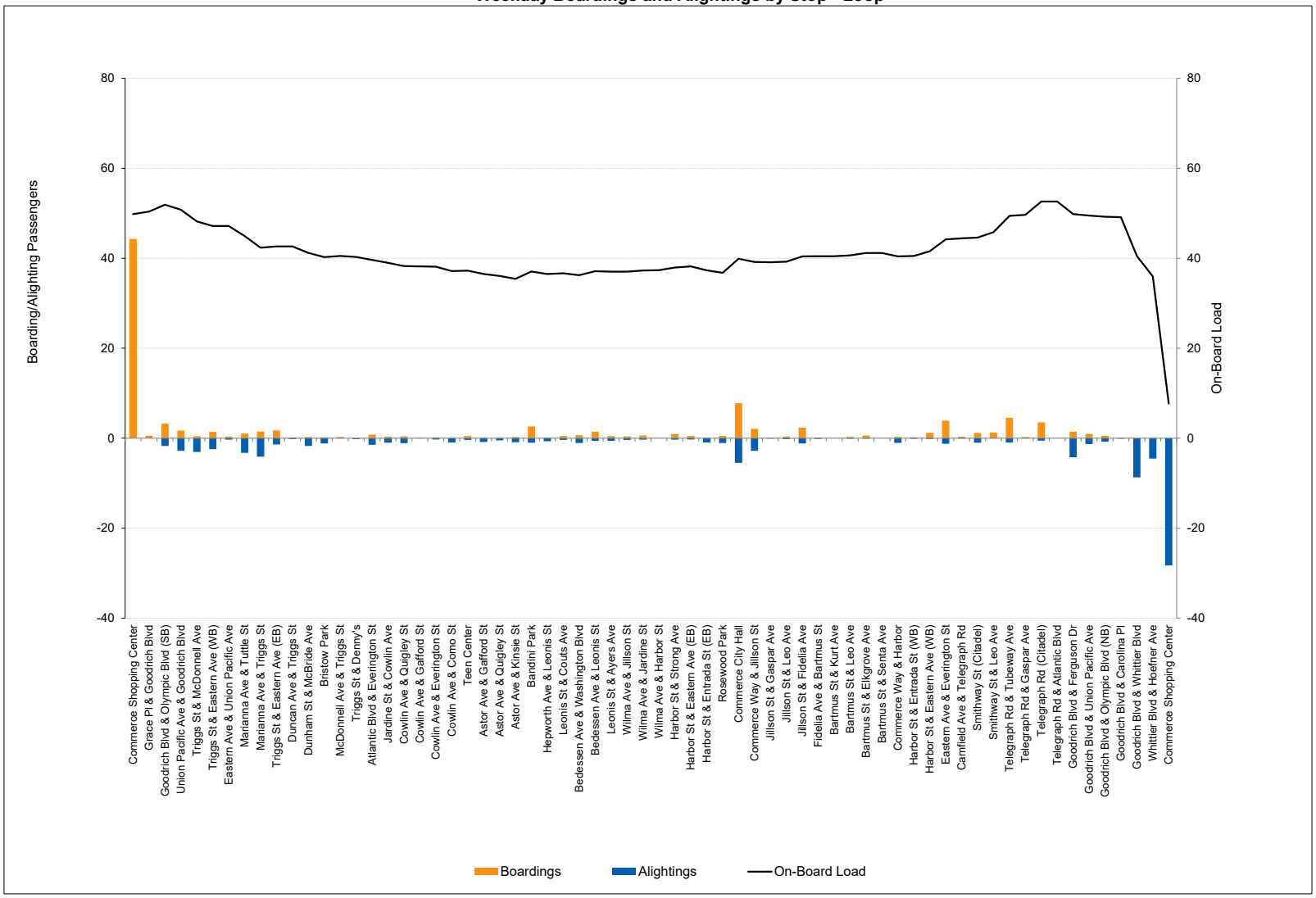


Weekday Running Time by Trip - Loop



NELSON NYGAARD

Weekday Boardings and Alightings by Stop - Loop

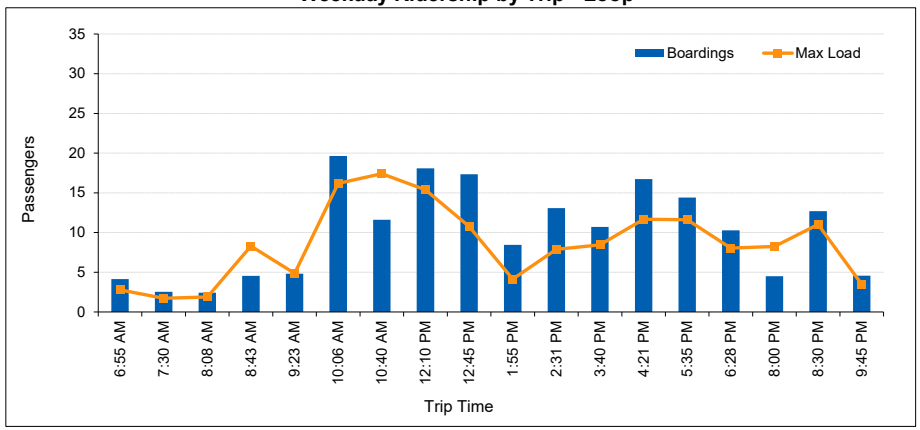


NELSON NYGAARD

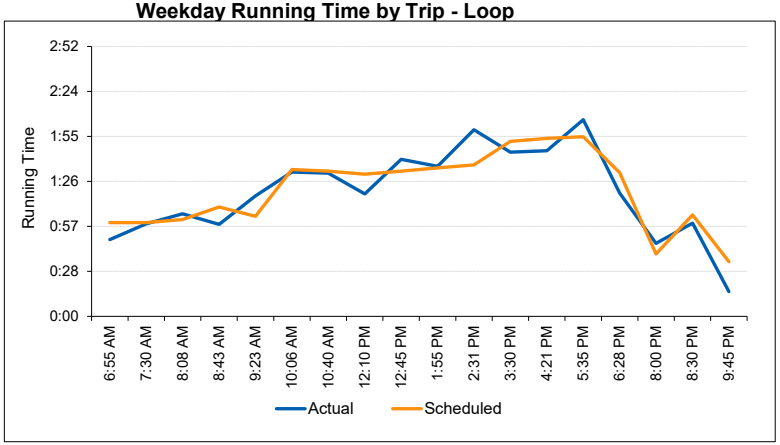
Route 600 Citadel Outlets Express Weekday

		Route Productivity Summary				Route Operations Summary				
		Activity		Service Hours	Productivity	On-Time Performance			On-Board Load	
		Boardings	Alightings	Service Hours	Boardings per Service Hour	% On-Time	% Early	% Late	Max Passengers On Board	Max Load Location
	Total	181	159	24.0	7.5				122	Olympic Blvd & Figueroa St
	Loop	181	159	24.0	7.5	31%	56%	13%	122	Olympic Blvd & Figueroa St
	By Segment									
1	Hoefner Ave (Citadel) to Union Station	106	8	10.9	9.7	33%	39%	28%		
2	Union Station to Hoefner Ave (Citadel)	75	151	13.3	5.6	22%	72%	6%		
	By Time Period									
	AM	9	8	3.0	3.0				6	Union Station
	Midday	84	83	10.0	8.4				77	Olympic Blvd & Figueroa St
	PM	41	27	5.2	7.8				27	Washington Blvd & Ransom St
	Eve	46	42	5.8	8.0				42	Washington Blvd & Ransom St

Weekday Ridership by Trip - Loop

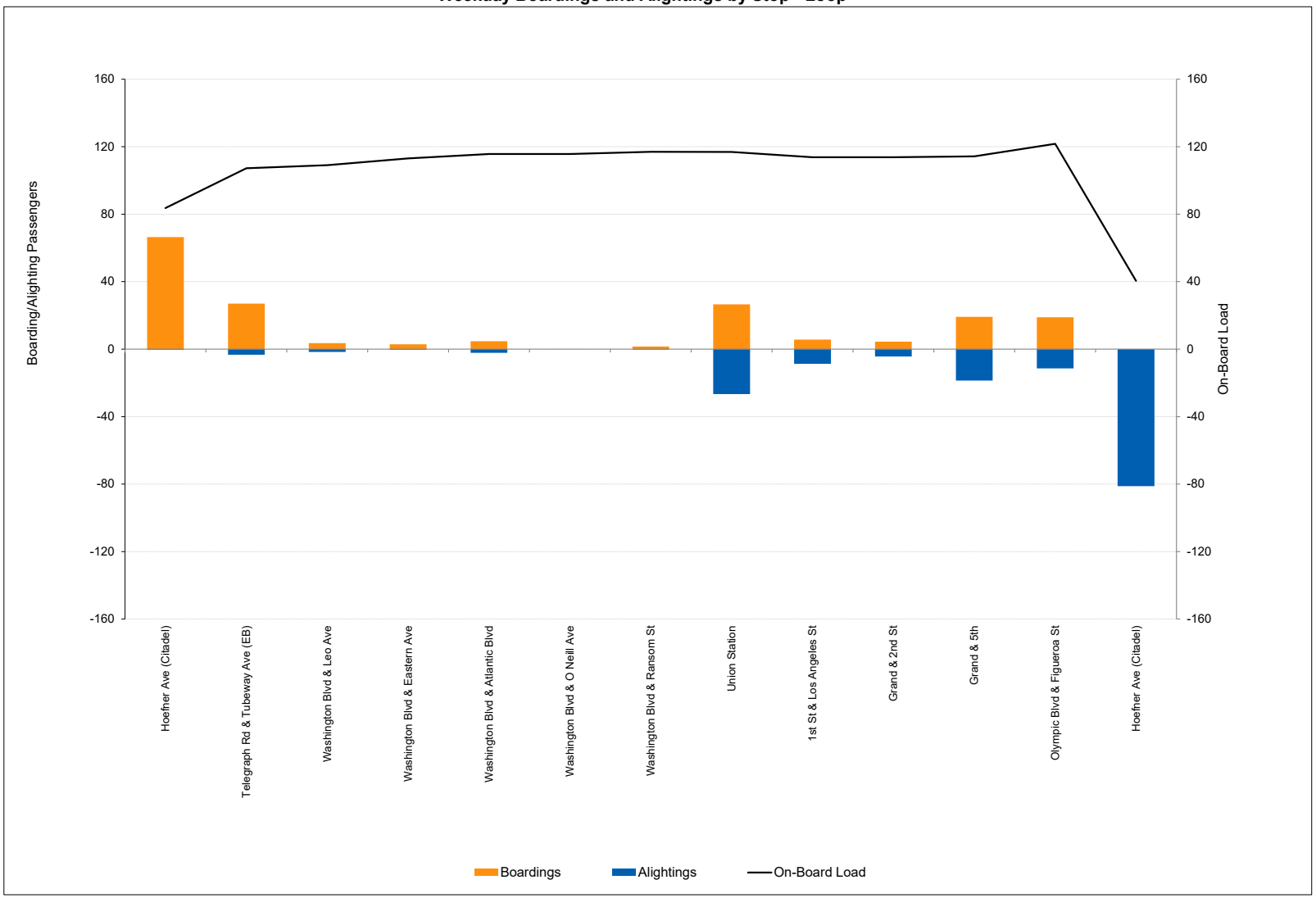


Weekday Running Time by Trip - Loop



NELSON NYGAARD

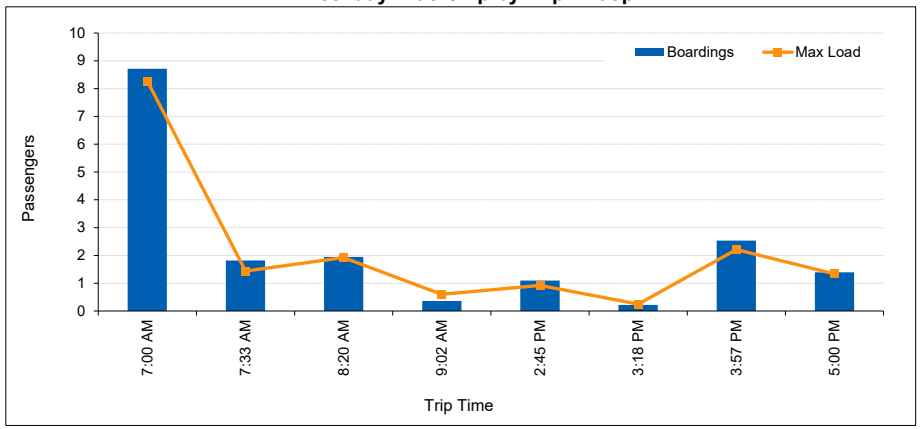
Weekday Boardings and Alightings by Stop - Loop



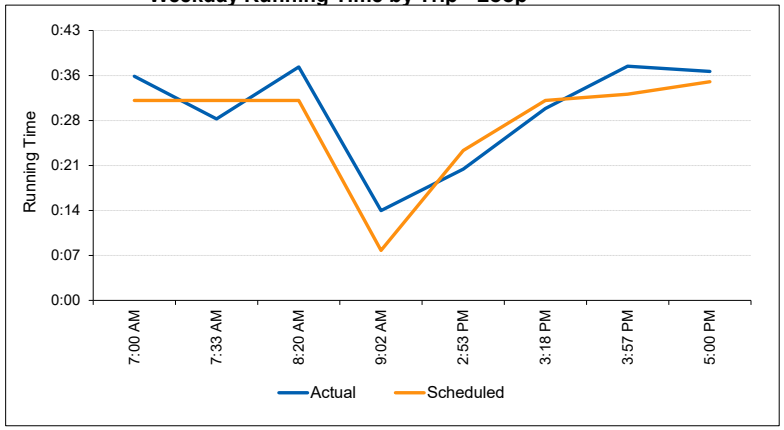
Route 700 26th Street Shuttle Weekday

		Route Productivity Summary				Route Operations Summary				
		Activity		Service Hours	Productivity	On-Time Performance			On-Board Load	
		Boardings	Alightings	Service Hours	Boardings per Service Hour	% On-Time	% Early	% Late	Max Passengers On Board	Max Load Location
	Total	18	15	4.3	4.2				12	Metrolink Station
	Loop	18	15	4.3	4.2	64%	23%	14%	12	Metrolink Station
	By Segment									
1	Metrolink Station to Eastern Ave & Bandini Blvd	14	4	0.9	14.2	63%	0%	38%		
2	Eastern Ave & Bandini Blvd to Metrolink Station	5	11	2.9	1.6	71%	29%	0%		
	By Time Period									
	AM	12	11	1.6	7.8				11	Metrolink Station
	PM	6	5	2.7	2.1				5	Telegraph Rd & Washington Blvd

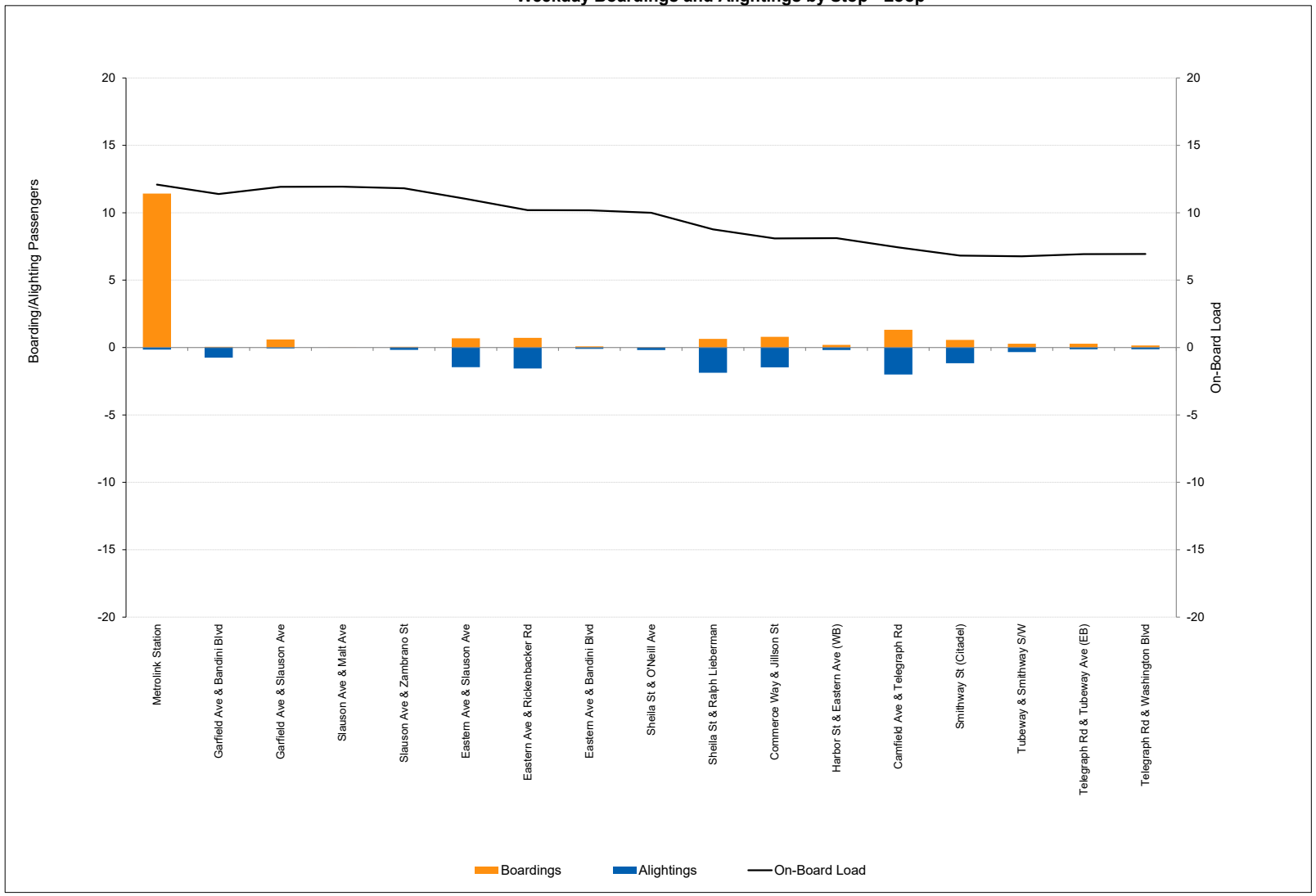
Weekday Ridership by Trip - Loop



Weekday Running Time by Trip - Loop



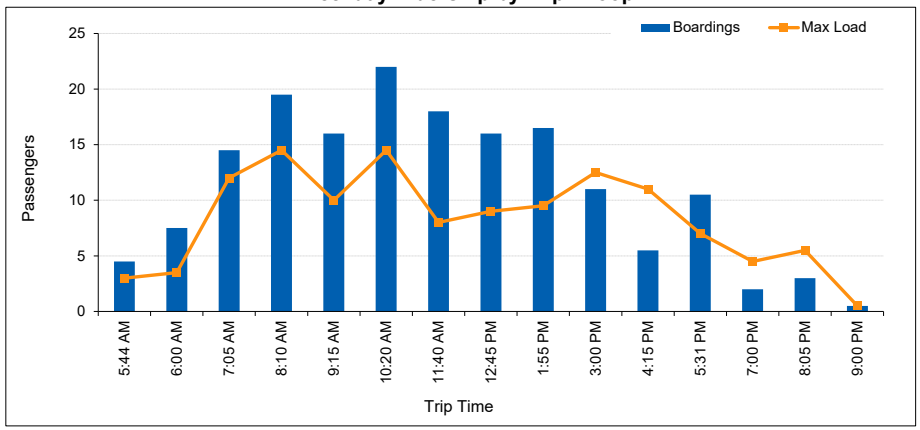
Weekday Boardings and Alightings by Stop - Loop



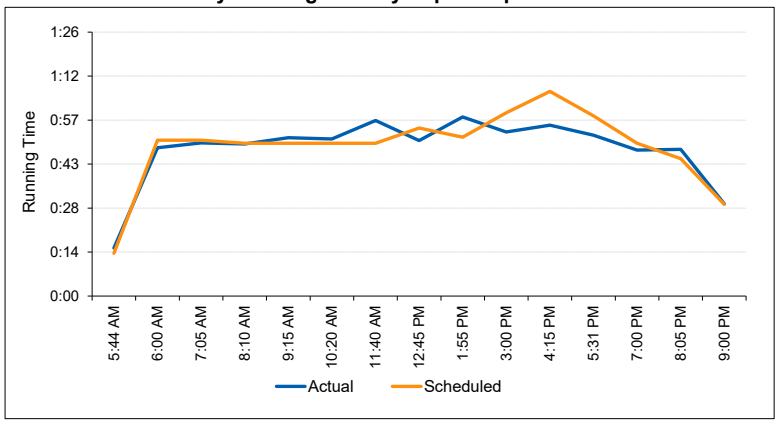
SATURDAY

Route 100 Green Saturday		Route Productivity Summary				Route Operations Summary				
		Activity		Service Hours	Productivity	On-Time Performance			On-Board Load	
		Boardings	Alightings	Service Hours	Boardings per Service Hour	% On-Time	% Early	% Late	Max Passengers On Board	Max Load Location
	Total	167	179	12.2	13.7				93	Commerce Shopping Center
	Loop	167	179	12.2	13.7	65%	14%	21%	93	Commerce Shopping Center
	By Segment									
1	Commerce Shopping Center to Gage Ave & Garfield Ave	72	36	4.3	16.7	86%	14%	0%		
2	Gage Ave & Garfield Ave to Jillson St & Commerce Way	53	52	3.3	16.1	27%	13%	60%		
3	Jillson St & Commerce Way to Commerce Shopping Center	43	91	4.7	9.1	50%	29%	21%		
	By Time Period									
	AM	46	38	2.8	16.6				32	Gerhart Ave & Union Pacific Ave (NB)
	Midday	89	79	4.3	20.7				42	Gerhart Ave & Olympic Blvd
	PM	17	33	2.1	7.8				24	Gerhart Ave & Union Pacific Ave (SB)
	Eve	16	29	3.1	5.2				17	Commerce Shopping Center

Weekday Ridership by Trip - Loop

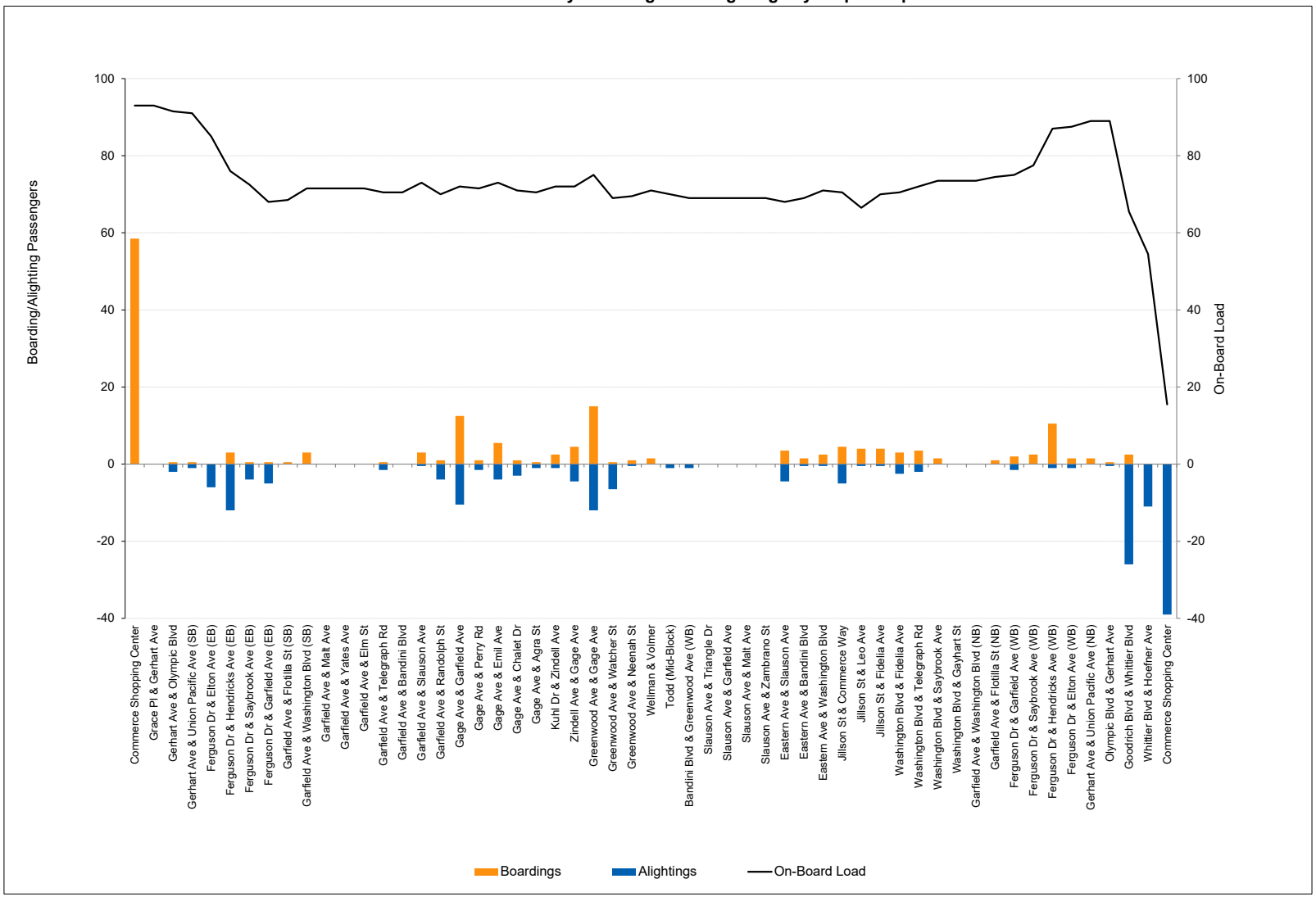


Weekday Running Time by Trip - Loop



NELSON NYGAARD

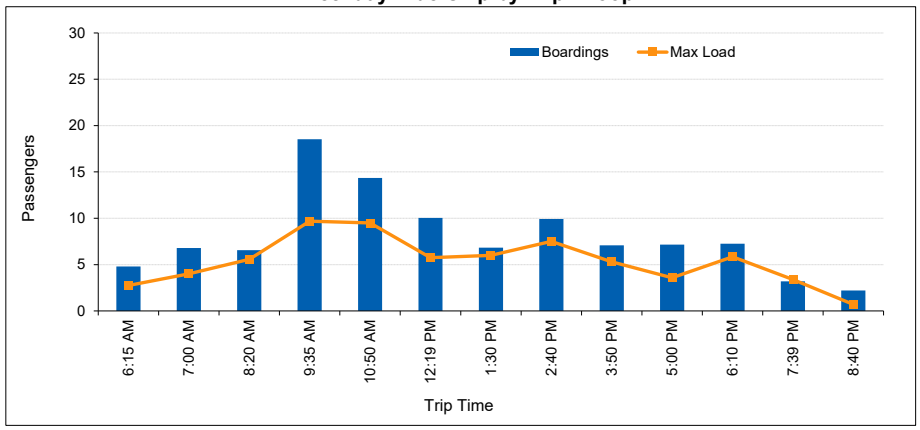
Saturday Boardings and Alightings by Stop - Loop



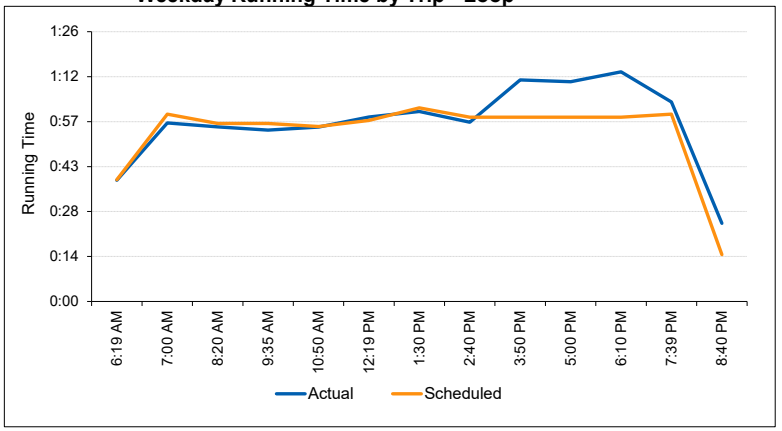
Route 400 Red Saturday

		Route Productivity Summary				Route Operations Summary				
		Activity		Service Hours	Productivity	On-Time Performance			On-Board Load	
		Boardings	Alightings	Service Hours	Boardings per Service Hour	% On-Time	% Early	% Late	Max Passengers On Board	Max Load Location
	Total	105	107	11.7	8.9				49	Grace Pl & Goodrich Blvd
	Loop	105	107	11.7	8.9	72%	26%	2%	49	Grace Pl & Goodrich Blvd
	By Segment									
1	Commerce Shopping Center to Fidelia Ave & Jillson St	47	22	2.9	16.0	85%	8%	8%		
2	Fidelia Ave & Jillson St to Bedessen Ave & Washington Blvd	16	22	2.1	7.4	50%	50%	0%		
3	Bedessen Ave & Washington Blvd to Goodrich Blvd & Olympic Blvd (NB	40	22	6.1	6.5	75%	25%	0%		
4	Goodrich Blvd & Olympic Blvd (NB) to Commerce Shopping Center	2	41	0.5	4.1	92%	8%	0%		
	By Time Period									
	AM	18	18	2.7	6.8				11	Goodrich Blvd & Union Pacific Ave
	Midday	50	44	3.9	12.8				24	Goodrich Blvd & Union Pacific Ave
	PM	24	27	3.0	8.2				16	Commerce Shopping Center
	Eve	13	17	2.2	5.7				9	Grace Pl & Goodrich Blvd

Weekday Ridership by Trip - Loop

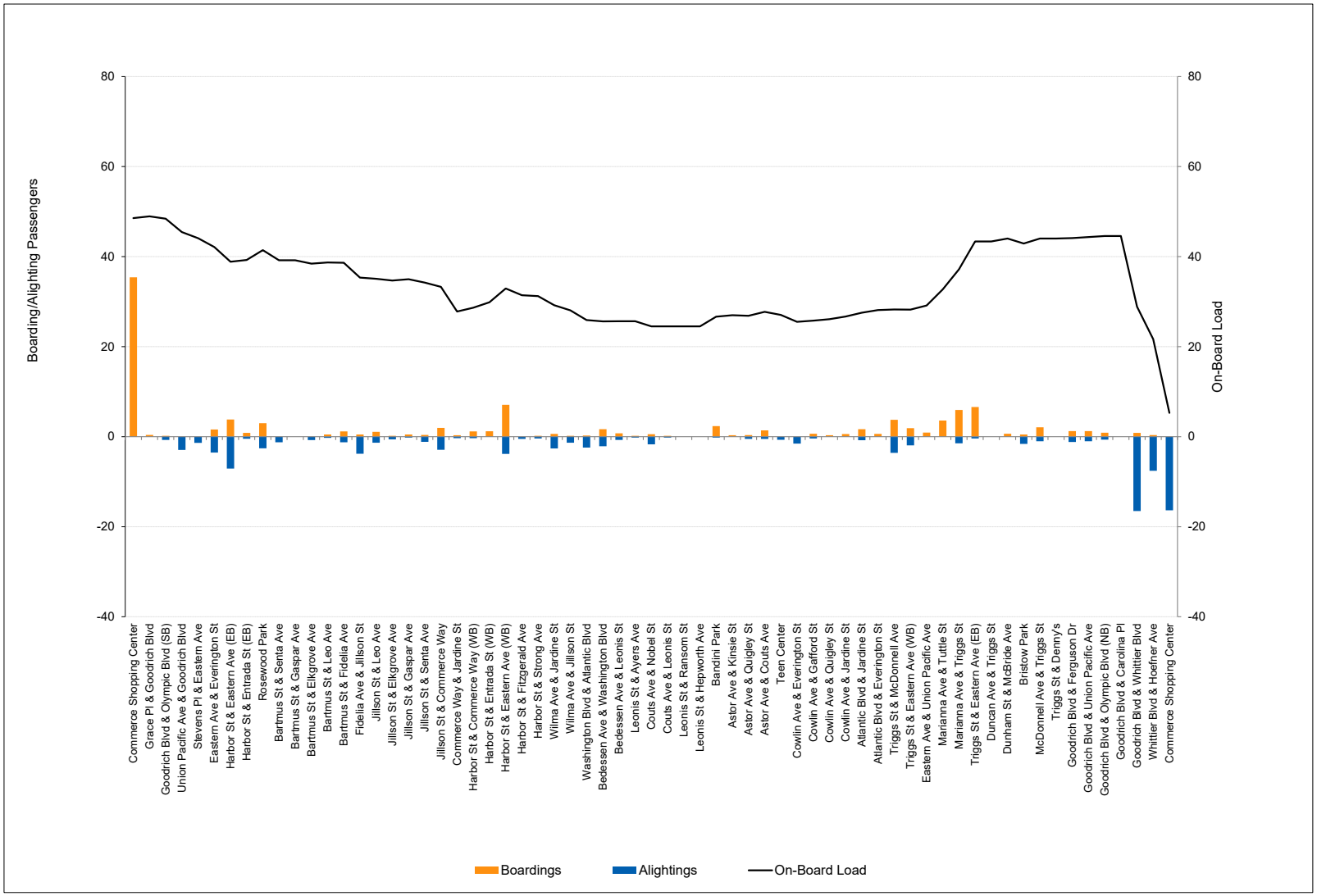


Weekday Running Time by Trip - Loop



NELSON NYGAARD

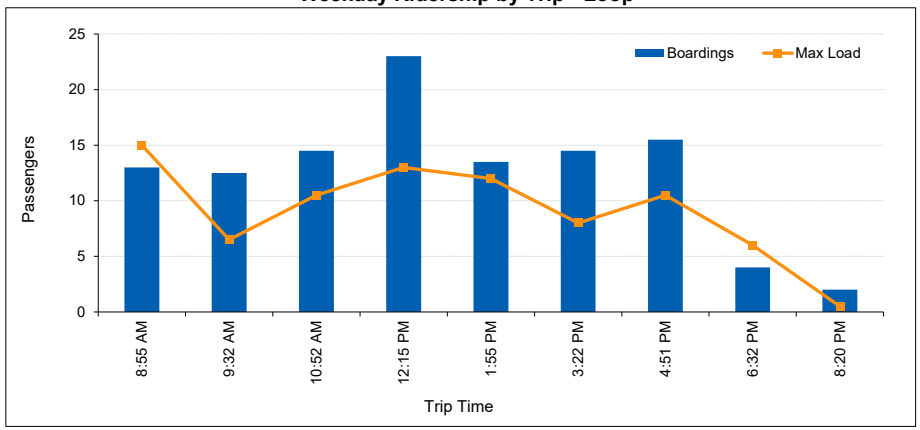
Saturday Boardings and Alightings by Stop - Loop



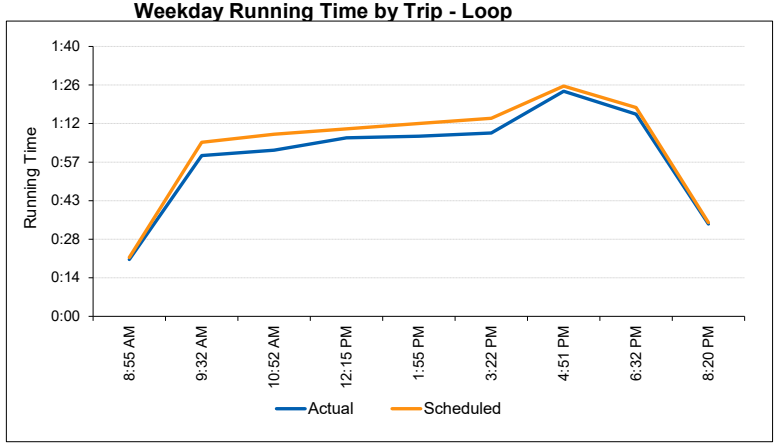
NELSON NYGAARD

Route 500 Blue Saturday		Route Productivity Summary				Route Operations Summary				
		Activity		Service Hours	Productivity	On-Time Performance			On-Board Load	
		Boardings	Alightings	Service Hours	Boardings per Service Hour	% On-Time	% Early	% Late	Max Passengers On Board	Max Load Location
	Total	113	126	9.5	11.8				63	Telegraph Rd (Citadel)
	Loop	113	126	9.5	11.8	48%	52%	0%	63	Telegraph Rd (Citadel)
	By Segment									
1	Commerce Shopping Center to Commerce City Hall	70	46	5.9	11.8	56%	44%	0%		
2	Commerce City Hall to Goodrich Blvd & Whittier Blvd	43	39	3.4	12.8	13%	88%	0%		
3	Goodrich Blvd & Whittier Blvd to Commerce Shopping Center	0	41	0.2	0.0	25%	75%	0%		
	By Time Period									
	Midday	77	84	5.0	15.5				53	Telegraph Rd (Citadel)
	PM	30	34	2.7	11.3				16	Commerce Shopping Center
	Eve	6	8	1.9	3.2				6	Marianna Ave & Tuttle St

Weekday Ridership by Trip - Loop

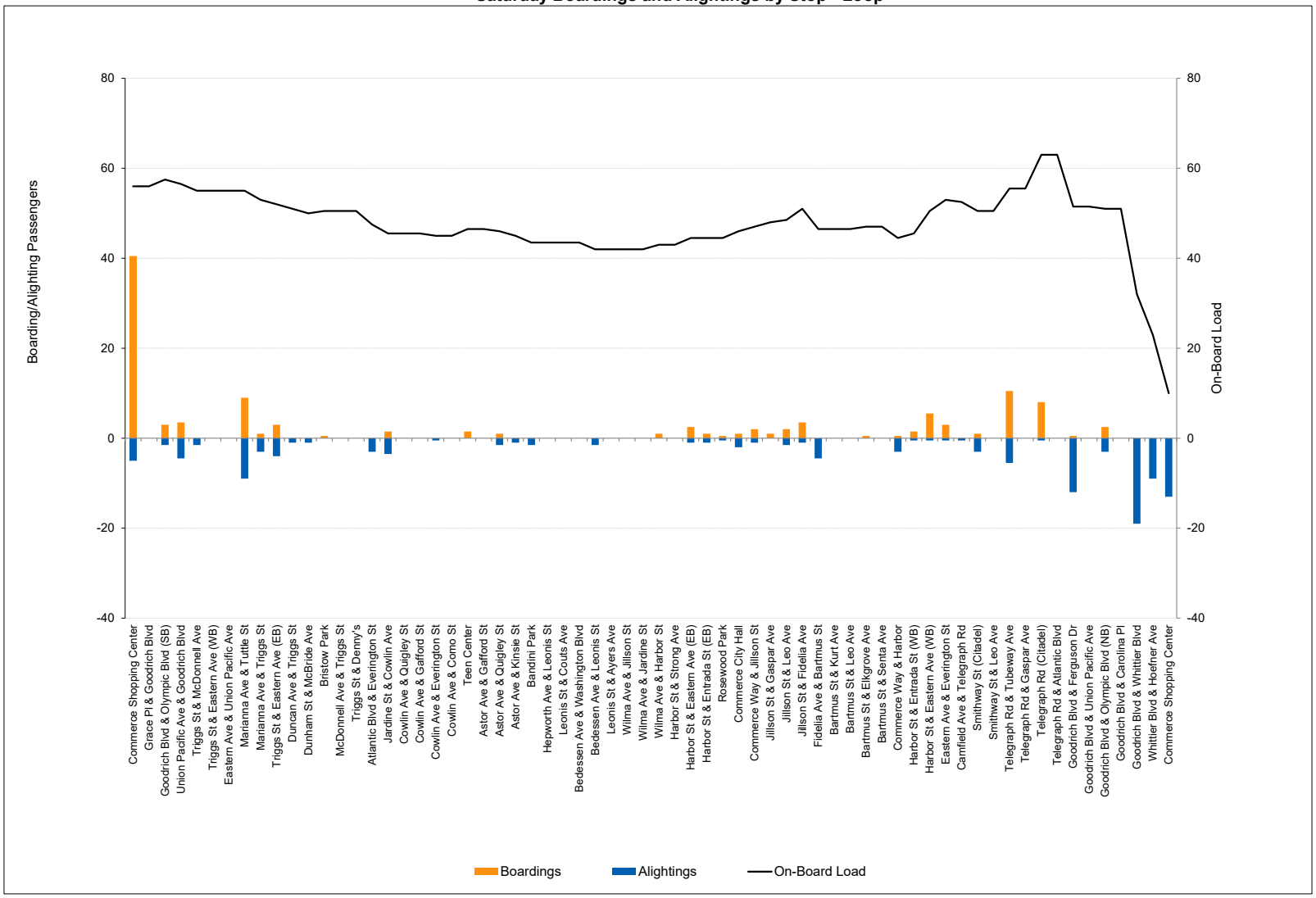


Weekday Running Time by Trip - Loop



NELSON NYGAARD

Saturday Boardings and Alightings by Stop - Loop

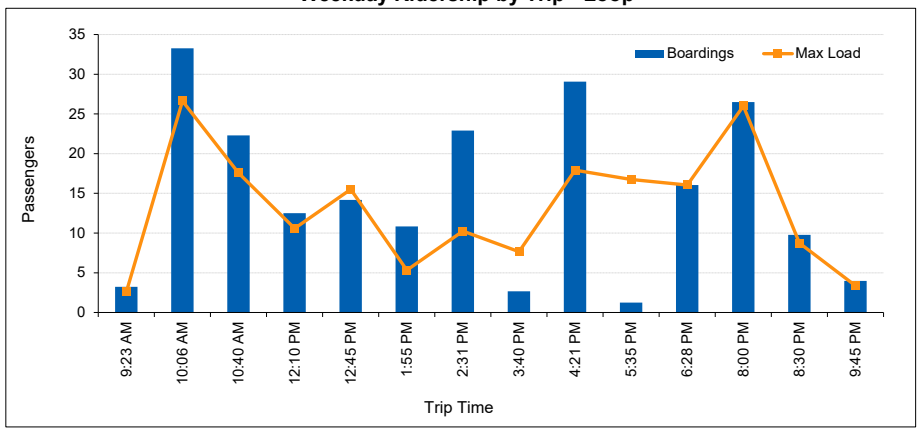


NELSON NYGAARD

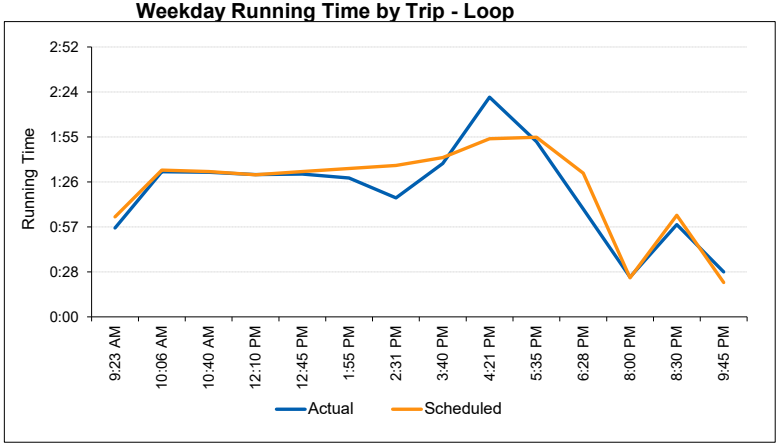
Route 600 Citadel Outlets Express Saturday

		Route Productivity Summary				Route Operations Summary				
		Activity		Service Hours	Productivity	On-Time Performance			On-Board Load	
		Boardings	Alightings	Service Hours	Boardings per Service Hour	% On-Time	% Early	% Late	Max Passengers On Board	Max Load Location
	Total	208	168	19.8	10.5				157	Olympic Blvd & Figueroa St
	Loop	208	168	19.8	10.5	55%	38%	8%	157	Olympic Blvd & Figueroa St
	By Segment									
1	Hoefner Ave (Citadel) to Union Station	127	18	8.2	15.4	57%	36%	7%		
2	Union Station to Hoefner Ave (Citadel)	82	150	11.2	7.3	33%	58%	8%		
	By Time Period									
	Midday	96	72	8.8	10.9				78	Olympic Blvd & Figueroa St
	PM	55	56	5.2	10.5				35	Washington Blvd & Atlantic Blvd
	Eve	58	41	5.8	9.9				70	Washington Blvd & Leo Ave

Weekday Ridership by Trip - Loop

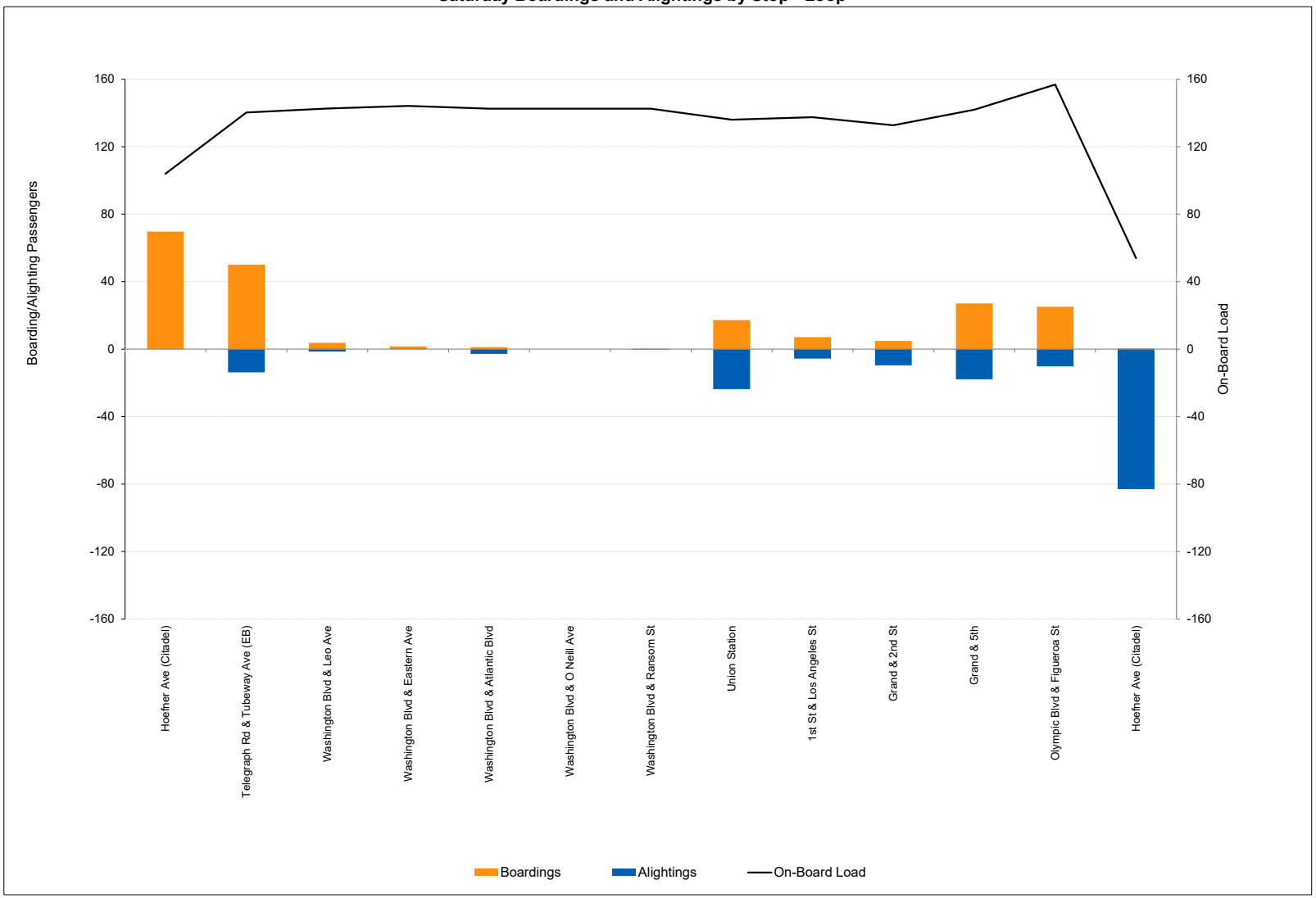


Weekday Running Time by Trip - Loop



NELSON NYGAARD

Saturday Boardings and Alightings by Stop - Loop

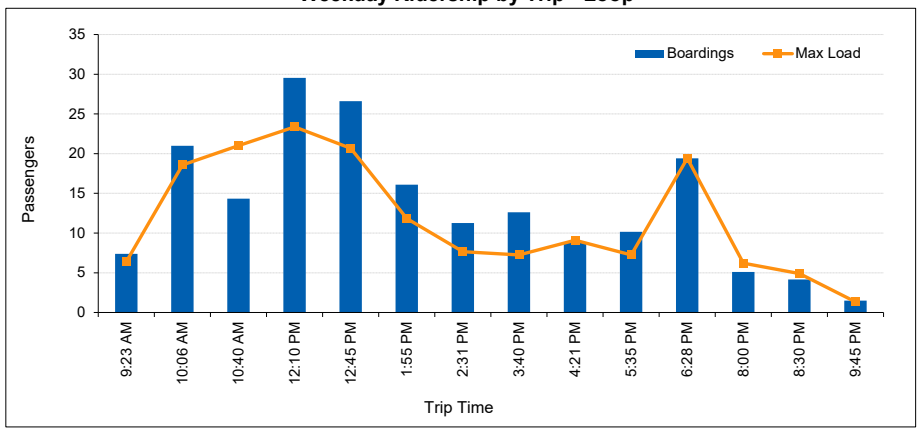


SUNDAY

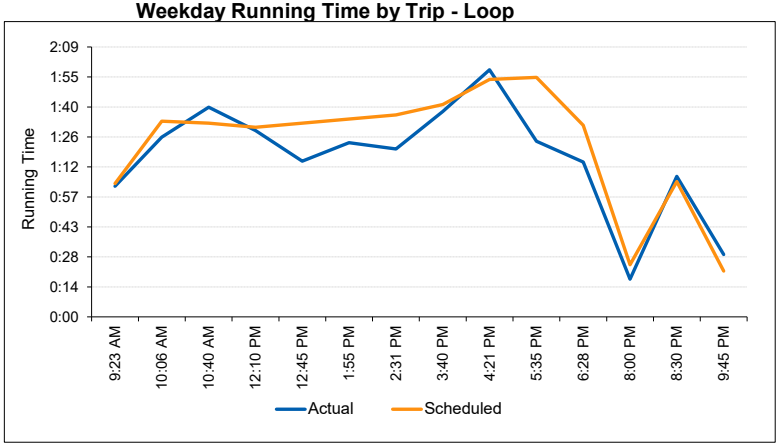
Route 600 Citadel Outlets Express Sunday

		Route Productivity Summary				Route Operations Summary				
		Activity		Service Hours	Productivity	On-Time Performance			On-Board Load	
		Boardings	Alightings	Service Hours	Boardings per Service Hour	% On-Time	% Early	% Late	Max Passengers On Board	Max Load Location
	Total	188	136	19.8	9.5				139	Olympic Blvd & Figueroa St
	Loop	188	136	19.8	9.5	22%	68%	10%	139	Olympic Blvd & Figueroa St
	By Segment									
1	Hoefner Ave (Citadel) to Union Station	100	8	8.2	12.2	21%	64%	14%		
2	Union Station to Hoefner Ave (Citadel)	88	128	11.2	7.9	17%	83%	0%		
	By Time Period									
	Midday	115	70	8.8	13.0				102	Olympic Blvd & Figueroa St
	PM	33	37	5.2	6.3				21	Washington Blvd & Eastern Ave
	Eve	40	30	5.8	7.0				39	Washington Blvd & Leo Ave

Weekday Ridership by Trip - Loop

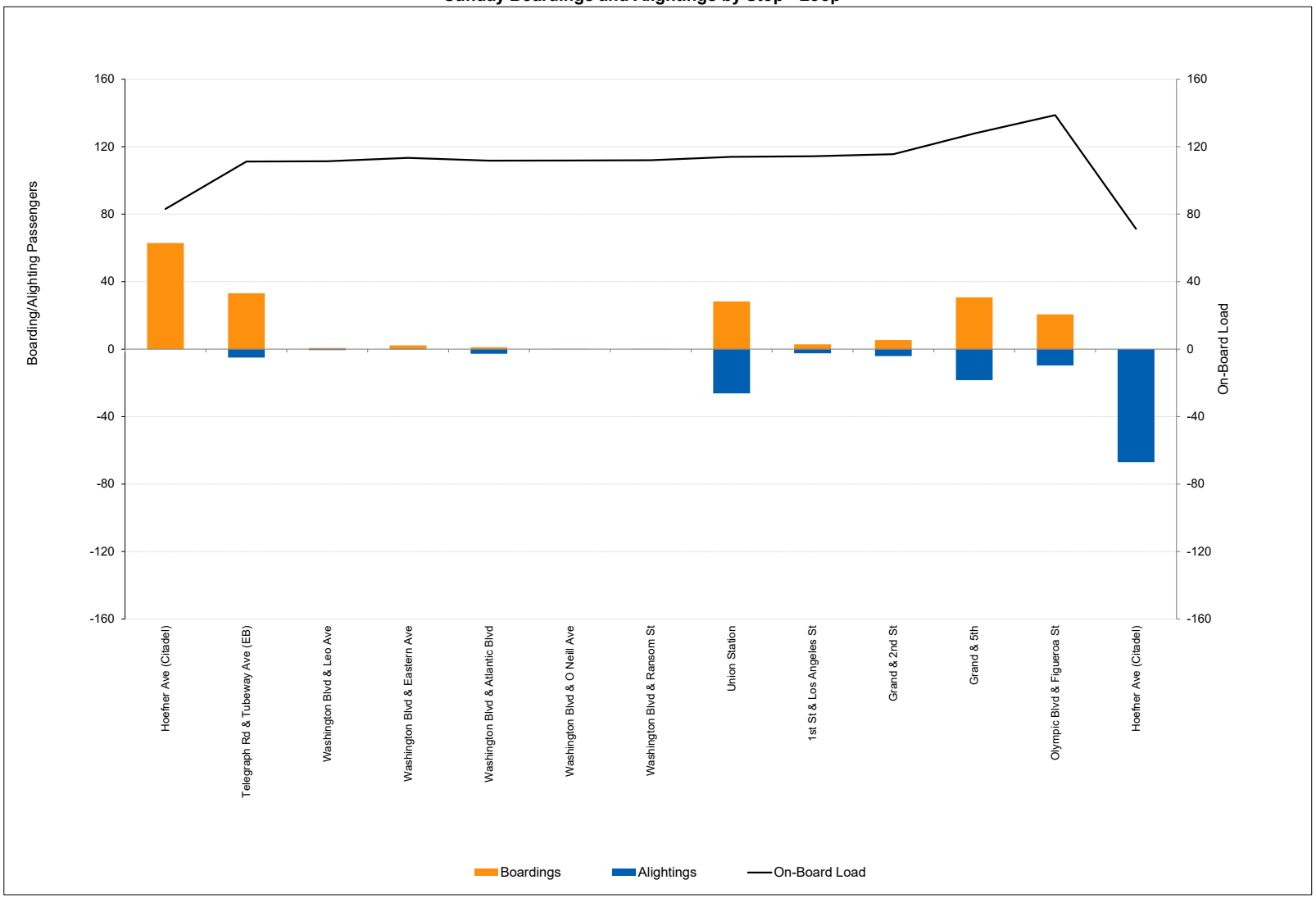


Weekday Running Time by Trip - Loop



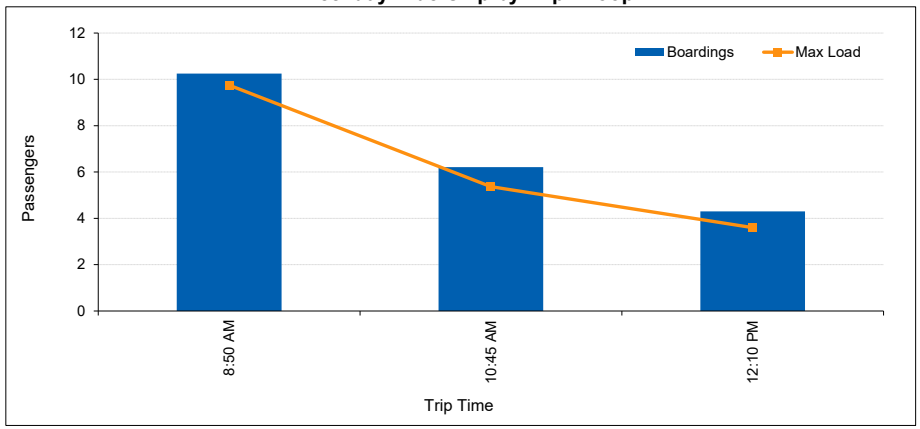
NELSON NYGAARD

Sunday Boardings and Alightings by Stop - Loop

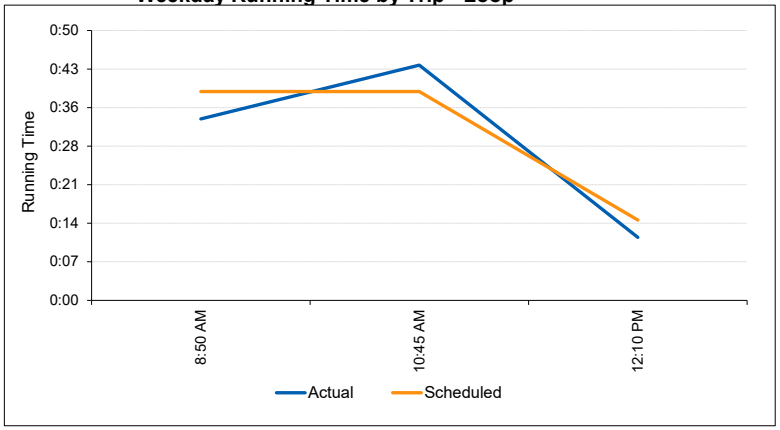


Route 800 Church Special Sunday		Route Productivity Summary				Route Operations Summary				
		Activity		Service Hours	Productivity	On-Time Performance			On-Board Load	
		Boardings	Alightings	Service Hours	Boardings per Service Hour	% On-Time	% Early	% Late	Max Passengers On Board	Max Load Location
	Total	21	14	1.6	13.4				11	St Marcellinus Church
	Loop	21	14	1.6	13.4	100%	0%	0%	11	St Marcellinus Church
	By Segment									
1	Jillson St & Commerce Way to St Marcellinus Church	10	1	0.5	20.5	100%	0%	0%		
2	St Marcellinus Church to Rosewood Park	10	8	0.5	19.6	100%	0%	0%		
3	Rosewood Park to Eastern Ave & Washington Blvd	1	5	0.4	1.7	100%	0%	0%		
	By Time Period									
	Midday	21	14	1.6	13.4				11	St Marcellinus Church

Weekday Ridership by Trip - Loop

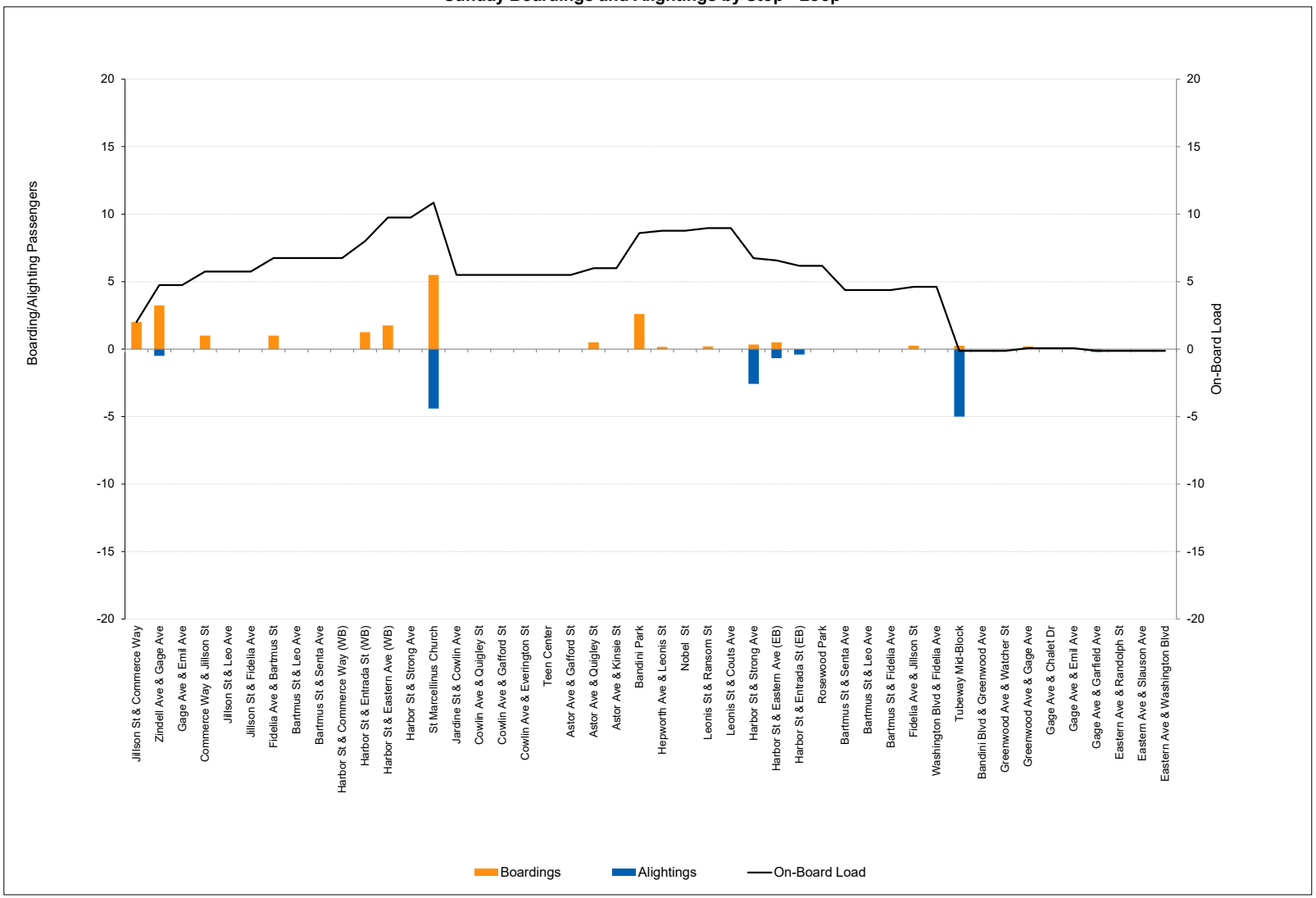


Weekday Running Time by Trip - Loop



NELSON NYGAARD

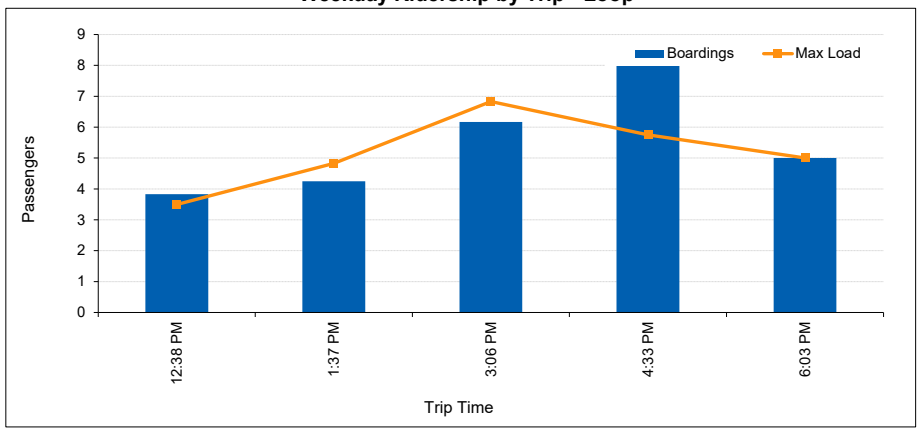
Sunday Boardings and Alightings by Stop - Loop



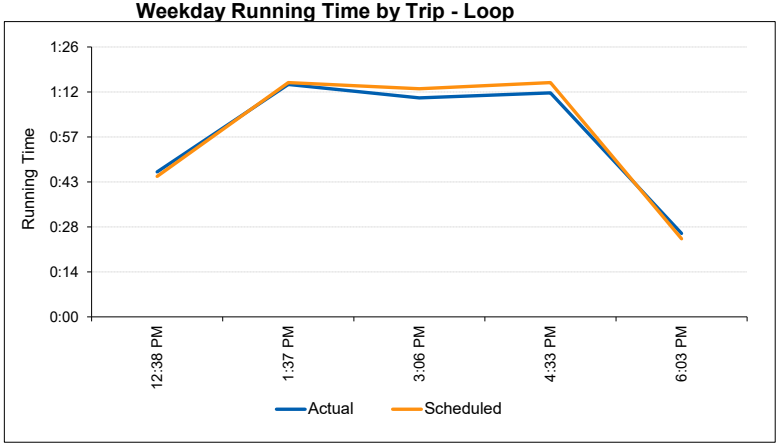
Route 900 Shopper Special Sunday

		Route Productivity Summary				Route Operations Summary				
		Activity		Service Hours	Productivity	On-Time Performance			On-Board Load	
		Boardings	Alightings	Service Hours	Boardings per Service Hour	% On-Time	% Early	% Late	Max Passengers On Board	Max Load Location
	Total	27	32	4.9	5.6				22	Commerce Shopping Center
	Loop	27	32	4.9	5.6	92%	8%	0%	22	Commerce Shopping Center
	By Segment									
1	Commerce Shopping Center to Rosewood Park	20	12	1.7	11.6	100%	0%	0%		
2	Rosewood Park to Commerce Shopping Center	7	20	3.2	2.3	75%	25%	0%		
	By Time Period									
	Midday	8	12	2.0	4.0				6	Garfield Ave & Telegraph Rd
	PM	14	16	2.5	5.8				13	Commerce Shopping Center
	Eve	5	4	0.4	12.0				5	Commerce Shopping Center

Weekday Ridership by Trip - Loop

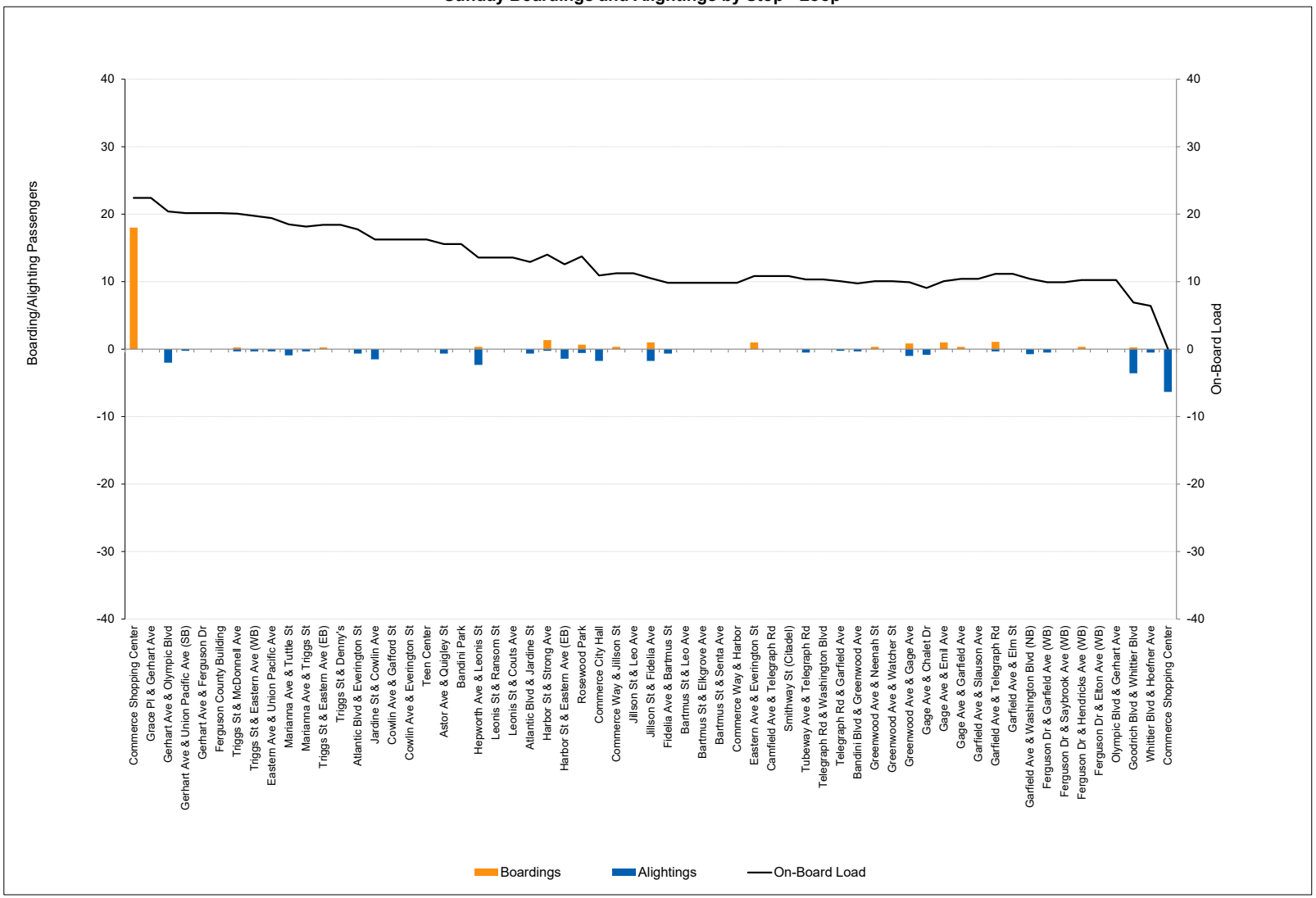


Weekday Running Time by Trip - Loop



NELSON NYGAARD

Sunday Boardings and Alightings by Stop - Loop



NELSON NYGAARD

Appendix C Survey Comment Logs

"If there are any new places that you would like City of Commerce Transit to provide service to, enter them below"
Citadel Outlets
Goldline station
Bell Gardens high school (Bus service between Eastern and Garfield along Gage ave)
Gold line station
Downey
Atlantic Metrorail station
Metro Goldline connect
Some other grocery store
Los Angeles County Regional Food Bank Headquarters nearby in Vernon
More shopping centers
Montebello
Lakewood Mall
East la college
Parque de los sueños (on Bonnie beach PL and Union Pacific)
Garfield & Flotilla
Steven place and eastern
The shops at Montebello
Montebello
Montebello HighSchool
Connection to metro rail (near by stations)
Montebello
White memorial hospitol
Bandini Blvd with the green bus
Gold Line Atlantic Station
Grand Central Market
Montebello Mall
Disneyland
Broad Museum/MOCA
Stadiums during games
McDonald's

"If there are any new places that you would like City of Commerce Transit to provide service to, enter them below"
Brea
downtown alhambra
Downey
Santa Monica
Florence & Garfield, Bell Gardens
Pike at Long Beach
Walmart
To Monrovia Zip Code 91016
Make a route to go the beach at Long Beach
East L.A. College
Hearst Castle
Whittier
Tubeway California Water Service Commerce
Tubeway Commerce Water Service
Hollenbeck Park
Huntington
Cal State LA
Greenwood & Gage 1 bus to Triggs
Hollywood Bl
El Centro De Los Angeles
Washington & Maple on weekends
City of Whittier
A las tiendas
Bandini-Eastern
Long Beach
Bellflower, CA
First st
South gate
Atlantic/ Whittier Blvd stop
Walmart on Washington blvd
Disney land
The Shops At Montebello
Around stake house on Eastern

"If there are any new places that you would like City of Commerce Transit to provide service to, enter them below"
Washington
A stop on Atlantic and Ferguson Dr. (to allow connections to other modes of transit)
E. Los Angeles
East Los Angeles Alma foundation center
Knotts Berry Farm Market place
Knotts Barry Farm
Beach
Whinchells
old town pasadena
Cerritos Mall
Holywood
Disneyland (even if only on weekends)
To Whittier zip code 90603
Make a route going to Anaheim Downtown
Montebello Mall
Downtown
Long Beach
Fashion District
Red without transfering to Green
Metro Court Building
Long Beach
Long Beach, CA
Downtown
Goldline
Pasadena
More flexible bus stops when not on the freeway
Bell gradens.
A stop on Atlantic and Whittier to be able to shop on the Whittier Blvd Strip
Downey landing
montebello town center
South Gate
Down town disney
The Shops at Montebello

"If there are any new places that you would like City of Commerce Transit to provide service to, enter them below"
Make a route going to downtown Whittier
Pico Rievera Town Center
Santa Monica
East Los Angeles Community College (ELAC)
Zindell & Gage to Downey Firestone
San Gabriel

"Please provide any additional feedback for Commerce in Motion"
Some of us have difficulty boarding bus; when cars park at bus stops, we must board bus in Middle of street. Painting bus stops red for no parking would help. Especially when we have to unload groceries
Have the citadel express operate in a two way direction between downtown l.a and commerce
Congratulations and thank you to all workers at cctransit
Earlier citadel bus to union station on weekends
The drivers are very nice and kind. Very hard workers.
Great service. Being using service for years
Please schedule for more Metrolink lines, like 91/Perris line at Union Station inbound and outbound.
All bus stops with shade would be great. Thank you!
Good luck with all this!
I enjoy the low cost service and superb bus operators.
i am disabled and there are no benches where i can sit down while i wait for the bus... or shade
The bus driver need to pay more attention on people waiting on the bus stop because sometimes they don't stop also listen when we want to get off since sometimes they dont stop when we are requesting
Overall, I am happy with the service and the bus drivers are friendly and helpful more often than not. It would be nice to have more frequent buses.
Wifi would be nice.
East La College is not in commerce I understand but many residents attend the college and providing free transportation could benefit many college students and further improve their lives
Please keep the announcement volume in all buses to a reasonable volume. As sometimes it is too quiet and you can barely hear it due to the AC. And sometimes it's too loud that the voice gets scratchy.
Thank you for asking our opinion.
Would love to take transit at commute times between metrolink and Garfield/Flotilla. As far as I know no options currently exist
Love your service. Live bus tracking
Thank you for all the nice drivers. My riding experience has always been a pleasure.
You're doing such a great job providing bus services to people like me that can't drive. Thank you so much.

"Please provide any additional feedback for Commerce in Motion"
The transportation is great i.is mostly used.for citadel ride or target
Maybe trash cans, i dont like when people leave their trash
The service is good, but some times the bus drivers are not very polite
I would like to go places where its family friendly with options of restaurants. Museums, shopping, culture friendly, safe, and great outdoors experience. I'm a local that enjoys riding the citadel express with my family. I love that I can walk to union station and walk to La Placita Olvera and enjoy a family trip with options of restaurants, shopping and culture environment. Thank you for providing the citadel express bus line which my family and I use on a regular basis.
Needs to become more like a Uber or routes that go to more places
Friendly bus drivers... one time I took the commerce bus and the gentleman was so kind and with a big smile.
I really like the service they provide to our community
There must be some places 'just' out of C of C that would connect with other transit service providers that would greatly enhance the potential for riders/ridership who live or work in C of C. I am aware that CMBL is exploring/planning to take part of a Metro line. That is a good idea and perhaps either slight extensions of current lines would enhance connectivity.
Please make the bus signage easier to read and located at every stop with sound. Please include a map of ALL stops, including times. I am disabled and legally blind and rely on voice to help me navigate the buses when I am not be driven by a household member.
Sure hoping to see the Yellow route start back up soon. Thank you for all you do for us!!!
Make for better time in between route
Yo estoy satisfecha con lo transportacion que tenemos
Assistance in loading and unloading packages
Es muy eficiente
Buen servicio gracias
The red and blue routes should go all the way to Boris Street instead of turning on Fidelia.
A mi en particular me parece un exelante servicio
New neighboring cities need to be linked
Transportation is great
The transportation is great
None at this time
No new places, everything is perfect for me
I don't have idea
Drivers are courteous and helpful
It would be nice if DAR would travel further
Muy buen servicio (gracias)
yo uso walker para caminar para no el transporte commerce es excelente pero en este tiempo no porque no puedo usar la puerta de enfrente para usar el bus

"Please provide any additional feedback for Commerce in Motion"
I live SE Commerce before I had a car would have to walk to Telegraph which is a distance when you have groceries, cross railroad tracks which is dangeroues
Install handicap delacs into front seats for people with knee problems & legs. Also easy to get out of van. Encourage use of seat belts. Decrease noise from wheel chair ramp on back. To use wedges made of hard rubber. Maybe the driver will be happy. Congrats to all the staff at transportation medivan. Thanks.
Commerce transit is excellent service always
Citadel outlets express could make 1 or 2 more stops in downtown LA

Appendix D Demographic Maps

Figure 1 Density of Seniors Ages 65 and Older

Figure 2 Density of People with Disabilities

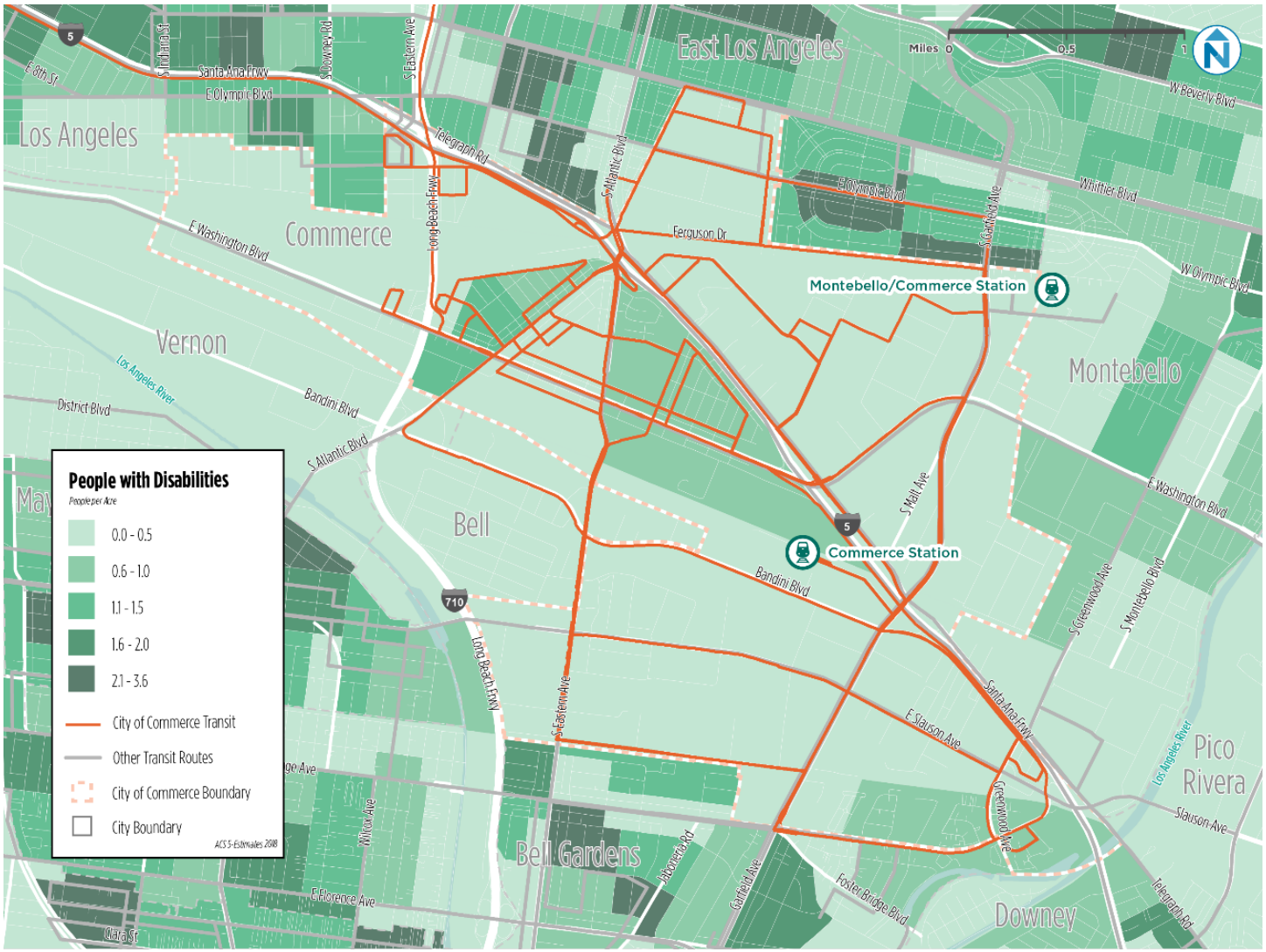


Figure 3 Density of Zero-Vehicle Households

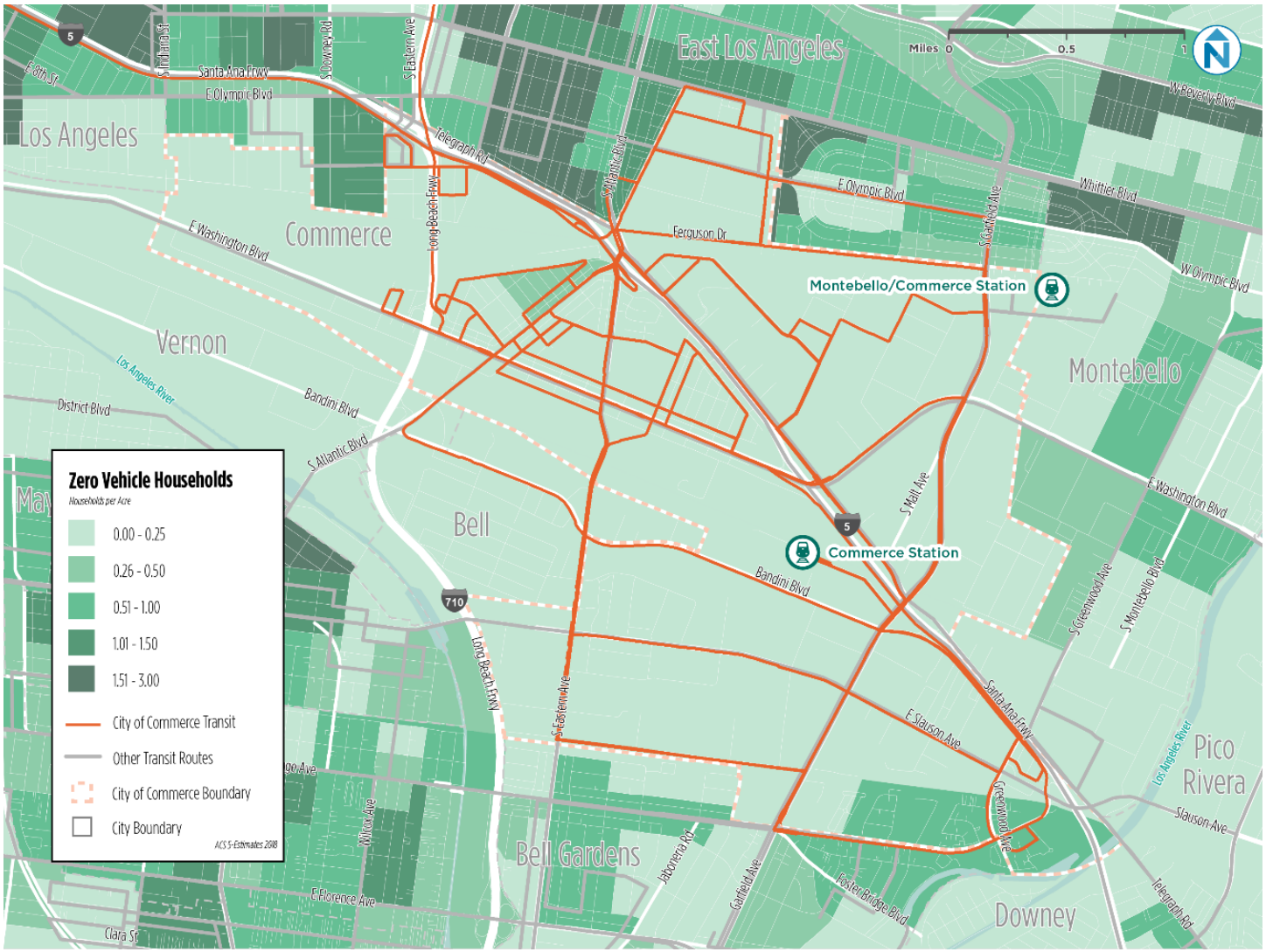


Figure 4 Density of Rental Households

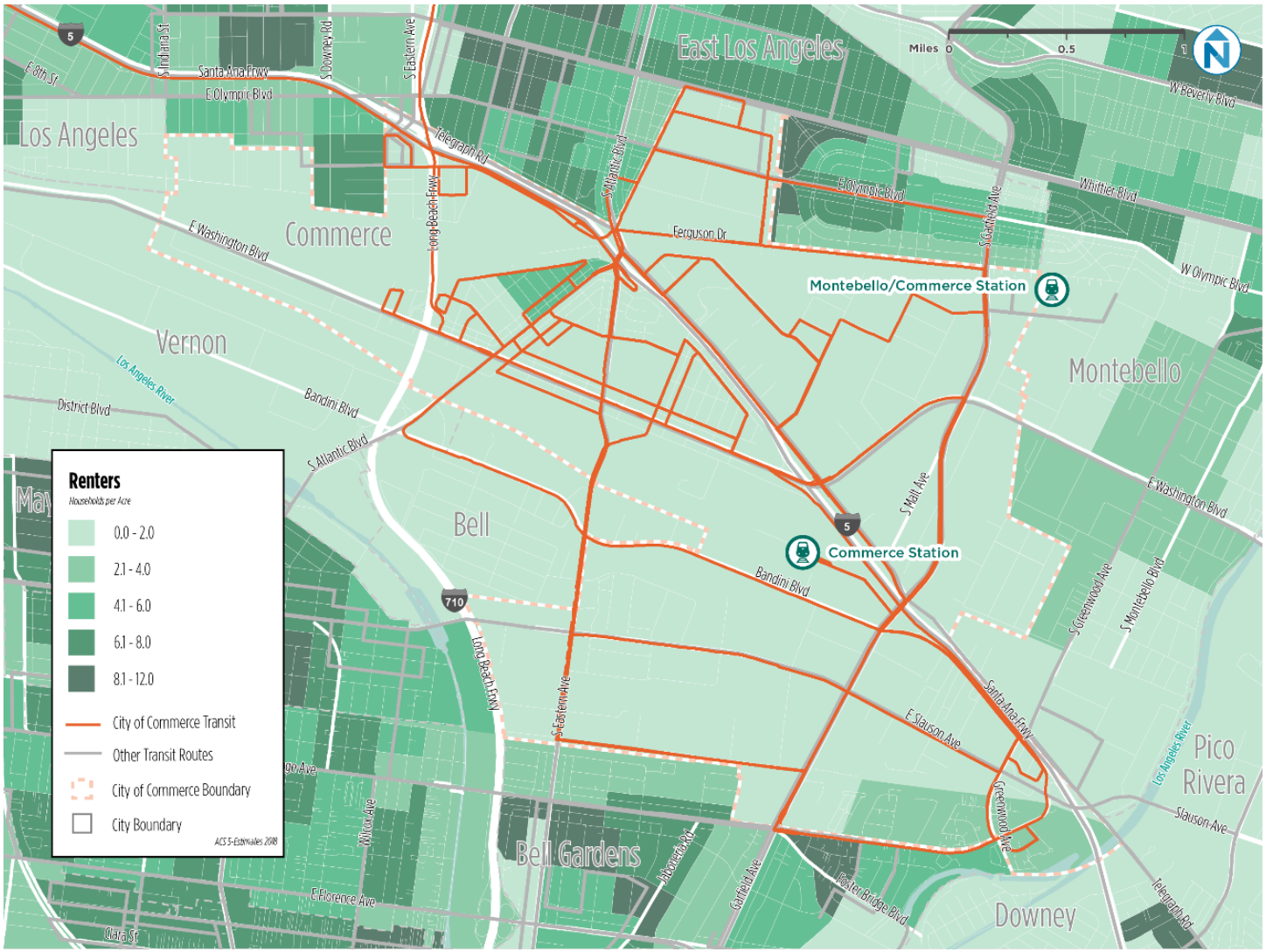
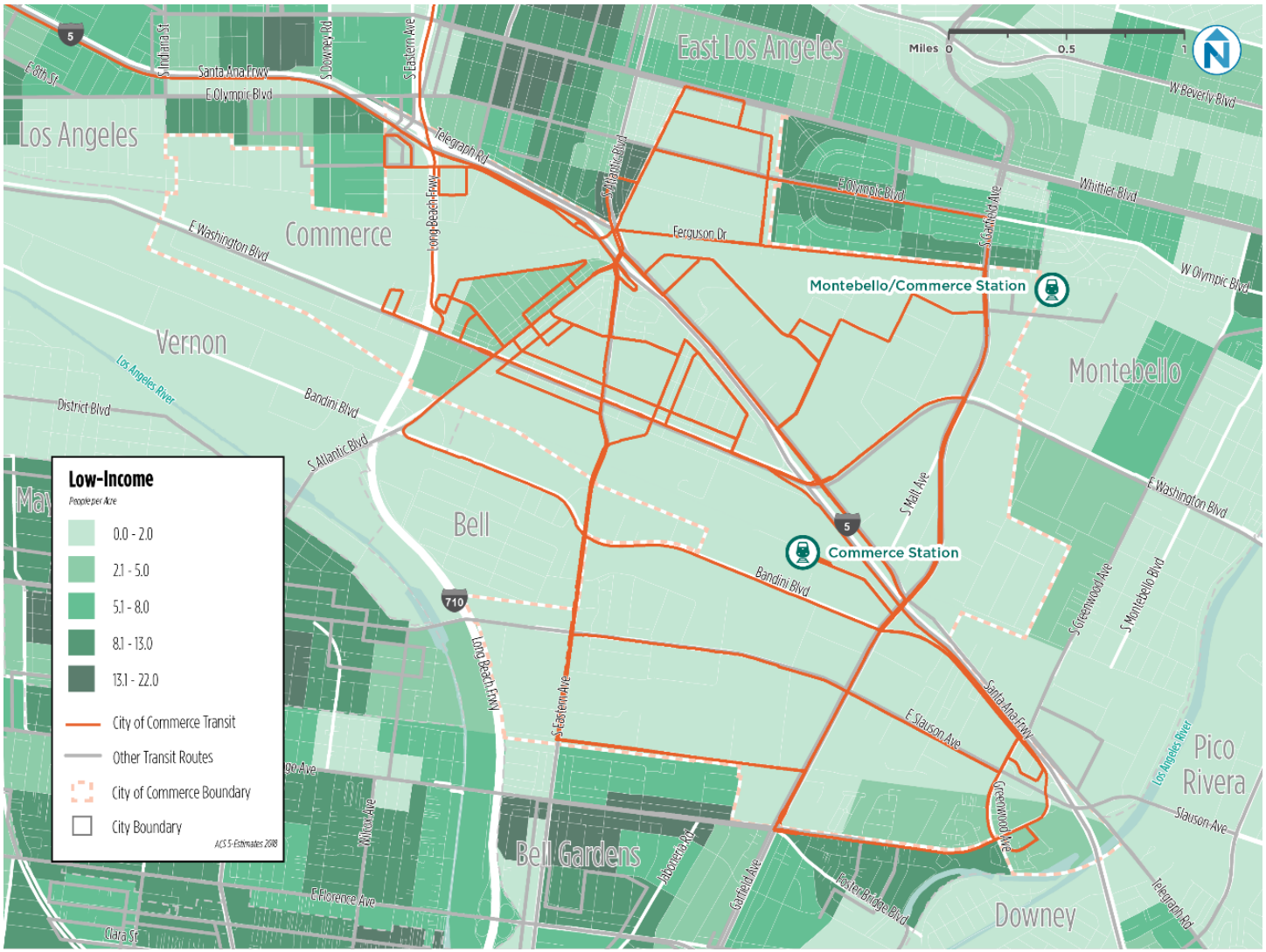


Figure 5 Density of Low-Income Households



Appendix E Route Analysis

ROUTE ASSESSEMENT

This appendix describes each of the City of Commerce Transit's routes accompanied by a table detailing ridership, productivity, on-time performance, frequency, and service span. Productivity and performance indicators were calculated using historical ridership and revenue hours from October 2019. Systemwide ridership by stop and on-time performance are based on July 2019 – October 2019 automatic passenger count (APC) data. While the historical ridership and revenue data is a more accurate assessment at the route level, the APC data is necessary to analyze ridership at the stop level. Trips were considered on-time at each time point if they departed between 0 and 5 minutes after the scheduled departure time. Early trips were those arriving before the scheduled time, and late trips were those arriving 6 or more minutes after the scheduled time.

Ridership maps for individual routes are shown in Appendix A of this document. Due to low sample sizes and limited coverage on APC equipped vehicles, stop and trip level ridership on the Yellow Route and Purple Route could not be adequately evaluated and a route level ridership map was not developed for this route.

100 Green Route

Description

The Green Route is a one-way loop that operates 15 trips per day between Commerce Shopping Center, Veterans Park, and Rosewood Park from 5:45 a.m. to 9:30 p.m. Monday through Saturday. Most trips operate on 65-minute headways, though there are gaps of up to 80 minutes between some trips.

The Green Route serves the Commerce Shopping Center, Bell Gardens Family Medical Center, Del Rio Convalescent Center, Commerce City Hall, and the Senior Center. The Green Route begins and ends at Commerce Shopping Center and operates along a "figure eight" alignment, including a clockwise loop southbound on Garfield Ave, westbound on Slauson Ave, northbound on Eastern Ave, and eastbound on Jillson St, and eastbound on Washington Blvd as well as a counterclockwise loop southbound on Garfield Ave, eastbound on Gage Ave, northbound on Greenwood Ave, and westbound on Slauson Ave. The Green Route operates on a similar alignment as the Yellow Route, but travels in roughly the opposite direction.

100 Green Route Characteristics		
Start Time		5:45 a.m.
End Time		9:30 p.m.
Frequency (mins)		55-80
Weekday		
Average Daily Boardings[1]		321
Boardings per Revenue Hour		19.5
Schedule Adherence	On Time	70%
	Early	11%
	Late	19%
Saturday		
Average Daily Boardings		239
Boardings per Revenue Hour		15.2
Schedule Adherence	On Time	65%
	Early	14%
	Late	21%

Ridership by Stop and Trip

The Green Route has the highest weekday ridership and second highest Saturday ridership in the City of Commerce Transit system, averaging 321 and 239 boardings per day, respectively. The Green Route also has the highest productivity in the City of Commerce Transit system on both weekdays and Saturdays, averaging 19.5 and 15.2 boardings per revenue hour, respectively.

On weekdays, ridership is generally highest in the morning and afternoon peak periods, though the 11:40 a.m. midday trip has the third highest ridership on weekdays and is also the first trip after an 80-minute break in service. This suggests that there is latent demand for an additional trip to fill the gap between the 10:20 a.m. and 11:40 a.m. trip. On weekdays, ridership drops below four passengers per trip after 7:00 p.m., while on Saturdays, ridership drops to three passengers or less after 5:30 p.m. This trend indicates that service on the route may be operating later than demand for service warrants, particularly on Saturdays.

On-Time Performance

The Green Route was on time for 70% of trips, late for 19% of trips, and early for 11% of trips during weekday service, making it an average route in terms of on-time performance. Early arrivals occur on the first segment of the route, between Commerce Shopping Center and Gage Ave & Garfield Ave. Nearly half of weekday trips are late on the segment between Gage Ave & Garfield Ave and

[1] Average daily boardings is drawn from historical ridership data between from October 2019.

Jillson St & Commerce Way. Late running may be caused by traffic congestion or may be due to the circuitous alignment through the Veterans Park neighborhood which requires a large number of vehicle turning movements.

On Saturdays, the Green Route is on time for 65% of trips, late for 21% of trips, and early for 14% of trips. Scheduled run times of both weekday and Saturday trips are extended during the afternoon peak to account for increased travel times associated with afternoon rush hour on weekdays. Because the Saturday operating environment does not encounter the same afternoon congestion and scheduled travel times are consistent between weekday and Saturday service, Saturday trips consistently arrive early. This suggests that the increase in early trips on Saturdays may be due to lower levels of traffic congestion along the route that are not accounted for in the schedule. Adjusting the Saturday schedule to reflect the operating conditions may improve on-time performance for the route.

200 Orange Route

Description

The Orange Route is a one-way, primarily clockwise loop operating 10 trips per day between Commerce Shopping Center, Veterans Park, Bandini Park, and Rosewood Park from 5:37 a.m. to 6:17 p.m. on weekdays only. The Orange Route serves the Commerce Metrolink Station on six trips between 6:00 a.m. – 9:00 a.m. and between 2:45 p.m. – 5:45 p.m. As discussed in Chapter 5, Orange Route service to the Commerce Metrolink Station aligns with scheduled Metrolink service for the 9:08 a.m. trip and the 5:45 p.m. trip. Frequency on the route is relatively low and fluctuates significantly throughout the day, with service operating every 70 – 100 minutes.

200 Orange Route Characteristics		
Start Time		5:37 a.m.
End Time		6:17 p.m.
Frequency (mins)		70-100
Weekday		
Average Daily Boardings		197
Boardings per Revenue Hour		15.5
Schedule Adherence	On Time	78%
	Early	11%
	Late	11%

The Orange Route serves Commerce Shopping Center, the Citadel Outlets, and Commerce Casino, as well as other key destinations like the Bell Gardens Family Medical Center, Commerce Metrolink Station, National Polytechnic College, and Commerce City Hall. The Orange Route begins and ends at Commerce Shopping Center and operates a generally clockwise loop serving the Citadel Outlets and Commerce Casino eastbound on Camfield Ave, southbound on Smithway St, and southbound on Tubeway Ave. The route continues a clockwise loop eastbound on Telegraph Rd, southbound on Garfield Ave, eastbound on Slauson Ave, southbound on Greenwood Ave, westbound on Gage Ave, westbound on Randolph St, northbound on Eastern Ave, eastbound on Bandini Blvd, northbound on Atlantic Blvd, eastbound on Harbor St, southbound on Commerce Way, eastbound on Jillson St, and eastbound on Washington Blvd.

Ridership by Stop and Trip

The Orange Route has average ridership compared to other weekday routes and is the third highest weekday productivity route in the City of Commerce Transit system, averaging 15.5 boardings per revenue hour. The first two trips in the morning and last trip in the evening have less than two passenger boardings. The highest ridership stops on the route are Commerce Shopping Center, Goodrich Blvd & Whittier Blvd, Telegraph Rd & Tubeway Ave, and Slauson Ave & Garfield Ave. There are no boardings or alightings between stops at Eastern Ave & Bandini Ave and Harbor St & Atlantic Blvd. Ridership is also very low between the Citadel Outlets and Metrolink Station on Smithway St and Telegraph Blvd in the southbound direction. There is only one daily boarding on average at the Metrolink station, indicating it may not need to be served.

On-Time Performance

Trips on the Orange Route are on-time 78% of the time, on average, with 11% of trips running late and 11% arriving early, making it an above average route. Most delays on late trips occur on the segment between Commerce City Hall and Commerce Shopping Center, which passes through the mixmaster intersection. End-to-end running time is consistently longer than scheduled trips in the afternoon, indicating that cycle times may need to be adjusted to address impacts of afternoon congestion.

300 Yellow Route

Description

The Yellow Route is a one-way loop that operates 13 trips per day between Commerce Shopping Center, Veterans Park, and Rosewood Park from 5:44 a.m. to 8:57 p.m. on weekdays only. The route operates on a similar alignment as the Green Route but in the opposite direction, serving Del Rio Convalescent Center, Bell Gardens Family Medical Center, and Commerce City Hall. Most trips operate on 70-minute headways, but there are gaps as large as 100 minutes between some trips.

300 Yellow Route Characteristics	
Start Time	5:44 a.m.
End Time	8:57 p.m.
Frequency (mins)	70-100
Weekday	
Average Daily Boardings	243
Boardings per Revenue Hour	15.0

The route begins and ends at Commerce Shopping Center and generally operates a "figure eight" pattern in the opposite direction of the Green Route. The Yellow Route operates a clockwise loop eastbound on Bandini Blvd, southbound on Greenwood Ave, westbound on Gage Ave, and northbound on Garfield Ave and a counterclockwise loop westbound on Washington Blvd, southbound on Eastern Ave, eastbound on Bandini Blvd, and northbound on Garfield Ave.

Ridership by Stop and Trip

The Yellow Route is the fourth highest ridership and fourth highest productivity route in the City of Commerce Transit system, averaging 243 daily boardings and 15.0 boardings per revenue hour. Due to low sample sizes and limited coverage on APC equipped vehicles, stop and trip level ridership on the Yellow Route was not included in this analysis.

On-Time Performance

Due to low sample sizes and limited coverage on APC equipped vehicles, on-time performance on the Yellow Route was not included in this analysis.

400 Red Route

Description

The Red Route is a loop operating 13 trips per day between Commerce Shopping Center, Rosewood Park, Bandini Park, and Bristow Park from 6:15 a.m. to 8:55 p.m., Monday through Saturday. The route serves Commerce Shopping Center, Commerce City Hall, and the Commerce Teen Center. The route operates a similar alignment as the Blue Route but in the opposite direction and does not serve the Citadel Outlets or the Commerce Casino.

The Red Route operates every 70-75 minutes on most trips. While the frequency for this route is more consistent than on other routes, it still varies considerably and makes the route more difficult to understand. The route operates a relatively circuitous alignment including bi-directional service on Triggs St to Bristow Park, a clockwise loop on Bartmus St, Jillson St, and Commerce Way, and a clockwise loop on Wilma Ave, Washington Blvd, Couts Ave, Leonis St, Astor Ave, Cowlin Ave, and Atlantic Blvd. The Red Route operates on a similar alignment as the Blue Route, but in the opposite direction.

400 Red Route Characteristics		
Start Time		6:15 a.m.
End Time		8:55 p.m.
Frequency (mins)		70-80
Weekday		
Average Daily Boardings		268
Boardings per Revenue Hour		18.3
Schedule Adherence	On Time	84%
	Early	8%
	Late	8%
Saturday		
Average Daily Boardings		144
Boardings per Revenue Hour		9.8
Schedule Adherence	On Time	72%
	Early	26%
	Late	2%

Ridership by Stop and Trip

On weekdays, the Red Route is the third highest ridership route and second highest productivity route, averaging 268 boardings per day and 18.3 boardings per revenue hour. On Saturdays, the Red Route is a below average ridership and productivity route, averaging 144 boardings per day and 9.8 boardings per revenue hour. The highest ridership stop on the Red Route by far is the Commerce Shopping Center, with 53 daily weekday boardings. Other high ridership stops include Harbor St & Commerce Way (Rosewood Park and School), and Bedessen Ave & Washington Blvd, which is not adjacent to any notable destinations, but may be used as a transfer location to Montebello Line 50, or as a stop from which customers can walk to employers nearby on Washington Boulevard.

On weekdays, the first trip of the day at 6:15 a.m. has the second highest ridership of all trips, primarily driven by a large number of boardings at Bedessen Ave & Washington Boulevard. On-board loads indicate that these passengers may be riding through to the next trip and alighting at Harbor St & Commerce Way, likely associated with school start time at Rosewood Park School. Midday trips at 12:19 p.m. and 1:30 p.m. have the highest ridership, partly due to boarding activity at the Commerce Shopping Center. Saturday ridership is concentrated in the midday, ranging from 14 to 23 passengers per trip between 9:35 a.m. and 12:19 p.m. All other Saturday trips have between five and ten passengers.

On-Time Performance

On average, 84% of weekday trips on the Red Route arrive on time, with to 8% arriving early and 8% arriving late, making it the highest performing route in terms of on-time performance. The majority of delays on late trips occur in the first and last segment of the route, between Commerce Shopping Center and Rosewood Park and between Goodrich Blvd & Olympic Blvd and Commerce Shopping Center, respectively.

On average, 72% of Saturday trips arrive on-time, with almost all other trips arriving early. Average running times exceed scheduled running times during the 3:50 p.m. and 5:00 p.m. trips on weekdays and during the 5:00 p.m., 6:10 p.m., and 7:39 p.m. trips on Saturdays, indicating that traffic congestion related delays may be worse during this time period. This discrepancy between weekday and Saturday on-time performance indicates that weekday traffic congestion is notably worse than on Saturdays and without accounting for faster travel times in the Saturday schedule, the number of trips arriving early increases significantly. Adjusting schedules to reflect changes in traffic patterns would help to improve on-time performance for the route.

500 Blue Route

Description

The Blue Route is a loop operating nine trips per day between Commerce Shopping Center, the Citadel Outlets, Rosewood Park, Bandini Park, and Bristow Park from 8:55 a.m. to 8:55 p.m. on Mondays through Saturdays. The Blue Route serves several key destinations including Commerce Shopping Center, the Citadel Outlets, Commerce Casino, Commerce City Hall, and the Commerce Teen Center. The route operates along a similar alignment as the Red Route, but in the opposite direction. It is important to note that the span on the Blue Route starts later in the morning than the Red Route, meaning that during the morning peak, most of the route is only served in one direction.

The Blue Route begins and ends at Commerce Shopping Center and operates a circuitous alignment including bi-directional service on Triggs St to Bristow Park, a clockwise loop on Camfield Ave, Smithway St, Tubeway Ave, and Telegraph Rd, a counterclockwise loop on Commerce Way, Jillson St, Fidelia Ave, and Bartmus St, and a counterclockwise loop on Atlantic Blvd, Cowlin Ave, Astor Ave, Leonis St, Couts Ave, and Washington Blvd.

500 Blue Route Characteristics		
Start Time		8:55 a.m.
End Time		8:55 p.m.
Frequency (mins)		80-110
Weekday		
Average Daily Boardings		155
Boardings per Revenue Hour		12.9
Schedule Adherence	On Time	73%
	Early	27%
	Late	0%
Saturday		
Average Daily Boardings		117
Boardings per Revenue Hour		9.7
Schedule Adherence	On Time	48%
	Early	52%
	Late	0%

Ridership by Stop and Trip

The Blue Route is a below average ridership and productivity route on both weekdays and Saturdays. The route averages 155 boardings per day and 12.9 boardings per revenue hour on weekdays and 117 boardings per day and 9.7 boardings per revenue hour on Saturdays. The highest ridership stops on the Blue Route are the Commerce Shopping Center, Marianna Ave & Tuttle St, Commerce City Hall, and Goodrich Blvd & Whittier Blvd. Ridership in the mornings and evenings is relatively low, with the highest ridership trips between 1:55 p.m. and 5:00 p.m.

Saturday ridership is relatively consistent throughout the day, with most trips averaging between 13 and 16 boardings. Ridership drops below five passengers on the last two trips of the route, at 6:32 p.m. and 8:20 p.m., indicating that service may be operating later than demand warrants.

On-Time Performance

The Blue Route has above average on-time performance on weekdays, with 73% of trips arrive on-time, with 27% of trips arriving early, and no trips arriving late at scheduled time points. On Saturdays, 48% of trips are on-time, compared to 52% of trips arriving early and no late running. Because running times are identical between weekdays and Saturdays, reduced traffic congestion on Saturdays may result in excess scheduled time, and a high level of early arrivals.

600 Citadel Outlets Express

Description

The Citadel Outlets Express provides connections between the Citadel Outlets, and several destinations in downtown Los Angeles including Union Station and LA Live. The route operates 19 trips per day on weekdays and 15 trips per day on Saturdays and Sundays. Weekday service operates from 6:55 a.m. through 10:20 p.m., while Saturday and Sunday service operates from 9:23 a.m. through 10:20 p.m. Frequency on the Citadel Outlets Express fluctuates throughout the day between 30 and 90 minutes. This is the highest frequency route in the City of Commerce Transit system at certain times of day, and also the only route that operates seven days per week.

600 Citadel Outlets Express Characteristics		
Weekday		
Start Time		6:55 a.m.
End Time		10:20 p.m.
Frequency (mins)		30-90
Average Daily Boardings		289
Boardings per Revenue Hour		10.0
Schedule Adherence	On Time	31%
	Early	56%
	Late	13%
Saturday		
Average Daily Boardings		299
Boardings per Revenue Hour		12.3
Schedule Adherence	On Time	55%
	Early	38%
	Late	8%
Sunday		
Average Daily Boardings		297
Boardings per Revenue Hour		12.4
Schedule Adherence	On Time	22%
	Early	68%
	Late	10%

The route is an express service that operates a clockwise loop on local streets in Commerce, connects to downtown Los Angeles via highways, and then operates a clockwise loop via highways and surface streets in downtown Los Angeles. The Citadel Express begins and ends at the Citadel Outlets and operates northbound on Hoefner Ave, southbound on Smithway St, southbound on Tubeway Ave, southbound on Telegraph Rd, eastbound on Washington Blvd, northbound on I-710, westbound on I-10, westbound on US-101 to Union Station, westbound on US-101, southbound on Los Angeles St, westbound on 1st St, northbound on Grand Ave, westbound on Olympic Blvd, southbound on I-110, eastbound on US-101, southbound on I-5, and northbound on Hoefner Ave. It should be noted that Union Station is served as the first Citadel Express stop in downtown Los Angeles, however it is not served before returning to Commerce. This means that passengers who wish to return to Commerce from Union Station must ride through the surface street stops in downtown Los Angeles, significantly adding to travel times.

Ridership by Stop and Trip

The Citadel Outlets Express is the second highest ridership route on weekdays and the highest ridership routes on both Saturdays and Sundays, averaging 289, 299, and 297 boardings per day, respectively. Despite relatively high ridership, the route has below average productivity on weekdays, Saturdays, and Sundays, averaging 10.0, 12.3, and 12.4 boardings per revenue hour, respectively. This is likely due to the fact that, as an express route, much of the route's operating time is spent on freeways between Commerce and downtown Los Angeles, during which passengers

cannot board or alight. The Citadel Outlets Express also operates much higher service levels, with almost double the weekday revenue hours of any other route.

The highest ridership stops on the route are the Citadel Outlets, Union Station, Telegraph Rd & Tubeway Ave, Grand Ave & 5th St, and Olympic Blvd & Figueroa St. On weekdays, the first five trips of the day do not connect to most stops in downtown Los Angeles and only serve Union Station. Ridership on these trips is relatively low, averaging fewer than five passengers per trip. After 10:00 a.m. all stops are served and ridership increases during the late morning and afternoon, from about 10:00 a.m. – 1:00 p.m. and 4:00 p.m. – 6:30 p.m. In the morning and midday, riders are traveling inbound to Commerce, with boardings in downtown Los Angeles, and alightings mostly at the Citadel. In the afternoon and evening, ridership patterns reverse, with most boardings happening in Commerce, and most alightings happening in downtown Los Angeles.

Saturday ridership fluctuates throughout the day, with several peaks occurring around 10:00 a.m., 2:30 p.m., 4:30 p.m., and 8:00 p.m. The first trip on Saturday only serves Union Station, not downtown Los Angeles, and averages three riders, while the second trip, which does serve downtown Los Angeles has roughly ten times the ridership as the first trip. This indicates that there is demand for service in downtown Los Angeles earlier in the morning. Consistently serving downtown Los Angeles on all trips would make the service easier to understand for passengers and better meet the observed demand for service. Sunday ridership generally increases in the morning and midday period. before decreasing in the afternoon and evening. Sunday service averages five passengers or fewer on the last three trips in the evening.

On-Time Performance

The Citadel Express has the worst weekday on-time performance in the system, with only 31% of trips arriving on-time. More than half of trips (56%) arrive early. Early running is partially due to early departures at the first time point. Operators may be leaving early to try to avoid late running at subsequent timepoints, however early departures also inconveniences passengers. On-time performance generally improves on Saturdays, with 55% of trips arriving on-time, 38% of trips arriving early, and 7% of trips arriving late. On-time performance worsens on Sunday, with 22% of trips arriving on-time, 68% of trips arriving early, and 10% of trips arriving late.

Actual and scheduled travel times fluctuate throughout the day but are consistent between days of the week. The variations in on-time performance are likely due to the unique traffic congestion characteristics observed during freeway operations. Traffic congestion related delays on freeways may be less predictable than on surface streets and result in less predictable travel times for the route.

700 26th Street Shuttle

Description

The 26th Street Shuttle is a clockwise loop route serving the Commerce Metrolink Station, the Citadel Outlets, Commerce Casino, National Polytechnic College, and Commerce City Hall on weekdays only. The route operates eight trips per day and only provides service during peak periods between 7:00 a.m. – 9:30 a.m. and 2:45 p.m. – 5:35 p.m. Service frequency varies between 33 minutes and 63 minutes throughout the day. As discussed in Chapter 5, the 26th Street Shuttle is scheduled to provide connecting service to the Commerce Metrolink Station and facilitate transfers.

700 26th Street Shuttle Route Characteristics		
Start Time		7:00 a.m.
End Time		5:35 p.m.
Frequency (mins)		33 – 63
Weekday		
Average Daily Boardings		43
Boardings per Revenue Hour		8.2
Schedule Adherence	On Time	64%
	Early	23%
	Late	14%

The route begins and ends at the Commerce Metrolink Station and operates eastbound on 26th St, southbound on Garfield Ave, westbound on Slauson Ave, northbound on Eastern Ave, westbound on Sheila St, northbound on Ralph Liberman Ave, eastbound on Washington Blvd, northbound on Commerce Way, westbound on Harbor St, northbound on Eastern Ave, southbound on Telegraph Rd, eastbound on Camfield Ave, southbound on Smithway St, northbound on Leo Ave, eastbound on Corvette St, southbound on Tubeway Ave, southbound on Telegraph Rd, and westbound on 26th St.

Ridership by Stop and Trip

The 26th Street Shuttle is the lowest ridership and lowest productivity route in the system, averaging 44 boardings per day and 8.2 boardings per revenue hour. The majority of boardings and alightings occur at the Commerce Metrolink Station, with other ridership activity occurring at Camfield Ave & Telegraph Rd, Sheila St & Ralph Lieberman Ave, and Commerce Way & Jillson St. The first trip of the day is the highest ridership trip, averaging nearly nine boardings, eight of which take place at the Metrolink Station. This corresponds to the arrival of the northbound Orange County Line train at 7:00 a.m., indicating that people are traveling from the south to access destinations in Commerce. All other trips average two or fewer boardings.

On-Time Performance

The 26th Street Shuttle arrives on-time for 64% of trips, early for 23% of trips, and late for 14% of trips. Travel times increase on the afternoon trips, around 4:00 p.m. and 5:00 p.m. Because the 26th Street Shuttle operates as a connecting service to the Commerce Metrolink service, on-time performance is particularly important for this route.

2000 Purple Route

Description

2000 Purple Route Characteristics	
Start Time	10:30 a.m.
End Time	6:08 p.m.
Frequency (mins)	69 - 86
Weekday	
Average Daily Boardings	66
Boardings per Revenue Hour	8.7

The Purple Route is a primarily counterclockwise loop providing seven trips per day between Commerce Shopping Center, Bristow Park, Rosewood Park, Commerce Casino, and the Citadel Outlets. The route operates on weekdays only with a frequency that varies throughout the day from 69 – 86 minutes.

The route begins and ends at Commerce Shopping Center and operates bi-directionally to Bristow Park and Marianna Ave on Triggs St, a clockwise loop through the Bandini Park and Rosewood Park neighborhoods on Cowlin Ave, Harbor St, Commerce Way, Jillson St, and Washington Blvd. The route also operates a clockwise loop on Telegraph Rd, Camfield Ave, and Smithway St, before returning to the Commerce Shopping Center northbound on Tubeway Ave, eastbound on Corvette St, northbound on Saybrook Ave, eastbound on Flotilla St, northbound on Garfield Ave, and westbound on Olympic Blvd.

Ridership by Stop and Trip

The Purple Route is the second lowest weekday ridership and productivity route in the system, averaging 66 boardings per day and 8.7 boardings per revenue hour. Due to low sample sizes and limited coverage on APC equipped vehicles, stop and trip level ridership on the Purple Route was not included in this analysis.

On-Time Performance

Due to low sample sizes and limited coverage on APC equipped vehicles, on-time performance on the Purple Route was not included in this analysis.

800 Church Special

Description

The Church Special is a connector route that provides three trips on Sunday mornings between Rosewood Park, St. Marcellinus Church, Bandini Park, the Teen Center, Telacu Manor, and Veterans Park. Each of the three trips (departing at 8:50 a.m., 10:45 a.m., and 12:10 p.m.) operates along a similar alignment but serves unique stops. All three trips serve the Rosewood Park and Bandini Park neighborhoods, but only the 8:50 a.m. and 10:45 a.m. trips serve the Veterans Park neighborhood.

800 Church Special Route Characteristics		
Start Time		8:50 a.m.
End Time		12:25 p.m.
Headway (mins)		*3 trips*
Sunday		
Average Daily Boardings		51
Boardings per Revenue Hour		13.9
Schedule Adherence	On Time	100%
	Early	0%
	Late	0%

The first trip of the route provides a connection between Veterans Park and St. Marcellinus Chruch by operating southbound on I-5 to Veterans Park, northbound on Telegraph Rd, and westbound on Washington Blvd before circulating counterclockwise through Rosewood Park and Bandini Park, ending at St. Marcellinus Church.

The second and third trips of the route both operate a counterclockwise loop through Bandini Park. The third trip of the route ends at Harbor St and Rosewood Park, while the second trip continues operating a clockwise loop through the Rosewood Park neighborhood, a bi-directional extension past the Commerce Casino on Telegraph Rd and Tubeway Ave, and a clockwise loop in Veterans Park before terminating at Eastern Ave and Washington Blvd.

Ridership by Stop and Trip

The Church Special Route is a low ridership route due to limited service levels, averaging 51 boardings per day, and an average productivity route, averaging 13.9 boardings per revenue hour. The highest ridership stops on the route include St. Marcellinus Church, Tubeway Ave midblock, Zindell Ave & Gage Ave, Bandini Park, and Harbor St & Strong Ave. Ridership is strongest on the first trip of the morning and declines on the second and third trips.

On-Time Performance

The route arrives on-time for 100% of trips. The relatively low levels of traffic congestion on Sunday and the short distance for the route alignment likely create a predictable operating environment with few delays resulting in strong on-time performance for the route.

900 Shopper Special Route

Description

The Shopper Special Route is a connector route that provides five trips per day between the Commerce Shopping Center, Bandini Park, Rosewood Park, the Citadel Outlets, and Veterans Park. The route operates every 90 minutes between 12:38 p.m. and 6:28 p.m. on Sundays only.

900 Shopper Special Route Characteristics		
Start Time		12:38 p.m.
End Time		6:28 p.m.
Frequency (mins)		90
Sunday		
Average Daily Boardings		77
Boardings per Revenue Hour		13.1
Schedule Adherence	On Time	92%
	Early	8%
	Late	0%

The route begins and ends at the Commerce Shopping Center, except for the first and last trips which begin and end at Rosewood Park, respectively. The route operates a circuitous alignment including bi-directional service on Triggs St to Bristow Park, a counterclockwise loop through Bandini Park, a counterclockwise loop through Rosewood Park, serves the Citadel Outlets and Commerce Casino via Camfield Ave, Smithway St, Tubeway Ave, and Telegraph Ave before operating a clockwise loop through Veterans Park and connects back to the Commerce Shopping Center via Garfield Ave, Ferguson Ave, Gerhart Ave, and Olympic Blvd.

Ridership by Stop and Trip

The route is a relatively low ridership route, averaging 77 boardings per day, and an average productivity route, averaging 13.1 boardings per revenue hour. The highest ridership stops on the route include Commerce Shopping Center, Greenwood Ave & Gage Ave, Goodrich Blvd & Olympic Blvd, and Hepworth Ave & Leonis St. Ridership is relatively consistent throughout the day, averaging between four and eight passengers per trip.

On-Time Performance

The 900 Shopper Special Route arrived on-time for 92% of trips, early for 8% of trips, and late for 0% of trips. Similar to the 800 Church Special Route, the relatively low levels of traffic congestion on Sunday likely create a predictable operating environment with few delays resulting in strong on-time performance for the route.