CHAPTER 2: EXISTING TRANSIT SERVICE

Transit Market Areas

Transit service demand varies across the region. The Transit Market Index is an indicator of the potential demand for transit service within a specific area and guides the types and level of transit service that are appropriate for each market area. There are five Transit Market Areas in the seven-county region. These are defined using a combination of measures, including population and employment density, urban form, automobile availability, and intersection density (proxy for pedestrian connectivity). The Highland Park study area is entirely in Market Area II, as shown in **Appendix B**.

Transit Market Area I contains the highest density of population and employment and has the fewest vehicles compared to people over the legal driving age of 16 years. This area typically has a grid pattern street network that promotes walking. Market Area I has the potential transit ridership necessary to support the most intensive fixed-route transit service, typically providing higher frequencies, longer hours and more transit options outside of peak periods. None of the study area is located Transit Market Area I. However, many routes that terminate in, or operate through the Highland Park study area, originate from Market Area I and operate at a Market Area I level of service. Because of this geographic relationship, Highland Park benefits from levels of service that are equal or better than its market area would otherwise warrant.

Transit Market Area II contains moderately high population and employment densities and typically has a traditional street grid. Most of Market Area II can support many of the same types of fixed-route transit service as Market Area I, although usually at wider route spacing, lower frequencies and shorter service spans.

Opportunities exist to increase employment and population density at the Ford Site. The *City of Saint Paul adopted the Ford Site Zoning and Public Realm Master Plan* in September of 2017. While the site has historically been an employment center, the plan establishes land use controls that would increase residential density while maintaining a significant employment presence.

Demographics and Land Use

Factors that can influence a person's likelihood to use transit include the availability of transit service to important destinations, whether an auto is available for a trip, the cost and availability of parking, and the pedestrian connectivity of an area. People living and/or working in areas of the highest population and employment densities tend to ride transit more frequently than those in less-dense areas.

Population

The total population in the study area is approximately 31,772. As shown in **Appendix C**, the highest residential density within the study area is concentrated along West 7th Street between St Paul Avenue on the east and Gannon Drive on the west. Additional pockets of higher levels of residential density are found near:

- Cleveland Avenue and St Paul Avenue adjacent to the Ford Site
- Highland Parkway between Cleveland and Fairview
- Randolph Avenue between Cleveland and Snelling

Analysis of trends in demographic data helps Metro Transit adjust service to match areas of growing or declining populations. The study area population is expected to increase by nearly 20 percent between 2010 and 2040. Specific areas of population growth:

- primarily planned residential and mixed-use redevelopment at the Ford Site
- Shepard Davern area with the expected redevelopment of Sibley Plaza to mixed use and the redevelopment in and around the Shepard Road and Gannon Road sites.

Employment

There are approximately 11,300 jobs in the study area. As shown in **Appendix D** employment opportunities within the study area are currently concentrated adjacent to Ford Parkway between Cretin and Cleveland, most notably office, retail and service industry jobs at the Highland Village shopping area. This retail center and adjacent development is a large trip generator that serves as a focal point for transit service. Employment uses are also planned to create jobs on the Ford Site.

Appendix E describes where job concentrations are located. Specifically, the Highland Village shopping area contains approximately 7,100 jobs paying less than \$40,000 a year. This measure is important because the employees that have these jobs that pay less than \$40,000 a year are more likely to use transit.

Transit-Reliant Groups

Analysis of transit ridership users show that low-income communities, people of color and people with disabilities are more likely to rely on transit for a larger percentage of their overall travel. It is important that these groups share equitably in the service provided. The City's goal is the have 20% affordable housing at the Ford Site.

Low-Income Communities

Across the region, 12 percent of all residents are considered low-income, defined as households earning less than 185 percent of the poverty line.

Appendix F shows the largest percentage of low-income residents in the study area live in the Sibley Manor neighborhood along West 7th Street at Maynard Street. This Area of Concentrated Poverty is defined by the Met Council as an area where at least 50 percent of the population lives in poverty. This group is important to note because the costs of owning an automobile are more challenging for persons with lower income.

Other low-income communities within the study boundaries are observed in several areas:

- Along St Paul Avenue between Montreal Avenue and Davern Street
- Along West 7th Street within the entire study area

People of Color

The Federal Transit Administration defines minority persons referred to as people of color in this section, to include anyone who identifies themselves as American Indian and Alaskan Native, Asian, Black or African American, Hispanic or Latino, or Native Hawaiian or Other Pacific Islander. **Appendix G** shows the persons of color population in the study area using the 2010 Census. In the Twin Cities region, 28.8 percent of the population are people of color.

Concentrations of people of color within the study area:

- The neighborhood bounded by Davern and Homer along West 7th Street has the highest percentage (above 51 percent) of people of color in the study area.
- Other areas that are higher than the regional average include east of Lexington Avenue, south of W. 7th Street, along St. Paul Avenue and on Ford Parkway between Cleveland and Fairview avenues.

People with Disabilities

Appendix H shows people with disabilities, defined as someone who has vision, hearing, cognitive, ambulatory, self-care or independent living disabilities. People with disabilities are more likely to use transit, particularly if the disability limits or prohibits driving. Region-wide, 9.7 percent of the population has a disability.

Concentrations of people with disabilities within the study area:

- The highest percentage (16 to 20 percent) of people with disabilities in the study area is located along West 7th Street between Davern and Randolph
- Near St. Catherine's University along Fairview and Randolph avenues

It is important to note that some people with disabilities use Metro Mobility paratransit service instead of regular route service.

Cars Available per Person

People are more likely to use transit if an automobile is not always available, regardless if that is by choice or by circumstance. **Appendix I** shows the cars available per person. Zero-car households are one part of this measure, but anytime that vehicles are being shared it is more likely that transit is being used for some trips. For example, an average of less than one car per person over age 16 means that not everyone has access to a vehicle for all trips. The lower the average, the more sharing of cars and using other forms of travel such as biking and transit.

Areas within the project area where many residents do not have reliable access to a vehicle:

- The area bounded by Cleveland, Fairview, Randolph, and Highland Parkway (likely influenced by the St. Catherine's student population)
- The area along West 7th Street bounded by Davern Street and Highland Parkway

Regional Transit Standards

Design guidelines and service standards are outlined in the 2040 TPP. Route types, along with transit market areas, help guide the appropriate service levels and set minimum ridership and route performance thresholds.

Route Types

The study area is served by four route types: core local, supporting local, Arterial BRT (Rapid Bus) and commuter/express. The core local radial routes operate to downtown St. Paul, supporting local cross-town routes are oriented north-south. Arterial BRT A line service generally operates as a crosstown route. Route 134 commuter express service operates from Highland Park to downtown Minneapolis during weekday rush hours.

The route structure in the study area is designed to meet a variety of transportation needs. The overall route structure is radially oriented to downtown St. Paul or downtown Minneapolis and a grid of cross-town routes that connect with the radial route service.

A map of the routes under review in this study area are shown in Figure 1 on page 6.

Core Local

The core local routes in the study include all those which operate a portion of their total service in the study area including routes 70, 74 54, and A Line.

Supporting Local

The supporting local routes in the study include all those which operate a portion of their total service in the study area including routes 23, 46, 83, 84, 87.

Commuter/Express

Route 134 is the only commuter/express route in the study area. During peak hours Route 134 offers service from Highland Park with local pick-up and then operates express to downtown Minneapolis with limited reverse commute service from downtown Minneapolis to Highland Park.

Service Standards

Appendix G of the 2040 TPP describes transit service design guidelines and performance standards by route type and market area. Span of service shown in

Table 1 refers to how early in the morning and late at night service runs.

Table 2 describes how often trips operate and Table 3 shows PPISH guidelines.

Table 1: Minimum Span of Service Guidelines

| Doute Tune | | Wee | Weekend | | | |
|----------------------|------|--------|---------|-----|----------|--------|
| Route Type | Peak | Midday | Evening | Owl | Saturday | Sunday |
| Core Local Bus* | • | • | • | 0 | • | • |
| Supporting Local Bus | • | • | • | 0 | • | • |
| ABRT | • | • | • | 0 | • | • |
| Commuter Express Bus | • | 0 | 0 | 0 | 0 | 0 |

Service Provided ●; Service Typically Provided ①; Service As Demand Warrants ○

Peak - 6:00am to 9:00am and 3:00pm to 6:30pm; Midday - 9:00am to 3:00pm; Evening - 6:30pm to 1:30am; Owl - 1:30am to 5:00am; Saturday - Saturday Service; Sunday - Sunday/Holiday Service

Table 2: Minimum Service Frequency Guidelines

| Route Type | Market Area | | | | | | |
|----------------------|--|-------------|-------------------------|---------|--------|--|--|
| | Area I | Area II | Area III | Area IV | Area V | | |
| Core Local Bus | 15" Peak 30" Offpeak 30" Weekend | 60" Offpeak | 30" Peak 60" Offpeak | NA | NA | | |
| Suburban Local Bus | NA | 60" Weekend | 60" Weekend | NA | NA | | |
| Commuter Express Bus | 30" Peak | | 3 Trips each peak | | NA | | |

 $Additional\,service\,may\,be\,added\,as\,demand\,warrants\,and\,guidelines\,apply\,primarily\,to\,the\,peak\,direction.$

Table 3: Appendix G PPISH Guidelines

| Pouto Typo | PPISH Guidelines | | | | |
|----------------------|------------------|------------------|--|--|--|
| Route Type | Route Average | Minimum Per Trip | | | |
| Core Local Bus* | > 20 | >15 | | | |
| Supporting Local Bus | >15 | >10 | | | |
| Commuter Express Bus | Peak >20 | Peak >15 | | | |
| ABRT | >25 | >5 | | | |

^{*}Local limited stop routes will operate primarily in the peak period.

Existing Service Levels, Performance and Facilities

The route structure in the study area is designed to meet a variety of transportation needs. The overall structure is both radial oriented to downtown St. Paul or Minneapolis and a grid of cross-town routes perpendicular to the radial routes.

Radial routes from downtown St Paul operate through Highland Park and extend to Minneapolis, where they terminate at the METRO Blue Line 46th Street Station or they terminate in Highland Park near Cleveland and Ford Parkway.

Crosstown routes are generally located about 1 mile apart. North-south crosstown routes serving Highland Park make connections with the METRO Green Line service at University Avenue and terminate at the Rosedale Transit Center in Roseville. Minneapolis crosstown routes connect Highland Park with METRO Blue Line 46th Street Station and to south Minneapolis radial routes.

The Highland Park and Highland Village shopping district is one of the most well served areas by transit in the region. Today nearly 800 weekday transit trips operate through or terminate in Highland Park. Furthermore, this level of transit service is nearly as good on weekends. Routes included in the study include all those which operate a portion of their total service in the study area.

An analysis uses peer areas mostly taken from urban commercial nodes in Market Area II. These areas share similar demographics including population density, employment density, car availability, and urban form. Population densities of the selected areas are all between 7 and 9 people per acre, similar to the approximate population density of 7.5 people per acre in Highland Park. The Uptown area of south Minneapolis is also included in the analysis and is the exception, with higher levels of population and employment density. Located in Market Area I it is the densest, most transit supportive area outside of the downtown region and is included for comparison purposes only. The peer area analysis shows that Highland Park has more transit trips than comparable areas in the analysis with the exception of Uptown. A map of the peer area comparison is shown in Figure 2 on page 17.

The level of transit service in Highland Park is more than what is typically available in comparable areas within Transit Market Area 2. Highland Park benefits from its multiple route connections to the Green Line on University Avenue and to the Blue Line at 46th Street Station across the Ford Bridge. **Figure 3** on page 18 shows levels of transit service by market area for the region.

Table 4, comparable Market Area 2 locations (not including Highland Park) have an average of about 450 daily trips, ranging from about 300 to 700 daily trips. Highland Park stands at the upper range with about 800 daily trips. This count is closer to Uptown with its 1,000 daily transit trips.

Table 4: Peer Area Weekday Transit Trip Counts

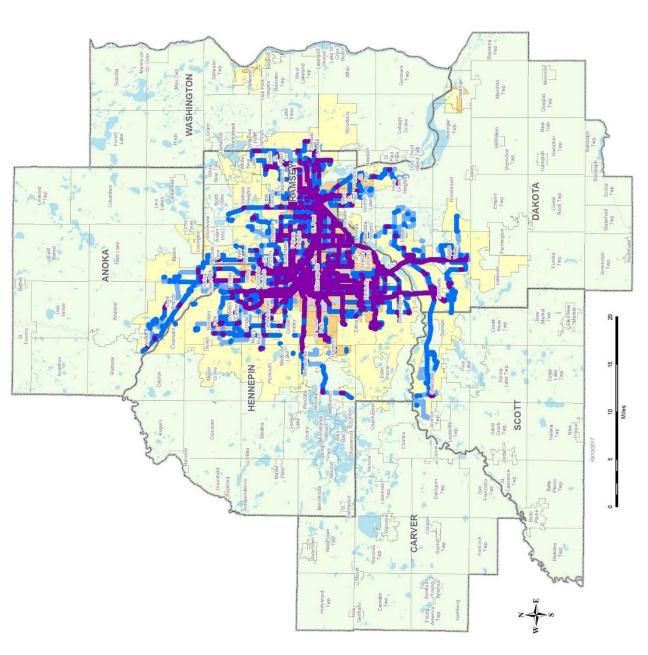
| Uptown | | | | | |
|--------|-------|--|--|--|--|
| Route | Trips | | | | |
| 4 | 150 | | | | |
| 6 | 228 | | | | |
| 12 | 40 | | | | |
| 17 | 139 | | | | |
| 21 | 259 | | | | |
| 23 | 89 | | | | |
| 53 | 18 | | | | |
| 113 | 15 | | | | |
| 114 | 20 | | | | |
| 115 | 4 | | | | |
| 612 | 46 | | | | |
| TOTAL | 1008 | | | | |

| NE Minneapolis | | | | | | |
|----------------|-------|--|--|--|--|--|
| Route | Trips | | | | | |
| 4 | 103 | | | | | |
| 10 | 194 | | | | | |
| 17 | 85 | | | | | |
| 25 | 38 | | | | | |
| 32 | 65 | | | | | |
| 59 | 21 | | | | | |
| 118 | 4 | | | | | |
| 141 | 11 | | | | | |
| TOTAL | 521 | | | | | |

| Longfellow | | | | | | |
|------------|-------|--|--|--|--|--|
| Route | Trips | | | | | |
| 7 | 77 | | | | | |
| 9 | 83 | | | | | |
| 21 | 184 | | | | | |
| 23 | 89 | | | | | |
| 53 | 18 | | | | | |
| Blue Line | 220 | | | | | |
| TOTAL | 671 | | | | | |
| | | | | | | |

| Highlar | Highland Park | | | | | | | |
|---------|---------------|--|--|--|--|--|--|--|
| Route | Trips | | | | | | | |
| 23 | 34 | | | | | | | |
| 46 | 62 | | | | | | | |
| 54 | 159 | | | | | | | |
| 70 | 35 | | | | | | | |
| 74 | 114 | | | | | | | |
| 84 | 65 | | | | | | | |
| 87 | 85 | | | | | | | |
| 134 | 22 | | | | | | | |
| A Line | 212 | | | | | | | |
| TOTAL | 788 | | | | | | | |
| | | | | | | | | |

Figure 2: Peer Area Comparison – Weekday Daily Total Trips



Note:
Transit ink Service is available in Market Areas IV and V during the normal span of service. TransitLink service extends into Market Areas I, II, and III when regular route service does not meet minimal requirments.

Market Area Definitions

Market Area IV & V

Market Area II Market Area III Market Area III

Market Area II Level of Service Market Area III Level of Service

Market Area I Level of Service

Transit Service

Figure 3: Transit Service Market Area Analysis

Service Descriptions and Frequencies

A description of specific route structures, key destinations served, and the span and frequency of these area routes are outlined below (service frequencies are averages and may apply to only the main portion of the route). Service frequencies for study area routes meet regional standards and are summarized below.

A Line

A Line Rapid Bus service was introduced in 2016 as the region's first arterial BRT service. Funded by a Federal Congestion Mitigation and Air Quality (CMAQ) grant for a term of three years, this new service offers off-vehicle fare payment, a faster routing provided by limited stop service and high customer amenity stations between the METRO Blue Line 46th Street Station via 46th Street, Ford Parkway, and Snelling Avenue and the Rosedale Transit Center. Service operates every 10 minutes seven days a week during most hours of the day. Since the introduction, A Line and Route 84 ridership has increased in the corridor by 30% and now carries an average of 5,800 weekday rides.

Route 23

Route 23 provides local crosstown service from the Highland Park on Ford Parkway, and the METRO Blue Line 38th Street Station via 38th Street to Uptown. Service frequencies in Highland Park are hourly.

Route 46

Route 46 provides local service from the Highland Park via Ford Parkway, 46th Street, METRO Blue Line 46th Street Station, the 46th Street and I-35W Station and 50th Street in south Minneapolis and Edina. Service frequencies in Highland Park are generally every 30 minutes.

Route 54

Route 54 provides limited stop service between the Mall of America, MSP airport, downtown St. Paul and the Union Depot via Hwy. 5 and West 7th Street. Service frequencies range from every 12 to every 15 minutes. Beginning in June 2018 Route 54 rush hour service frequencies on West 7th Street was improved to every 10 minutes and some trips were extended to the East Side and Maplewood Mall. The service expansion will be funded by a Federal Congestion Mitigation and Air Quality (CMAQ) grant for a term of three years.

Route 70

Route 70 provides local service from Highland Park via Ford Parkway, St. Clair, West 7th, Downtown St. Paul and Sun Ray Transit Center. Service frequencies are every 30 minutes during peak times and every 60 minutes during weekday midday. There is no weekend service west of downtown St. Paul.

Route 74

Route 74 provides local service from the METRO Blue Line 46th Street Station, via 46th Street, Ford Parkway, Randolph, West 7th, downtown St. Paul East 7th and Minnehaha Avenue, to Sun Ray Transit Center. Service frequencies to Highland Park range from every 15 minutes to every 20 minutes on weekdays and Saturdays and every 30 minutes on Sundays.

Route 83

Route 83 provides local crosstown service from West 7th and Montreal via Lexington Parkway to the METRO Green Line Lexington Parkway Station at University Avenue, to Roseville. Service frequencies are every 30 minutes all days of the week during the day and every 60 minutes at night.

Route 84

Route 84 is a local crosstown route that makes local bus stops from the West 7th and Davern Avenue, along West 7th Street, St. Paul Avenue, Ford Parkway, Snelling Avenue, METRO Green Line Snelling Station, to Rosedale Transit Center. Service frequencies were reduced to every 30 minutes all days of the week with the introduction of the new A Line Rapid Bus service in 2016, which mostly replaced Route 84. There is service after 9pm.

Route 87

Route 87 provides local crosstown service from Highland Park via Cleveland Avenue, METRO Green Line Raymond Station, Fairview Avenue to Rosedale Transit Center. Service frequencies are every 20 minutes during weekday peak times and every 30 minutes during non-peak times all days of the week.

Route 134

Route 134 provides limited stop service between Highland Park via Cleveland Avenue and Cretin Avenue to downtown Minneapolis on weekdays during peak hours. Service frequencies are every 15-30 minutes. Limited reverse commute service between downtown Minneapolis and Highland Park is also offered.

Table 5: Existing Service Frequency and Span

| | Weekday | | | | Saturday | | Sunday | | | | |
|--------|---------|--------|-------|----------------|----------|--------|----------------|--------|--------|----------------|--------|
| Route | AM | | PM | | | | | | | | |
| | Peak | Midday | Peak | Evening | Span | Midday | Evening | Span | Midday | Evening | Span |
| 23 | 60 | 60 | 30-60 | 60 | 7a-8p | 20-40 | 60 | 8a-8p | 60 | 60-90 | 8a-8p |
| 46 | 30 | 30 | 30 | 30-60 | 6a-11p | 30 | 60 | 7а-р | 30 | 60 | 8a-8p |
| 54 | 15 | 15 | 13 | 15-30 | 3a-1a | 15 | 15-30 | 3a-1a | 20 | 20-30 | 3a-1a |
| 70 | 30 | 60 | 30 | NA | 6a-7p | NA | NA | NA | NA | NA | NA |
| 74 | 15 | 15-20 | 15 | 30 | 5a-1a | 20 | 30 | 5a-1a | 30 | 30 | 5a-12a |
| 83 | 30 | 30 | 30 | 30-60 | 6a-10p | 30 | 30-60 | 7a-10p | 30 | 30-60 | 7a-10p |
| 84 | 30 | 30 | 30 | 30 | 5a-9p | 30 | NA | 6a-8p | 30 | NA | 9a-8p |
| 87 | 20 | 30 | 20 | 30-60 | 4a-12p | 30 | 60 | 6a-12p | 30 | 60 | 6a-12p |
| 134 | 15 | NA | 15 | NA | 6a-7p | NA | NA | NA | NA | NA | NA |
| A Line | 10 | 10 | 10 | 15 | 4a-1a | 10 | 15-30 | 4a-1a | 10 | 15-30 | 4a-1a |

Existing Ridership and Service Performance

Ridership at the bus-stop level for each of these routes is shown in Appendix J, K, and L.

There are two ways to measure how much service is provided on a route. In-service hours are the hours as shown on the public timetable, when buses are in revenue service. Platform hours covers the entire time from when a bus leaves the garage to travel to the start of a route, all the trips, and when it returns to the garage from the end of the route. Platform hours are a more accurate representation of the total cost of providing service, since labor is a significant factor in service costs.

Productivity is a measure of a route's ridership relative to the cost of providing the service. The higher the route productivity, the more effective the service. Service performance and route productivity are measured using Passengers per In-Service Hour (PPISH), which is calculated as the number of passengers divided by the number of hours of inservice service provided on the route. **Figures 4-6** show Regional Bus Route Productivity maps.

Figure 4: Regional Bus Route Productivity — Weekday Service

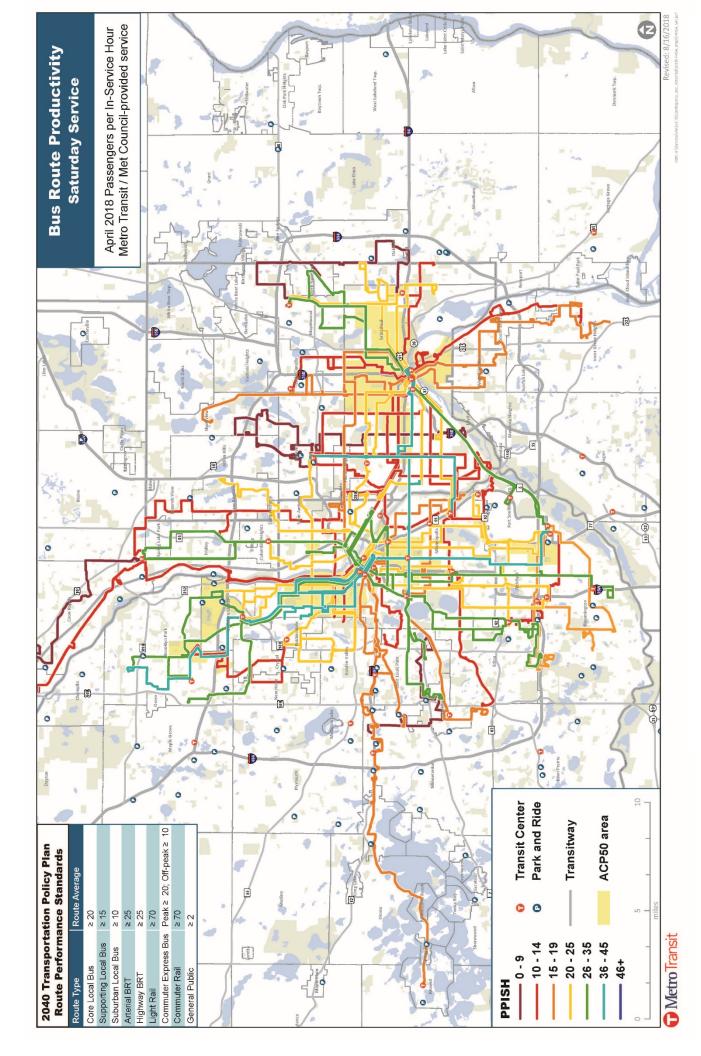


Figure 5: Regional Bus Route Productivity – Saturday Service

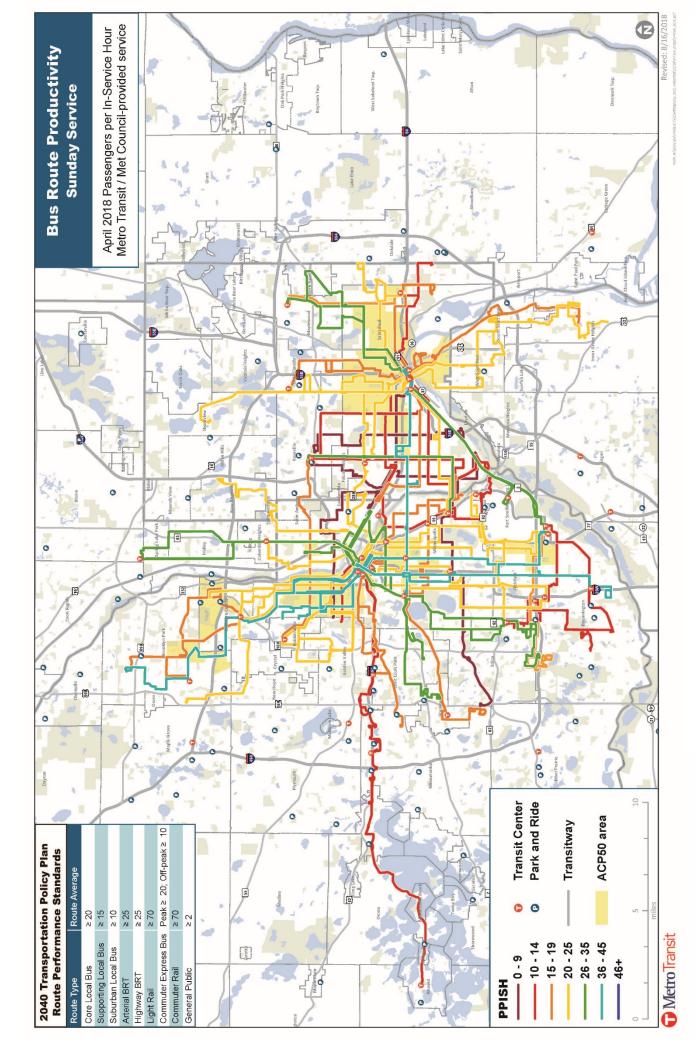


Figure 6: Regional Bus Route Productivity – Sunday Service

Existing ridership and performance for routes within the study area are summarized in

Table **6.** The calculated Passengers Per In-Service Hour (PPISH) is based on service levels and ridership during the fall of 2017.

PPISH standards by route type the Metropolitan Council Transportation Policy Plan are shown in **Table 3**.

Table 6: Ridership and Route Performance

| Service Day | Route Type | Route | Route PPISH | Highland PPISH | In-Service Hours | Boardings | Local Rides |
|--------------------|----------------------|----------|--------------------|-----------------------|-------------------------|------------------|--------------------|
| Weekday | Supporting Local | 23 | 28.6 | 29.8 | 2.7 | 79 | 4 |
| Weekday | Supporting Local | 46 | 21.7 | 21.4 | 15.6 | 333 | 181 |
| Weekday | Core Local | 54 | 38.8 | 51.9 | 21.4 | 1,109 | |
| Weekday | Core Local | 70 | 23 | 32.5 | 2.4 | 78 | 4 |
| Weekday | Core Local | 74 | 34.3 | 43.4 | 43.4 | 1,885 | 714 |
| Weekday | Supporting Local | 83 | 11.4 | 13.4 | 8.0 | 107 | 12 |
| Weekday | Supporting Local | 84 | 18.1 | 27.0 | 18.3 | 495 | 197 |
| Weekday | Supporting Local | 87 | 18.5 | 50.4 | 4.6 | 232 | 19 |
| Weekday | Commuter/Express | 134 | 40.1 | 50.9 | 3.3 | 168 | 18 |
| Weekday | ABRT (Rapid Bus) | A Line | 49.6 | 54.3 | 38.9 | 2,112 | 678 |
| | | | | | | | |
| Service Day | Route Type | Route | Route PPISH | Highland PPISH | In-Service Hours | Boardings | Local Rides |
| Saturday | Supporting Local | 23 | 19.6 | 24.5 | 2.9 | 71 | 5 |
| Saturday | Supporting Local | 46 | 11.0 | 15.4 | 13.3 | 205 | 102 |
| Saturday | Core Local | 54 | 34.9 | 37.2 | 17.9 | 666 | |
| Saturday | Core Local | 70 | NA | NA | NA | NA | NA |
| Saturday | Core Local | 74 | 22.4 | 29.8 | 33.9 | 1,010 | 386 |
| Saturday | Supporting Local | 83 | 7.7 | 4.8 | 7.3 | 35 | 21 |
| Saturday | Supporting Local | 84 | 16.3 | 19.6 | 14.5 | 284 | 122 |
| Saturday | Supporting Local | 87 | 9.2 | 44.3 | 3.5 | 155 | 10 |
| Saturday | Commuter/Express | 134 | NA | NA | NA | NA | NA |
| Saturday | ABRT (Rapid Bus) | A Line | 42.4 | 48.2 | 36.0 | 1,735 | 467 |
| | | | | | | | |
| Service Day | Route Type | Route | Route PPISH | Highland PPISH | In-Service Hours | Boardings | Local Rides |
| Sunday | Supporting Local | 23 | 20.1 | 20.9 | 2.3 | 48 | 2 |
| Sunday | Supporting Local | 46 | 9.5 | 14.7 | 10.1 | 148 | 74 |
| Sunday | Core Local | 54 | 37.1 | 36.8 | 13.6 | 501 | |
| Sunday | Core Local | 70 | NA | NA | NA | NA | NA |
| Sunday | Core Local | 74 | 24.6 | 30.7 | 24.2 | 744 | 288 |
| Sunday | Supporting Local | 83 | 6.1 | 13.7 | 7.3 | 100 | 3 |
| Sunday | Supporting Local | 84 | 13.8 | 17.5 | 10.9 | 191 | 85 |
| Sunday | Supporting Local | 87 | 6.7 | 31.7 | 3.5 | 111 | 11 |
| Sunday | Commuter/Express | 134 | NA | NA | NA | NA | NA |
| Sunday | ABRT (Rapid Bus) | A Line | 37.3 | 43.6 | 33.0 | 1,439 | 376 |
| In service tim | e was from the stop | crossin | g times calcula | ted in TransitMast | er. | | |
| Local Rides ar | e boardings and alig | htings v | within the stud | y area. | | | |

Facilities

Regional facilities include rail stations, transit centers, and bus turnarounds/layovers.

Service from Highland Park extends to connections to METRO Green Line Stations on University Avenue, the METRO Blue Line 46th St Station and transit centers in downtown Saint Paul and Rosedale Mall These facilities are shown in **Figure 7**.

Passenger Waiting Shelters

A total of 26 passenger waiting shelters are located within the study area, 12 of these sites have A Line Station amenities including ticket vending machines, real-time schedule information, heat and lighting. Two new shelters with lighting sites have been installed in the study area at 7th and Albion, and 7th and St Paul Avenue as part of Metro Transit's Better Bus Stops program.

METRO Blue Line 46th Street Station

This facility is located on the west side of Hiawatha Avenue and 46th Street in Minneapolis. This station connects to routes 7, 9, 46, 74, 436, 446, A Line and Blue Line.

Kenneth and Ford Turnaround/Layover

This on-street turnaround and layover site and is located next to the Highland Community Center on Kenneth. Routes 23, 70, and 87 terminate at this site. This location will not be sufficient to accommodate transit expansion as a result of the Ford Site redevelopment, as it is too small and too far away from the redevelopment.

Bus Stop Spacing

The bus stop spacing standard for local routes is six to eight stops per mile. Local routes in Highland Park typically stop every eighth mile (one long block or two short blocks). A Line Rapid Bus service has one stop about every half mile to every mile.

Bus Travel Times and Speeds

Bus service speeds and travel times are affected by a number of factors including traffic, signals, and stop frequency. Bus-only lanes, transit advantages (such as bus-only shoulders, queue jumps, ramp-meter bypasses and traffic signal priority), fewer bus stops and free flow traffic can result in higher average speeds. Local, limited-stop and express buses operate at significantly different speeds and provide different travel times. Examples of these transit advantages include traffic signal priority (TSP) added to Ford Parkway and Snelling Avenue in 2016 with the introduction of the new A Line Rapid Bus service, and ramp meter bypass at Cretin and I-94 for Route 134 Express.