

# How Downtown Saint Paul Travels

**Mode Share Models** 



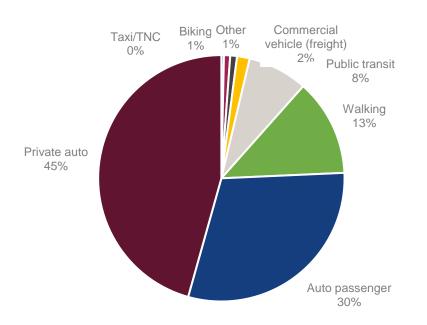


# 18% of trips to downtown by foot, bike, & transit More than ¼ of weekday trips into downtown involve driving.

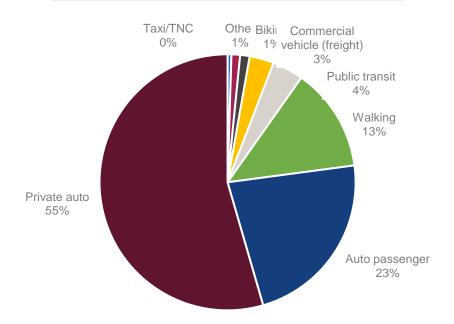
# **Trips Ending In Downtown - Weekday**

Source: Replica Model

#### Fall 2019 Weekday Modeshare



#### Spring 2024 Weekday Modeshare



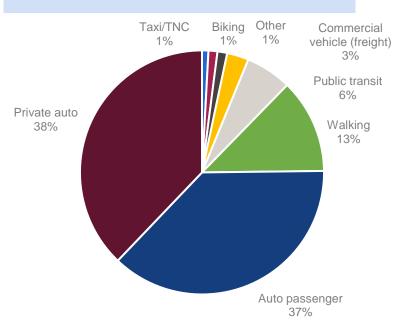


# Driving continues to be the dominant way people travel into downtown on weekends.

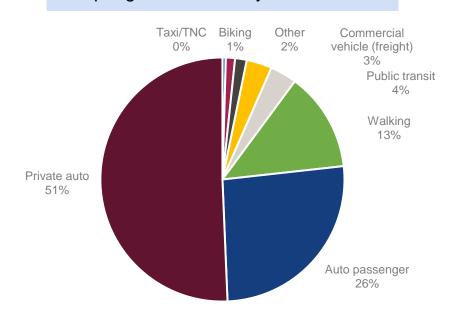
# **Trips Ending in Downtown - Weekend**

Source: Replica Model

#### Fall 2019 Weekend Modeshare



#### Spring 2024 Weekday Modeshare





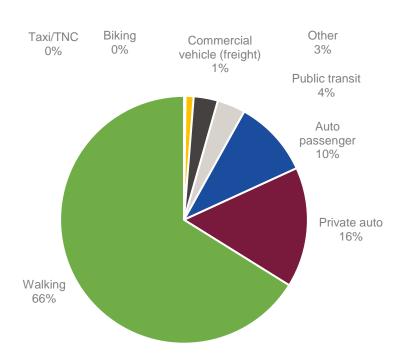
# Over half of weekday trips within downtown are by foot.

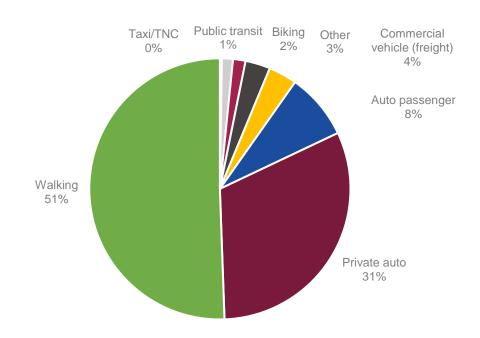
# **Trips Within Downtown-Weekday**

Fall 2019 Weekday Modeshare

Spring 2024 Weekday Modeshare

Source: Replica Model







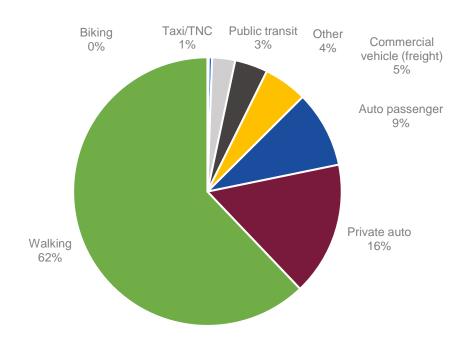
#### The same is true on weekends.

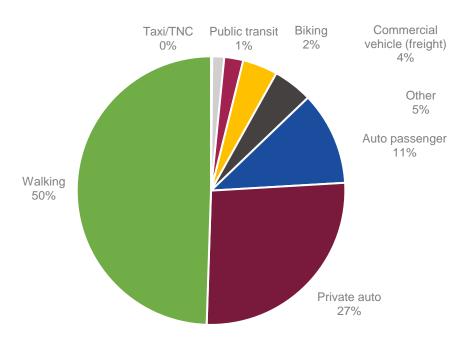
# **Trips Within Downtown-Weekend**

Fall 2019 Weekend Modeshare

Spring 2024 Weekend Modeshare

Source: Replica Model







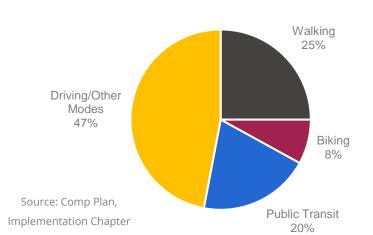
## Driving modeshares needs to drop by 24% to meet city goals

# Modeshare compared to Comprehensive Plan Goals

#### Comprehensive Plan Goal City Modeshare

- 25% walking
- 20% public transit
- 8% bicycling

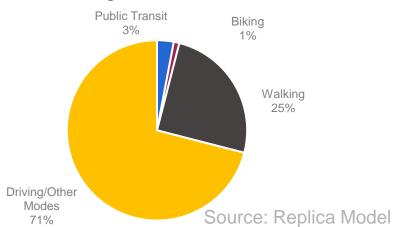
#### Goal Modeshare in Comprehensive Plan



#### Current Average 2024 Modeshare

- Trips within downtown meet walking modeshare goal
- Biking, transit, and walking share too small in all other trip models

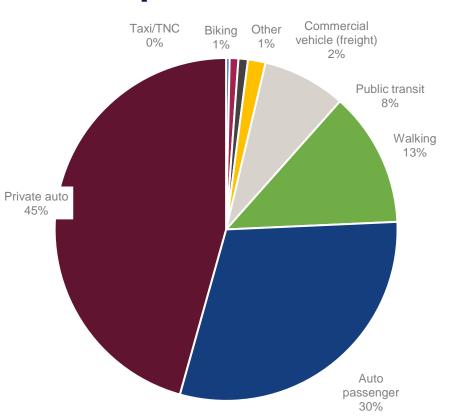






## Replica - Modeled Modeshare Data

# **Example Chart and Definitions**



- Private auto/Driver: Trips made by drivers in private auto vehicles. This is
  equivalent to the number of private auto vehicle movements. This category
  can also capture trips made by rental cars.
- Auto passenger/Carpool: Trips made by passengers in private auto vehicles.
   Combine this number with the number of private auto trips to get the number of people who traveled in private autos.
- Public Transit: Trips that primarily used public transit. For example, buses, light rail, ferries, and subways. This does not include trips made by paratransit or private shuttles.
- Walking: Trips made by people walking.
- Biking: Biking-only trips. Replica does not model scooter trips and does not separate out e-bike trips.
- Taxi/Transportation Network Company (TNC): Trips made by passengers in a Taxi or using a TNC such as Uber or Lyft. These are also known as For Hire Vehicles, On-demand Autos, Ride-shares, or Transportation Network Providers (TNP).
- . Commercial (freight): Trips made by medium and heavy trucks:
  - Medium-duty commercial vehicles (14,000 26,000 lbs)
     Heavy-duty commercial vehicles (>26,00 lbs)
- Other: Trips made in which the mode was not detected. Near airports, "Other"
  can also include trips made by airplanes coming to and from the airport. Since
  we do not explicitly model airplane travel, we do not recommend analyzing
  "Other" trips to understand total flight travel in an area.

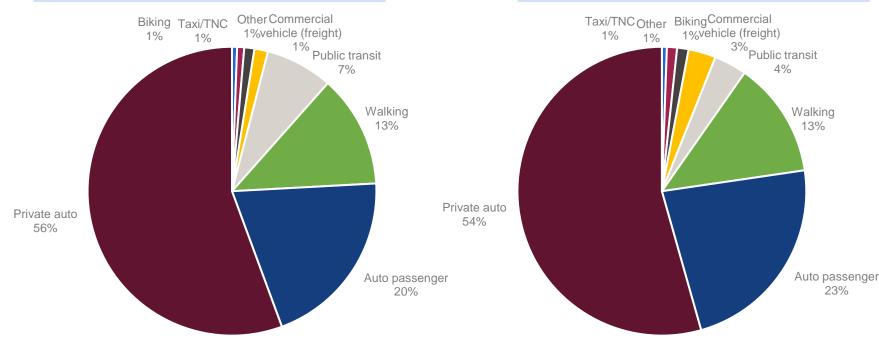


# Trips leaving downtown mirror those ending there.

#### **Trips Beginning in Downtown - Weekday** Source: Replica Model

Fall 2019 Weekday Modeshare

#### Spring 2024 Weekday Modeshare



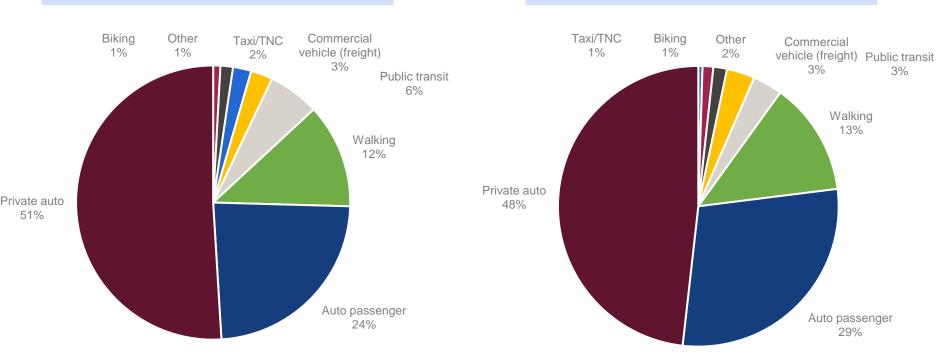


### The same is true on weekends.

# Trips Beginning in Downtown - Weekend Source: Replica Model

Fall 2019 Weekend Modeshare

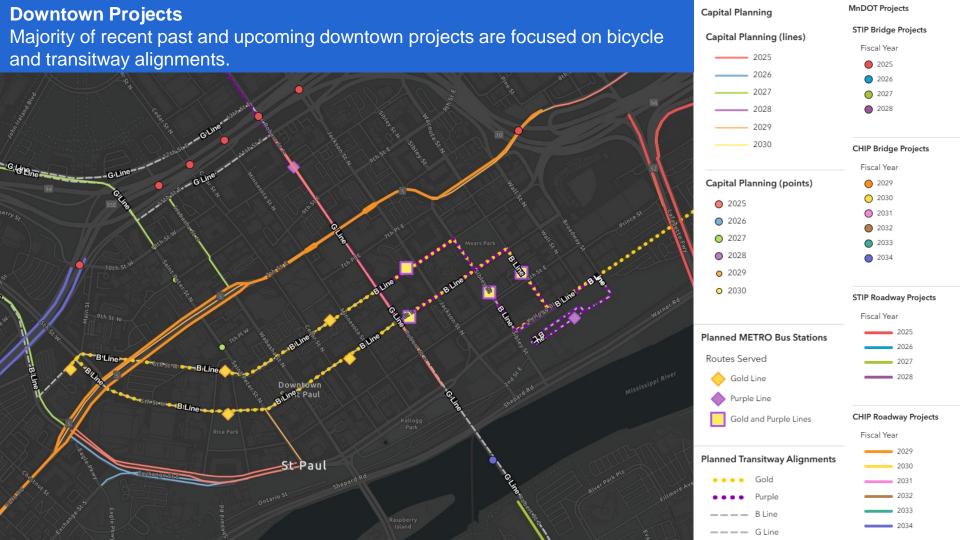
Spring 2024 Weekend Modeshare





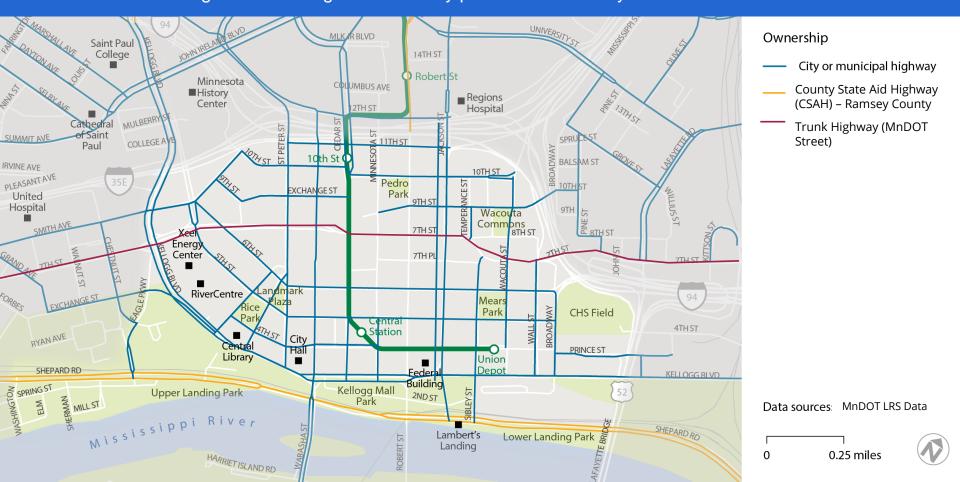
# Key Features of the Street Network





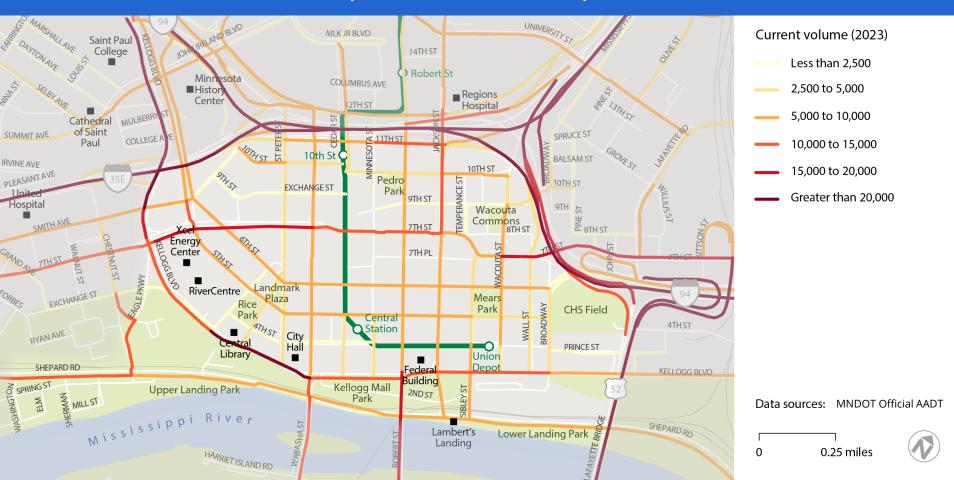
#### **Street Network**

Downtown has a block grid scaled for good walkability potential. Some City streets are on the MSA network.

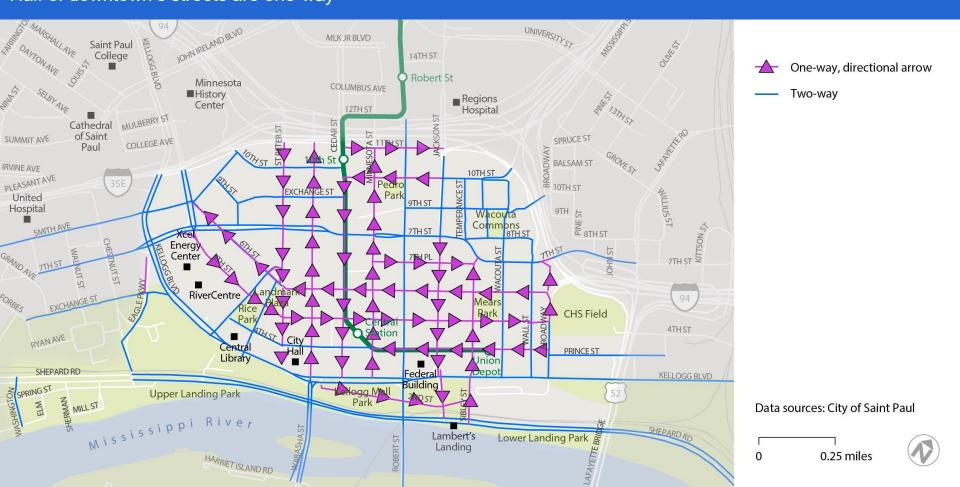


#### Minnesota 2023 Annual Average Daily Traffic (AADT)

Most streets in the core of downtown carry less than 10,000 cars a day.



# Street Direction Half of downtown's streets are one-way





#### **Street Network: Observations**

- Good potential for walkable scale
- Walkable block grid
  - Somewhat limited opportunity for vehicle queuing (block length)
- Roadway capacity for growth (adaption)
- Rich multimodal networks
- 1-way streets can be less friendly to downtown visitors
- 25 mph speed limit on all streets
- MSA design standards for many streets
- Travel speed could be higher than the speed limit when there's excess capacity
- From 2018-2022, 91 crash incidents have involved people walking

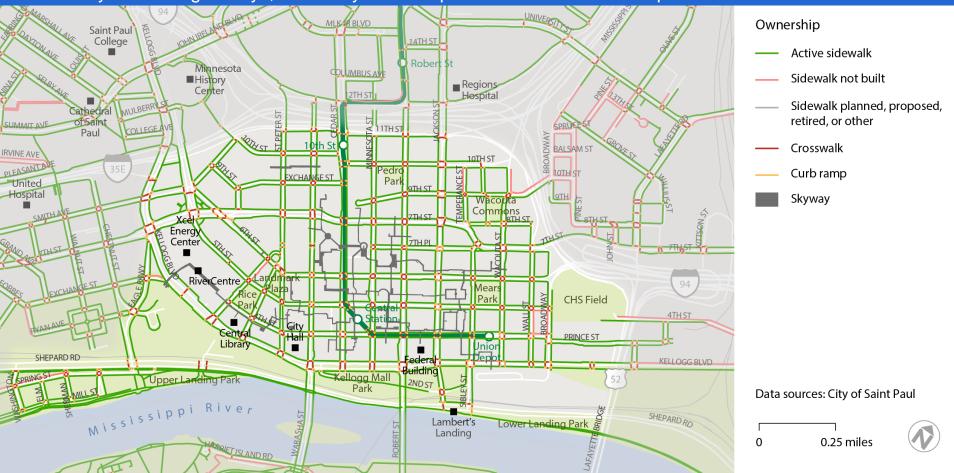


# Walking and Rolling Assisted Devices



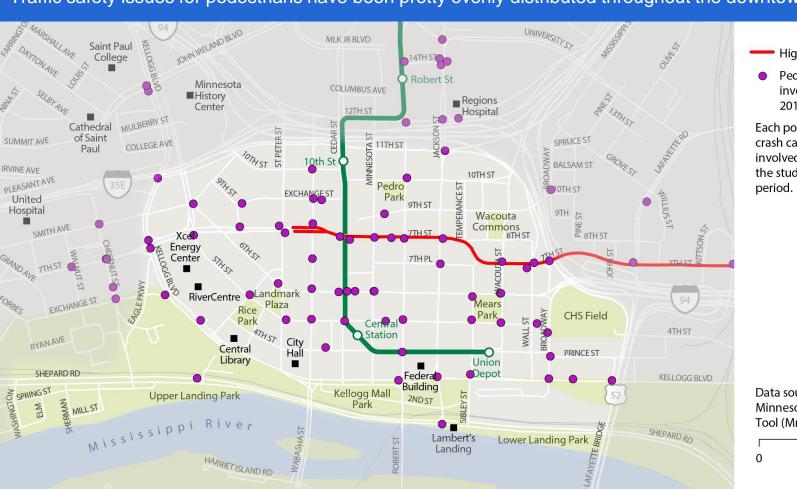
#### Sidewalks and Skyways

Wide sidewalk of decent conditions throughout the majority of Downtown, connectivity issues at gateways, and many curb ramps need evaluation and improvement.



#### **Crashes involving someone Walking**

Traffic safety issues for pedestrians have been pretty evenly distributed throughout the downtown.



High injury Network

 Pedestrian crash incident investigated by a police agency, 2018-2022

Each point represents a single crash case, with 91 pedestrian-involved crash cases occurring in the study area in the 5-year time period.

Data sources: City of Saint Paul, Minnesota Crash Mapping Analysis Tool (MnCMAT2)

0.25 miles





# Sam Morgan Regional Trail / Shepard Road Trail





# Walking and Rolling Assisted Devices: Observations

- Most streets have wide sidewalks with acceptable concrete quality
  - Some curbs/ramps in poor condition
- Skyways provide connections in cold weather
  - Between parking and offices
  - For staying active
  - Unpredictable hours/tricky wayfinding
- Robust Downtown Improvement District programs and initiatives
- Reasonable crossing distances and many continental crosswalks
  - Inconsistent hi-viz crosswalk treatments

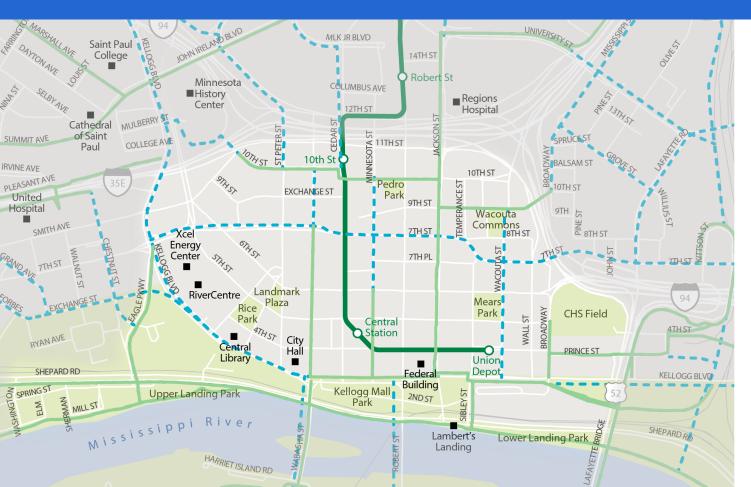
- Many sidewalks lack contiguous street tree canopy
- Street level activation lacking in some areas of downtown (both retail frontages and skyways)
- Not enough ped scale wayfinding could aggregate past plans for wayfinding strategy
- Connections to surrounding neighborhoods and riverfronts can be infrequent, indirect, and unclear for walkers/rollers
- Winter Maintenance challenges



# Biking and Scootering



#### **Existing and Proposed Bicycle Facilities**



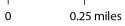
Existing and proposed bicycle facilities

- Existing bike network
- Bike network proposed by past plans

Bicycle parking is concentrated:

- near Rice Park, Landmark Plaza, Kellog Park Mall, Pedro Park, Wacouta Commons, Mears Park, City Hall, Federal Building, and Green Line stations such as 10th St and Central Station
- along Wabasha St between 10th St and 7th St, Robert St between 9th St and 5th St, Wall St and Broadway St between 6th St and Kellogg Blvd, and at 7th St on Chestnut St

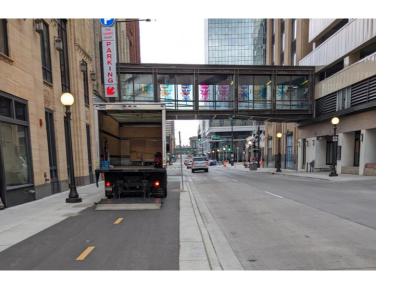
Data sources: City of Saint Paul







## Biking and Scootering: Observations



- High quality separated bikeway facilities
   Capital City Bikeway and plan
   implementation progress
- Limited east-west street connectivity options
- Dockless electric bikeshare and scooter program
- Scooters can impact sidewalk accessibility when not parked properly
- Commercial loading happens on sidewalk level bikeways (shown in photo to left)
- Connections under highway and railroads to surrounding neighborhoods and riverfronts can be indirect
- Winter Maintenance can be a challenge
- Inter-agency coordination (State, County, City) can be a challenge



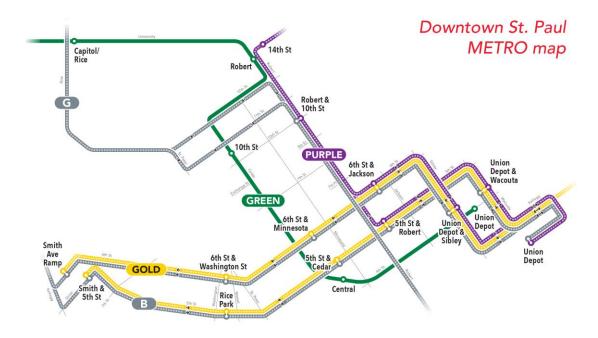
# **Transit**





#### **METRO Network**

- Gold Line and B Line stations are built on 5<sup>th</sup> and 6<sup>th</sup> Streets
- Purple and G Line stations are in progress via Robert Street reconstruction

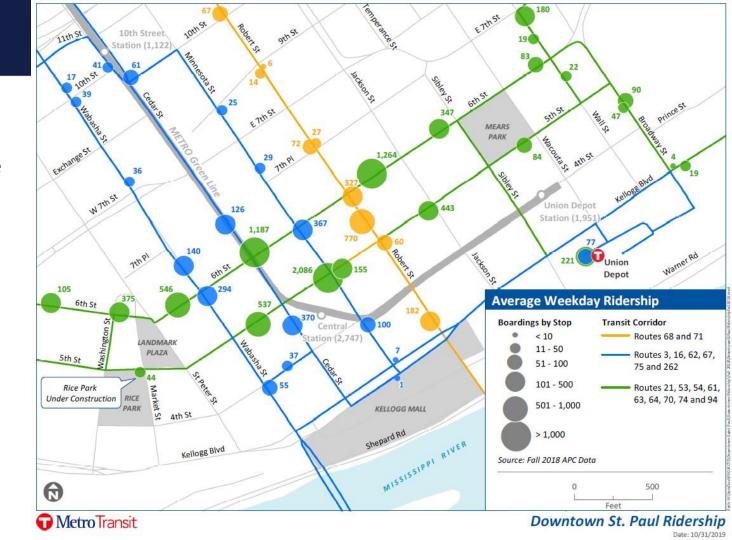






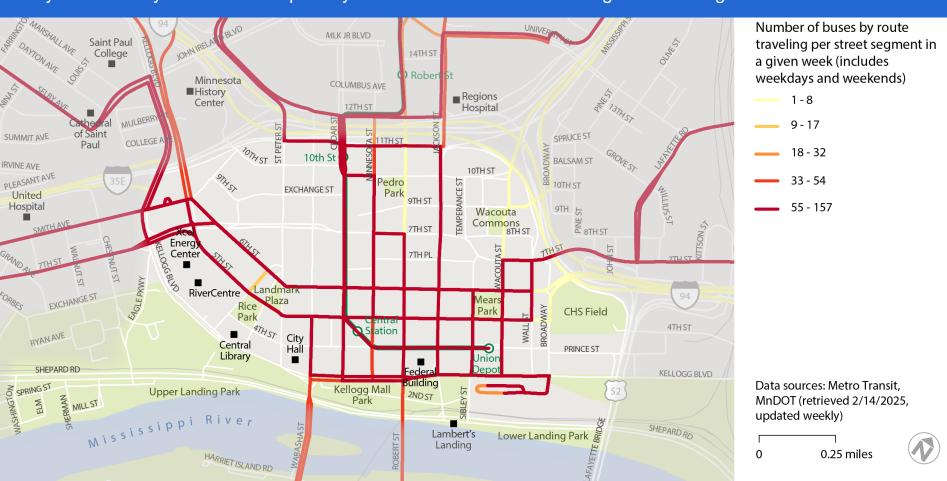
# **Boardings**

- Analysis from another effort – pre consolidation of Wabasha routes to MN Street;
- Highest ridership is at 5<sup>th</sup>/6<sup>th</sup> Street, by far



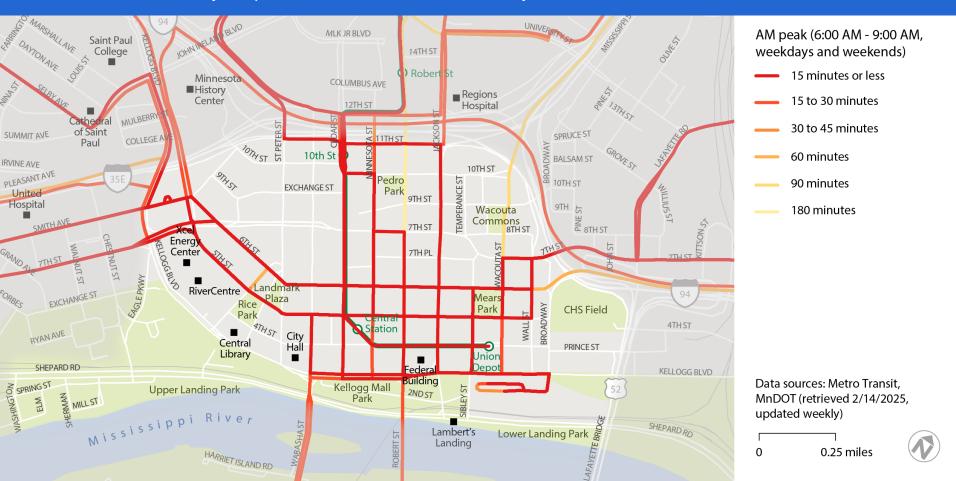
#### Transit trips per street

Many streets carry over 50 buses per day. 5th and 6th streets have the highest boardings.



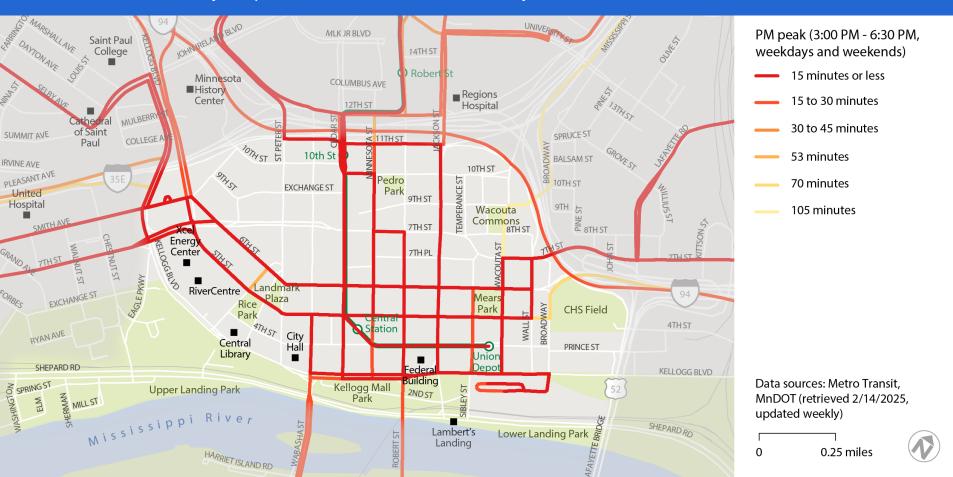
#### Transit headways - AM peak

Downtown well-served by frequent transit with shorter headways



#### Transit headways – PM peak

Downtown well-served by frequent transit with shorter headways





#### **Transit: Observations**

- Routes support downtown destinations
- Rich network of options
- Direct gridded routes
- Many streets with high capacity and transit priority
- Plentiful bus stop amenities and comforts
- Split transit pairs can cause transfer issues
- Recent infrastructure improvements make any corridor changes costlier
- Opportunity for event management plans and TDM
- Personal security concerns
- Driving and parking has relative convenience

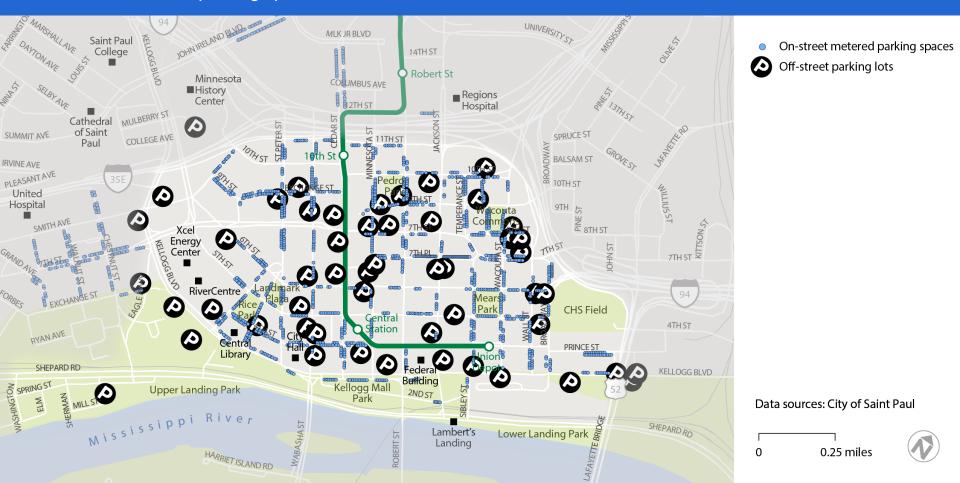


# **Vehicle Parking**



#### **Downtown Parking**

There are over 28,000 parking spaces, less than 10% are on-street





# **Curbside Management: Observations**

- Pricing and time management program
- Visible, easy to read graphical parking regulation signs
- Need for more enforcement of on-street assets to ensure parking availability
- Commercial loading for businesses and pickup/dropoff for deliveries happen regardless of presence of loading zone
- Parking event zones for utilization of on-street supply for events/games





Source: City of Saint Paul