

Focus Group Technical Meeting

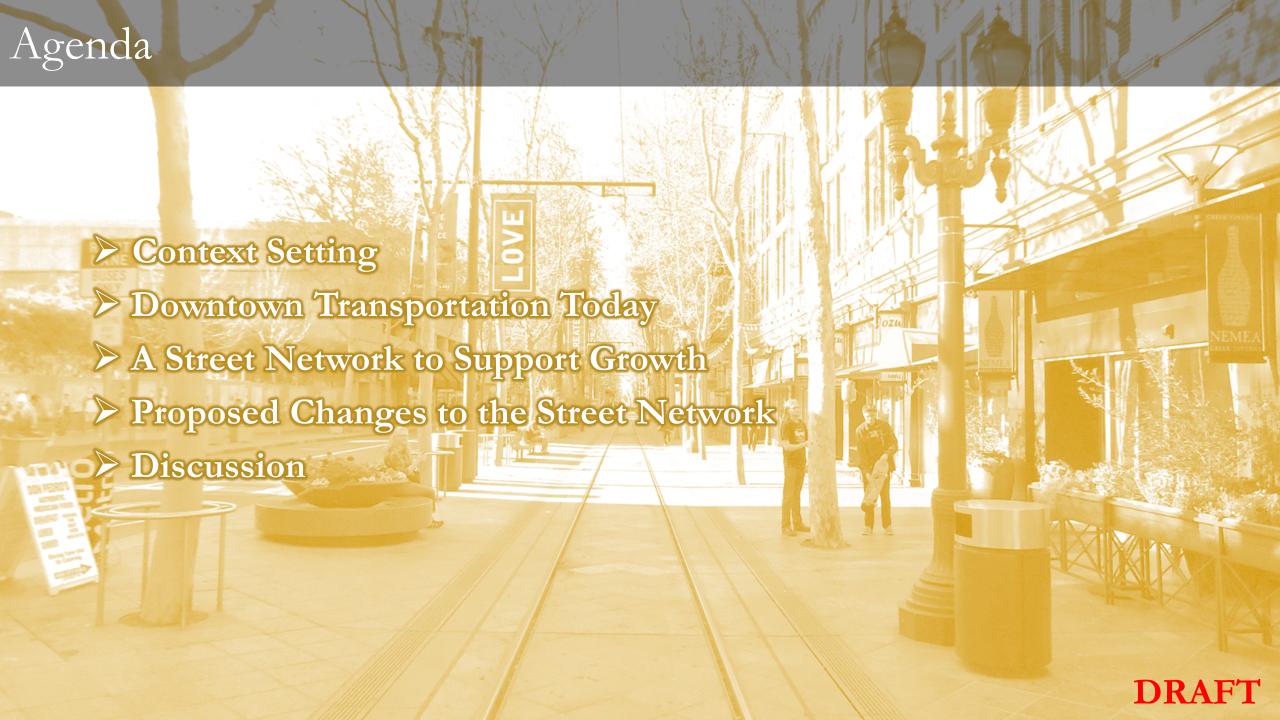
SAP Center

SJDOT

September 2, 2021

Draft for Internal Discussion Only

Source: Tomwsulcer

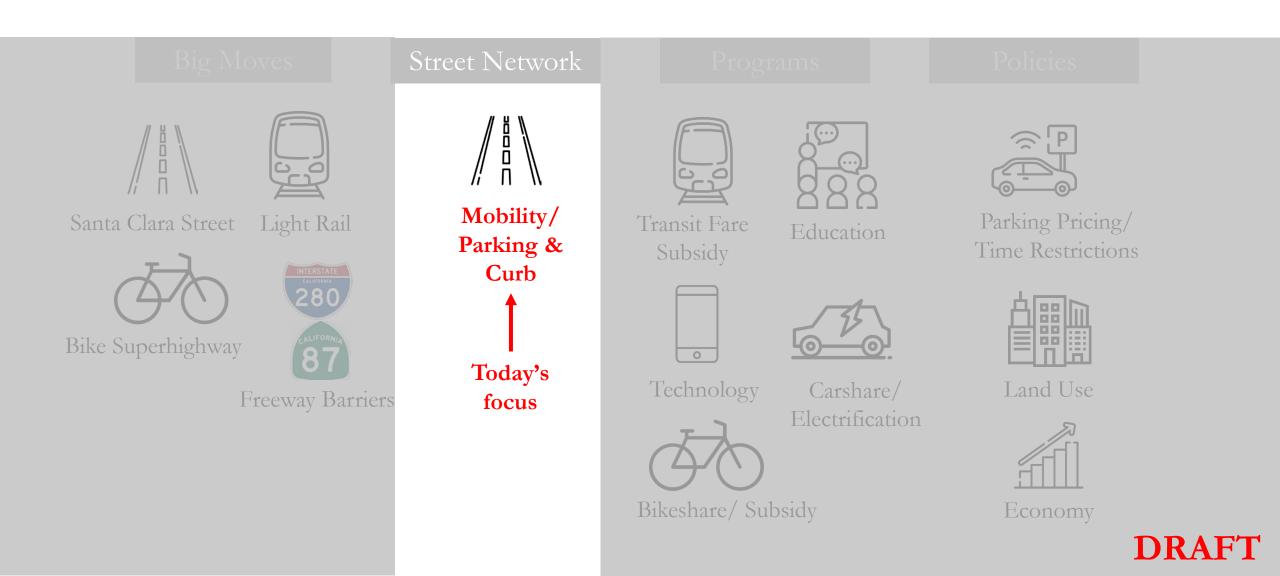


San José is growing and changing The Downtown Transportation Plan (DTP) allows us to shape this growth Google



Strategies

Types of strategies being considered



Community Feedback from Engagement #1 (Fall 2020)

Respondents expressed a desire for efficient, safe, and comfortable travel options for all ages and abilities. They also expressed a need for safer and easier access to jobs, businesses, entertainment, and homes in Downtown, including goods deliveries.

- Transit: We need faster travel times, shorter wait times, and more reliable service.
- Santa Clara Street: We need a main street that is safer and more iconic. It should have more active storefronts.

- Freeways: We need safe and efficient connections between key destinations across freeway barriers that degrade public spaces.
- Walking and Biking: We need physical separation from cars, safer crossings, and more car-free streets.
- Street life: We need safer, more attractive places with outdoor dining, urban greening, and parklets that promote key destinations.

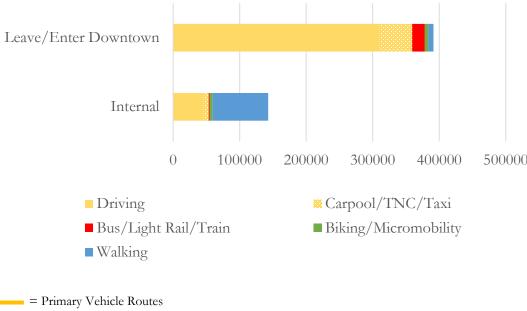






The automobile is by far the most popular mode of transportation today. Most streets prioritize driving and parking.

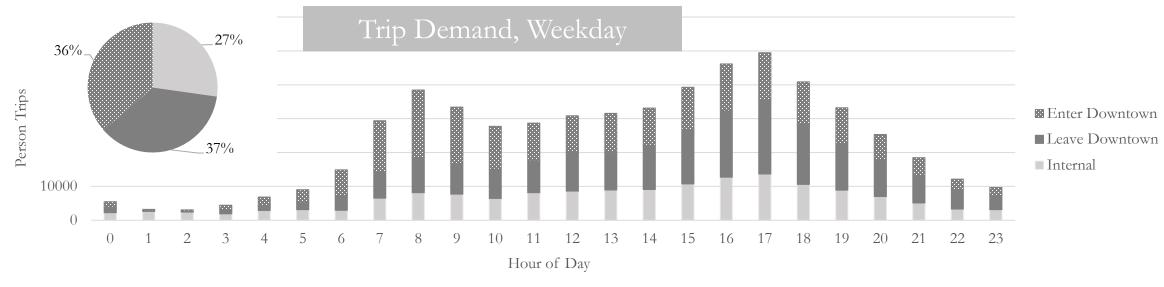
2019 Daily Trips in Downtown



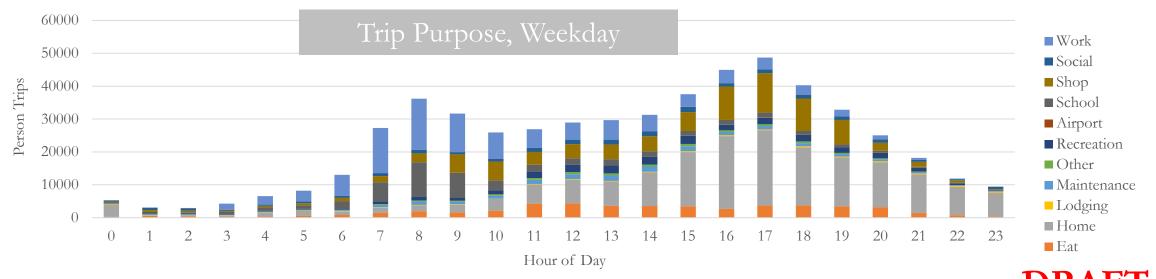
= Other streets for vehicle circulation

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Two-thirds of Downtown trips today come from elsewhere.







Source: Replica, SJDOT

The community has concerns relating to transportation and personal safety.

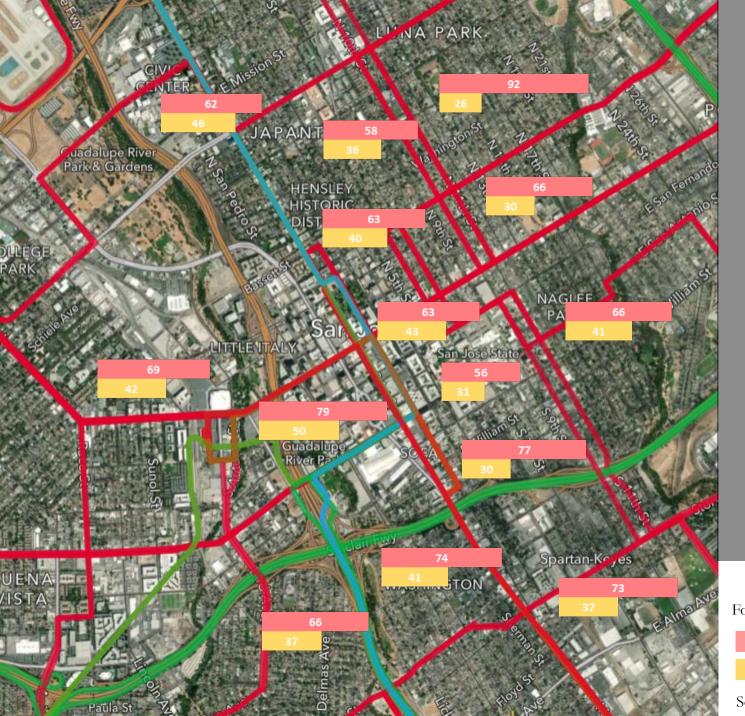


Source: SJDOT Vision Zero 2016-2020

District 3 Statistics:

- > 5,801 crashes in between 2016-2020
- ➤ 225 crashes in Equity Focused Areas
- ➤ 195 crashes caused severe injuries or fatalities
- > 29 of 42 fatalities were pedestrians & bicyclists
- ➤ High collision corridors in Downtown
 - Santa Clara St (Vision Zero)
 - 1st St (Vision Zero)
 - 10th St & 11th St





Transit travel times and reliability are primary challenges faced by transit riders.

Buses and light rail vehicles get delayed in traffic.

For trips starting or ending in the subarea of Downtown (in minutes):

Average Travel Time for Transit Trips

Average Travel Time for Driving Trip

Source: Replica, Moovit, VTA, SJDOT





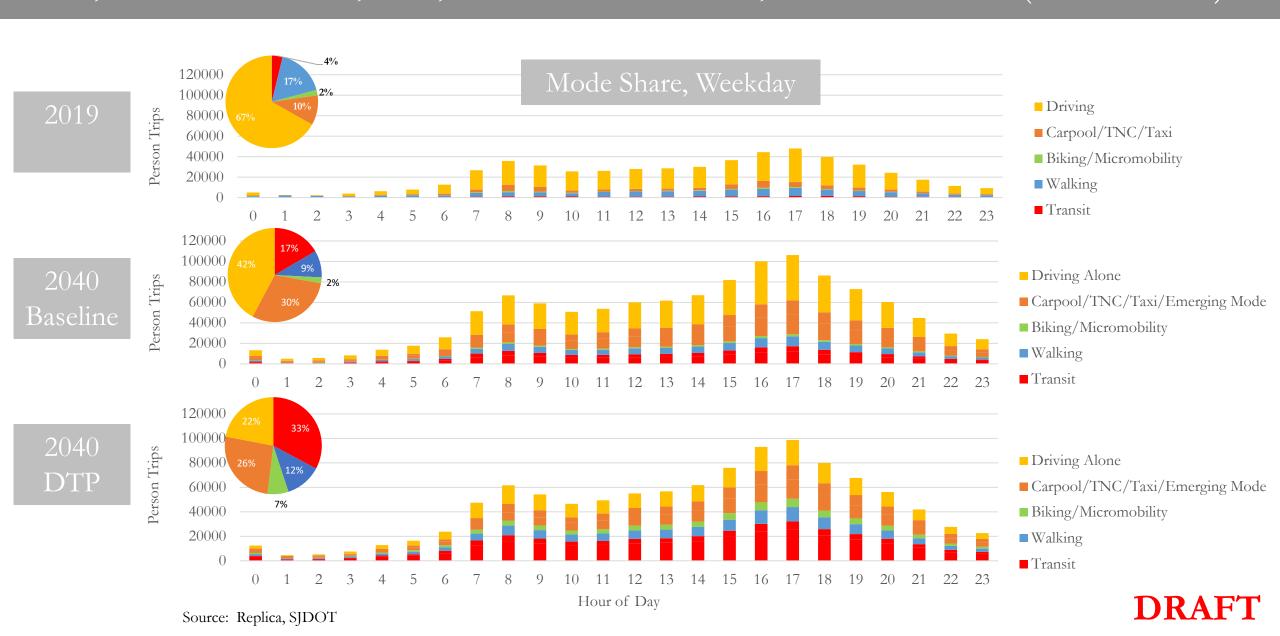
Downtown growth (2x residents and 2.5x workers) is expected to double travel demand from 50,000 to as many as 100,000 peak hour trips in 2040.



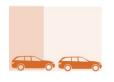
Source: Replica, SJDOT

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To realize our collective economic development goals, we must do more than just delivering BART, electrified Caltrain, HSR, VTA enhanced service, and the Bike Plan (2040 Baseline).



Moving People vs. Moving Vehicles



PRIVATE MOTOR VEHICLES 600-1,600/HR



MIXED TRAFFIC WITH FREQUENT BUSES 1,000—2,800/HR



TWO-WAY PROTECTED BIKEWAY 7,500/HR



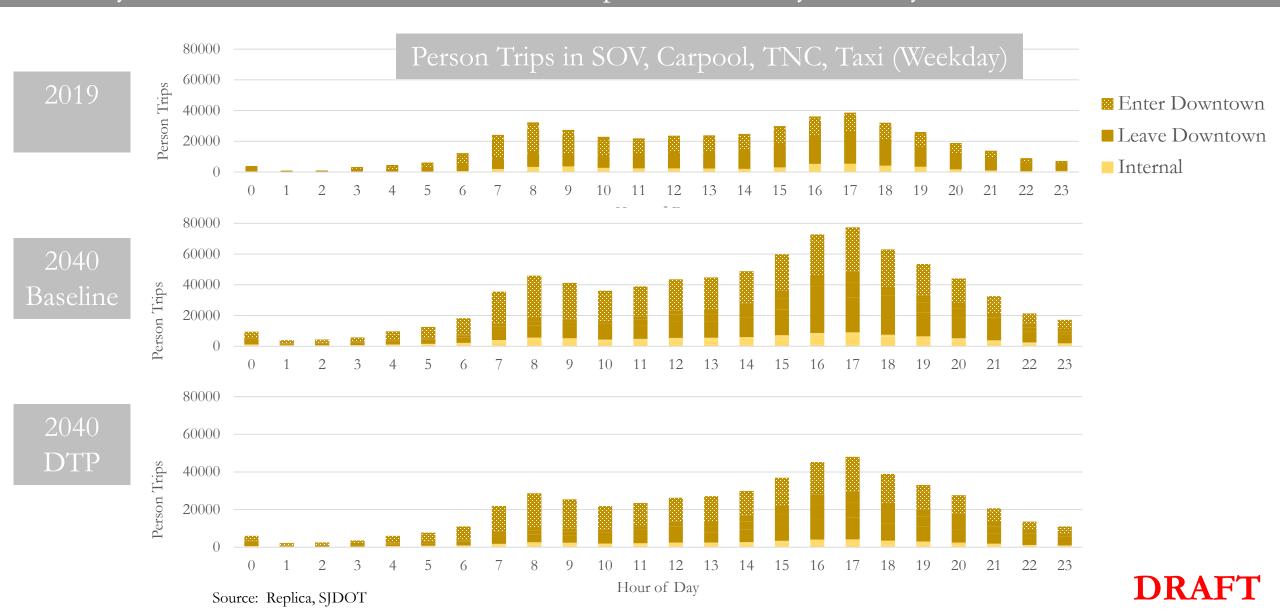
DEDICATED TRANSIT LANES 4,000—8,000/HR



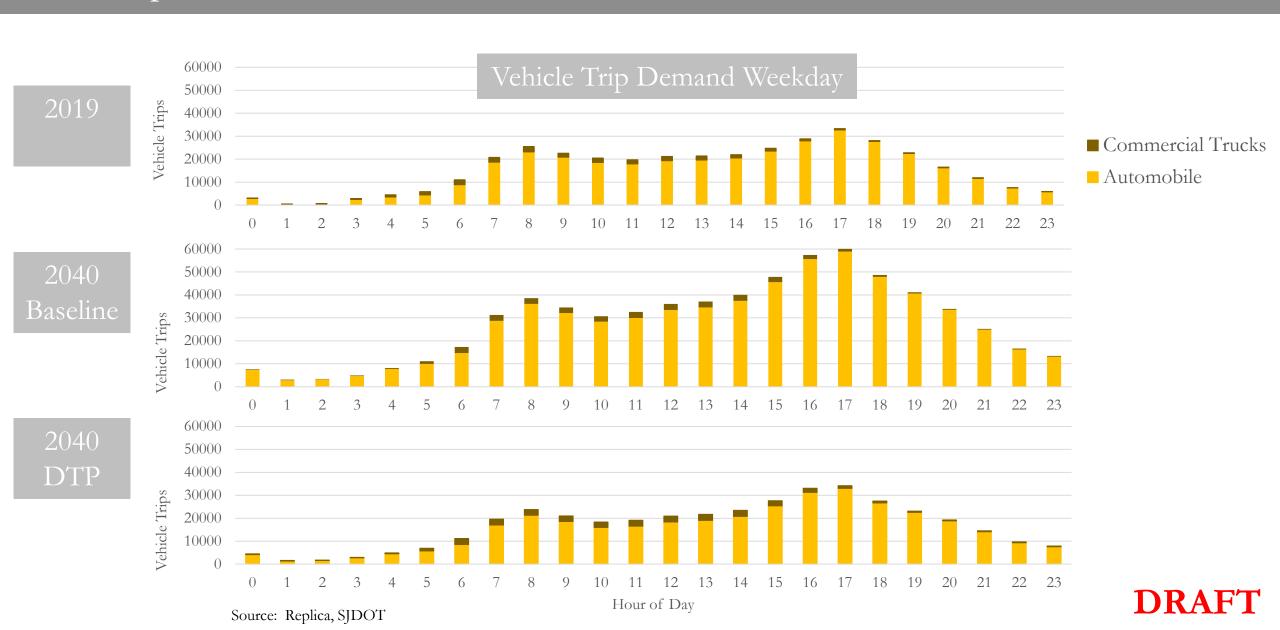


ON-STREET TRANSITWAY, BUS OR RAIL 10,000—25,000/HR

If we do not reach our mode shift goals for Downtown, the number of person trips made in vehicles would double to as many as 80,000 during peak hour in 2040. The vehicle network cannot support this many drivers, and so Downtown economic potential is likely to be stymied.



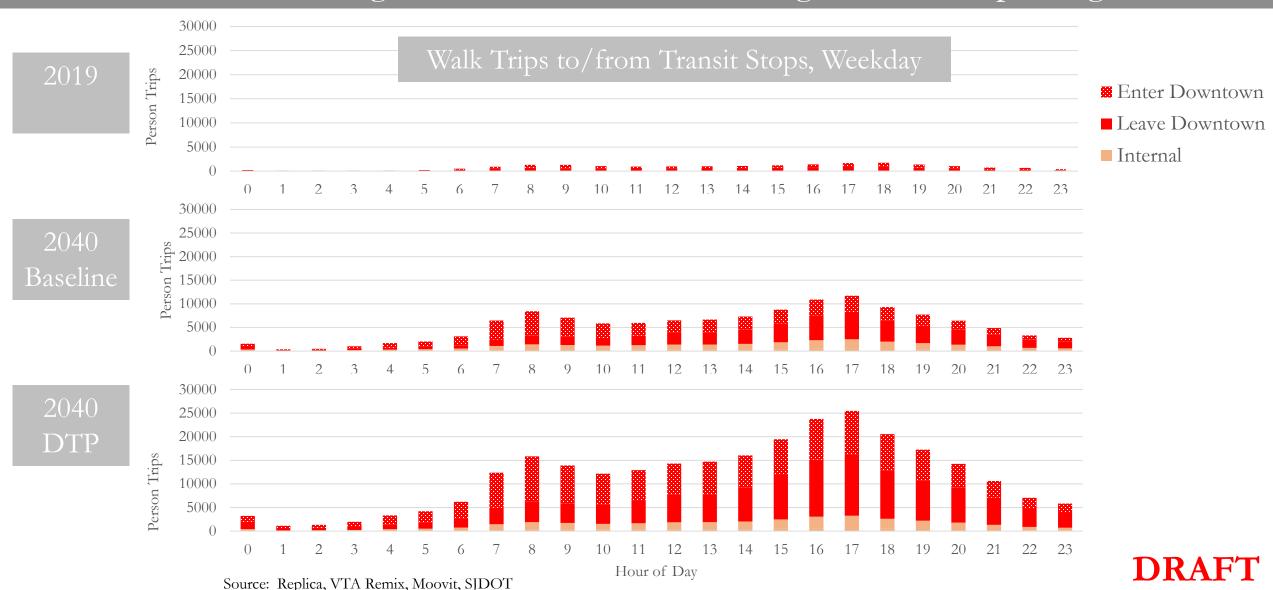
Designing streets to make transit, walk, and bike trips more attractive can help reduce vehicle trip demand.



Investments in high-capacity transit (VTA, BART, Caltrain, HSR) have the potential to double overall ridership (to as many as 35,000 trips in PM peak hour) and produce much higher economic returns if accommodated by corridors that prioritize transit.



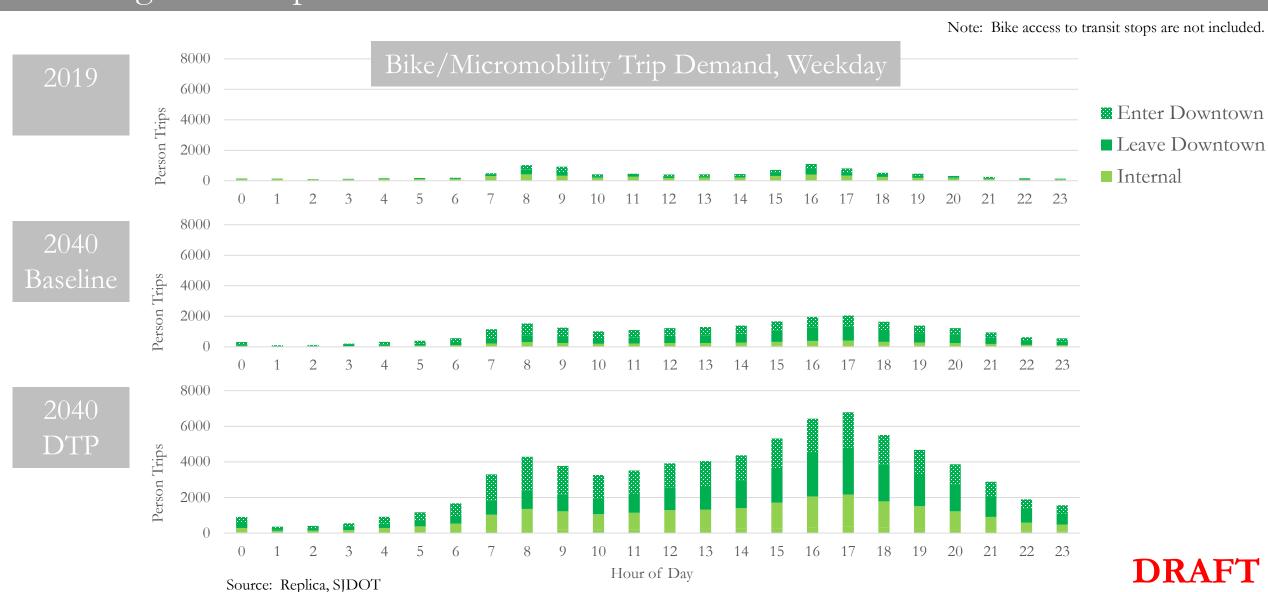
As many as 25,000 transit riders could walk to the transit stops in the peak hour, generating more Downtown business opportunities than the case when they would otherwise be drivers being stuck in traffic and not being able to find parking.



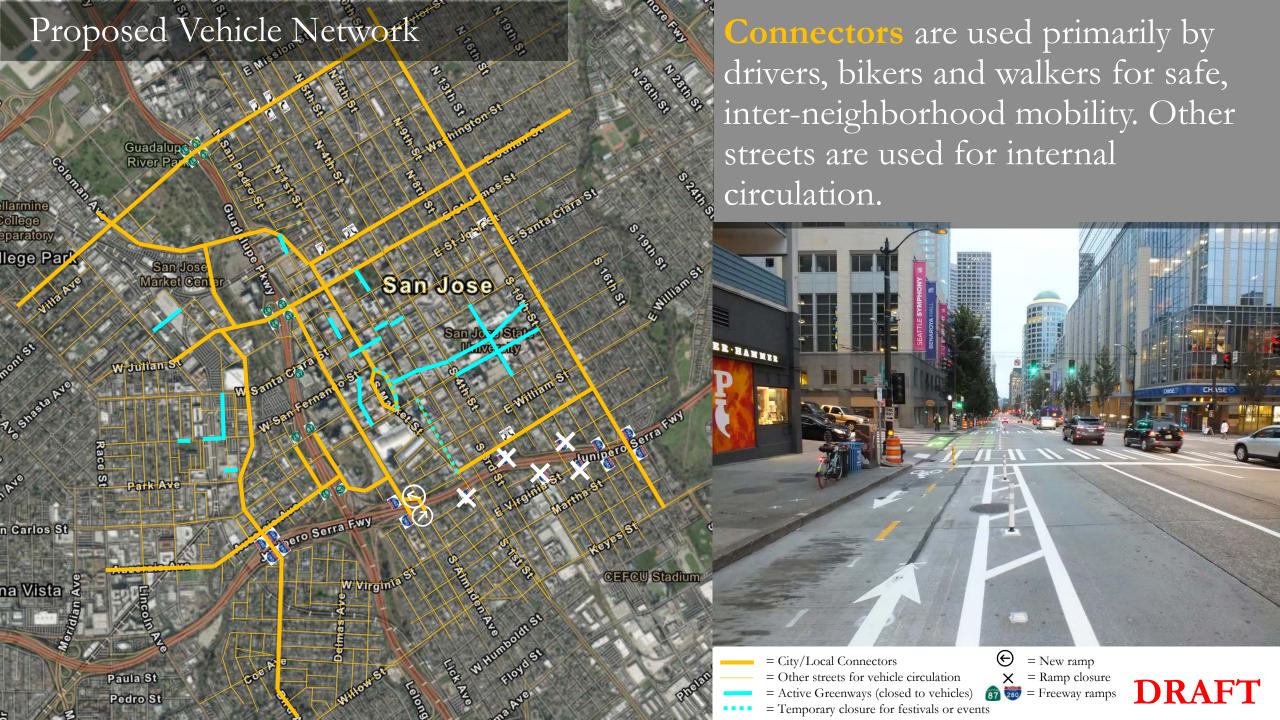
Fully connected corridors that prioritize pedestrian connectivity and access to destinations could generate as many as 8,000-12,000 walk trips per hour during peak periods, increasing foot traffic to Downtown businesses.

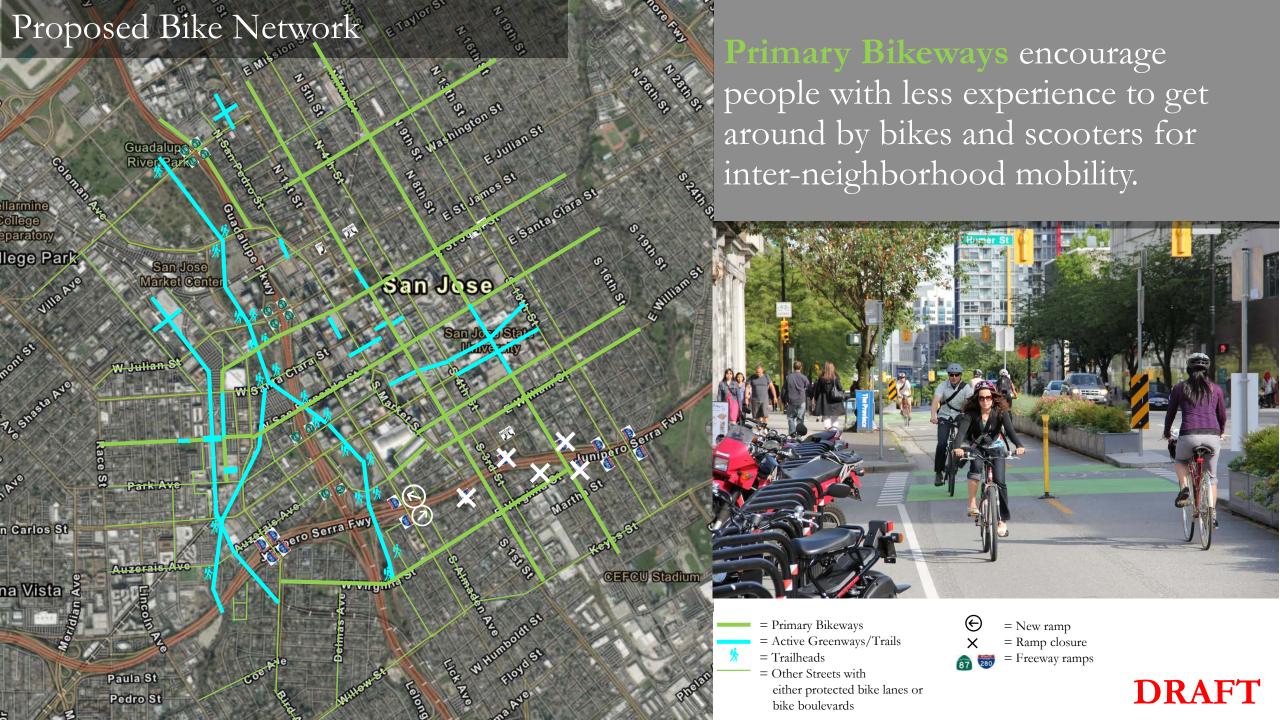


Fully connected corridors that prioritize bike mobility and access could generate as many as 4,000-7,000 bike and micromobility trips per hour during peak periods, increasing business potential.

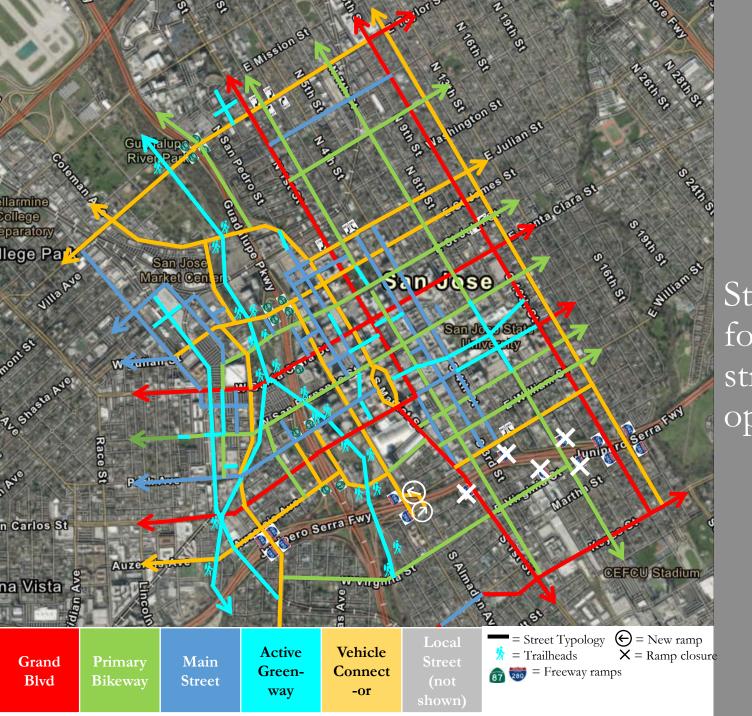












Street Typology is a policy framework for street design, ensuring that each street is designed, constructed, and operated to serve its primary uses.





W Julian S Park Ave n Carlos St na Vista 🤻 Virtual screenline representing the direction of trips entering and exiting Downtown

Can the Downtown street network accommodate the vehicle trip demand?

- A screenline is an imaginary line on a map that crosses multiple parallel streets serving the same direction of traffic. The sum of traffic demand traversing through the screenline is compared with total roadway capacity of the screenline to evaluate network performance.
- ➤ 4 Screenlines
 - South, North, East, West
- ➤ 3 Scenarios
 - 2019 Weekday
 - 2040 Baseline, Weekday
 - 2040 DTP, Weekday



n Carlos St na Vista screenline representing the direction of trips entering and exiting Downtown

Can the Downtown street network accommodate the vehicle trip demand?

- If the total traffic demand of the same direction traversing through a screenline is less than the total capacity of the screenline, the screenline would be considered adequate to accommodate the traffic demand of that direction, though congestions may still occur at some locations.
- ➤ Otherwise, the screenline would be considered inadequate. Long durations of massive gridlock would occur.

 Unserved demand may be discouraged to travel to Downtown again.



San Jose W Julian St Park Ave n Carlos St CE CU Stadium na Vista 🤻 Local Routes used by trips traveling through the screenline Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering and exiting Downtown

South Screenline, Northbound Traffic 2019 Weekday

Northbound traffic enter Downtown via one of 11 gateway options:

- > 5 primary local routes (9 lanes)
- ➤ 4 off-ramps on SR-87
- ➤ 2 off-ramps on I-280

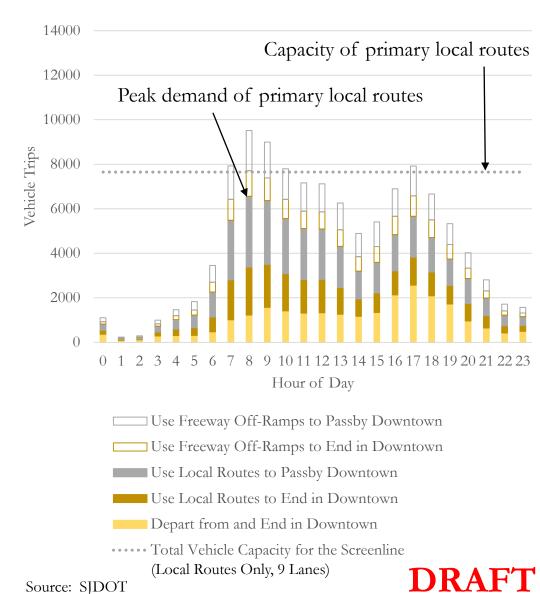
Not all entering traffic end in Downtown; roughly half of them drive past Downtown to elsewhere without stopping.

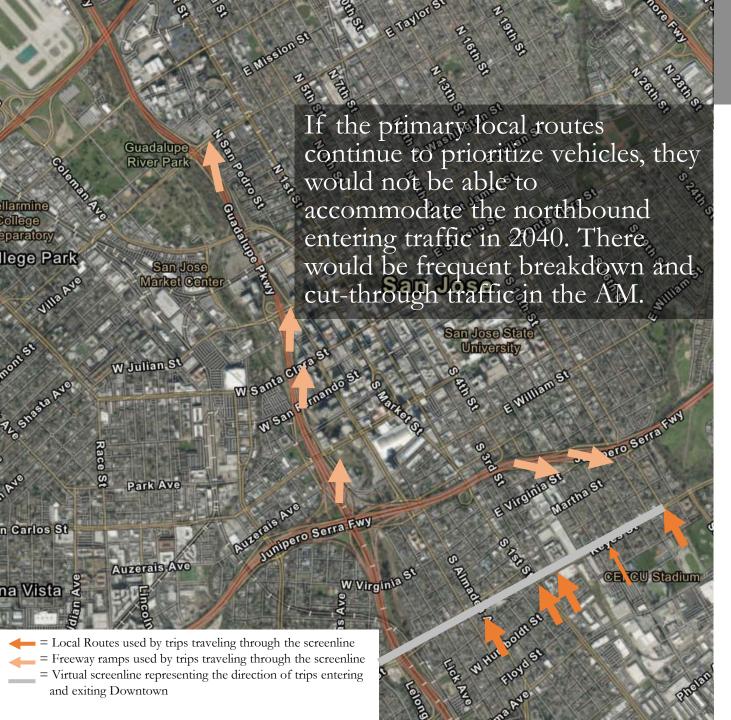
Three-quarters of entering traffic travel on primary local routes; 25% travel on northbound SR-87 and take exits at the 6 off-ramps.

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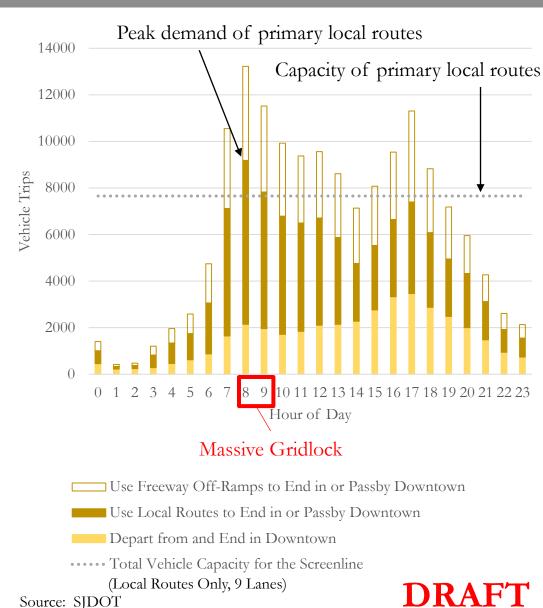
The 5 primary local routes (9 Guadalupe traffic lanes) can accommodate River Park northbound entering traffic today. llege Park San Jose W Julian St Park Ave n Carlos St CE. CU Stadium na Vista 🤻 Local Routes used by trips traveling through the screenline Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering and exiting Downtown

South Screenline, Northbound Traffic 2019 Weekday



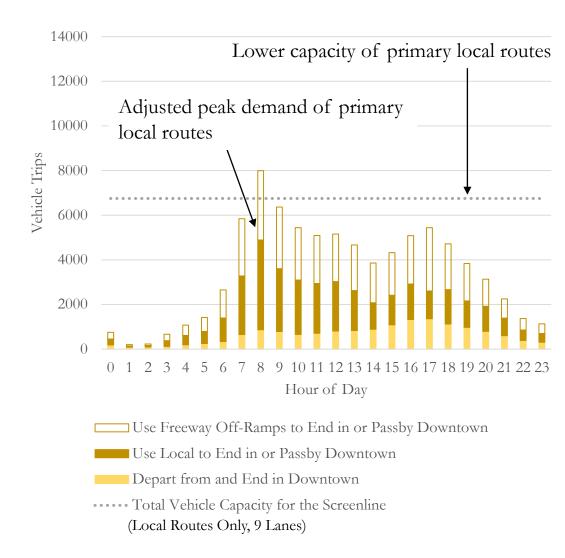


South Screenline, Northbound Traffic 2040 Baseline, Weekday



The lower local capacity (due to couplet conversions and River Park reprioritization of the primary local routes) would be more than enough to accommodate the adjusted demand of northbound entering traffic in 2040 (due to removal of I-W Julian St 280/6th St off-ramp). Park Ave n Carlos St CE. CU Stadium na Vista 🤻 Local Routes used by trips traveling through the screenline Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering and exiting Downtown

South Screenline, Northbound Traffic 2040 DTP, Weekday



Source: SJDOT DRAFT

San Jose W Julian St Park Ave n Carlos St na Vista 🤻 Local Routes used by trips traveling through the screenline = Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering and exiting Downtown

South Screenline, Southbound Traffic 2019 Weekday

Southbound traffic depart from Downtown via one of 10 gateway options:

- > 5 primary local routes (9 lanes)
- ➤ 3 on-ramps on SR-87
- ≥ 2 on-ramps on I-280

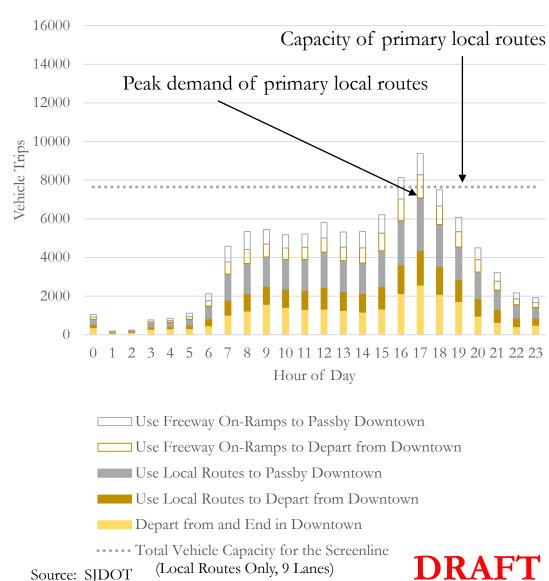
Not all exiting traffic originate from Downtown; roughly half of them drive past Downtown without stopping.

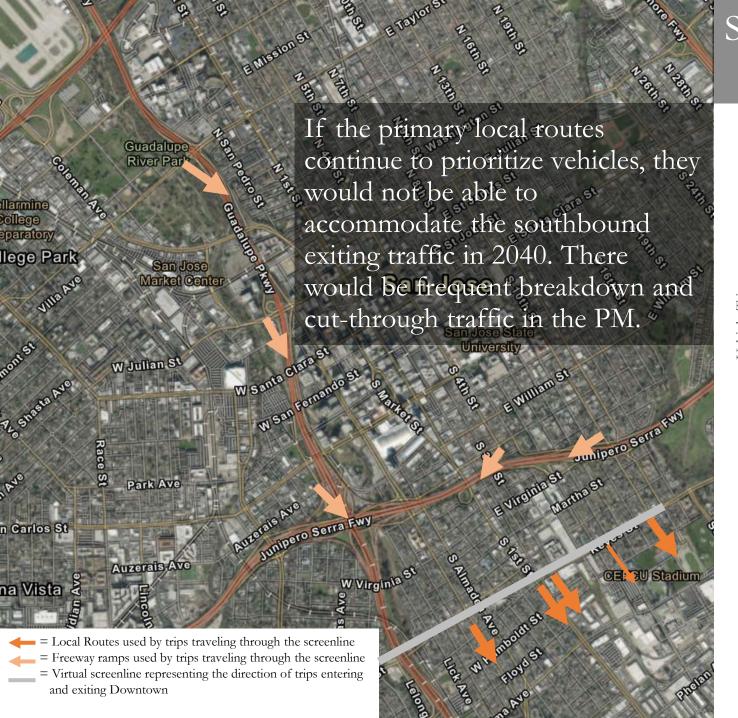
80% of exiting traffic travel on primary local routes; 20% use the 5 on-ramps and travel on southbound SR-87.



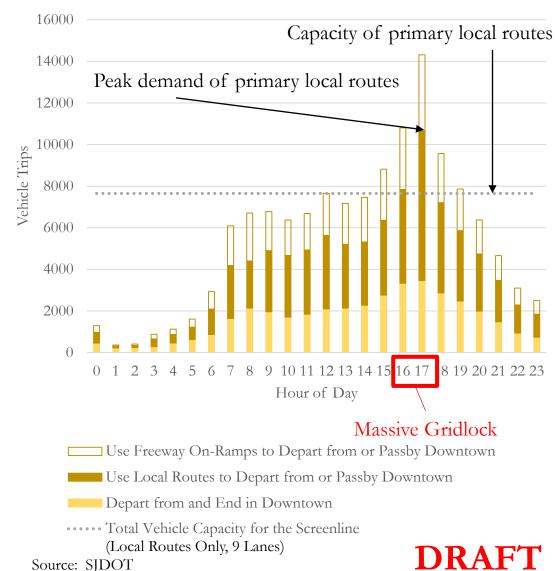
The 5 primary local routes (9 traffic lanes) can accommodate southbound exiting traffic today. llege Park San Jose W Julian St Park Ave n Carlos St Stadium Stadium na Vista 🤻 Local Routes used by trips traveling through the screenline Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering and exiting Downtown

South Screenline, Southbound Traffic 2019 Weekday



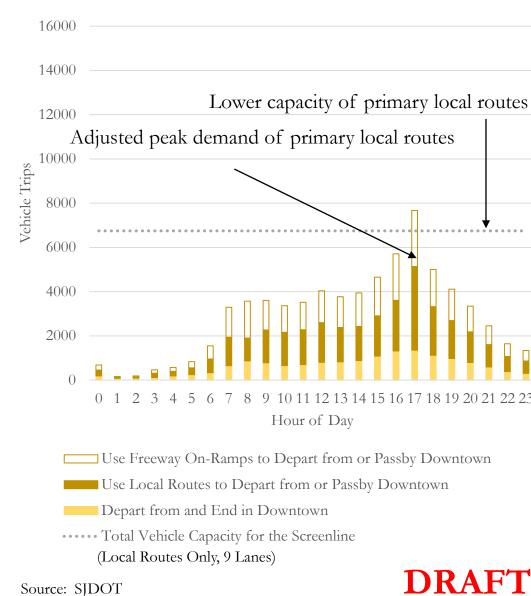


South Screenline, Southbound Traffic 2040 Baseline, Weekday



The lower local capacity (due to couplet conversions and reprioritization of the primary local routes) would still be more than enough to accommodate the adjusted demand of southbound exiting traffic in 2040 (due to removal W Julian St of I-280/4th St on-ramp). Park Ave n Carlos St na Vista 🤻 = Local Routes used by trips traveling through the screenline Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering and exiting Downtown

South Screenline, Southbound Traffic 2040 DTP, Weekday



llege Park San Jose W Julian St Park Ave n Carlos St na Vista 🤻 Local Routes used by trips traveling through the screenline Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering and exiting Downtown

North Screenline, Southbound Traffic 2019 Weekday

Southbound traffic enter Downtown via one of 12 gateway options:

- > 7 primary local routes (9 lanes)
- ➤ 3 off-ramps on SR-87
- ➤ 2 off-ramps on I-280

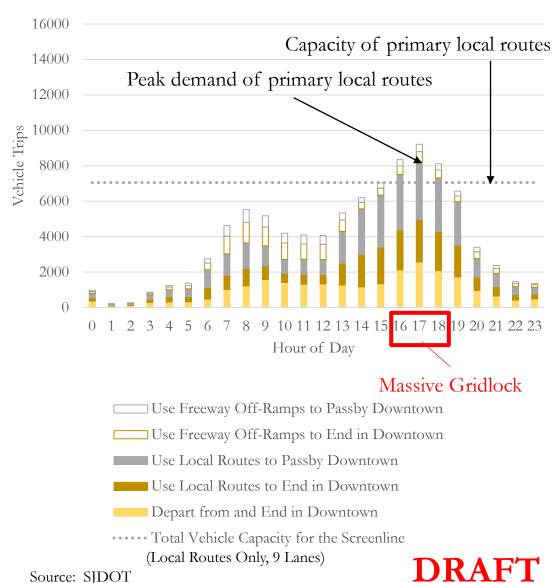
Not all entering traffic end in Downtown; roughly 40% drive past Downtown to elsewhere without stopping.

Most entering traffic travel on primary local routes as opposed to southbound SR-87 in the PM.



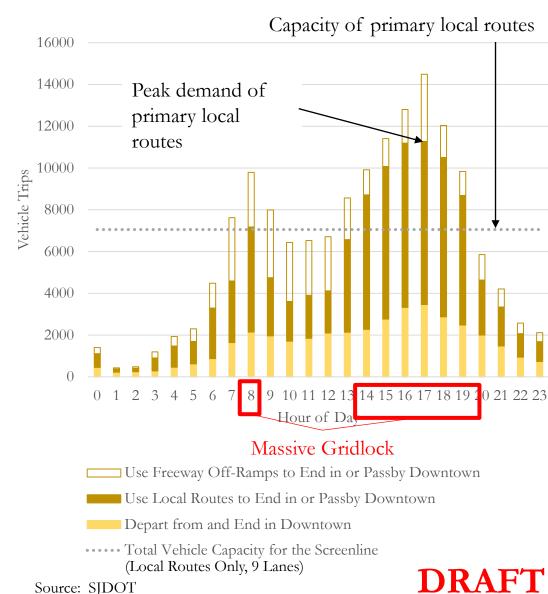
The 7 primary local routes (9 traffic lanes) cannot accommodate the southbound entering traffic today. Frequent traffic breakdown and cut-through occur in the PM today. San Jose llege Park W Julian St Park Ave n Carlos St na Vista 🧗 Local Routes used by trips traveling through the screenline Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering and exiting Downtown

North Screenline, Southbound Traffic 2019 Weekday



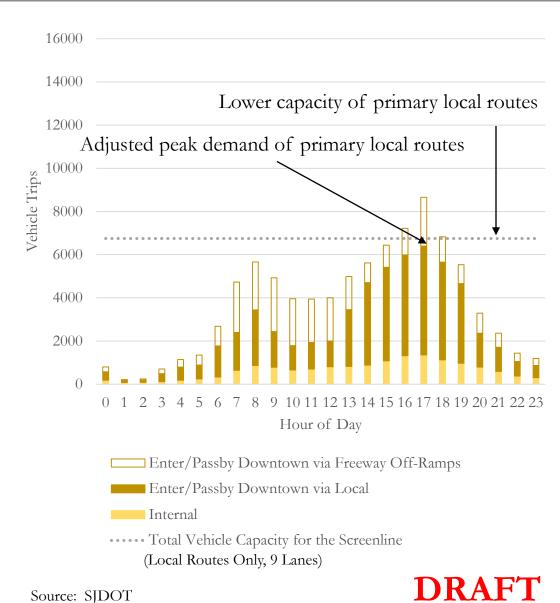
The southbound entering traffic is only going to get much worse to the point a complete breakdown especially in the PM if the primary local routes continue to prioritize llege Park vehicles in 2040. W Julian St Park Ave n Carlos St na Vista 🧸 = Local Routes used by trips traveling through the screenline Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering and exiting Downtown

North Screenline, Southbound Traffic 2040 Baseline, Weekday



The lower local capacity (due to reprioritization of the primary local routes) would be enough to accommodate the adjusted demand of southbound traffic llege Park entering Downtown in 2040 (due to removal of I-280/6th St off-ramp). W Julian St Park Ave n Carlos St na Vista 🧗 Local Routes used by trips traveling through the screenline Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering and exiting Downtown

North Screenline, Southbound Traffic 2040 DTP, Weekday



llege Park San Jose W Julian St Park Ave n Carlos St na Vista 🤻 Local Routes used by trips traveling through the screenline Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering and exiting Downtown

North Screenline, Northbound Traffic 2019 Weekday

Northbound traffic depart from Downtown via one of 12 gateway options:

- > 7 primary local routes (9 lanes)
- ➤ 3 on-ramps on SR-87
- ➤ 2 on-ramps on I-280

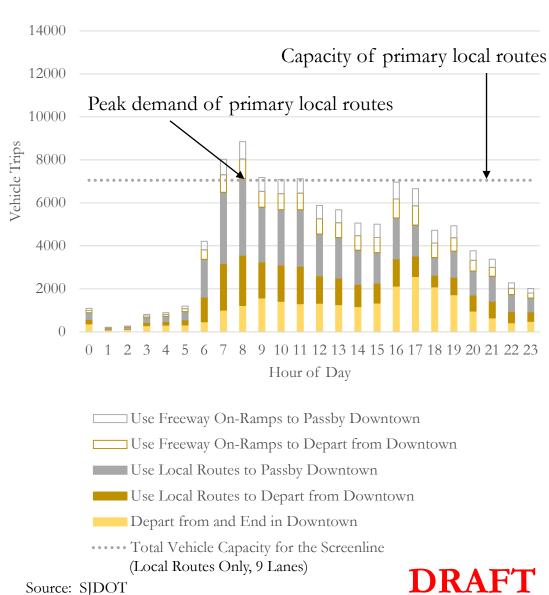
Not all exiting traffic end in Downtown; roughly 40% drive past Downtown to elsewhere without stopping.

85% of exiting traffic travel on primary local routes; 15% use the 5 on-ramps and travel on northbound SR-87.

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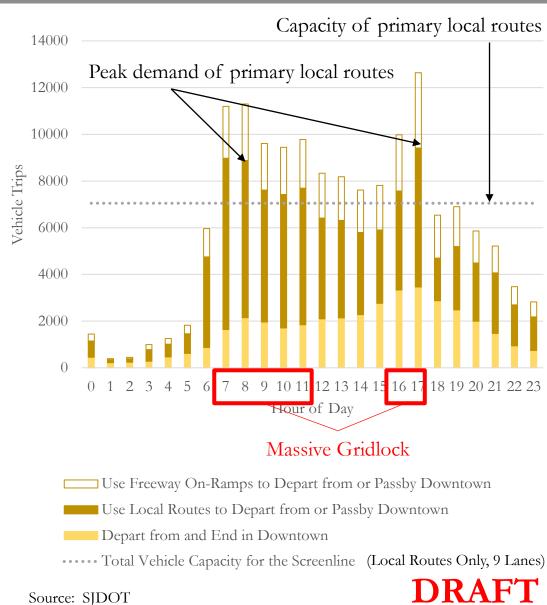
The 7 primary local routes (9) traffic lanes) almost reach a breakdown condition in the AM for the northbound traffic departing from Downtown today. San Jose llege Park W Julian St Park Ave n Carlos St **CEFCU Stadium** na Vista 🧸 = Local Routes used by trips traveling through the screenline Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering and exiting Downtown

North Screenline, Northbound Traffic 2019 Weekday



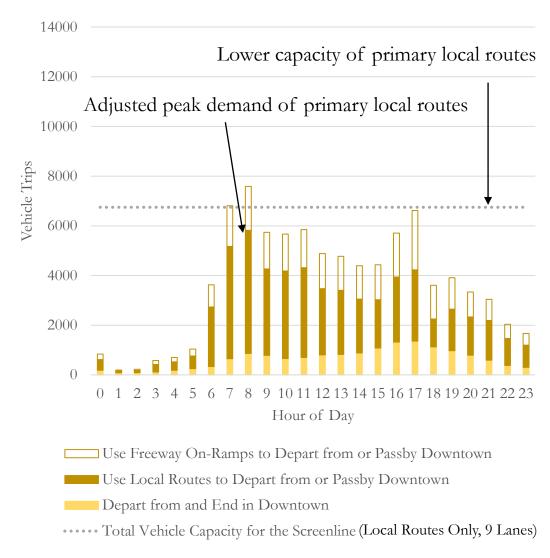
The northbound exiting traffic is only going to get much worse to a complete breakdown in both AM and PM if the primary llege Park local routes continue to prioritize vehicles in 2040. W Julian St Park Ave n Carlos St na Vista 🧸 Local Routes used by trips traveling through the screenline Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering and exiting Downtown

North Screenline, Northbound Traffic 2040 Baseline, Weekday



The lower local capacity (due to reprioritization of the primary local routes) would be enough to accommodate the adjusted demand of northbound exiting llege Park traffic exiting in 2040 (due to removal of I-280/4th St onramp). W Julian St Park Ave n Carlos St na Vista 🧗 Local Routes used by trips traveling through the screenline Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering and exiting Downtown

North Screenline, Northbound Traffic 2040 DTP, Weekday



Source: SJDOT DRAFT

San Jose W Julian St Park Ave n Carlos St na Vista 🤻 ocal Routes used by trips traveling through the screenline Freeway ramps used by trips traveling through the screenline Virtual screenline representing the direction of trips entering Paula St and exiting Downtown Pedro St

East Screenline, Westbound Traffic 2019 Weekday

Westbound traffic enter Downtown via one of 13 gateway options:

- > 7 primary local routes (10 lanes)
- ➤ 3 off-ramps on SR-87
- ➤ 3 off-ramps on I-280

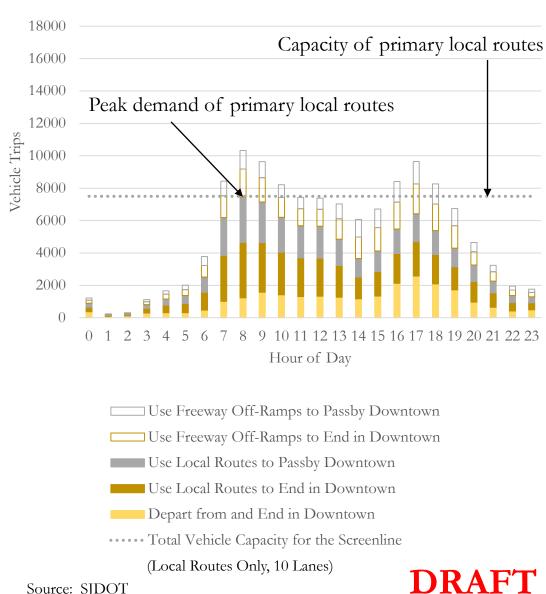
Not all entering traffic end in Downtown; roughly 30% drive past Downtown to elsewhere without stopping.

Three-quarters of entering traffic travel on primary local routes; 25% travel on northbound I-280 and use the 6 off-ramps.

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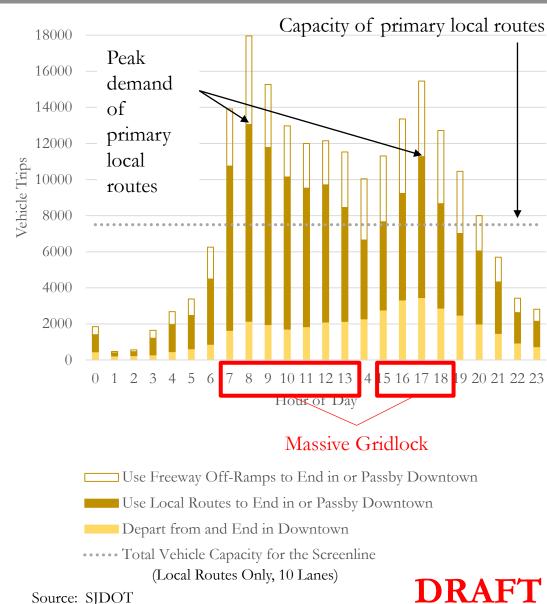
East Screenline, Westbound Traffic 2019 Weekday



Source: SJDOT

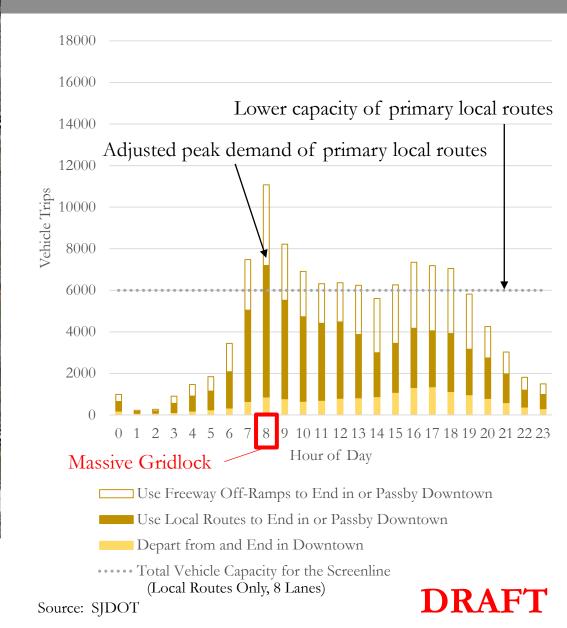


East Screenline, Westbound Traffic 2040 Baseline, Weekday



San Jose The lower local capacity (due to reprioritization of the primary local routes) could not accommodate the adjusted AM peak hour demand of westbound traffic entering Downtown in 2040. Significant congestion would Local Routes used by trips traveling through the screenline still occur in that Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering peak hour. and exiting Downtown

East Screenline, Westbound Traffic 2040 DTP, Weekday



San Jose W Julian St Park Ave n Carlos St na Vista 🧗 Local Routes used by trips traveling through the screenline = Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering and exiting Downtown

East Screenline, Eastbound Traffic 2019 Weekday

Eastbound traffic depart from Downtown via one of 13 gateway options:

- > 7 primary local routes (10 lanes)
- ≥ 2 on-ramps on SR-87
- ➤ 4 on-ramps on I-280

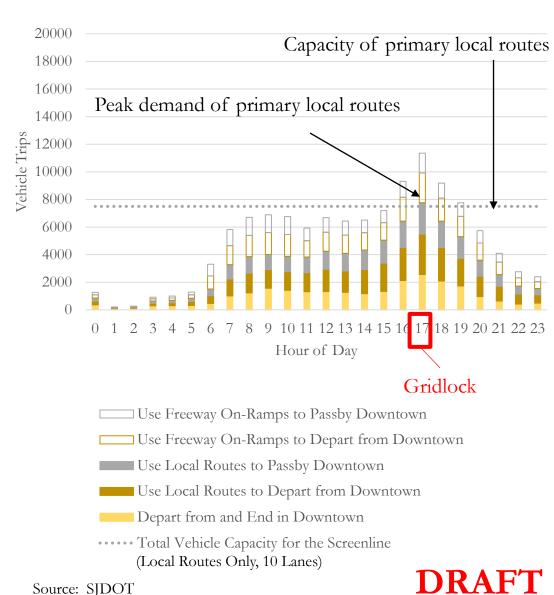
Not all exiting traffic originate from Downtown; roughly 30% drive past Downtown without stopping.

Two-thirds of exiting traffic travel on primary local routes; 33% use the 6 on-ramps travel on southbound I-280.



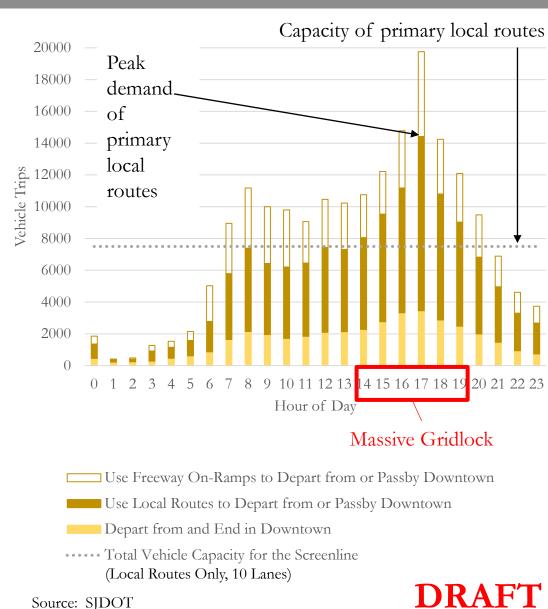
llege Park San Jose San Jose State W Julian St The 7 primary local routes (10 traffic lanes) reach a breakdown condition CEFCU Stadium for the eastbound traffic leaving Local Routes used by trips traveling through the screenline Downtown in the PM peak hour today. Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering and exiting Downtown

East Screenline, Eastbound Traffic 2019 Weekday



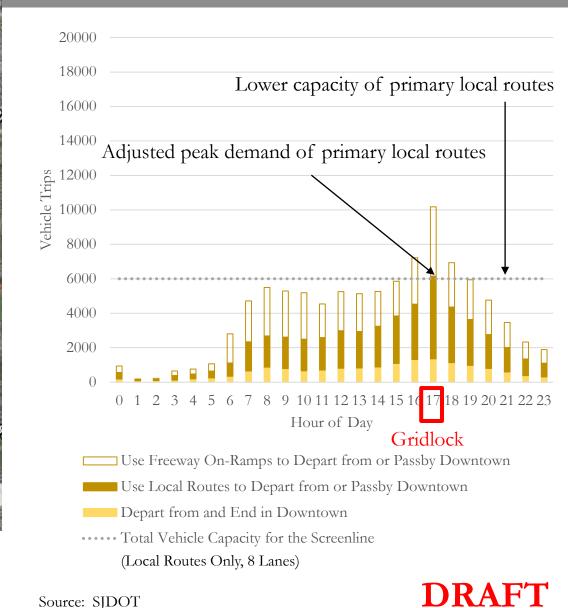


East Screenline, Eastbound Traffic 2040 Baseline, Weekday



The lower local San Jose capacity (due to reprioritization of the primary local routes) would be enough to accommodate the adjusted demand of eastbound traffic (due on-ramp consolidation) leaving Downtown in 2040. Significant congestion would = Local Routes used by trips traveling through the screenline occur in PM peak = Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering Paula St hour. and exiting Downtown Pedro St

East Screenline, Eastbound Traffic 2040 DTP, Weekday



San Jose W Junes W n Carlos St na Vista 🧗 Local Routes used by trips traveling through the screenline = Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering and exiting Downtown

West Screenline, Eastbound Traffic 2019 Weekday

Eastbound traffic enter Downtown via one of 15 gateway options:

- > 8 primary local routes (12 lanes)
- > 4 off-ramps on SR-87
- ➤ 3 off-ramps on I-280

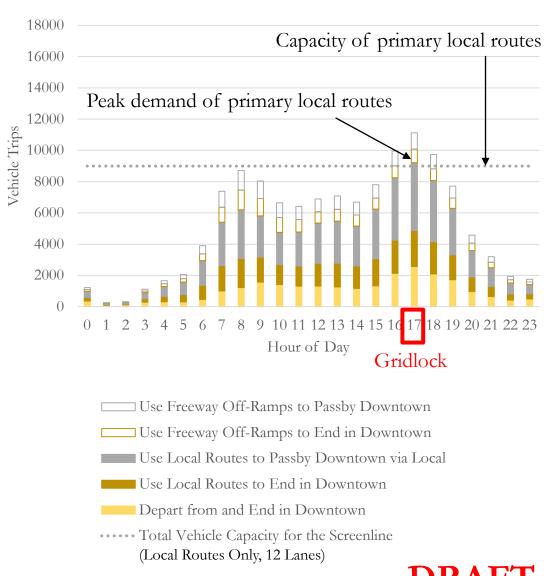
Not all entering traffic end in Downtown; roughly half of them drive past Downtown without stopping.

80% of exiting traffic travel on primary local routes; 20% use the 7 on-ramps travel on southbound I-280.



The 8 primary local routes (12) traffic lanes) almost reach a River Park breakdown condition for the eastbound traffic entering Downtown in the PM peak hour today.se W Junes J n Carlos St na Vista 🤻 Local Routes used by trips traveling through the screenline Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering and exiting Downtown

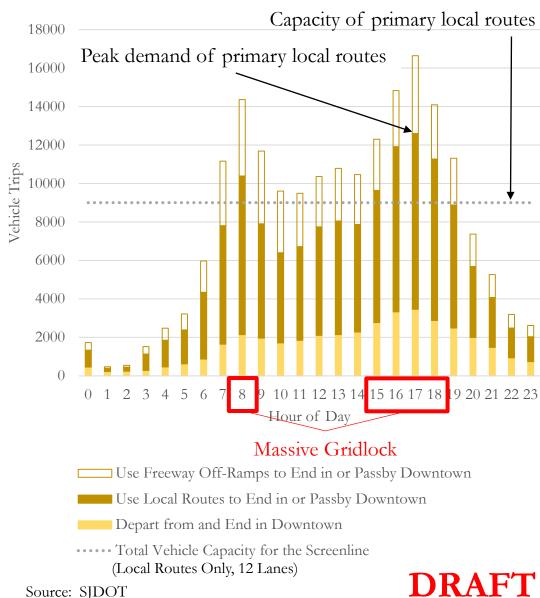
West Screenline, Eastbound Traffic 2019 Weekday



Source: SJDOT

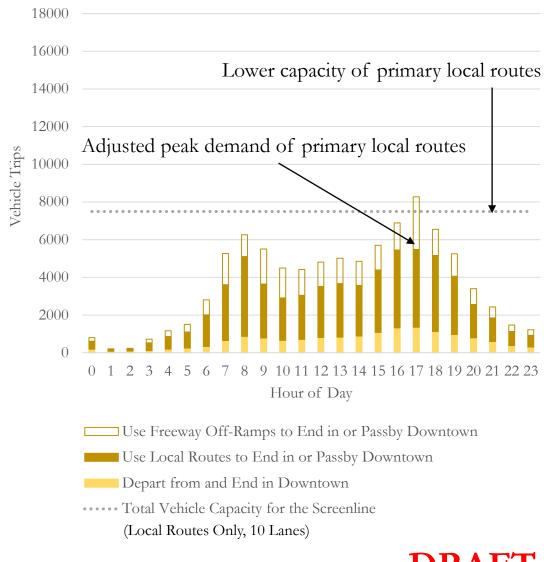
The eastbound entering traffic Guadalupe would face a complete River Park breakdown for long periods in both AM and PM if the primary local routes continue to prioritize vehicles in 2040. W Junes J n Carlos St na Vista 🧸 Local Routes used by trips traveling through the screenline Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering and exiting Downtown

West Screenline, Eastbound Traffic 2040 Baseline, Weekday



The lower local capacity (due to reprioritization of the primary local routes) would be enough to accommodate the adjusted demand of eastbound entering traffic in 2040 (due to removal) of I-280/6th St off-ramp). W Julian St Park Aw n Carlos St na Vista 🤻 = Local Routes used by trips traveling through the screenline Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering and exiting Downtown

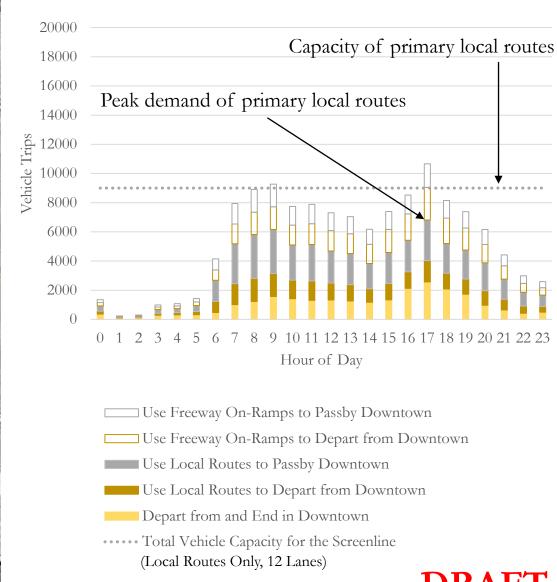
West Screenline, Eastbound Traffic 2040 DTP, Weekday



Source: SJDOT DRA

The 8 primary local routes (12) traffic lanes) can accommodate River Par westbound exiting traffic today. San Jose WJu. mst Park A n Carlos St CEFCU Stadium na Vista 🤻 = Local Routes used by trips traveling through the screenline = Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering and exiting Downtown

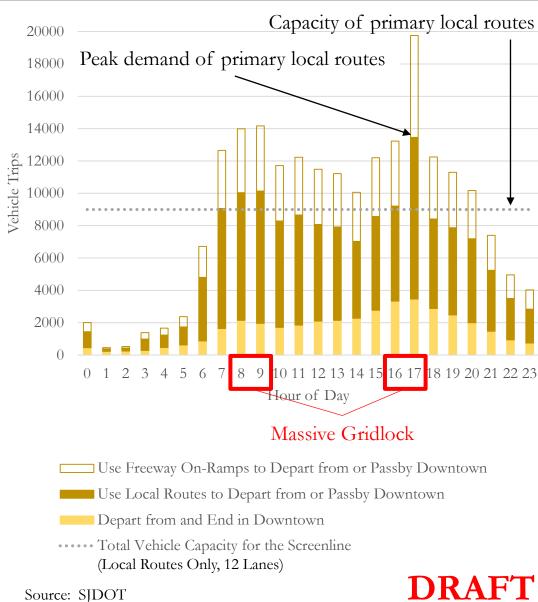
West Screenline, Westbound Traffic 2019 Weekday



Source: SJDOT

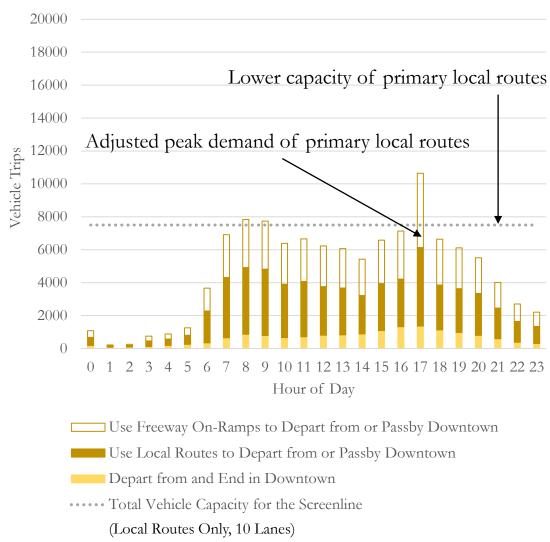
The westbound exiting traffic would face a complete breakdown in both AM and PM if the primary local routes continue to prioritize vehicles in 2040.Jose WJu. mst Park A n Carlos St CEFCU Stadium na Vista 🧸 Local Routes used by trips traveling through the screenline Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering and exiting Downtown

West Screenline, Westbound Traffic 2040 Baseline, Weekday



The lower local capacity (due to reprioritization of the primary local routes) would be enough to accommodate the adjusted demand of westbound exiting traffic in 2040 (due to removal of I-280/4th St on-ramp). W Julian St Park A n Carlos St na Vista 🧗 Local Routes used by trips traveling through the screenline Freeway ramps used by trips traveling through the screenline = Virtual screenline representing the direction of trips entering and exiting Downtown

West Screenline, Westbound Traffic 2040 DTP, Weekday



Source: SJDOT



Local Route

Capacity

(# Lanes)

9

9

10

12

Screenline

South

North

East

West

ary	DRAFT

Traffic Gridlock

(Direction/

Time)

Northbound

(8-10am)

Southbound

(4-6pm)

Northbound

(7-12pm, 4-6pm)

Southbound

(8am, 2-8pm)

Eastbound

(2-8pm)

Westbound

(7-2pm, 3-7pm)

Eastbound

(8-9am, 3-7pm)

Westbound

(8-10am, 4-6pm)

2040 DTP, Weekday

Traffic Gridlock

(Direction/

Time)

No

No

Eastbound

(5-6pm)

Westbound

(8-9am)

No

Local Route

Capacity

(# Lanes)

9

9

8

10

2040 Baseline, Weekday

Vehicle Net	work Analysis S	ummary		DK

Local Route

Capacity

(# Lanes)

9

9

10

12

Traffic Gridlock

(Direction/

Time)

No

Southbound

(4-7pm)

Eastbound

(5-6pm)

Eastbound

(5-6pm)