

Seattle Center Arena Redevelopment

SEATTLE
CITY HALL



Presentation Overview

- Arena information
- Problem we are trying to solve
- Master Use Permit (MUP) decision transportation requirements
 - 1st Ave N and Queen Anne Ave N redesign
- Arena Access Management Plan (AAMP)

Road Map to Mobility Solutions

Process	EIS	MUP/SIP	NODO MAP
Definition	Recommends mitigation to address environmental impacts, which are identified during the SEPA process. Mitigation must be directly related to impacts identified.	Project must meet land use and street use code requirements. Can apply conditions that will further reduce impacts identified in the SEPA process.	Prioritizes multimodal mobility solutions for north downtown neighborhoods. Projects do not require nexus with EIS impacts.
Specific to SC Arena?	Yes	Yes	No
Sample actions/projects	<ul style="list-style-type: none"> Physical improvements near the Arena Arena Access Management Plan (AAMP) Construction Management Plan (CMP) 	<ul style="list-style-type: none"> Street improvements adjacent to project site Street tree replacement Utility relocations Bicycle parking 	<ul style="list-style-type: none"> Denny Way adaptive signals Transit speed and reliability improvements Pedestrian crossing improvements Complete bike connections Monorail station improvements
Expected completion	FEIS issuance: August 30, 2018	Phased, Q4 2018-Q4 2021	Final soon

Arena information

EIS preferred alternative

- 17,300-18,800 seat arena with 450 underground parking spaces
- Landmark features (roof) preserved
- Truck tunnel with 8 loading berths under the Arena
- Sign Plan, including digital video display sign on 1st Ave N
- Five buildings, Skatepark, surface parking lot, loading area, selected plazas demolished

Arena EIS

EIS Purpose

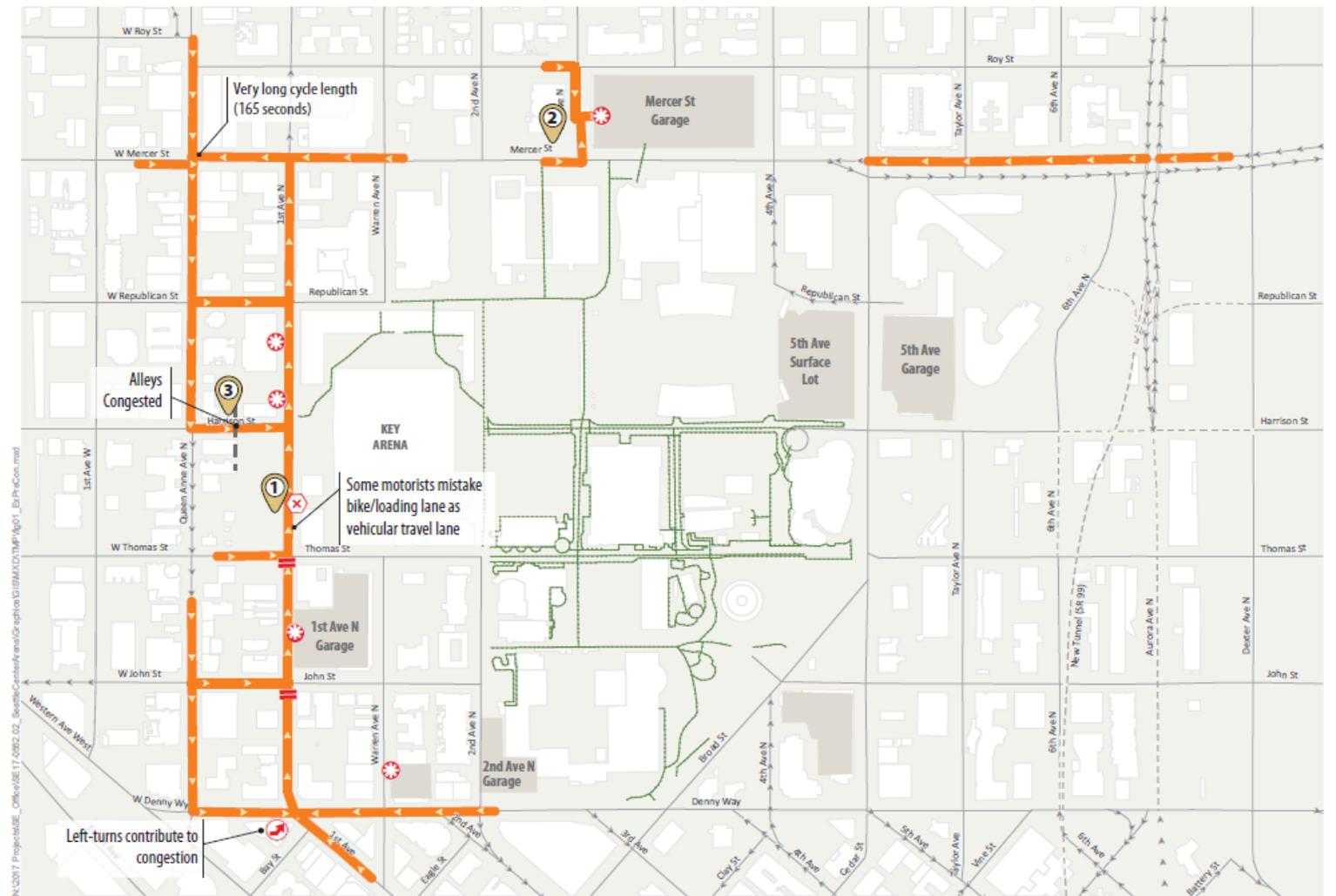
- To disclose likely significant impacts of a project
- To advise of potential mitigation of those impacts
- Accept public comment

FEIS Transportation Key Findings

- Traffic operations congestion and intersection delay
- Ridehailing and localized impacts to transit, people riding bicycles, and safety for people walking
- Transit crowding post-event and speed and reliability issues
- Modal conflicts caused by parking circulation

Problem:

Key Arena pre-event existing conditions

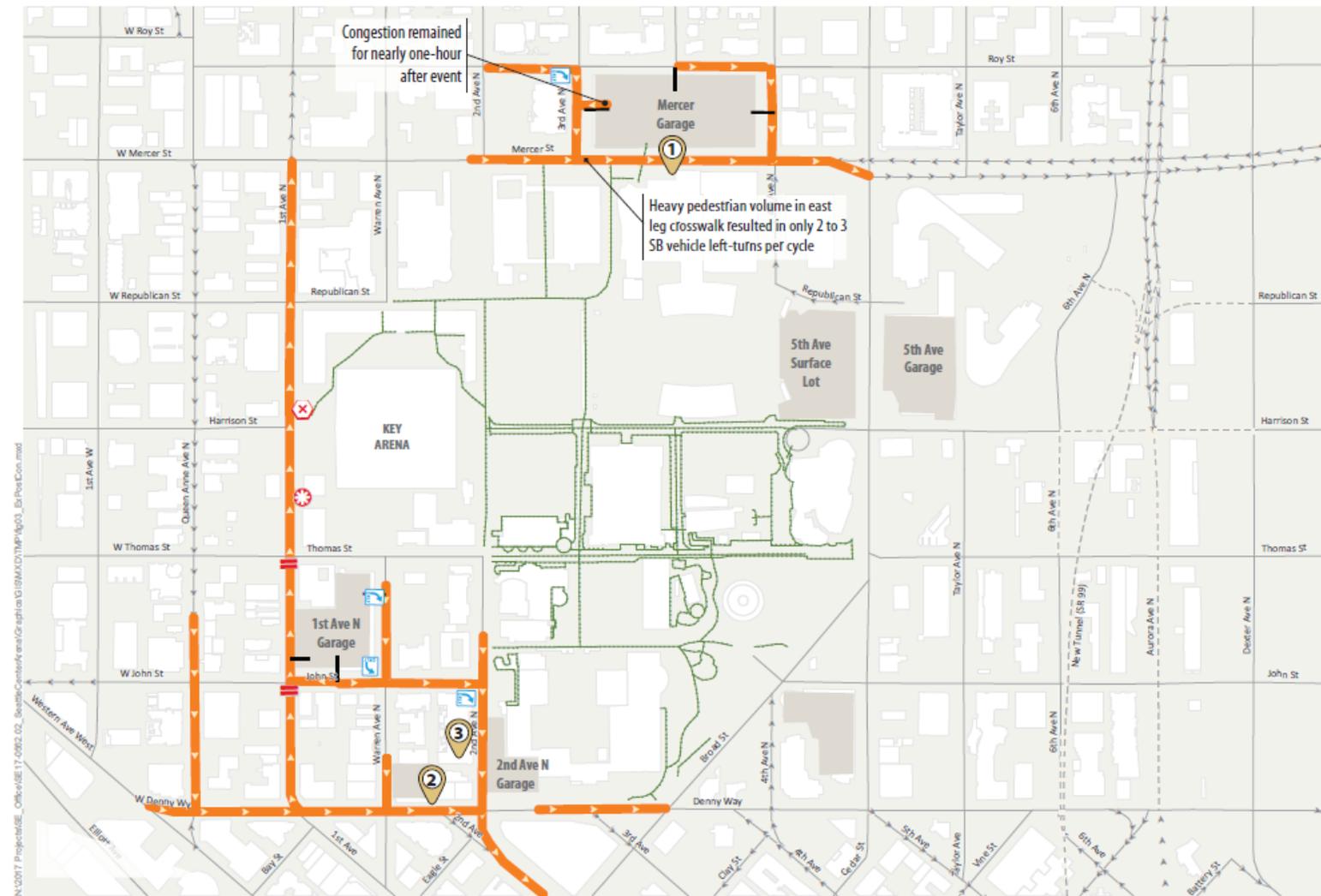


- Event Related Congestion
- Pedestrian Pathway
- Monorail Line
- Planned Street
- Parking Garage
- Parking Garage Operations Adversely Affected Adjacent Street
- Parked Vehicle in Loading Zone
- Challenging Pedestrian Crossing (Given lack of signalized crosswalk)
- Problematic Left-turn

Note:
Based on observations at Kevin Hart Comedy Show at Key Arena that began at 7:00 PM on Thursday, June 14th, 2018.

Problem:

Key Arena post-event existing conditions



- ▶ Event Related Congestion
- Challenging Pedestrian Crossing (Given lack of signalized crosswalk)
- Parking Garage Exit
- Pedestrian Pathway
- ⊗ Heavy Competition for Curb-space by TNCs, Pick-ups, Taxis and Paratransit
- Parking Garage
- - - Monorail Line
- ⊗ Vehicles/Limos Block Bus Dwell Area
- ⬆ Temporary signage showing permitted movements
- - - Planned Street

Note:
Based on observations at Kevin Hart Comedy Show at Key Arena that ended at 10:00 PM on Thursday, June 14th, 2018.

Traffic Control Officer at 1st Ave N/Harrison St



1st Ave N Congestion



Problem:

Congestion will increase without the Arena project and will worsen with the Arena project in 2020

Frequency of events - Number of events increases from 100 (Key Arena typical year) to up to 200-250 events/year

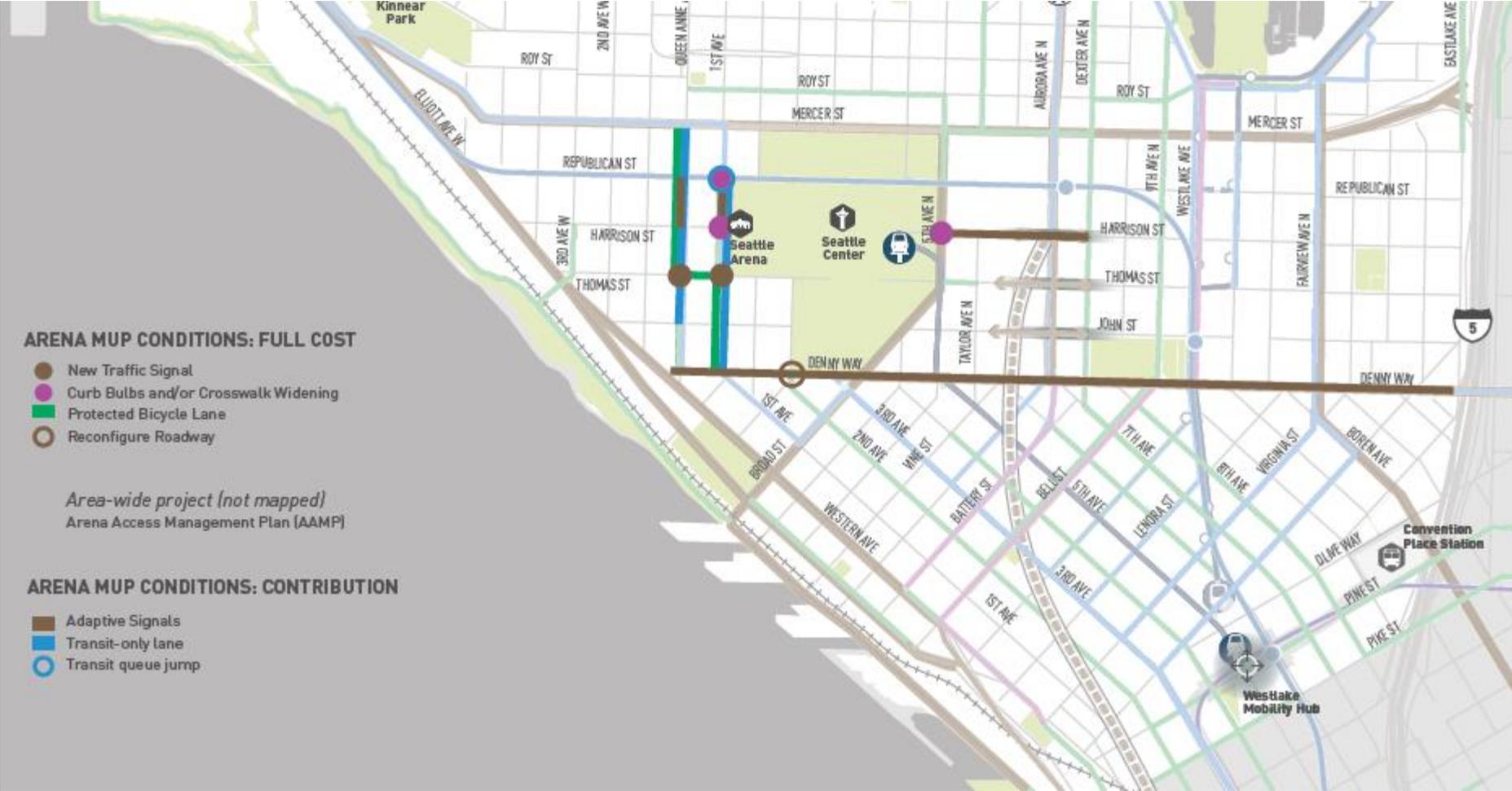
Alley Usage



MUP decision - summary

- Construction Management Plan (CMP) and construction mitigation – 1st Ave N temporary redesign and signal
- Physical improvements
 - 1st Ave N and Queen Anne Ave N
 - AAA bike facility
 - Bus-only lanes
 - Transit queue jump
 - Two new signals
 - Curb bulb outs and crosswalk widening
 - 2nd Ave lane reconfiguration at Denny Way
 - Adaptive signal system payment along Denny Way and six other intersections
 - Monetary payment to King County Metro for additional post-event bus service
- Arena Access Management Plan (AAMP)

MUP decision - summary



MUP decision - QA Ave N and 1st Ave N



ARENA MUP CONDITIONS: FULL COST

- New Traffic Signal
- Curb Bulbs and/or Crosswalk Widening
- Protected Bicycle Lane
- Reconfigure Roadway

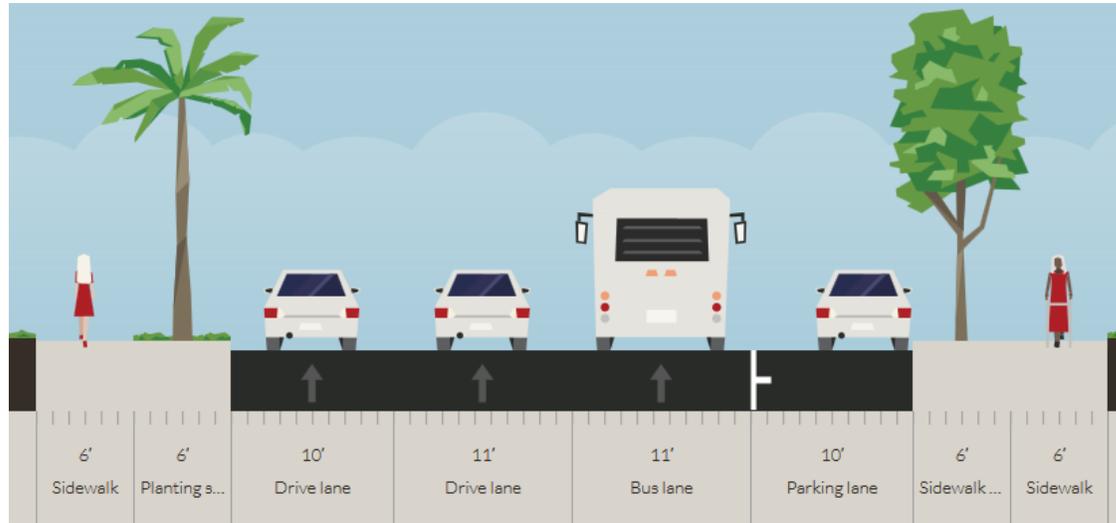
Area-wide project (not mapped)
Arena Access Management Plan (AAMP)

ARENA MUP CONDITIONS: CONTRIBUTION

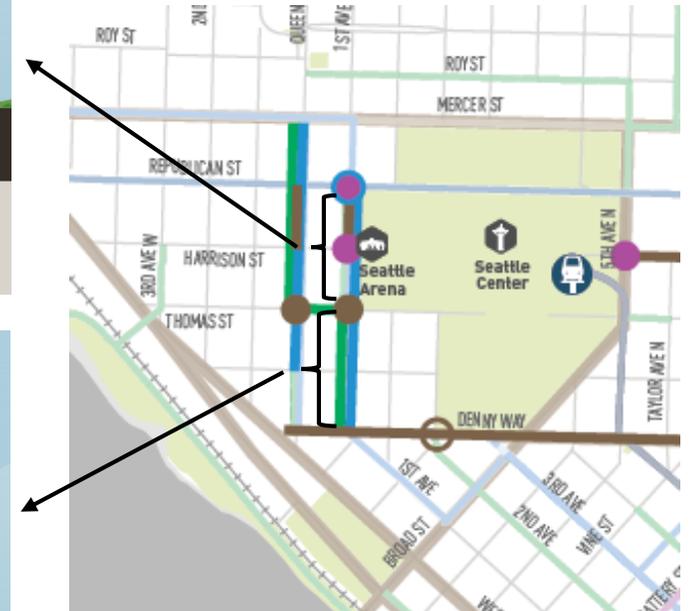
- Adaptive Signals
- Transit-only lane
- Transit queue jump

1st Ave N

Thomas St to Republican St



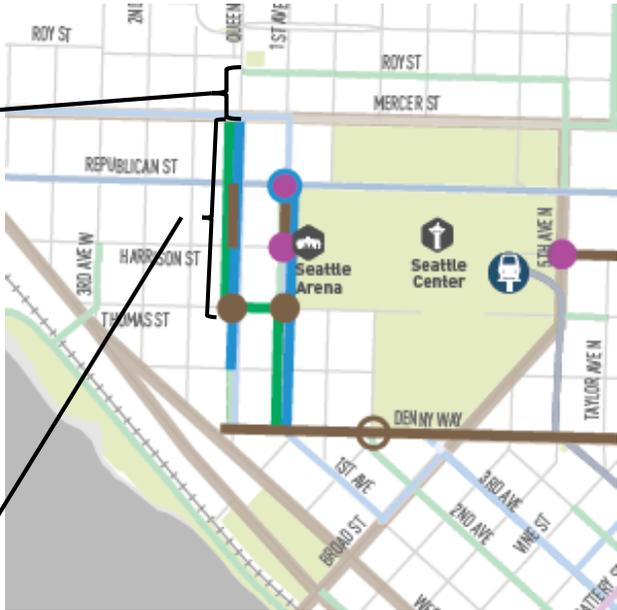
Denny Way to Thomas St



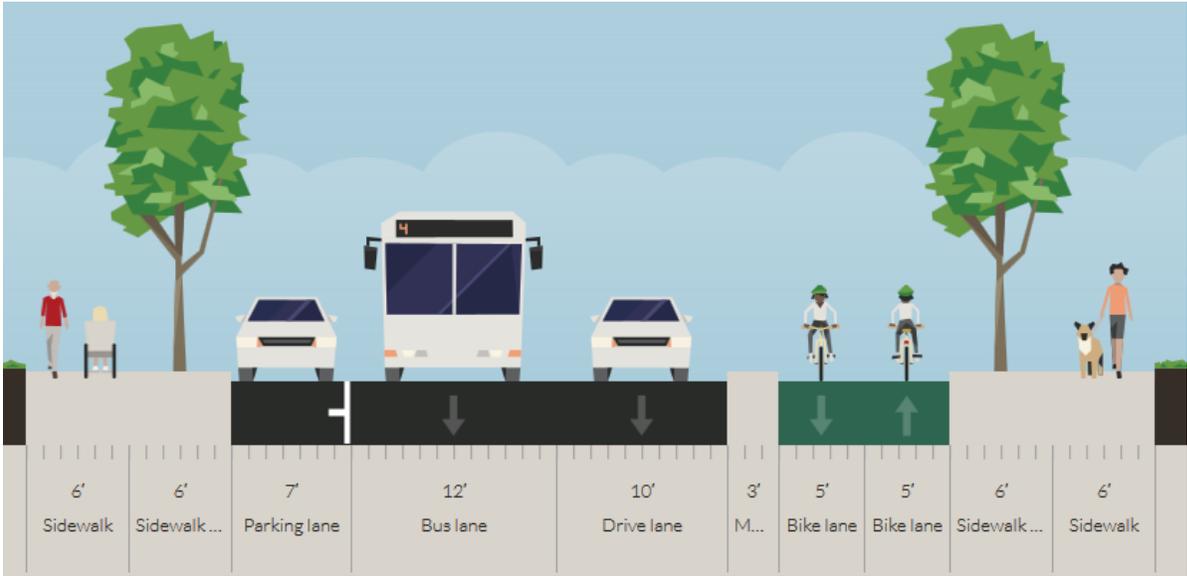
QA Ave N

Mercer St to Roy St

To be modified by SDOT



Thomas St to Mercer St



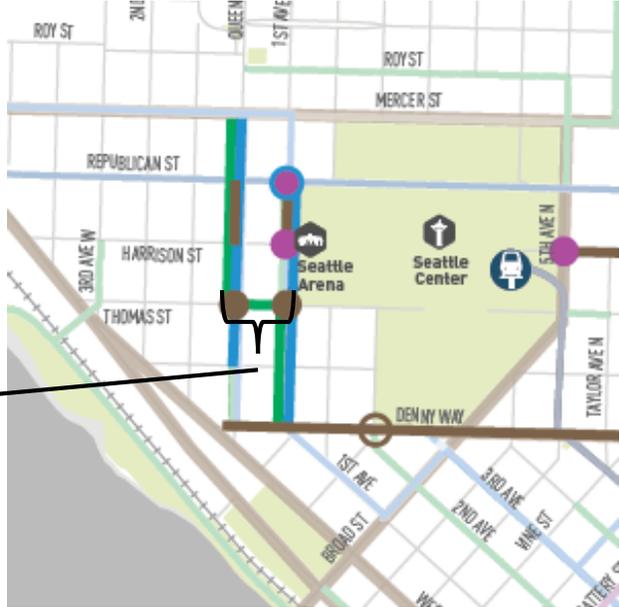
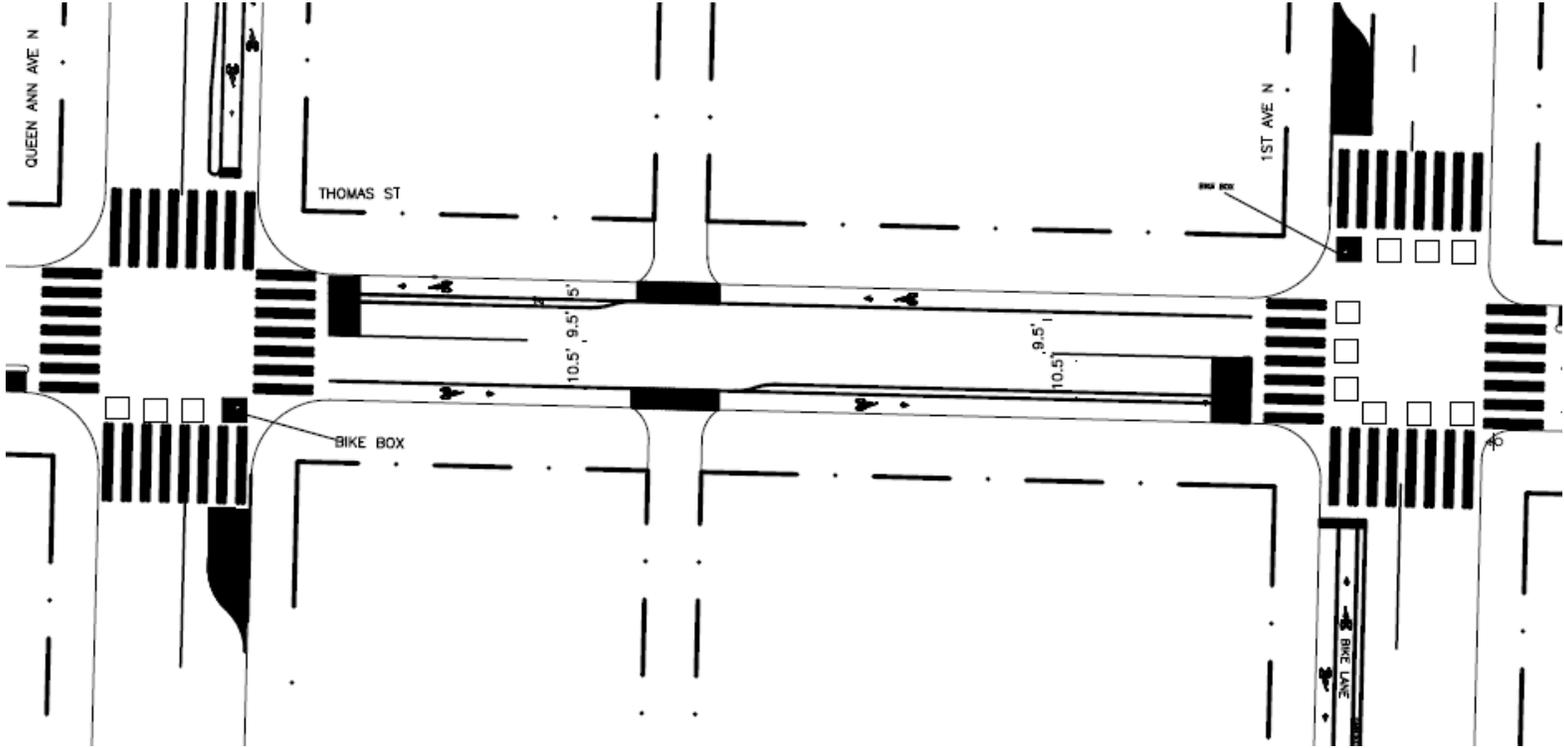
Thomas St

1st Ave N to QA Ave N

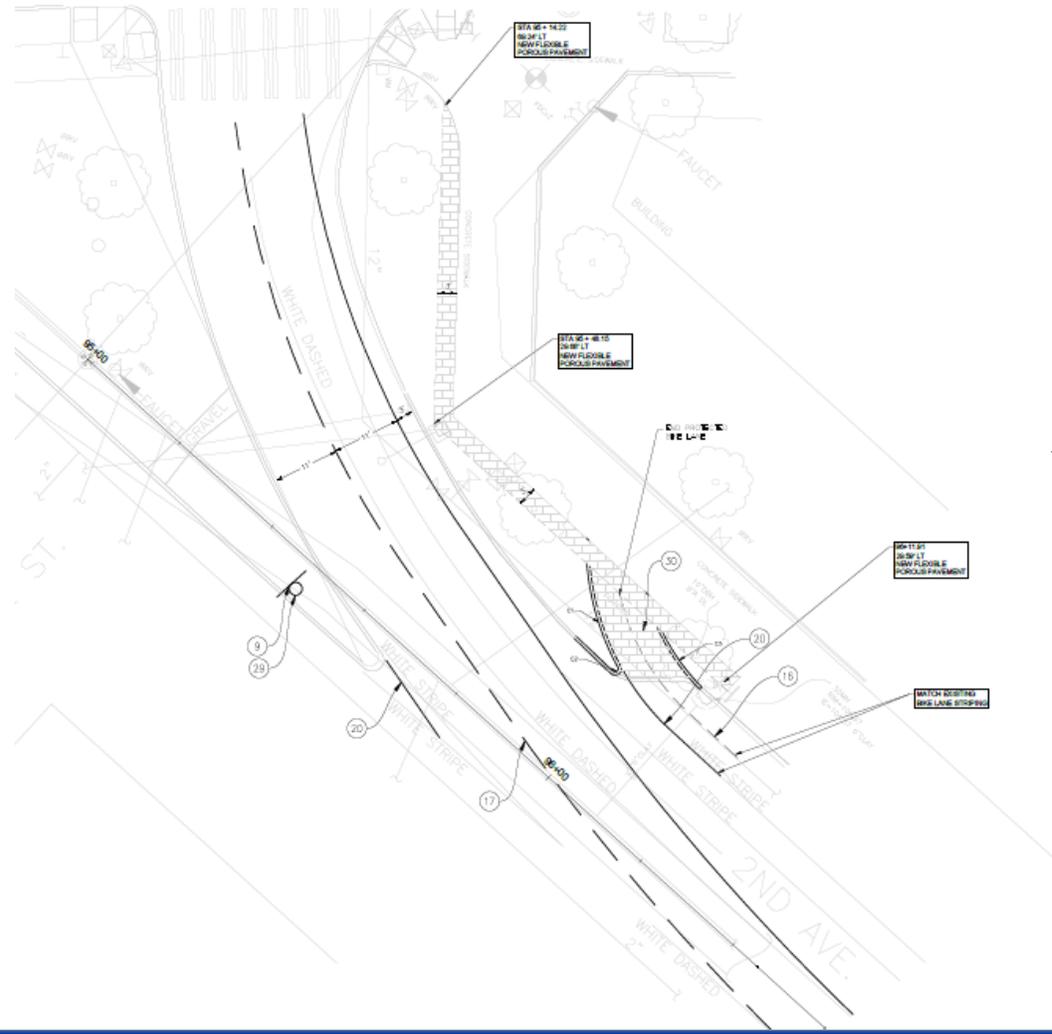


Thomas St

1st Ave N
to QA
Ave N



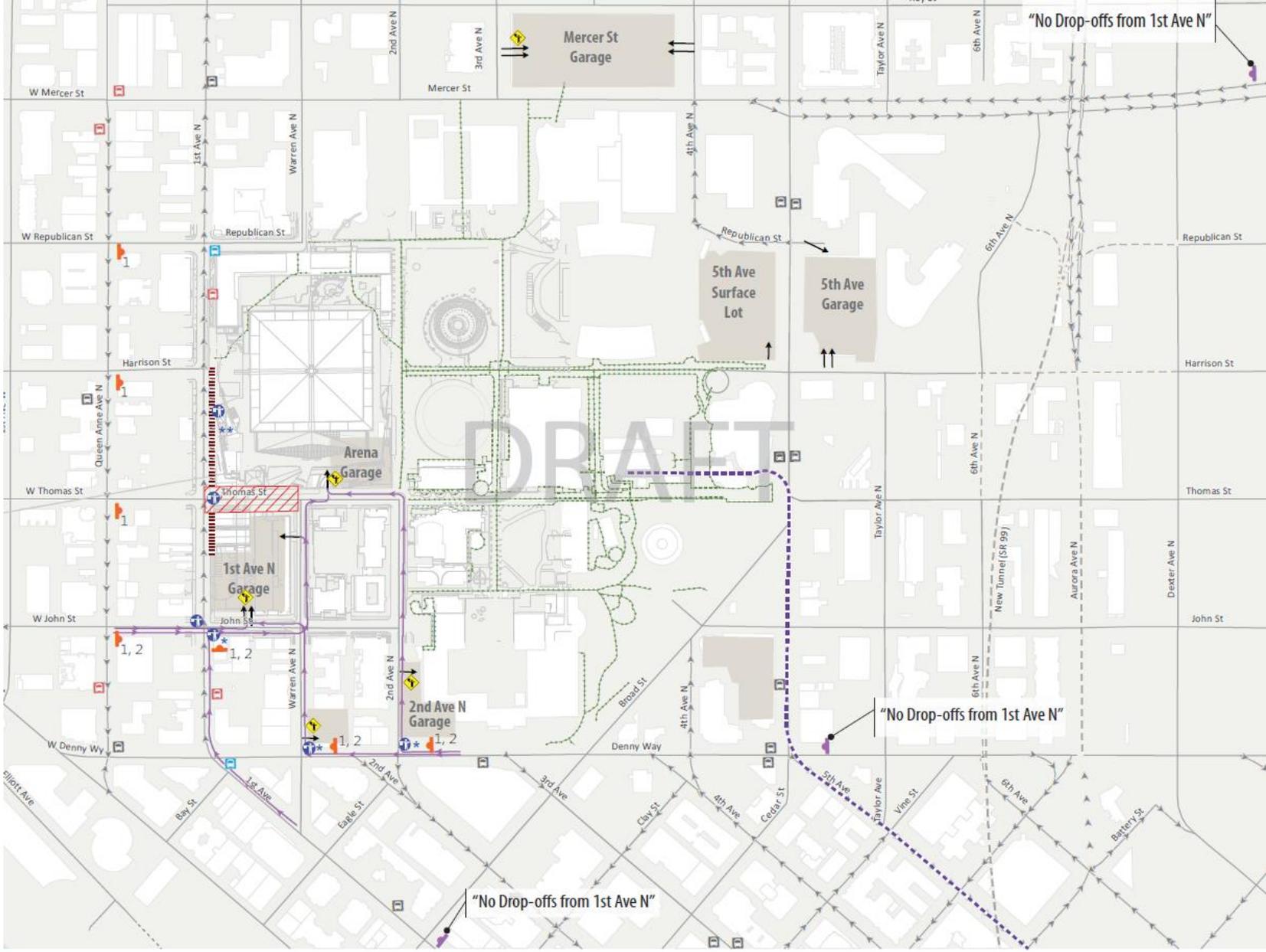
2nd Ave and Denny Way



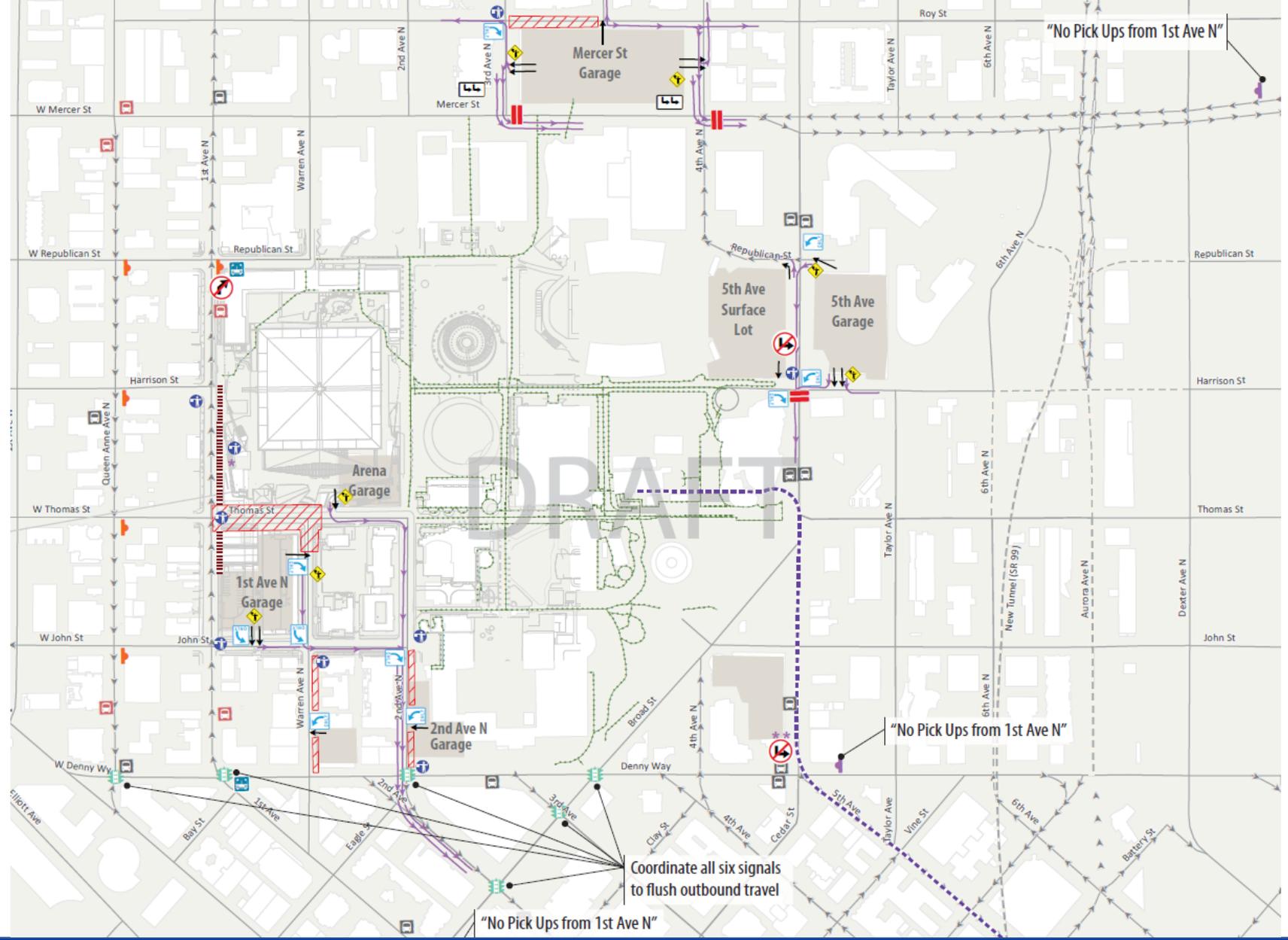
Draft AAMP Elements

- Demand Management Strategies:
 - Encourage attendees to travel more efficiently: more walking, biking and transit and less private auto and ridehailing
 - Mode share goals for Arena attendees and employees
- Traffic, Parking, Transit, Ridehailing and Pedestrian Management
 - Individual management plans developed for before and after events
- Performance Standards and Monitoring

Draft AAMP Pre-Event Transportation Management Plan



Draft AAMP Post-Event Transportation Management Plan



Projected benefits

Transit speed and reliability

Corridor	Pre-event peak hour	
	No mitigation	With AAMP and physical improvements
	Average travel time	Average travel time
NB 1 st Ave N	6.8 minutes	5.8 minutes
SB QA Ave N	11.8 minutes	6.3 minutes

Intersection Level Of Service (LOS)

	No Action		No Mitigation		With AAMP and improvements	
	Pre-event peak hr	Post-event peak hr	Pre-event peak hr	Post-event peak hr	Pre-event peak hr	Post-event peak hr
LOS F	24	0	23	22	17	13
LOS E	6	0	8	7	11	6
Average intersection delay (sec/veh)	117	12	122	123	78	73

Projected benefits

People walking

- Two new signals
- Wider crosswalks at three intersections
- New curb bulbs at two intersections
- New pedestrian crossing at Denny Way / 1st Ave N (TBD)

People biking

- Two new signals
- Protected bicycle lane couplet
- New bike crossing at Denny Way / 1st Ave N (TBD)
- Short-term bike parking for attendees
- Bike parking valet for large events

Questions?

To download the draft AAMP, use the link below:

<https://www.seattle.gov/Documents/Departments/economicDevelopment/arena%20evaluation%20docs/Draft%20AAMP%208%2030%2018%20v3.pdf>

www.seattle.gov



Arena information

Project Timeline:

- 2017 – RFP and selected developer team
- Della Zora born Sept 17, 2017
- April 2018 – DEIS released
- August 30, 2018 – FEIS released
August 30, 2018 – Draft Arena Access Management Plan (AAMP) released
- September 21, 2018 – MUP decision published
- December 2018 – present – Construction mitigation (1st Ave N redesign and all other items)
- November 2019 – 60% SIP design submittal for all MUP improvements

Arena information

For the Arena project to achieve their mode share goals, rethinking 1st Ave N and QA Ave N operations and how space is allocated had to be reevaluated due to the impacts of the project.

Attendee mode share baseline assumptions (for EIS analysis) and goals (NHL/NBA)

Travel mode	Baseline Assumptions		Project goals	
	2020	2035	2020	2035
Private vehicle	63%	35%	55%	31%
Transit	8%	6%	15%	30%
Ridehailing	15%	25%	15%	20%
Walk	10%	8%	10%	12%
Monorail	3%	2%	5%	5%
Bicycle	1%	1%	1%	2%

Project Impacts and Mitigation

Package #2: Redesign 1st Ave N and Queen Anne Ave N

Impact	Mitigation
a. Transit delay on 1 st Ave N and Queen Anne Ave N	Transit-only lanes: <ul style="list-style-type: none"> - 1st Ave N between Denny Way and Republican St - Queen Anne Ave N between Mercer St and John St Transit queue jump at 1 st Ave N / Republican St
b. Pedestrian access	New signal at 1 st Ave N / Thomas St New signal at Queen Anne Ave N / Thomas St
c. More space for people at intersections (pedestrian crowd surge)	Curb bulb outs (on non-arterial streets): <ul style="list-style-type: none"> - 1st Ave N / Harrison St and 1st Ave N / Republican St Widen crosswalks: <ul style="list-style-type: none"> - 1st Ave N / Harrison St and 1st Ave N / Republican St
d. Relocation of bike facility	2-way Protected Bicycle Lane (PBL) on QA Ave N: Mercer St to Thomas St 2-way Protected Bicycle Lane (PBL) on 1 st Ave N: Denny Way to Thomas St Neighborhood greenway or PBL on Thomas St: 1 st Ave N to Queen Anne Ave N

Project Impacts and Mitigation

Package #3: Ensure pre- and post-event traffic congestion is minimized

Impact	Mitigation
<p>a. Congestion and corridor speed and reliability degradation</p>	<p>Adaptive signal system (SCOOT):</p> <ul style="list-style-type: none"> - Denny Way (15 intersections) - Six other intersections: Queen Anne Ave N/Harrison St, Queen Anne Ave N/Republican St, 1st Ave N/Harrison St, 1st Ave N/Republican St, 5th Ave N/Harrison St, Dexter Ave N/Harrison St <p>Pre- and post-event transportation management plans (within AAMP)</p>
<p>b. Motorists circulating for parking</p>	<p>Parking reservation and best practices systems</p>
<p>c. Post-event garage flush</p>	<p>Modification of 2nd Ave PBL: to allow for 2-thru lanes on 2nd Ave for garage flush</p> <p>Post-event transportation management plan (within AAMP)</p> <ul style="list-style-type: none"> - Traffic Control Officers (TCO) - Special event signal timing - Special event intersection modifications

Project impacts and mitigation

Package #4: Set mode share goals and encourage non-auto trips

Impact	Mitigation
a. Reduce the number of vehicles in the project vicinity	Arena Access Management Plan (AAMP) <ul style="list-style-type: none">- Trip Reduction for Event Attendees<ul style="list-style-type: none">o Reduce number of private auto and ridehailing trips- Trip Reduction for Arena Employees
b. Post-event pedestrian surge across Seattle Center campus	Widen crosswalks: <ul style="list-style-type: none">- 5th Ave N / Harrison St
c. Overcapacity transit buses and delay to access	Extra service on post-event crowding and delay of access to transit users on buses

Draft AAMP Demand Management Strategies

- Parking management – reservation system, parking operator best practices, minimum fees, lower-cost remote parking, on-street parking management
- Ridehailing management – routing algorithm changes, physical barriers and potential post-event geofence
- Transit incentives – last mile connection
- Mobility app – route and mode suggestions based on user's location, access to parking management system, wayfinding, and travel reward systems

Draft AAMP Event Transportation Management

- Transportation management strategies:
 - Manage parking to limit circulation and spillback from garages before events
 - Route traffic away from the arena after events
 - Manage people walking / biking and motorist conflicts
 - Manage ridehailing drop-offs and pick-ups
 - Develop special event signal timings
 - Limit delays to bus arrivals/departures
 - Limit some streets to local traffic
 - Traffic control officers and parking attendants at critical locations

Draft AAMP Performance Standards & Monitoring

- Private Vehicle Mode Share for Attendees
- Ridehailing Mode Share for Attendees
- Parking Reservation System
- Garage Ingress & Egress
- Transit Delay
- Private Vehicle Mode Share for Employees
- **Monitoring plans** – initial, first year typical events, first year employee, and ongoing.

AAMP next steps

- OVG is engaging with the City (SDOT, Seattle Center, SDCI, SPD) to further refine transportation strategies
- Key upcoming topics to continue to discuss:
 - Ridehailing operations strategy
 - Parking reservation system
 - Demand management strategies
 - Continuing work on performance measures
 - Ongoing coordination regarding capital projects
- Updates will be made through the Arena C3 meetings