



Seattle City Council

Central Staff - Memorandum

Date: March 30, 2016
To: Sustainability and Transportation Committee
From: Lish Whitson
Subject: Summary of the Transportation Appendix to the Final Environmental Impact Statement (FEIS) for the Seattle Arena project

WSA Properties, et al. has applied for the vacation of Occidental Avenue South between South Massachusetts Street and South Holgate Street in order to build a 750,000 square foot 18,000- to 20,000-seat arena that can accommodate professional basketball and hockey games. Street vacations are reviewed by the City Council pursuant to the City's Street Vacation Policies and environmental policies, which are found in [Clerk File 310078](#), and the [State Environmental Policy Act](#) (SEPA).

On May 7, 2015, the Seattle Department of Planning and Development (DPD)¹ issued a [Final Environmental Impact Statement \(FEIS\)](#)² for the Seattle Arena project. URS Corporation³ with the Transpo Group, Parametrix, Transportation Solutions, Inc. Pro Forma Advisors LLC, and The Tioga Group prepared the FEIS for DPD. ArenaCo funded the study but the City hired and managed all consultants.

This memo summarizes some of the key analysis and findings of the FEIS related to transportation impacts and proposed mitigation measures. At the Sustainability and Transportation Committee Meeting on April 5, the Committee will receive a briefing from the City's experts and consultants regarding these findings. There is a significant amount of additional information contained in the FEIS and I am happy to review the FEIS findings in more detail if you have questions after that briefing.

This memo will cover the following items:

1. FEIS assumptions;
2. Current conditions in and around Occidental Avenue South;
3. Transportation impacts of a SoDo Arena; and
4. Proposed mitigation measures.

¹ The permitting and environmental review functions of DPD are, as of January 1, now located in the Seattle Department of Construction and Inspections (SDCI).

² An [addendum](#) addressing pedestrian facilities around the SoDo Arena site was published on October 29, 2015.

³ Since the FEIS was published, URS has merged with AECOM.



Stadium District Street System

Seattle Arena

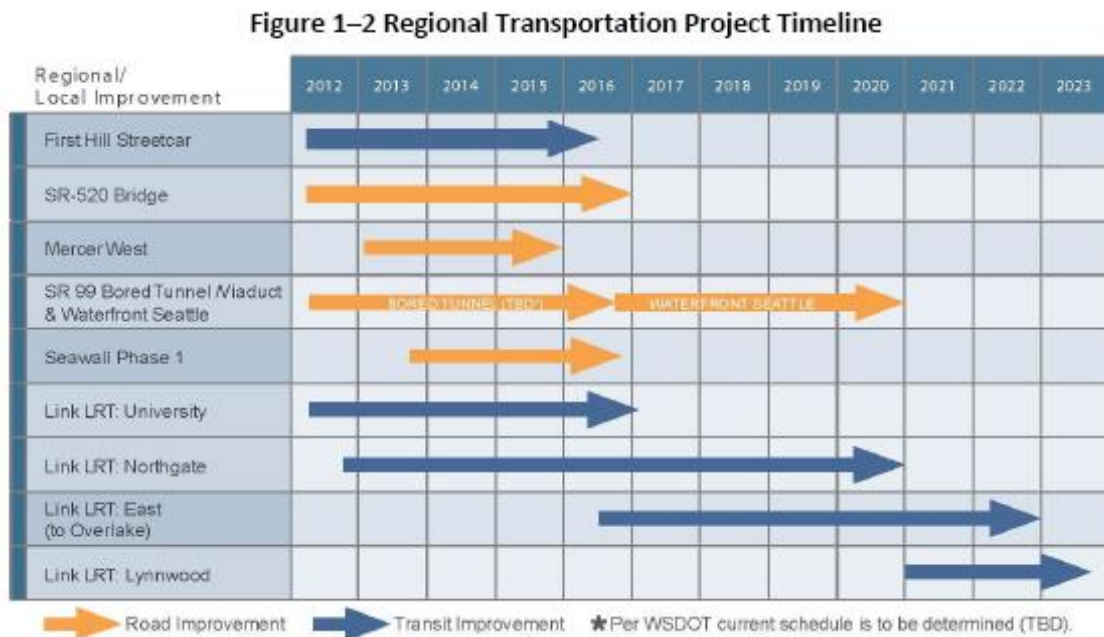


FIGURE 2-2

1. FEIS Assumptions

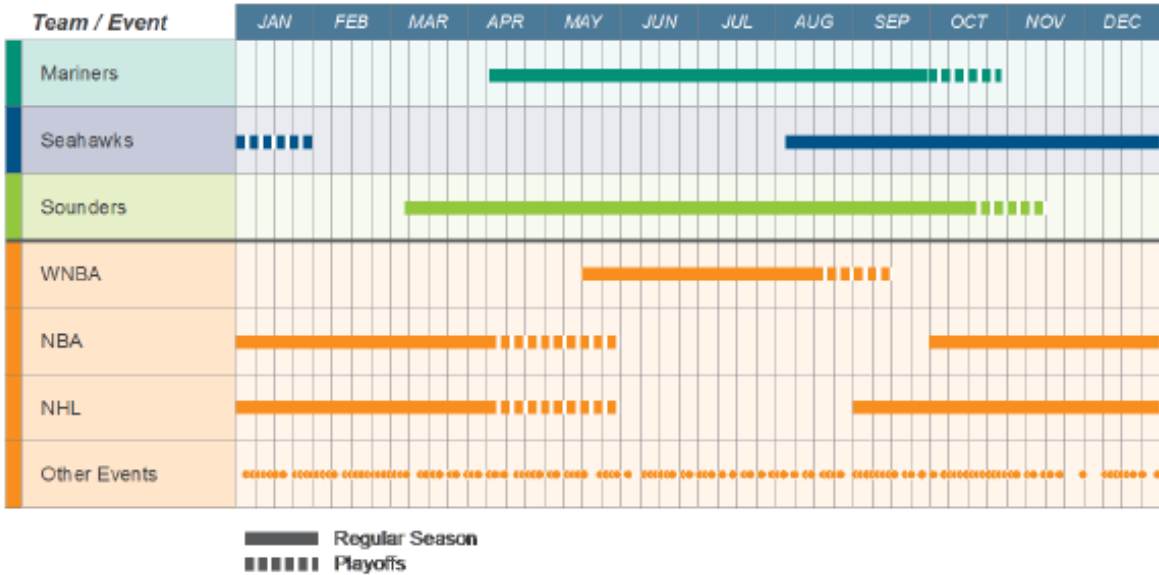
The FEIS reviewed the impact of building an 18,000- to 20,000-seat Arena in three locations: two Seattle Center sites (demolishing and replacing Key Arena or Memorial Stadium) and one site in the SoDo area at 1st Avenue South and S Holgate Street. Because the decision currently in front of the Council is whether to approve the vacation of one block of Occidental Avenue S to facilitate the SoDo Arena project, this memo focuses on the impacts of that alternative.

The FEIS modeled transportation impacts for two years: 2018 and 2030. The analysis assumed the following Regional Transportation Projects would be completed per this schedule:



The FEIS reviewed event schedules for the Mariners, Seahawks, Sounders, and typical NBA, WNBA and NHL schedules. The primary overlap in schedules would occur between May and September between the Mariners, Sounders and WNBA as shown in Figure 1-3 from the FEIS.

Figure 1–3 Stadium District – Combined Event Schedules (Typical)



Looking at these schedules, the FEIS forecast how many days a year there would be an event in the Stadium District. It also forecast attendance levels for those event days. With the arena, there would be an increase in days with events in the Stadium District, particularly days with 10,000 to 20,000 eventgoers.

Table A: Stadium District Cumulative Event Day Attendance Levels and Frequency⁴

Attendance Range	Number of Days with Events in the Stadium District		
	Existing/ No Action	Future with Arena	Change Due to Project
0 to 10,000 attendees	165	109	-56
10,000 to 20,000 attendees	34	122	+88
20,000 to 50,000 attendees	66	84	+18
Over 50,000 attendees	19	23	+4
Total	284	338	54

Based on this data, the FEIS analyzes three scenarios for the SoDo 20,000-seat Arena alternative:

1. Scenario 1 = 20,000 attendees at the Arena and no events at Safeco Field or CenturyLink = 20,000 total attendees;

⁴ This table summarizes Table 1-2, page 1-10 of Appendix E to the FEIS.

2. Scenario 2 = 20,000 attendees at the Arena + 40,500 attendees at Safeco Field⁵ for a Mariners game = 60,500 total attendees; and
3. Scenario 3 = 20,000 attendees at the Arena + 47,500 attendees at a Mariners game + a 5,000 person concert at CenturyLink exhibition center = 72,500 total attendees.

"No Action" alternatives were developed to compare activity levels without an Arena with the increased activity from an Arena. Under these alternatives, the Arena is not built. They assume the following attendance for comparison to the "With Arena" scenario as follows:

1. Scenario 1 = no Arena + no events at Safeco Field or CenturyLink = no attendees;
2. Scenario 2 = no Arena + 40,500 attendees at Safeco Field for a Mariners game = 40,500 total attendees; and
3. Scenario 3 = no Arena + 47,500 attendees at a Mariners game + a 5,000 person concert at Century Link exhibition center = 52,500 total attendees.

Because the impacts of Scenario 3 are the highest, this memo focuses on that scenario. It should be noted that the number of attendees in Scenario 3 would be experienced on fewer than 23 days a year, and many of those days will be on the weekend, having less impact on commutes and freight activity.

2. Current conditions in and around Occidental Avenue South and South Holgate Street

Traffic and Freight

The City Council would need to approve the vacation of one block of Occidental Avenue S for the Arena to be sited in the Stadium District. The Arena would be built over the block of Occidental between S Massachusetts Street and S Holgate Street (see Figure 2-2 from the FEIS, above). This section of Occidental Avenue S is a non-arterial street that predominantly serves the adjacent properties. South of Holgate, Occidental continues for another seven blocks past S Lander Street to S Hinds Street.

Most north-south traffic in the area uses 1st Avenue S or 4th Avenue S. Over the PM peak hour, approximately 300 vehicles use Occidental north of S Holgate Street. Traffic does not appear to shift to Occidental during the PM peak hour on event days.

⁵ The FEIS notes that there were 81 home games at Safeco Field during the 2012 season with an average attendance of 21,258. From other sources such as www.baseball-reference.com and <http://espn.go.com/mlb>, it appears that 2012 was a low point in attendance at Mariners games. Average annual attendance peaked at 43,740 attendees in 2002, the second year that the Mariners played at Safeco Field. In 2015, the average attendance was 27,081 and the highest attendance game was April 6 (Opening Day) with 45,909 attendees for the first game against the LA Angels.

Table B: Existing Northbound and Southbound traffic counts on avenues between Edgar Martinez Drive/S Atlantic Street and S Holgate Street

Street	PM Peak Hour	
	Non-Event Days	Event Days
1 st Avenue S	2,150	2,315 (+8%)
Occidental Avenue S	305	250 (-18%)
4 th Avenue S	2,365	2,580 (+9%)

The FEIS identified a 30% increase in the number of trucks using these Avenues during the PM peak hour on event days. On event days, freight traffic shifts from 1st Avenue South to 4th Avenue South, with a 28% decrease of truck traffic along 1st Avenue S during the peak hour on event days and a 228% increase of truck traffic along 4th Avenue S. Three trucks were counted using Occidental Avenue S on event days. None were counted using Occidental Avenue S on non-event days.

Eastbound and westbound traffic is also higher on event days, particularly along Edgar Martinez Drive S – a primary connection to the interstate highway system. Unlike the shift in freight traffic seen on the avenues, there was not a shift in freight traffic between these streets on event days. There was a 50% increase in the number of trucks using Edgar Martinez Way S during event days, but no change in the number of trucks using S Holgate Street.

Table C: Existing Eastbound and Westbound traffic counts on streets east of Occidental Avenue S

Street	PM Peak Hour	
	Non-Event Days	Event Days
Edgar Martinez Dr S	1,580	2,145 (+36%)
S Holgate Street	645	760 (+18%)

Transit

Bus routes in the area are located on 4th Avenue South (20 peak hour buses). The light rail line and SoDo busway are located one block farther east, along 5th Avenue S. A concentration of transit facilities is located at King St. and Union Stations, approximately a 20-minute walk north of the proposed Arena.

Pedestrians

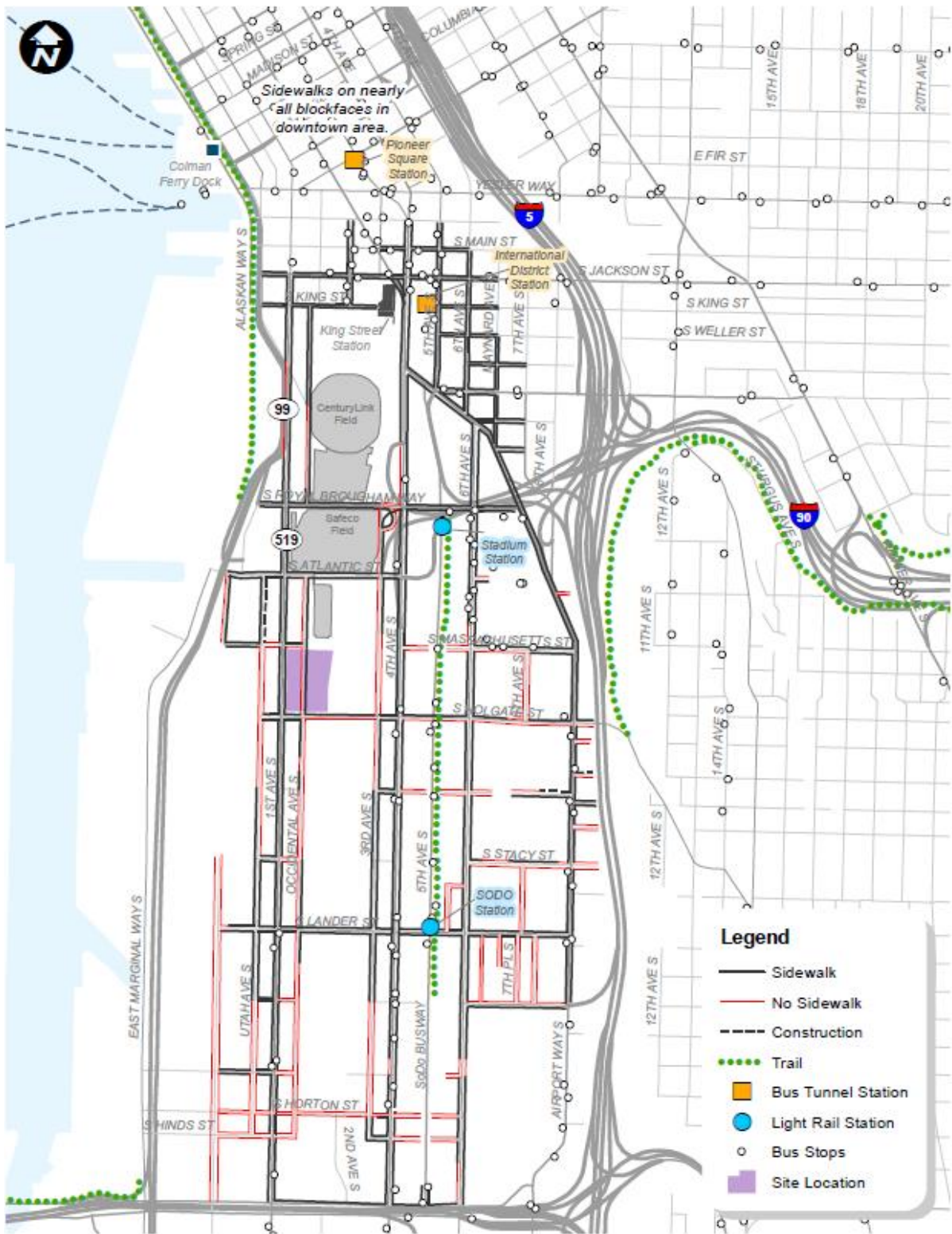
The area around Occidental Avenue S and S Holgate Street does not see significant volumes of pedestrian activity, except during game days. The highest volume of pedestrian activity in the area is during the hour after events. The FEIS studied the highest fifteen-minute period during this hour and identified pedestrian volumes on the same corridors surrounding the Arena site. The highest volume of pedestrians is along Occidental Avenue S between Edgar Martinez Drive S and Massachusetts, where the Safeco Field parking garage is located.

Table D: Post-Event Peak Hour Pedestrian Volumes

Street	Side of Street	No Event Pedestrians	Pedestrians after Events
1st Avenue S			
Edgar Martinez Drive S to S Massachusetts St.	West	10	12,155
	East	35	10,045
S Massachusetts St. to S. Holgate St.	West	10	1,625
	East	10	1,270
Occidental Avenue S			
Edgar Martinez Drive S to S Massachusetts St.	West	5	1,235
	East	5	16,055
S Massachusetts St. to S. Holgate St.	West	5	715
	East	0	2,535

Parking

The proposed arena would include 100 on-site parking spaces, primarily for players, coaches and staff. Across Holgate Avenue S, a parking garage and surface lots would be built for the project with approximately 1,950 spaces. The FEIS identified a primary parking study area that extended from S Spokane Street to the blocks north of Yesler Way. Within the primary parking study area the FEIS identified 5,900 on-street parking spaces and 11,200 off-street parking spaces. A secondary parking study area north of Yesler includes 1,600 on-street and 24,500 off-street spaces. On-street parking in Pioneer Square and the Chinatown/International District is generally heavily occupied during events. Off-street parking remains available during events, reaching 63% occupancy in the SoDo area.



Stadium District Pedestrian Facilities

Seattle Arena



FIGURE
2-2

3. Impacts of the Arena

Traffic Volume

The FEIS forecast increased in traffic on 1st and 4th avenues if the Arena is built. The following tables compare Scenario 3 with a 20,000-seat Arena and the No Action alternative. The 20,000-seat Arena Scenario 3 assumes a sell-out game at the Arena with a well-attended game at Safeco Field and a small event at Century Link. No Action Scenario 3 assumes the same events at Century Link and Safeco stadiums but no Arena game. The major impact would be additional traffic in the area south of Edgar Martinez Drive S, particularly along 1st Avenue S.

Table E: Northbound and Southbound PM Peak Hour Traffic Forecast for Scenario 3⁶ on Avenues between Edgar Martinez Drive S/S Atlantic Street and S Holgate Street

Avenue	2018		2030	
	No Action	20,000-seat Arena	No Action	20,000-seat Arena
1 st Avenue S	3,815	4,220 (+10%)	4,555	5,597 (+23%) ⁷
Occidental Avenue S	230	N/A	220	N/A
4 th Avenue S	3,795	4,010 (+14%)	4,970	5,175 (+4%)

East-west traffic in the immediate area would also change, with more traffic on Edgar Martinez Drive S. This increase in traffic is due to the roadway's connection to and from the regional freeway network. Decreases in forecast traffic along S Holgate Street are due to likely traffic patterns based on available parking in the area, capacity constraints on S. Holgate Street due to future rail activity, and anticipated event-related traffic control.

Table F: Eastbound and Westbound PM Peak Hour Traffic Forecast for Scenario 3 on Streets east of Occidental Avenue S

Street	2018		2030	
	No Action	20,000-seat Arena	No Action	20,000-seat Arena
Edgar Martinez Drive S	3,790	4,325 (+14%)	4,910	5,946 (+21%) ⁸
S Holgate Street	830	805 (-3%)	320	295 (-8%)

⁶ Differences between the No Action and 20,000-seat Arena are similar under Scenarios 1 and 2. See Table 2-10 on page 2-130 and Table 2-11 on page 2-136 of the FEIS.

⁷ Adjusted to include traffic changes related to the South Warehouse Garage Sensitivity Analysis, see Table 2-44 on page 2-273 of the FEIS Appendix E.

⁸ Adjusted per the South Warehouse Garage Sensitivity Analysis.

Freight Travel Times

The FEIS studied travel times for freight along key corridors in SoDo. Freight corridor travel times would increase in 2018 with the addition of the Arena, with the exception of eastbound traffic along Edgar Martinez Drive S/S Atlantic Street. In 2030, traffic times would increase with the Arena on all corridors.

Table G: 2018 Weekday PM Peak Hour SoDo Corridor Travel Times under Scenario 3

Street	Corridor	Direction	2018	
			No Action (m:ss) ⁹	20,000-seat Arena (m:ss)
1 st Avenue South	S Horton Street to Railroad Way S	Northbound	17:46	24:53 (+7:13)
		Southbound	9:30	10:56 (+1:26)
4 st Avenue South	S Horton Street to S King Street	Northbound	11:42	14:59 (+3:17)
		Southbound	18:37	23:53 (+5:16)
S Atlantic Street/ Edgar Martinez Drive S	1 st Avenue S to I-90	Eastbound	3:03	3:01 (-0:02)
		Westbound	10:39	15:48 (+5:09)

Table H: 2030 Weekday PM Peak Hour SoDo Corridor Travel Times under Scenario 3

Street	Corridor	Direction	2030	
			No Action (m:ss)	20,000-seat Arena (m:ss)
1 st Avenue South	S Horton Street to Railroad Way S	Northbound	20:15	28:33 (+8:18)
		Southbound	11:29	12:04 (+0:35)
4 st Avenue South	S Horton Street to S King Street	Northbound	19:28	24:39 (+5:11)
		Southbound	24:44	30:26 (+5:42)
S Atlantic Street/ Edgar Martinez Drive S	1 st Avenue S to I-90	Eastbound	10:15	12:01 (+1:46)
		Westbound	14:36	21:57 (+7:21)

⁹ (m:ss) = minutes:seconds

Transit Use

The FEIS found that current and planned bus, train, ferry and streetcar service could accommodate passengers traveling to the Arena and other facilities before events under Scenario 3 in both 2018 and 2030. There would be some passengers who would not be able to fit on buses or trains in the first hour after the events ended. By 2030, with improvements to the Light Rail network (not including ST3) impacts to light rail would be addressed. In 2018, additional capacity could be gained by adding extra cars to light rail or the streetcar (2 cars were assumed) or adding additional buses to routes.

Table I: Transit passengers over vehicle capacity after games under Scenario 3

Transit Mode	Destination	2018		2030	
		No Action	With Arena	No Action	With Arena
		2018	2018	2030	2030
Bus	Ballard/Fremont	0	50	0	0
	North/East Seattle	0	0	35	140
	Eastside	0	5	105	200
	Southeast Seattle	0	0	0	0
	South of Seattle	0	165	0	25
	West Seattle	0	0	0	0
Light Rail		710	1,510	0	0
Street car		20	180	10	150

Pedestrian Activity

The Addendum to the FEIS found high levels of pedestrian activity in the area after events. Adding an additional event facility will add pedestrians to the area, particularly in the hour after a game. The vacation of Occidental Avenue South will shift pedestrians to 1st Avenue South. In order to avoid conflicts with the railroad tracks due east of the Arena, the project will be required to add a pedestrian bridge wide enough to accommodate post-game traffic heading east along Holgate Avenue S.

Table J: Post-Event¹⁰ Pedestrian Volumes

Street	Side of Street	Post Event Peak Hour	
		No Action	With Arena
1 st Avenue South			
Edgar Martinez Dr to Massachusetts	West	12,155	14,155 (+16%)
	East	10,045	16,055 (+60%)
Massachusetts to Holgate	West	1,625	2,610 (+61%)
	East	1,270	11,545 (+809%)
Occidental Avenue S			
Edgar Martinez Dr to Massachusetts	West	1,235	1,815 (+47%)
	East	16,055	23,595 (+47%)
Massachusetts to Holgate	West	715	N/A
	East	2,535	N/A

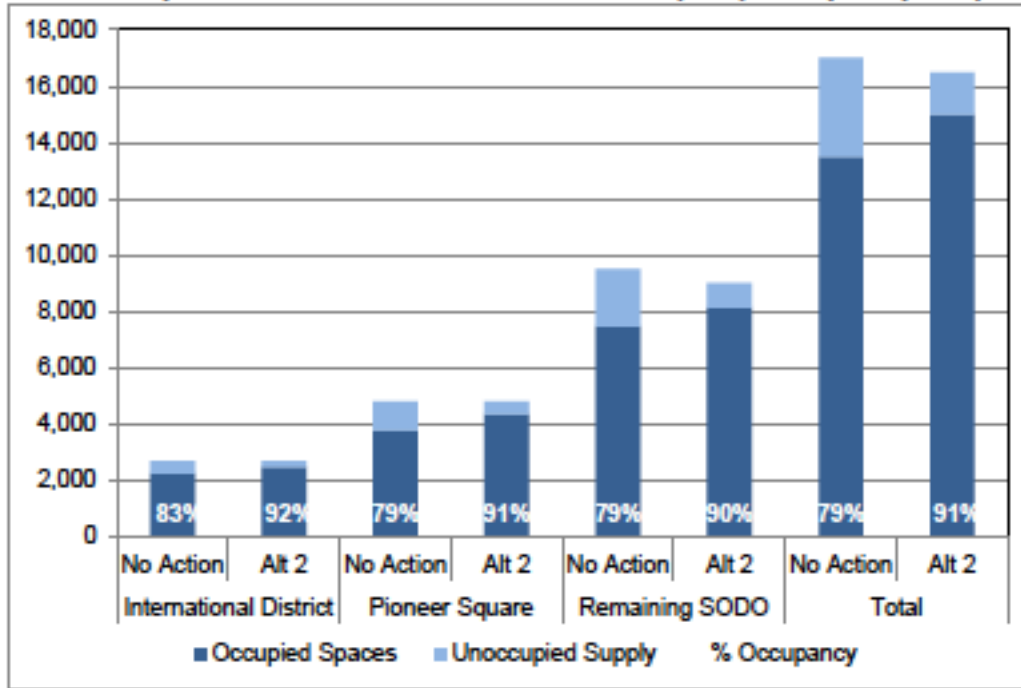
Parking

Additional demand for parking in and around the Arena can be expected. With a game at Safeco Field and a concert at CenturyLink, approximately 79% of parking in the primary parking study area (Yesler Way to S Spokane Street) would be occupied. With the Arena, that increases to 91% occupancy in the primary parking study area. In particular, parking nearest the Arena and stadia would be occupied. During these times, parking demand would shift further north, into the secondary parking study area north of Yesler, particularly in the Downtown Financial District. That area would have sufficient capacity to accommodate demand.

The analysis assumed that the Safeco Field and CenturyLink parking garages would be open to attendees. This is an appropriate assumption if there are events at those facilities. If there is no event at either of those facilities, the FEIS found that there was sufficient remaining capacity in the primary study area to accommodate up to 20,000 attendees at an Arena event.

¹⁰ “No Action” Scenario 3 = 47,500 attendees at Safeco Stadium and 5,000 attendees at CenturyLink (52,500 total attendees), “With Arena” scenario adds 20,000 attendees at the Arena (72,500 total attendees).

**Figure 2-137 Stadium District Parking Occupancy –
Weekday: No Action and Alternative 2 Case S3 7:00 p.m. (Primary Study Area)**



Note: the parking analysis in the FEIS assumed that the Arena would not include a parking facility. The project now includes an approximately 1,950 stall parking facility (garage and surface parking), which would reduce these occupancy figures.

4. Potential Mitigation

The FEIS identifies a number of potential mitigation measures to mitigate the impacts identified above. Some but not all of these mitigation measures are included as proposed conditions in the SDOT recommendation to approve the proposed street vacation of Occidental Avenue South with conditions. If a potential mitigation measure is not included in the Council’s conditions on the street vacation, the Seattle Department of Construction and Inspections still has authority to condition the project based on the FEIS.

A comparison of the Requirements of the Memorandum of Understanding, the FEIS potential mitigation measures and the SDOT recommended street vacation conditions is attached.

**Attachment:
Seattle Arena MOU requirements, Potential SEPA Mitigation Measures, and Recommended Street Vacation Conditions**

Topic	MOU Requirements	EIS Potential Mitigation Measures ¹	SDOT Recommended Street Vacation Conditions
Transportation (Construction Management)		<p>Construction Management Plan A construction management plan would be required as a condition of permit approval. The plan would include the following:</p> <ul style="list-style-type: none"> • Central Construction Coordination Office. During construction, the construction manager shall maintain coordination with the existing venues and the Port of Seattle to advise them of major phases of construction that may create constraints or disruption along roads and sidewalks in the immediate vicinity of the Arena. • Construction Hours and Sensitive Receivers. Identify demolition and construction activities within permissible construction hours. • Construction Noise Management. Include the requirement that all demolition and construction activities shall conform to the Noise Ordinance, except as approved through the variance process. Identify and list techniques and measures to minimize or prevent demolition and construction noise including: timing restrictions, noise reduction construction technologies, process modifications. • Measures to Minimize Noise Impacts. List measures to be implemented to reduce 	<p>Community Liaison The Petitioner shall provide a community liaison position during the construction and operation of the arena. This role shall be filled by a person who is fully responsible for carrying out the task. This person will work with the neighboring businesses and residents to resolve traffic, parking, noise, and other environmental, construction, and operational issues arising from the project. This person will also be available to answer questions and keep the arena operator informed as to community issues. The liaison’s contact information shall be distributed to neighborhood groups and stated on the project’s website.</p>

¹ EIS mitigation measures approved by the Council will be included as part of the approval of the Master Use Permit. Per Council rules, approval of the Master Use Permit will not occur until after the Council considers the vacation of Occidental Avenue S. Seattle DCI may decide to require additional SEPA mitigation in addition to the Council’s mitigation measures.

Topic	MOU Requirements	EIS Potential Mitigation Measures ¹	SDOT Recommended Street Vacation Conditions
		<p>or to prevent noise impacts during demolition and construction activities during standard and non-standard working hours.</p> <ul style="list-style-type: none"> • Construction Milestones. Include a description of the various phases of demolition and construction, including a description of noise and traffic generators, and anticipated construction hours for each phase. • Construction Parking Management. Identify areas for construction worker parking. As part of the agreement with the Arena, the general contractor would develop a construction worker parking program, so available public off-street and on-street parking is not adversely impacted by the influx of this large temporary population of workers. This would involve remote parking with a shuttle service, use of parking and loading areas in vacant buildings, or other means of providing construction worker parking without impacting existing on- and off-street public parking. <p>Construction Traffic/Street and Sidewalk Closures. As part of the Arena construction, the construction manager would be required to identify anticipated street closures, the timing for street closures, and the detour routes and signing plan to guide drivers,</p>	

Topic	MOU Requirements	EIS Potential Mitigation Measures ¹	SDOT Recommended Street Vacation Conditions
		<p>bicyclists and pedestrians around these restrictions. The CMP shall identify potential sidewalk, transit stop and bicycle lane closures or rerouting, and shall consider the need for construction truck traffic to avoid peak traffic periods (e.g., 6-9 AM, 3-6 PM). This proposal would be reviewed and coordinated with SDOT, the Port of Seattle, and others nearby venues through the Maintenance of Traffic Task Force (MOTTF).</p> <p>Off-site Construction Coordination. The Transportation Coordinator would regularly attend and / or be informed by the Maintenance of Traffic Task Force (MOTTF) relating to utility and road projects that would potentially impact Arena and other event access in the immediate area as well as more regional transportation projects like the SR 520 and Mercer Corridor projects that shift traffic patterns and may impact access to the Arena.</p> <p>Priority Truck Routing and Loading. Develop demolition, earthwork excavating, concrete and other truck routing plans and submit those plans for approval through SDOT for site-specific development. The arena general contractor would specify priority truck routes</p>	

Topic	MOU Requirements	EIS Potential Mitigation Measures ¹	SDOT Recommended Street Vacation Conditions
		<p>and loading areas as part of a coordinated Construction Traffic Control Plan. This plan could not only be reviewed by SDOT but also could be coordinated with other venue transportation managers and the Port of Seattle to ensure that there are minimal conflicts with existing and scheduled operations.</p> <p>The following elements shall be included in the CMP if applicable.</p> <ul style="list-style-type: none"> • Schedule the most intensive construction activities such that they are spread out over time and prohibit material deliveries from leaving or entering the area during AM and PM peak hours when feasible. • Schedule street closures and other disruptions to the street system during off-peak periods, unless approved for other hours by SDOT to minimize impacts to the system. • Provide safe pedestrian and bicycle circulation adjacent to the construction site through the use of temporary facilities, detours, and signs. • If construction activities cause the need to close on-street parking adjacent to the site, coordinate such closures with SDOT and obtain appropriate street use permits. 	
Transportation (Off-site)	SODO Fund		

Topic	MOU Requirements	EIS Potential Mitigation Measures ¹	SDOT Recommended Street Vacation Conditions
<p>Infrastructure Improvements)</p>	<p>The MOU creates a new \$40 million SODO Fund to pay for transportation infrastructure in the vicinity of the SODO arena. During the period prior the City and County’s purchase of the completed SODO arena, the SODO Fund will be seeded with ArenaCo rent payments and with Arena Tax Revenues (if any) that flow from Key Arena after the Key Arena Fund reaches \$7 million. Installment 2 of Public Financing will be used first to bring the SODO Fund up to \$40 million.</p>	<p>Lander Street Pro-rata Contributions. ArenaCo would be required to make a pro-rata contribution to the future grade separation of Lander Street. This has been identified based on existing and future deficiencies noted in the analysis. Further pressure would be put on the east/west capacity of the system and increases potential for vehicle/rail safety conflicts due to increases in the north/south rail activity and resulting decrease in capacity of the at-grade street crossings.</p> <p>North-South On-Site Connection. As part of the Proposed Action, a north-south connection parallel to the proposed vacated Occidental Avenue S. would link S. Holgate Street with the extension of S. Massachusetts Street, along the east side of the property. This link could serve as direct ingress and egress to the Safeco Field garage to allow emergency and service vehicles to the Safeco Field garage, surface parking, and service and</p>	<p>Lander Street overpass. The Petitioner shall be required to provide a pro-rata contribution to the future grade separation of Lander Street based on the existing and future deficiencies identified in the FEIS. Such proportional share will be determined at a later date when the Lander Street project moves forward and may not be determined by the completion of the vacation process.</p>

Topic	MOU Requirements	EIS Potential Mitigation Measures ¹	SDOT Recommended Street Vacation Conditions
		<p>emergency road.</p> <p>S. Massachusetts Street Realignment. As part of the Proposed Action, S. Massachusetts Street between Occidental and 1st Avenues S. would be realigned to the north to improve the direct alignment of the street with the section immediately east of Occidental Avenue S. This would enhance accessibility to the Safeco Field garage and service road. In addition, it would allow the pedestrian plaza at the north side of the Arena to be generous in size and limit the potential for pedestrian spillover onto S. Massachusetts Street, avoiding the potential for conflict with S. Massachusetts Street traffic. This realignment would also improve the alignment of this segment of S. Massachusetts Street with the segment west of 1st Avenue S.</p>	<p>South Massachusetts Right-of-Way Realignment and Curbless Street. Realignment of S Massachusetts Street includes dedication of 2,400 square feet of private property from the north side of S Massachusetts Street to the public Right-of-Way. S Massachusetts will be recreated as a curbless street between 1st Avenue S and Occidental Avenue S with 16,000 square feet of concrete and granite resurfacing, drainage, channelization and new signage, 15 street trees, 20 linear feet of seating, and pedestrian lighting with 1 foot candle average.</p> <p>South Massachusetts ROW between Utah and 1st Avenue. Realign the street, construct curb and gutter, provide drainage, channelization and signage on both sides of S Massachusetts Street west of the project site. Provide 12,500 square feet of new asphalt resurfacing, curb and gutter, channelization and signage; 8 street trees and 2,600 square feet of rain garden/swale.</p>
<p>Transportation (Pedestrian Improvements)</p>		<p>Pedestrian Improvements. Implementation of the following pedestrian improvements would contribute to increased safety and / or improved connectivity between the Arena and pedestrian connections to transit and / or offsite parking areas.</p> <ul style="list-style-type: none"> • The north-south crossing of S. Atlantic 	

Topic	MOU Requirements	EIS Potential Mitigation Measures ¹	SDOT Recommended Street Vacation Conditions
		<p>Street at Occidental Avenue S. would be improved by:</p> <ul style="list-style-type: none"> ○ Providing manual traffic control at the north-south crossing before, during, and after Arena events, and / or, ○ Developing a more-permanent improvement such as adding a staircase to the south side of S. Atlantic Street connecting to 3rd Avenue S. ● To improve the connectivity and safety of the east-west pedestrian connection between the Arena site and 4th Avenue S., the Proponent has agreed to develop and implement the following: <ul style="list-style-type: none"> ○ Construction of a pedestrian bridge from the Arena along S. Holgate Street to the east spanning such that it clears the easternmost railroad tracks. This would reduce the need for surface management pedestrian traffic control measures before or after events. The pedestrian bridge would directly connect to the Arena with a pathway wide enough to assure free flow of pedestrians during ingress and egress conditions. ○ If the Arena construction is completed prior to the development of the pedestrian bridge, the Proponent may provide operating shuttles or jitneys that follow a fixed route on a fixed headway that link 	<p>South Holgate Street Pedestrian Bridge. The Petitioner shall develop a pedestrian bridge at S Holgate Street to provide a grade-separated means for event patrons and the general public to cross the rail lines in S Holgate Street. The pedestrian bridge shall provide for pedestrians and bicycles and shall be ADA compliant. The dimension, ramps, and location must generally be consistent with the pedestrian bridge presented to SDOT and to the Design Commission. In addition to SIP review, the pedestrian bridge will require a term permit from SDOT and an indemnification agreement. Development of the pedestrian overpass may require pedestrian enhancements at 4th Avenue South such as additional pedestrian lighting. Timing of the pedestrian bridge, and interim shuttle service pending bridge completion, shall be set forth in the Master Use Permit decision for the project.</p> <p>S Holgate Street improvements. Provide an enhanced pedestrian streetscape, subject to SDOT design of S Holgate Street, includes: rain garden/swale and pedestrian lighting with 1 foot-candle average. On the south side of S. Holgate Street, provide street realignment, asphalt resurfacing and repair, channelization and signage, per SDOT direction, including: drainage improvements as required, sidewalks, a</p>

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		<p>the Washington State Ferry terminal, Link Light Rail and Transit Stations to/from the Arena during Arena events. The intent of these jitneys and/or shuttles would be to provide an incentive for walk-on ferry passengers, transit users and persons parking in more remote off-site parking spaces. A specific shuttle plan would be developed as part of the TMP. The shuttle option would be coupled with pedestrian lighting and sidewalk improvements along 1st Ave S. from S. Holgate Street to S. Lander Street, and along S. Lander Street between 1st Avenue S. and 4th Avenue S.</p> <p>1st Avenue S. Street Frontage. The pedestrian zone necessary to accommodate pedestrian flows on the east side of 1st Avenue S. between S. Massachusetts Street and S. Holgate Street shall be comprised of: 23 feet of contiguous unobstructed (no permanent intrusion) walking surface between the building façade and any landscaped/tree/permanent street furniture zone</p> <ul style="list-style-type: none"> The 23-foot unobstructed space may be located within the public right-of-way(public sidewalk), or on a 	<p>rain garden/swale and 8 street trees.</p> <p>1st Avenue South Pedestrian Improvements. Provide an expanded and upgraded pedestrian streetscape along the property frontage including rain garden/swales, pedestrian lighting with 1 foot candle average and permanent pedestrian seating. Construct new front improvements north of the project site to S Atlantic St/Edgar Martinez Dr S per SDOT approval, including: new sidewalks, street trees, rain garden/swales and pedestrian lighting at 1 foot-candle average.</p>

Topic	MOU Requirements	EIS Potential Mitigation Measures ¹	SDOT Recommended Street Vacation Conditions
		<p>combination of public sidewalk and private property</p> <ul style="list-style-type: none"> • Events in excess of 15,000 attendees (inclusive of the proposed Arena and all stadia and exhibition halls to the north) – the 23-foot pedestrian zone shall be kept free of all temporary obstacles (such as chairs, tables, etc.) to allow for unimpeded pedestrian flow • On low attendance event days (equal to or less than 15,000 attendees) - the required unobstructed pedestrian zone shall be a minimum of 18.5 feet. Any use of public sidewalk area for outside dining (tables, chairs, railings, etc.) must be approved through a street use permit issued by SDOT and will not be allowed to encroach upon the required minimum 18.5-foot pedestrian zone. • On non-event days (inclusive of all stadia and exhibition halls) - the required unobstructed pedestrian zone shall be a minimum of 10 feet In addition to providing a widened pedestrian zone, the Proponent is working with the City to include a pedestrian bridge over the railroad tracks on S. Holgate St. As a result, no specific updating of analysis or 	

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		<p>discussion of crossing conditions is included in this update.</p> <p>At- Grade Way-Finding System. In coordination with other Stadium District stakeholders, ArenaCo could be required to contribute to development of a way-finding system to guide pedestrians and cyclists to the various venues in the Stadium District. To the extent possible this system will link with and through the Pioneer Square, International District, and SoDo.</p> <p>Pedestrian Scale Street Lighting. Consider upgrading street lighting to enhance safety for pedestrians in several areas where there are preexisting low light levels. See Section 3.8 or Appendix E [of the FEIS] for potential locations.</p>	
<p>Transportation (Bicycles)</p>		<p>Bicycle Route Improvements. The Arena could participate in marketing and upgrading the bike route system and prioritize bike lanes in the immediate vicinity of the site.</p>	<p>Bicycle Master Plan Improvements. Complete public bicycle facilities from existing waterfront trail to arena site to Starbucks, including the following:</p> <ul style="list-style-type: none"> • Improve the Atlantic Street multi-use trail (600 linear feet); • Complete and repave the Utah Avenue Neighborhood Greenway from S Atlantic Street to S Stacy Street (2,800 linear feet) • Complete the South Massachusetts multi-use trail (175 linear feet) • Complete the South Holgate Street multi-use trail (160 linear feet) • Provide at least 12 bicycle wayfinding signs

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			<ul style="list-style-type: none"> • Provide a bicycle signal at the South Atlantic Street crossing to the Waterfront Trail.
Transportation (Parking)			<p>Parking. The Petitioner shall develop a parking garage in order to provide the Code-required parking for the facility. Parking should be developed in a multi-level parking structure across Holgate Street to the south of the project, on a site controlled by the Petitioner. It is anticipated that approximately 1,750 stalls would be provided; the exact number of parking stalls will be determined by the formula in Seattle Municipal Code (SMC) 23.54.015, Table A. The size of this parking facility would be reduced to the extent alternative dedicated parking in the vicinity becomes available for use by the project as determined by the Master Use Permit. The Petitioner should work to identify parking opportunities for event staff in areas that do not compete with event attendee parking. The provision of parking shall include accommodation for modal options such as van pools and other share transportation options (Uber, Lift, car2go, etc.) to the extent practicable. The Petitioner will be required to participate in the City’s e-Park Program and should:</p> <ul style="list-style-type: none"> • Provide a centrally coordinated event parking program that would allow fans to reserve and pre-purchase parking passes at convenient facilities;

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			<ul style="list-style-type: none"> • Pre-sell parking and incorporate it as part of ticket packages.
Transportation (Programmatic Measures/ Transportation Management Plan (TMP))	<p>Scheduling Coordination. ArenaCo will coordinate with the Seattle Mariners, the Seattle Sounders and the Seattle Seahawks, as well as the Washington State Public Stadium Authority (CenturyLink Field) and the Washington-King County Stadium Authority (Safeco Field), to minimize the number of conflicting and overlapping events held at the existing stadiums and the proposed Arena. The Transaction Documents will include specific provisions limiting the number and duration of such conflicts and providing for City oversight and enforcement of these provisions.</p>		<p>Event Scheduling The Petitioner shall schedule events according to the scheduling principles outlined below and as defined under the Master Use Permit decision for the project in order to avoid or closely overlap those events to avoid conflicts between egress and ingress of different events at different facilities. The arena and the other two facilities are strongly encouraged to enter into a Scheduling Agreement. The scheduling principles will include the following elements:</p> <ul style="list-style-type: none"> • Multiple events mean time-specific events occurring on the same day in the Ballpark, Stadium and/or Arena. • Overlapping events mean events with the projected start times and/or the projected end times occurring within one hour of each other. • Sequential events are events where the start of a second event follows the end of a first event. • Sequential events involving an Arena event will be separated by a minimum of 3 hours between the projected end time of one event and the scheduled start time of the next event on any non-holiday weekday or weeknight. Reduced time separation between events may be considered if the combined reasonably anticipated actual attendance of the Arena and the Ballpark or

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		<p>Transportation Management Plan (TMP). A TMP would be required as a condition of permit approval. A summary of what the TMP could be required to include is listed below. The final elements of the TMP will be determined by DPD as part of permit approval. See Section 3.8 or Appendix E (Section 4.0) of the FEIS for a complete listing</p>	<p>Stadium is less than 45,000 attendees.</p> <ul style="list-style-type: none"> • There shall be no overlapping events involving three time specific events. • No multiple, sequential, or overlapping events with a projected combined actual attendance exceeding 15,000 may start between 4:00 pm and 7:00 pm on non-holiday weekdays. • There will be no exceptions from the anticipated combined attendance thresholds for concurrent or overlapping weekday events involving arena events. • Scheduling principles should be reviewed and updated periodically. Such scheduling principles should include a discussion of playoff schedules for potential NBA/NFL/NHL/MLB playoff participation. • Final scheduling principles will be incorporated in the MUP decision for the project and such scheduling principles required under the Master Use Permit decision shall prevail over these principles. <p>Transportation Management Plan. The Petitioner shall develop and implement a Transportation Management Plan (TMP) subject to the conditions set forth in the Master Use Permit (MUP) decision for the project in order to reduce and manage vehicular traffic and parking demand associated with the Arena as disclosed during the EIS process. The TMP shall include specific goals, objectives, and strategies to</p>

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		<p>of the TMP elements:</p> <ul style="list-style-type: none"> • Event Management and Marketing: Event Transportation Coordinator; Event Access Guide; Event Scheduling Protocol and Management; and Port of Seattle Protocols. • Public Information and Marketing: Public Information Coordinator; Survey and Market Research; Static Electronic Media; Dynamic Electronic Media; Arena Call Center; Broadcast Advisory; Event Access Application; and Cross-Marketing with Area Businesses. • Traffic and Parking Demand Reduction: Transit, Premium Transit Service; Shuttles; Subsidized Transit Fares; Charter Bus/Meal/Ticket Packages; Adding Cars to Link Light Rail Trains; Adding Link Light Rail Trains on a Pocket Track. • Traffic and Parking Demand Reduction: Rail, Waterborne and Bicycle: Rail/Lodging/Ticket Packages; Facilitate Washington State Ferry Use; Facilitate Passenger Ferry Service; and Bicycle Racks. • Traffic and Parking Demand Reduction: Average Vehicle Occupancy (AVO): Priority Disabled, Taxi, and Limousine Loading; Higher Vehicle Occupancy Incentives. • Management of Vehicle and Parking Demand: Off-Street Parking: Participation in e-Park Program; Establish Parking 	<p>reduce the number of vehicles that travel to the venue, and facilitate and promote alternative transportation options to and from the arena. The TMP goals shall be established and included as specific conditions of approval of the MUP decision, and shall include two measures: a maximum number of vehicles per thousand attendees, and a transit mode split for weekday, weeknight and weekend events. The TMP goals shall be reviewed and adjusted over time to be commensurate with the level of transportation infrastructure and transit service, including rail, to and from the arena.</p> <p>In addition to the goals, the TMP, as set forth in the MUP conditions, should also include specific measures and strategies for meeting those goals, including but not limited to event coordination protocols and management strategy, event access guide, incentives, communication, marketing and outreach. Measures and strategies may include, but are not limited to:</p> <ul style="list-style-type: none"> • Communications, Marketing and Outreach <ul style="list-style-type: none"> ○ A dedicated public information coordinator to ensure accurate and consistent travel information provided over several media; ○ An Arena call center with a central phone number specifically for

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		<p>Agreements; Parking for Event Staff; Off-Street Parking Reservations; and Pre-Sell Reserved Arena Parking.</p> <ul style="list-style-type: none"> • Traffic Management Plan: Traffic Control Plan; Post-Opening Traffic Study; and Vehicle Wayfinding. • Implementation and Monitoring: Parking and Access Review Committee (PARC); Traffic Operations Group; and • Periodic Program Review and Survey. 	<p>transportation and access, parking information and referral;</p> <ul style="list-style-type: none"> ○ A webpage that is up to date and easy to use incorporating information on multi-modal transportation options to the arena; ○ An Event access App to provide advance planning and real time travel options providing a range of information and links to alternate transportation modes to real-time information regarding congested routes and alternative access; ○ An Event Access and Parking Guide listing alternatives to driving, parking areas that offer carpool incentives, neighborhood dinner/parking promotions and other programs to assist ticket holders with options for traveling to and from the area; ○ Cross marketing with area businesses to extend arrival and departure times of fans traveling to and from the area; ○ Use social media and mass email broadcasts to provide alerts of travel options and incidents and real-time congestion issues. ○ Use of broadcast advisory to actively promote alternative modes of travel in advance of games and major events, and to provide real-time information within four hours

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			<p>prior to an event. Real-time information should be coordinated with WSDOT and SDOT traffic control centers;</p> <ul style="list-style-type: none"> ○ Provide direct notice to all affected area business and residents concerning event schedules, including periodic updates as necessary to inform about revisions to the schedule. ● Alternative Transportation Modes <ul style="list-style-type: none"> ○ Coordinate with King County Metro and Sound Transit to identify express bus service that connects Park-and-Ride lots in Northgate, south Kirkland, Eastgate and Federal Way with off-loading in the vicinity of the arena. Use under-capacity return routes at the end of the commuter peak. Stage coaches on Occidental Avenue north of the arena or south of Holgate; ○ Operate fixed route shuttles on a fixed headway that link the arena site to the Washington State Ferry Terminal, Link Light Rail, and Transit Stations; ○ Work with King County Metro, Sound Transit, and Washington State Ferries to offer attendees a discount to regular fares to encourage use of these travel modes; ○ Work with neighborhood

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			<p>businesses and service providers to develop packages that involve meals, event admission, and charter bus transportation or for rail/lodging/meal packages with tickets for events at the arena;</p> <ul style="list-style-type: none"> ○ Work with Sound Transit to increase the capacity from two to four cars of regularly scheduled Link Light Rail prior to and following events, as feasible; ○ Work with Washington State Ferries to promote use of ferries from Bremerton and Bainbridge. Explore the feasibility of operating a shuttle between the ferry terminal and the arena during winter months; ○ Work with King County to extend ferry passenger service to and from West Seattle on major event days, as feasible; ○ Discourage driving to events, except for carpools/vanpools. Provide high occupancy vehicle (rate to be determined in TMP) promotions such as parking or reserved parking at reduced rates in parking facilities close to the arena. ○ Ensure easy access to bicycle parking racks and include a provision for a bicycle valet during events. If warranted, portable bike racks could be added during certain events.

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			<ul style="list-style-type: none"> ○ Work with the City to purchase and install at least 2 PRONTO bikeshare stations in the vicinity of the arena. ○ Clearly identify areas within walking distance, north and south of the arena to accommodate buses, limos, and shared vehicles and passenger drop-off and pick-up. ○ Specific TMP measures shall be identified in the Master Use Permit decision for the project. <p>Post-Occupancy Analysis The Petitioner shall, within one year after occupancy by a major tenant, be required to evaluate traffic conditions, assess the effects of arena-generated traffic on area intersections, conduct a comprehensive travel survey to better understand travel behavior of arena visitors and assess the transit service operations before and after events. The information will be provided to DPD and SDOT to determine whether the mitigation goals and strategies specified in the MUP must be adjusted either upward or downward. Following that assessment, the TMP, including goals, demonstrated performance, and strategies will be reviewed by the Parking and Access Review Committee (PARC) annually, similar to the reviews for the existing Safeco Field and CenturyLink Stadium. Goals shall be reviewed and strategies adjusted at least every 5 years to reflect goals commensurate with the transportation infrastructure and transit/rail</p>

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			<p>service to and from the arena.</p> <p>Parking and Access Review Committee (PARC) The Petitioner shall be required to participate as a member of the Parking and Access Review Committee (PARC) which was established to monitor TMP implementation for both Safeco Field and CenturyLink Stadium, to review their annual TMP reports and proposed TMP program changes and now should include the participation of the proposed arena.</p>
Transportation (Traffic Signals and Signs)		<p>Signal System Upgrades/ITS. ArenaCo would be required to make a pro-rata contribution to projects such as the ITS Next Generation project list. The results of the transportation analysis suggest that there is a need for area-wide improvements focusing on achieving a higher efficiency from the existing signal system as well as providing additional east/west connectivity in light of the increase in future rail activity.</p> <p>Traffic Control Equipment Upgrades. ArenaCo would work with SDOT to upgrade the traffic control equipment at signalized intersections in the Stadium District to increase its reliability through improving communications with the SDOT traffic control center and by utilizing current Adaptive Traffic Control technology. These improvements are more than simply</p>	<p>ITS. In addition to the goals, objectives, and strategies outlined in the TMP, the Petitioner should work on innovative Intelligent Transportation System (ITS) upgrades in the vicinity of the arena. The ITS elements should include:</p> <ul style="list-style-type: none"> • Participation in the e-Park program and integration of the parking garage entrance/exit into the signal system; • Contribution to the funding of advanced signal timing progression which allows signals to communicate with other signals based on data input, and Closed Circuit Television (CCTV) at three intersections (1st Avenue South & South Holgate Street; 1st Avenue South and South Massachusetts Street; and 4th Avenue South & South Holgate Street); and • Contribution to the funding for other ITS investments in the SODO area; this would likely include Dynamic Message Signs (DMS), Closed Circuit Television (CCTC), advanced

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		<p>optimizing traffic signals but give signals the flexibility to respond to unanticipated surges, interruptions, and / or shift in traffic flows due to collisions, road construction projects and / or variation in tenant access patterns.</p> <p>At- Grade Way-Finding System. In coordination with other Stadium District stakeholders, ArenaCo could be required to contribute to development of a way-finding system to guide pedestrians and cyclists to the various venues in the Stadium District. To the extent possible this system will link with and through the Pioneer Square, International District, and SoDo.</p> <p>Directional (Dynamic/Static) Event Signage. Directional signage between the freeway and other limited access facilities could be revised to incorporate the Arena. This would complement the existing signage that currently exists for CenturyLink Field and Safeco Field.</p> <p>Parking Guidance Signage. The Arena could participate with the City of Seattle in implementing a parking guidance system that provides direction and information regarding parking availability to those drivers who do not pre-purchase parking. This system could</p>	<p>signals and new technology as it develops.</p> <ul style="list-style-type: none"> • Specific requirements for ITS contributions shall be identified in the Master Use Permit decision for the project. <p>South Walker Street signal. The Petitioner shall provide for a new traffic signal at South Walker Street and 1st Avenue South should traffic warrants be met by the arena and the proposed parking garage.</p>

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		<p>notify drivers as to the location and number of spaces available in public and event garages in the Stadium District or Seattle Center area, reducing excess and erroneous circulation. This system will be similar to the downtown parking guidance system.</p> <p>SDOT Traffic Control Center Improvements. The Arena could contribute to improvements to the SDOT Traffic Control Center. The Traffic Control Center will have the ability to provide video feeds of information from WSDOT and SDOT traffic cameras and allow for posting of current conditions relating to congestion, parking, and traffic incidents that could help drivers’ decision-making as they travel to an event at the Arena, Safeco Field, and/or CenturyLink Field.</p>	
Public Services		<p>Fire Department Coordination. The project would require coordination with the SFD to develop a plan for emergency vehicle access to and from the Project Area during construction.</p> <p>Intelligent traffic signal controls at signalized intersections would be used as a partial mitigation measure for the effects on response times for fire and emergency medical services, particularly during</p>	<p>Utility Coordination and Relocation. The utility issues shall be resolved to the full satisfaction of the affected utility prior to the approval of the final vacation ordinance. Prior to the commencement of any development activity on the site, the Petitioner shall work with the affected utilities and provide for the protection of the utility facilities. This may include easements, restrictive covenants, relocation agreements, or acquisition of the utilities, which shall be at the sole expense of the Petitioner.</p>

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		<p>construction. If intelligent traffic signals cannot adequately mitigate the effects on emergency response, additional staff, apparatus, and facilities may be necessary.</p> <p>Police and Security. The project developer would be responsible for maintaining security at construction and staging areas during construction.</p> <p>Electrical Facilities. Mitigation for the relocation of the overhead 26-kV overhead lines would include undergrounding of these facilities adjacent to the Project Site and relocating of the overhead lines located within the project site on Occidental Avenue S.</p>	<p>Utilities impacted may include:</p> <ul style="list-style-type: none"> • DOIT • SPU Sewer • SPU Water • PSE Gas • Seattle City Light; and • CenturyLink Communications.
		<p>Fire and Emergency Evacuation: The project would require the establishment of an emergency evacuation plan. Emergency evacuation plans provide procedures in the event of an emergency: e.g., guests should follow evacuation plan instructions given via the public address announcer, seating hosts, uniformed security, police and medical personnel. If an emergency requires evacuation, exit directions will be given over the public address system and scoreboards. During emergencies, elevators and escalators</p>	<p>Security and Emergency Access Plan. The Petitioner shall provide the City with a plan detailing security and emergency access procedures. The arena shall pay the cost of developing such plan and shall coordinate with the Seattle Police Department, Seattle Fire Department, and other government agencies and adjacent communities. The plan, at a minimum, shall address security at arena parking locations, emergency access to the arena and to the surrounding communities, and additional measures necessary for dual events. The</p>

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		<p>are not to be used. All guests will be directed to exit using the stairs or ramps.</p> <p>Police Support Services: During events, high-volume traffic and pedestrian areas would require additional police support services to direct and control traffic and pedestrian movements.</p>	<p>emergency and security plan must be approved by SDOT and the plan shall be in place prior to the issuance of a C of O for the arena. A summary of the plan shall be publicly available and any substantive changes to the plan shall be publicized. The plan may be modified with approval by the Fire Chief.</p> <p>Security and Crowd Control. The Petitioner shall pay for equipment and services for security, emergency response, and crowd control that are over and above what is provided in the absence of arena events. Examples of such equipment and services include but are not limited to having crowd control around the arena, having paramedics on-site, and having adequate security inside the arena during events. When such equipment and series are provided by the City of Seattle, the arena shall reimburse the City annually for costs incurred by the City.</p> <p>Clean Up Plan. The Petitioner shall provide the City with a plan detailing clean-up procedures following games and events. The arena shall pay the costs of developing such a plan and shall coordinate with the City and the adjacent communities in preparing the plan. The arena shall review the area within a 3,000 foot radius</p>

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			<p>form the arena site. Major pedestrian and vehicular routes shall be identified and a specific clean-up program with a defined radius and routes shall be prepared. The arena shall pay the costs of the clean-up activity after arena events. The arena is encouraged to provide such clean-up services by coordinating with the existing community clean-up programs/MID in Pioneer Square and/or the International District, or with the SODO BIA. The plan must be approved by SDOT and shall be in place prior to the issuance of the final C of O for the arena. The plan may be modified with the approval of SDOT.</p> <p>Living Machine. An on-site gray and black water treatment and reuse facility with 4 million gallon capacity shall be provided. Explore the feasibility of including additional capacity to allow future other users to connect in a “District” fashion.</p>
Land Use	<p>Land-use protections for Port and Industrial Areas. With participation of stakeholders in the Greater Duwamish Manufacturing and Industrial Center ("MIC")/SODO area, including representatives from all the sports facilities, Pioneer Square and the Chinatown/International District,</p>		

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	<p>the Port of Seattle, the County, the Manufacturing Industrial Council and other MIC manufacturing, industrial, freight and shipping businesses, the City will undertake the following planning and land use study intended to develop new land use mechanisms to maximize the economic viability of the MIC, and civic vitality of the Stadium Transition Area Overlay District. These efforts will be coordinated with the transportation planning efforts and investments related to the SODO Transportation Infrastructure Fund.</p> <p>i. MIC Policy and Land Use Study. Evaluate the necessary policies, land uses, and zoning mechanisms, such as a Port Overlay District, to protect maritime and industrial uses and reinforce the role of the MIC as a manufacturing and industrial sanctuary. Industrial zoned land is a vital economic asset and industrial businesses located</p>		

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	<p>there are critical to the city's and region's overall economic health and global competitiveness, and contribute significantly to Seattle's family-wage job base and the economy. The planning effort ("MIC Policy and Land Use Study") will build on the City's Comprehensive Plan policies and goals for the MIC and the Container Port Element, the MIC Neighborhood Plan, as well as the Port of Seattle's Century Agenda. The objectives of this planning effort are to strengthen the long-term viability of the MIC, protect industrial uses and Port operations, such as at Terminal 46, outside of the Stadium Transition Area Overlay District from encroachment and conversion to non-industrial uses, reinforce the MIC as an industrial sanctuary, and coordinate with the Seattle Industrial Areas Freight Access Project that is scheduled to begin in January 2013.</p>		

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	<p>ii. Reevaluate the effectiveness of the Stadium Transition Area Overlay District and the City's Comprehensive Plan policies and goals for this area, particularly in light of the removal of the Alaskan Way Viaduct and other recent transportation improvements, the Central Waterfront Plan, and the Stadium District Concept Plan. Consider policy and regulatory changes that would better orient the District to the needs and experience of stadium patrons, improve pedestrian connections to and from the stadiums, and produce a pedestrian-friendly streetscape compatible with Pioneer Square, while recognizing the importance of preserving industrial uses outside of the District.</p> <p>iii. The MIC Policy and Land Use Study shall include recommendations to the City Council and Mayor for new land use regulatory changes to</p>		

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	implement the goals and purposes of this Section and shall be completed no later than December 31, 2014.		
Historic Resources		<p>Historic Resources. None of the buildings proposed for demolition appear to meet any of the six criteria for historic landmark status. If the landmark status nomination is denied, mitigation would not be required as impacts to historic resources would not occur. If the landmark status nomination is upheld by the Landmarks Preservation Board, the proponent would work with staff to develop a Controls and Incentives Agreement. In addition, any changes to historic features would follow the Certificate of Approval Process.</p> <p>Cultural Resources. An Unanticipated Discovery Plan would be prepared for the project that provides for notification and consultation among the State Historic Preservation Office Department of Archeology and Historic Preservation (DAHP), Tribes, and the City related to discoveries of unknown archaeological materials or human remains.</p>	
Geology		Design the new structures according to relevant and appropriate seismic design	

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		<p>methods to mitigate liquefaction and ground settlement. Site soils would also be improved as necessary to reduce the risk of liquefaction and related seismic damage.</p> <ul style="list-style-type: none"> • Designing the new structure to meet or exceed earthquake loading requirements in the latest issues of the relevant and appropriate building codes. • Implementing best management practices to mitigate adverse effects of sedimentation and erosion, and offsite migration of silt-rich soil and turbid water. • Implementing vibration monitoring if necessary to prevent offsite adverse effects. • Sampling and analyzing onsite soil and groundwater in order to determine the presence or absence of contamination. If contaminated soil and/or groundwater are encountered during the investigation and/or construction, and depending on the contaminant concentrations, the materials could potentially require special handling, treatment, transport, and /or disposal at offsite locations. <p>Construct the proposed structure on deep foundations that extend through the compressible soils to denser bearing material</p>	

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Air Quality		<p data-bbox="800 277 1289 305">in order to mitigate foundation settlement.</p> <p data-bbox="800 318 1325 461">Construction activities would comply with the PSCAA regulations that require reasonable precautions to minimize fugitive dust (PSCAA, 2013b).</p> <p data-bbox="800 513 1325 656">Construction equipment also would include emission-control devices to reduce CO, GHGs, and particulate emissions from gasoline and diesel engines.</p> <ul data-bbox="800 669 1325 1403" style="list-style-type: none"> <li data-bbox="800 669 1325 812">• Spraying water, when necessary, during demolition, grading, and construction activities to reduce emissions of particulate matter. <li data-bbox="800 824 1325 896">• Covering dirt, gravel, and debris piles to reduce dust and wind-blown debris. <li data-bbox="800 909 1325 1208">• Covering open-bodied trucks to reduce particulate matter blowing off trucks or dropping on roads while transporting materials. Alternatively, wetting materials in trucks or providing adequate freeboard (space from the top of the material to the top of the truck) could be used to reduce dust and deposition of particulate matter. <li data-bbox="800 1221 1325 1403">• Providing wheel washers at construction sites to remove particulate matter from vehicle wheel wells and undercarriages before they exit to decrease deposition of particulate matter on area roadways. 	

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		<ul style="list-style-type: none"> • Sweeping public streets, when necessary, to remove particulate matter deposited on paved roads and subsequent wind-blown dust. • Turning off construction trucks and engine-powered equipment during long periods of non-use, instead of being left idling, to reduce exhaust emissions and odors. • Requiring emission-control devices on construction equipment and using relatively new, well-maintained equipment to reduce exhaust emissions of CO, GHGs, and particulate matter from engine exhaust. • The project would include a CTMP to reduce temporary traffic delays on area streets. 	
Water		<p>The following measures could be used to mitigate impacts to water and water quality:</p> <ul style="list-style-type: none"> • If groundwater as a result of the installation of retaining walls becomes an issue, identify and implement engineering solutions, such as the installation of a perimeter drainage system. • In order to prevent schedule delays during construction as a result of the potential presence of contaminated groundwater, complete a groundwater 	

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		<p>quality investigation well in advance of the scheduled construction in order to determine the presence or absence of the contamination. If contamination is found to be present, identify and implement engineering solutions to remedy the situation before the construction commences.</p> <ul style="list-style-type: none"> • Based on existing soil properties and the total depth of cover over the pipe, it may be necessary to monitor the ground over the top of the pipe for settlement, and any extremely heavy construction loads may need to be restricted from traveling over the interceptor sewer. • Ground vibrations would likely occur during construction and demolition. Conduct studies as necessary to determine how to prevent or mitigate the potential to cause damage to underground utilities. Implement vibration monitoring during construction to prevent any damage to the Elliot Bay Interceptor. • It is important to keep the route of the interceptor available for maintenance and repairs. Avoid construction activities within S. Massachusetts Street that would prevent maintenance personnel 	

Topic	MOU Requirements	EIS Potential Mitigation Measures ¹	SDOT Recommended Street Vacation Conditions
		<p>from gaining access either in an emergency or for routine maintenance operations.</p>	
<p>Noise</p>		<p>Construction mitigation measures could include:</p> <ul style="list-style-type: none"> • Limiting noisier construction activities to between 7:00 AM and 10:00 PM would eliminate construction noise and vibration during sensitive nighttime hours. • Equipping engines of construction equipment with adequate mufflers, intake silencers, or engine enclosures would reduce engine noise. • Requiring contractors to use the quietest equipment available, maintain all equipment, and train their equipment operators would reduce noise levels and increase efficiency of operation. • Turning off construction equipment during prolonged periods of nonuse would eliminate noise from construction equipment during those time periods. • Locating stationary equipment and construction staging areas away from sensitive uses would reduce noise impacts because of greater distances to noise-sensitive receptors. The actual construction staging would be 	

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		<p>determined during the final design phases of the project.</p> <ul style="list-style-type: none"> • Installing temporary noise barriers, shields, or curtains around stationary construction equipment would decrease noise levels at nearby sensitive receptors. • Routing construction trucks to avoid sensitive receptors. • Implementing vibration monitoring if necessary to prevent offsite adverse effects. • Notifying nearby land uses in advance when noise-generating construction activities are scheduled. A telephone hotline number could be published and maintained by the construction company to directly receive calls from the public on noise and vibration impacts and other construction issues. 	
<p>Other key requirements of ArenaCo</p>	<p>Community Benefit Agreement. Prior to the Closing Date, ArenaCo shall enter into a Community Benefit Agreement ("CBA") with appropriate community organizations to foster equity and social justice and provide benefit to the communities that will be affected by the Arena, including for example Pioneer Square, and the</p>		<p>Arena Plaza. Provide a 31,800 sf publicly accessible neighborhood open space containing 2 water features, 2 drinking fountains, pedestrian lighting achieving 1 foot candle average, 300 linear feet of permanent public seating and temporary public seating per programming needs. The Plaza shall include public programming for non-event days with a focus on equitable programming. The plaza shall include utility connections (water and power) to facilitate programming flexibility. The arena building shall include 500 square feet of event</p>

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	<p>Chinatown/International District. ArenaCo shall communicate with a variety of community organizations, community members and the City and County to identify the appropriate issues to be addressed by the CBA, which may include economic development, employment opportunities with living wages, job training and apprenticeships, transportation and parking, community amenities, and public safety, as they relate to the Arena and its operations. The CBA shall also provide the structure for meaningful ongoing community dialog and partnership with ArenaCo once the Arena is operational, including annual reporting on fulfillment of mitigating measures.</p> <p>Labor Peace Agreement. Following the execution of the Umbrella Agreement, ArenaCo will enter into a "labor peace agreement" providing for the matters specified in the draft agreement set forth in Exhibit A [to the MOU].</p>		<p>storage space to facilitate programming. An arena public restroom shall be provided with park-hour access during non-event days to facilitate programming.</p> <p>Art Program. Art Program Budget is 1.5% of total project cost. The project cost is defined as construction cost plus consultant fees. The program will be led by collaborating/lead artist. The art will be coordinated between the arena building and the S Holgate Street pedestrian bridge. There shall be at least one piece of anchor art in the plaza. Several other pieces of permanent integrated art shall be provided. Temporary artworks, installations, programming will be part of the Art Plan.</p>

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	<p>Key Arena Fund. The City will establish a separate fund or account ("Key Arena Fund") to be managed by the City and used for improvements to Key Arena or to fund improvements at the new Arena,... The first \$7 million of Key Arena Taxes, as defined below, will be deposited into the Key Arena Fund...</p>		