

Section 3.13

Public Services



Public services discussed in this section include fire, police, school, and library services. The primary providers of these services for the study area are the Seattle Fire Department (SFD), the Seattle Police Department (SPD), the Port of Seattle Police Department (POSPD), Seattle Public Schools (SPS), and the Seattle Library System (SLS). The Primary Study Area includes industrially zoned lands both inside and outside of the manufacturing industrial centers. Secondary Study Areas include fire stations, police stations, schools, and libraries in proximity to the Primary Study Area.

Impacts of the alternatives on public services are considered significant if they:

- Negatively affect the response times for police and/or fire and emergency medical services.
- Increase demand for special emergency services beyond current operational capabilities of service providers.
- Result in increases in students and lack of facilities unanticipated in district plans or that would reduce adopted levels of service.

3.13.1 Affected Environment

Fire & Emergency Medical Services

Data & Methods

Information about fire and emergency medical services was collected from the Seattle Fire Department. SFD publishes an annual report each year which includes information about the department, incident response trends and response standards, preventative measures taken (e.g., fire code implementation), public events/education, and other notable highlights. The City of Seattle also publishes geolocated call data on its Open Data Portal. SFD's 2012-2017 Strategic Plan and the City's proposed 2022 Budget and 2022-2027 CIP were also referenced.

Services & Resources

The Seattle Fire Department provides fire and rescue response, fire prevention and public education, fire investigation, and emergency medical services (EMS) throughout the city, including the study area. Emergency medical services include basic life support (BLS) and advanced life support (ALS). SFD also has specially trained technical teams that provide technical and heavy rescue, dive rescue, tunnel rescue, marine fire/EMS response, and hazardous materials response. In addition, SFD provides mutual aid response to neighboring jurisdictions.

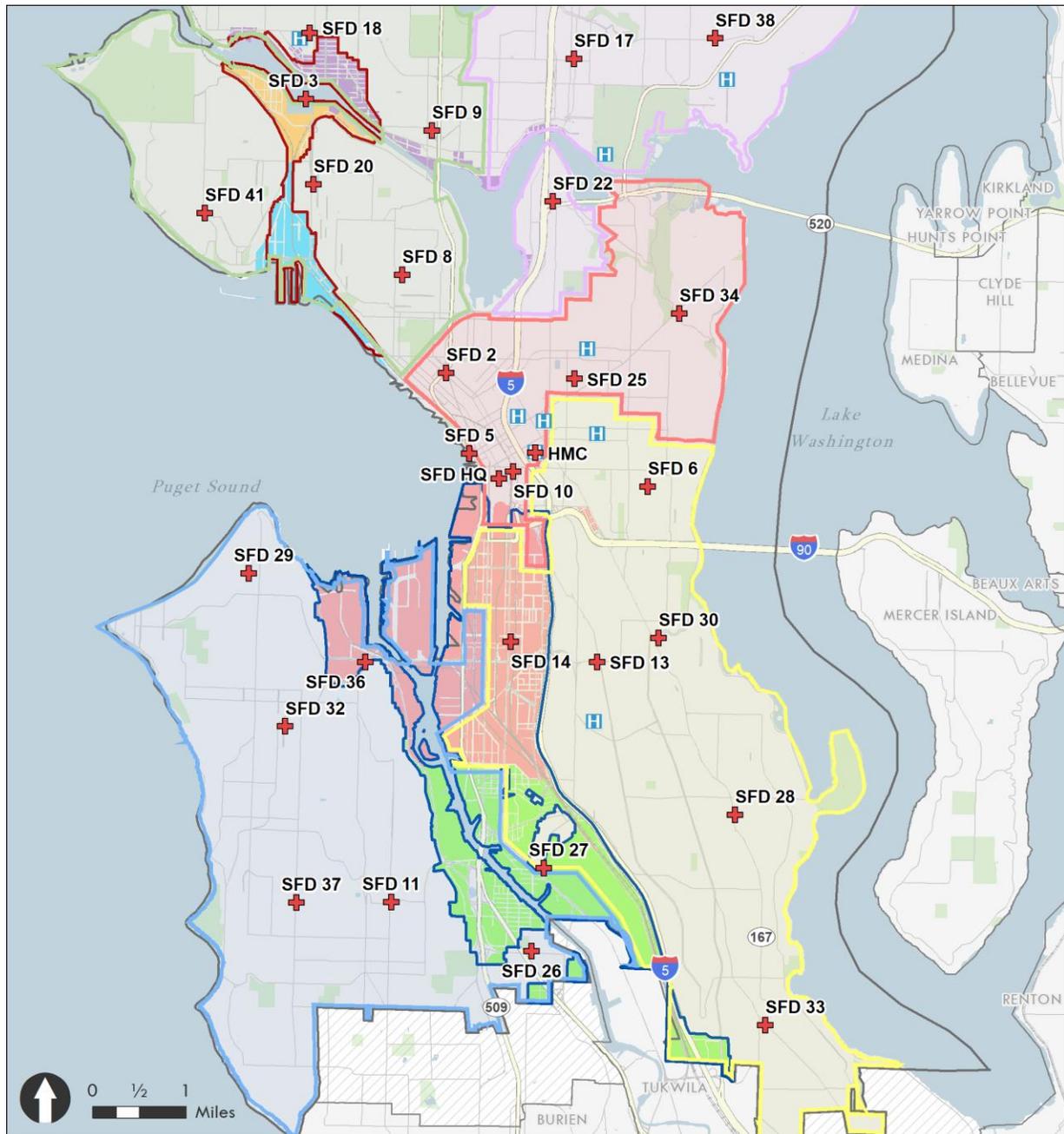
SFD provides emergency response services through five battalions consisting of 33 fire stations (plus Battalion 3/Medic One at Harborview Medical Center) strategically placed around the city to maximize coverage and minimize response time (see **Exhibit 3.13-1**). The study area is mostly within Battalions 4, 5, and 7 and is primarily served by the following stations:

- BINMIC: Stations 3, 5, 8, 9, 18, 20, and 41
- Greater Duwamish MIC: Stations 5, 10, 11, 13, 14, 26, 27, 29, 33, and 36

Marine fire response is provided by Station 3 at Fisherman’s Terminal and Station 5 on Seattle’s Waterfront (Station 5 is currently under construction concurrent with portions of the Seattle Waterfront project)—fire boats at these stations are prepared to respond to ship fires, marina fires, water rescues, and other water related emergencies. Other industrial lands along the north side of Salmon Bay are served by stations 9 and 17, and industrial lands in Eastlake are served by Station 22. Emergency support may come from other stations depending on resource needs and availability.

All SFD stations are staffed 24 hours a day, seven days a week, by four separate shifts of firefighters. There are 216 members responding to emergencies every day across the city (220 with upstaffing for 2 daytime aid cars). In total, SFD currently has 1,008 uniformed personnel and 77 civilian personnel—uniform personnel include 940 firefighter/EMTs (including 36 chiefs) and 68 firefighter/paramedics (Seattle Fire Department 2020).

Exhibit 3.13-1 Fire Battalions and Stations



- | | | | |
|---|---------------------|-------------|--------------|
| City of Seattle | Ballard | Battalion 2 | Fire Station |
| UGAs | Georgetown | Battalion 4 | Hospital |
| Public Lands | Interbay Dravus | Battalion 5 | |
| Manufacturing Industrial Centers | Interbay Smith Cove | Battalion 6 | |
| Ballard-Interbay MIC | SoDo Stadium | Battalion 7 | |
| Duwamish MIC | | | |

BERK
Map Date: November 2021

Source: City of Seattle, 2021; BERK, 2021.

A variety of ladder trucks, fire engines, fireboats, aid cars (BLS), medic units (ALS), and other specialty teams are housed at stations serving the study area (see [Exhibit 3.13-2](#)). Ladder trucks and fire engines are staffed by teams of four personnel while aid cars are staffed by teams of two personnel. Medic One at Harborview Medical Center also provides the city with ALS activities that, in the past, could only be performed by licensed physicians. In addition to responding to medical emergencies, medic units respond to all working fires, hazardous materials, and rescue responses citywide.

Exhibit 3.13-2 SFD Facility Locations, Equipment, and Staffing for Stations Serving the Study Area

Facility	Location	Equipment & Staffing
Headquarters*	301 2nd Avenue S	Does not serve as a working fire station, but houses the Executive Team, Deputy 1, Safety Chief, Fire Investigation Unit, and other administrative functions.
Medic One / Harborview Medical Center	325 9th Ave	Battalion 3, Medic 1, Medic 10, Medic 44, and Medic 55
3—Fisherman’s Terminal	1735 W Thurman	Fireboat Chief Seattle, Fireboat 1, FB1, FB3 and FB4
5—Seattle Waterfront	925 Alaskan Way	Fireboat Leschi, Fireboat 2, Rescue Boat 5, Engine 5, and PT520. <i>Note: Station 5 is currently under construction.</i>
8—Queen Anne	110 Lee St	Fire Engine 8 and Ladder Truck 6
9—Fremont	3829 Linden Ave N	Fine Engine 9
10—International District	400 S Washington St	Fire Engine 10, Ladder Truck 1, Aid Car 5, Aid Car 10, Staff 10, and the Hazardous Materials Team—includes the city’s Fire Alarm Center and Emergency Operation Center
11—Highland Park	1514 SW Holden St	Fire Engine 11
13—Beacon Hill*	3601 Beacon Ave S	Fire Engine 13 and Battalion 5
14—SODO District*	3224 4th Ave S	Ladder Truck 7, Aid Car 14, and Rescue One (Technical Rescue Team)
17—University District	1050 NE 50th St	Fire Engine 17, Ladder Truck 9, Medic 17, and Battalion 6
18—Ballard	1521 NW Market St	Fire Engine 18, Ladder Truck 8, Medic Unit (ALS) 18, Hose 18, and Battalion 4
20—West Queen Anne	2800 15th Ave W	Fire Engine 20
22—Roanoke	901 E Roanoke	Fire Engine 22, Command and Communications Van
26—South Park	800 S Cloverdale St	Fire Engine 26 and Medic Unit (ALS) 26**
27—Georgetown	1000 S Myrtle St	Fire Engine 27, REHAB1, and DECON1
29—Admiral District	2139 Ferry Ave SW	Fire Engine 29
33—Rainier Beach	9645 Renton Ave S	Fire Engine 33
36—Delridge & Harbor Island	3600 23rd Ave SW	Fire Engine 36 and Marine 1
41—Magnolia	3216 34th Ave W	Fire Engine 41

Note: Ladder trucks and fire engines are staffed by teams of four personnel. Aid cars are staffed by teams of two personnel.

*Indicates a historic building.

**SFD staffed an additional ladder truck (Ladder 13) and medic unit (Medic 26) to serve the residents of West Seattle in response to the closure of the West Seattle Bridge. Ladder Truck 13 is housed at Station 37 and Medic Unit 26 at Station 26.

Source: Seattle Fire Department Annual Report, 2020; Seattle 2035 Capital Facilities Appendix, 2020.

Stations and associated equipment and staffing serving each of the subareas are summarized below:

- **Ballard:** The Ballard Subarea is in the service area of stations 9 and 18. Station 18—the primary station serving the Ballard portion of the study area—houses Fire Engine 18, Ladder Truck 8, Medic Unit (ALS) 18, Hose 18, and Battalion 4 while Station 9 in Fremont houses one fire engine.
- **Interbay Dravus:** The Interbay Dravus Subarea is in the service area of stations 3, 20, and 41. Station 3 at Fisherman’s Terminal houses Fireboat Chief Seattle, Fireboat 1, FB1, FB3, and FB4. Station 20 in West Queen Anne and Station 41 in Magnolia each house a fire engine.
- **Interbay Smith Cove:** The Interbay Smith Cove Subarea is in the service area of stations 5, 8, and 20. Station 8 in Queen Anne houses a fire engine and ladder truck while Station 20 in West Queen Anne house a single fire engine. Station 5 houses two fire boats, one rescue boat, one fire engine, and the specialty unit PT520.
- **SODO/Stadium:** The SODO/Stadium Subarea is in the service area of stations 5, 10, 13, 14, 27, 29, and 36. Together these stations house two fire boats, six fire engines, two ladder trucks, three aid cars, and several specialty units, including SFD’s Hazardous Materials Team, Rescue One (Technical Rescue Team), REHAB1, DECON1, Marine 1, and PT520.
- **Georgetown/South Park:** The Georgetown/South Park Subarea is in the service area of stations 11, 26, 27, and 33. Together these stations house four fire engines, one medic unit (ALS), REHBA1, and DECON1.
- **Other Industrial Zoned Lands:** Other industrial lands along the north side of Salmon Bay are served by stations 9 and 17, and industrial lands in Eastlake are served by Station 22. Stations 9 and 17 north of Salmon Bay house two fire engines, one ladder truck, one medic unit (ALS), and Battalion 6, while Station 22 in Eastlake houses one fire engine and SFD’s Command and Communications Van.

Performance

Incident Response Trends

Between 2017 and 2020, total Seattle Fire Department incident responses ranged from 80,316 to 96,822. As shown in **Exhibit 3.13-3**, the number of total responses remained relatively constant in 2017 and 2018, then decreased in 2019 and 2020. The COVID-19 pandemic drove a decrease in EMS calls in 2020—a trend SFD believes resulted from fewer people being outside their homes coupled with a fear of being exposed to the virus—and a rise in fire responses. Total incident responses decreased from 2017-2019 by 5% and by 17% from 2017-2020.

Fire incident response increased 9% from 2017-2019. However, Seattle has fewer fires than the national average and of other cities with similar population size—Seattle averages 0.9 fires annually per 1,000 residents compared to the national average of 3.9 (Seattle City Budget Office 2021, 325). EMS incident responses decreased 7% from 2017-2019. The proportion of fire

incident responses compared to EMS incident responses has correspondingly increased. EMS calls still make up over three-quarters of total responses though, accounting for 81% of total responses in 2017 and 80% in 2019.

Exhibit 3.13-3 Seattle Fire Department Emergency Response Incidents, 2018-2020

Year	EMS Incidents: BLS & ALS	Fire & Specialty Incidents	Other & Mutual Aid	Total
2017	78,758 (81%)	16,548 (17%)	1,111 (1%)	96,822
2018	76,484 (81%)	17,080 (18%)	1,128 (1%)	94,780
2019	72,980 (80%)	18,088 (20%)	648 (1%)	91,716
2020	61,717 (77%)	18,094 (23%)	505 (1%)	80,316

Note: EMS incidents include BLS and ALS incidents. Other incidents include transfers to other agencies where a fire unit was also dispatched and, for 2020, includes responses where a single battalion chief was dispatched.
Source: Seattle Fire Department Annuals Reports, 2019 and 2020.

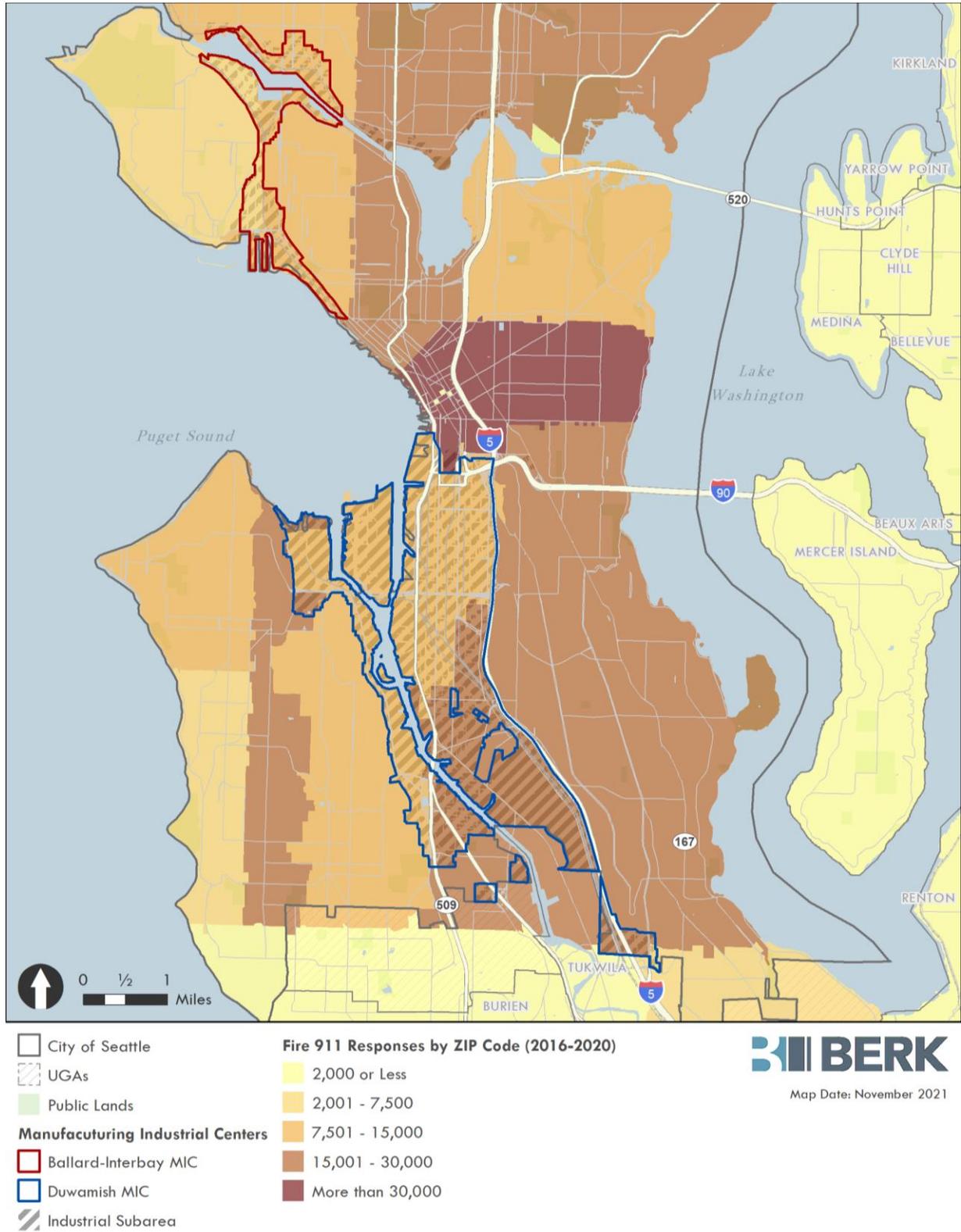
SFD received fewer calls for service citywide and within the study area in 2020 than in the four years prior (see **Exhibit 3.13-4**), likely because of the overall decrease in EMS related calls as a result of the pandemic (EMS incidents make up about 80% of incidents overall). Within the study area, the fewest calls were received in the Ballard Subarea and the most were received in the SODO/Stadium Subarea. Calls for service in the study area decreased by 19% from 2019 to 2020 but stayed relatively constant citywide (increased by 0.4%). Less than 0.2% of calls for service citywide were located in the study area each year from 2016 to 2020. As shown in **Exhibit 3.13-5**, SFD calls for service from 2016-2020 were more heavily concentrated in non-industrial areas of the city, including Downtown, east of Downtown near the hospitals, and in areas with large institutions such as the University of Washington. The Georgetown/South Park Subarea received more calls from 2016-2020 than other parts of the study area.

Exhibit 3.13-4 Calls for Fire and EMS Services by Subarea, 2016-2020

Subarea	2016	2017	2018	2019	2020	Total
Ballard	17	12	13	8	12	62
Interbay Dravus	39	31	35	31	29	165
Interbay Smith Cove	27	19	13	35	12	106
SODO/Stadium	47	56	51	46	32	232
Georgetown/South Park	45	43	31	21	20	160
Study Area Total	175	161	143	141	105	725
Citywide Total	101,974	102,947	101,485	102,368	93,495	502,269

Note: Citywide calls for service are higher than the number of response incidents in **Exhibit 3.13-3** as not all calls for service result in an emergency incident response.
Sources: Real Time Fire 911 Calls, 2021 (<https://data.seattle.gov/Public-Safety/Seattle-Real-Time-Fire-911-Calls/kzjm-xkqj>); BERK, 2021.

Exhibit 3.13-5 Total Calls for Fire and EMS Services in the Study Area and Surrounding Vicinity, 2016-2020



Sources: Real Time Fire 911 Calls, 2021 (<https://data.seattle.gov/Public-Safety/Seattle-Real-Time-Fire-911-Calls/kzjm-xkqj>); BERK, 2021.

Response Time

Maintaining or improving emergency response times is the core of Seattle Fire Department operations (Seattle Fire Department 2012). SFD’s response standards specify the minimum criteria needed to effectively and efficiently deliver fire suppression, special operations response, and emergency medical services (Seattle Fire Department 2020). The Capital Facilities Appendix of *Seattle 2035* establishes the following response time standards for the Department (City of Seattle 2020, 529-530):

- Call Processing Time: 60 seconds for phone answered to first unit assigned for 90% of calls.
- Fire Response Time: Arrival within 4 minutes for first-arriving engine at a fire for 90% of calls, and arrival within 8 minutes of the full first alarm assignment of 15 firefighters, for 90% of calls.
- Basic Life Support: Arrival within 4 minutes of the first medical unit with two EMTs, for 90% of calls.
- Advanced Life Support: Arrival within 8 minutes for 90% of calls.

Exhibit 3.13-6 shows the statistics the Department uses to measure response time performance. These statistics generally correspond with the Department’s response time standards. Between 2016 and 2020 the Department fell short of meeting its response time standards, with the exception of meeting its call processing time standard in 2018 and its full first alarm assignment standard in 2018, 2019, and 2020.

Exhibit 3.13-6 Response Statistics, 2016-2020

Year	Call Processing Time within 60 Seconds	First Arriving Engine at Fire within 4 Minutes	Full First Alarm Assignment at Fire within 8 Minutes	First Arriving Unit for a BLS Incident within 4 Minutes	First Arriving Unit for an ALS Incident within 8 Minutes
Adopted Standard	90%	90%	90%	90%	90%
2016	85%	84%	86%	84%	89%
2017	84%	77%	71%	79%	86%
2018	92%	76%	93%	79%	86%
2019	64%	75%	94%	76%	86%
2020	66%	78%	92%	73%	81%

Note: SFD updated data for 2018 and 2019 in the 2020 Annual Report to reflect more accurate information from their system. 2016 and 2017 information are from the 2018 Annual Report.
 Source: Seattle Fire Department Annual Report, 2018 and 2020.

Planning

Facilities

The Seattle Department of Finance & Administrative Services designs, builds, and maintains City-owned buildings, including fire facilities. They coordinate with SFD to ensure facility plans are consistent with strategic planning for fire services.

In 2003, a Fire Facilities and Emergency Response Levy was approved by Seattle voters. The levy provided funding for major facility improvements across the Seattle Fire Department including upgrades, renovations, or replacements of 32 neighborhood fire stations (including all stations serving the study area), construction of a new training facility, establishment of emergency preparedness facilities, renovation of the Chief Seattle Fireboat (located at Station 3 Fisherman’s Terminal), and construction of 2 new fireboats (Department of Finance and Administrative Services 2021). New facilities were built with excess physical capacity (City of Seattle 2020).

Seattle’s 2022-2027 proposed CIP includes funding for a new Station 31 in North Seattle,²⁶ replacement of the existing dock at Station 5 on the downtown waterfront, seismic assessments at five public safety facilities, and general maintenance to facilities system-wide (Seattle City Budget Office 2021). The City also anticipates it will need to replace Station 3 and the Fire Marshal office, acquire, or develop a new facility for SFD Headquarters, replace or expand the commissary and fire garage, develop a fire station in South Lake Union, and develop a freshwater marine fire suppression facility (City of Seattle 2020).

The 2022 Proposed Budget adds funding to enhance SFD operations in several areas including emergency responses, diversity recruitment, dispatch training, and IT system upgrades. In response to extensive research into community response models and on best practices gleaned from around the country, SFD will add a new specialized triage response program (Seattle City Budget Office 2021, 326).

Strategic Planning

The Department’s 2012-2017 Strategic Plan is a road map for SFD and a guide for identifying priorities for emergency response services into the future. The plan identifies internal and external challenges facing the Department. Internal challenges include providing adequate leadership development and operations training and maintaining employee involvement and engagement. External challenges include financial constraints, growth of non-emergency calls, and changing demographics. The plan sets forth six goals and related strategies and action

²⁶ Station 31 in Northgate closed in June 2019 in response to air quality concerns. Units were temporarily reassigned to neighboring stations until an interim facility is established. The interim Fire Station 31 at 10503 Interlake Avenue North is planned to open in fall 2021 and will house Engine 31, Ladder 5, Aid 31, and Medic 31 (Seattle Fire Department 2021). Construction on a new permanent fire station is tentative but could be ready for general contractor bid in 2023 (Seattle Fire Department 2020). Station 31 is located north of the study area but could be called upon to provide emergency support if assistance is requested.

steps to address these challenges and to support the Department’s mission. One of the goals is to maintain quality equipment, apparatus, facilities, and technology. The strategies and action steps under this step support facilities planning and coordination with the Department of Finance & Administrative Services.

Police

Data & Methods

Information about police services was collected from the Seattle Police Department, Port of Seattle Police Department, and Burlington Northern Santa Fe Railroad Police. SPD publishes calls for service, response times, and crime reports annually. Independent researches at Seattle University also collect data at the micro-community level through the annual Seattle Public Safety Survey (available via SPD’s Survey Results Dashboard). SPD’s 2019 Strategic Plan and the City’s adopted 2021 Budget and 2021-2026 CIP were also referenced. Median response times by precinct were calculated from call data published on the City of Seattle’s Open Data Portal.

The Port of Seattle Police Department publishes an annual report. BNSF Railway does not publish statistics about its police unit.

Services & Resources

Seattle Police Department

The Seattle Police Department (SPD) provides police protection services to the City of Seattle, including the study area. Its primary duties include foot, car, and bike patrols, harbor patrols, 911 calls, investigations, traffic enforcement, parking enforcement, homeland security, and specialty units such as Special Weapons and Tactics (SWAT), gang, bomb/arson, and canine units. SPD currently has 1,325 deployable sworn officers (1,433 total sworn officers) and 631 civilian employees (Seattle Police Department 2021).

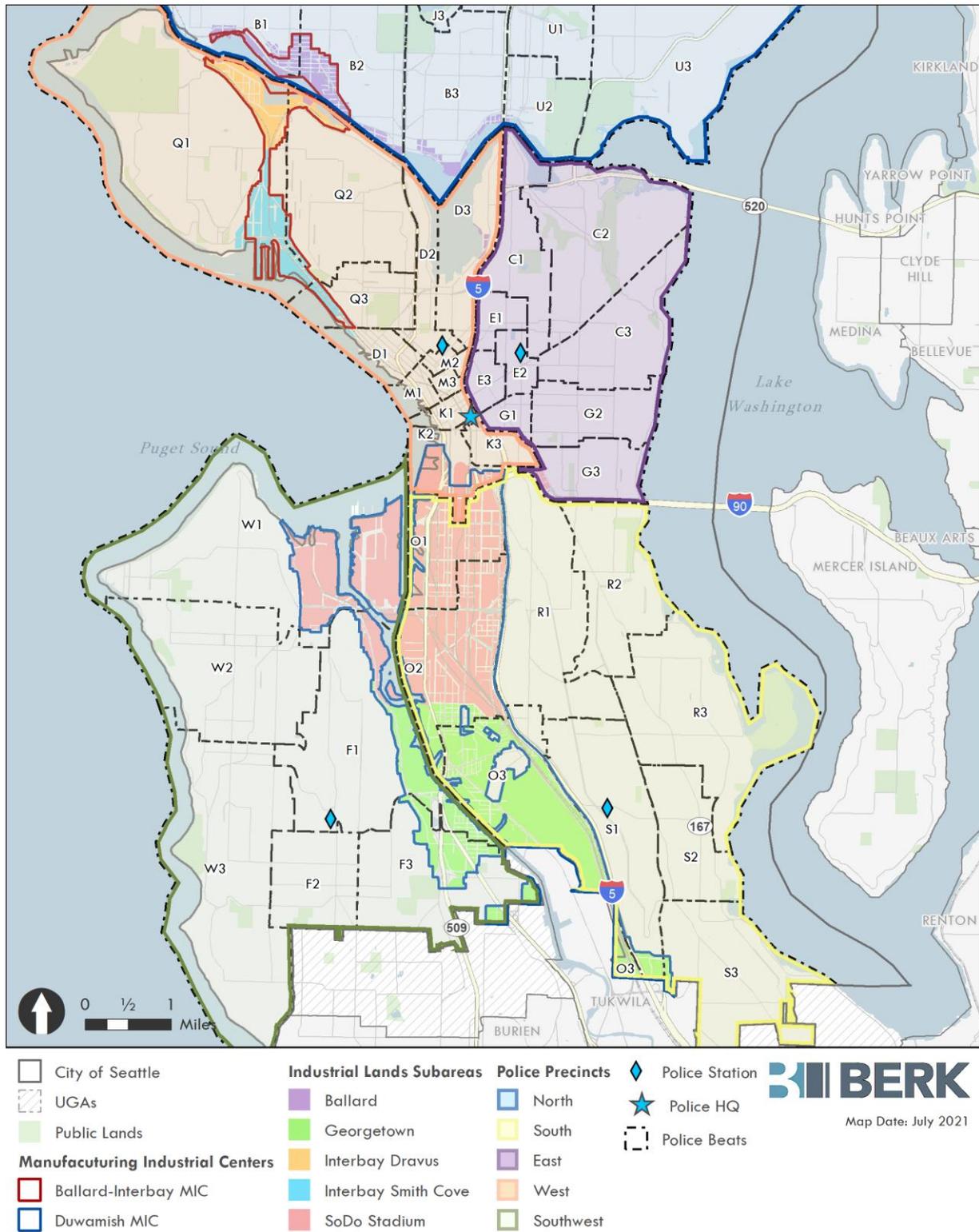
The Department is divided into five precincts, each with a police station that serves as the base of operations for that precinct (see **Exhibit 3.13-7**). The BINMIC portion of the study area is in the North and West precincts while the Greater Duwamish MIC portion is primarily in the South and Southwest precincts (the area near the stadiums is in the West Precinct and a small portion near I-90 is in the East Precinct). Other industrial lands along the north side of Salmon Bay are served by the North Precinct, and industrial lands in Eastlake are served by the West Precinct. Precincts are further divided into smaller geographic areas called sectors and beats (there are three beats per sector; e.g., Ocean Sector is divided into beats O1, O2, and O3). Individual patrol officers are assigned responsibility based on beats (Seattle Police Department 2021). The location of the study area relative to police service areas is shown in **Exhibit 3.13-8**.

Exhibit 3.13-7 SPD Station Locations and Areas Served

Precinct	Location	Primary Area Served	Sq. Ft.	Year Built
North	10049 College Way N (NE of the study area)	North of the Ship Canal to city limits	16,434	1984
West	810 Virginia St (E of the study area)	Queen Anne, Magnolia, the Downtown core, and the area west of I-5	46,231	1999
East	1519 12th Ave (E of the study area)	Eastlake and the area north of I-90 to the Ship Canal and east of I-5	61,580	1926 (updated 1985)
South	3001 S Myrtle St East (E of the study area)	South of I-90 to city limits and west of the Duwamish	13,688	1983
Southwest	2300 SW Webster St (W of the study area)	West Seattle and the Duwamish Industrial Area	28,531	2002

Source: City of Seattle, 2020.

Exhibit 3.13-8 Police Precinct, Sector, and Beat Boundaries



Source: City of Seattle, 2021; BERK, 2021.

Port of Seattle Police Department

The Port of Seattle Police Department was created in 1972 and provides the primary law enforcement service to Seattle-Tacoma International Airport and the Port's seaport properties (see **Exhibit 3.13-9**). Port of Seattle Police patrol more than 30 miles of waterfront property, piers, marinas, and cargo and cruise ship terminals and are the primary first responders for all reported crimes and incidents within its jurisdiction. The Department's Waterfront Office is located in the study area at Terminal 30 (2715 East Marginal Way South, Building A-5). The POSPD has been internationally accredited by the Commission on Accreditation for Law Enforcement Agencies since 2011 (Port of Seattle Police 2020).

Exhibit 3.13-9 Port of Seattle Properties Near the Study Area, 2020



Source: (Port of Seattle Police 2020).

The POSPD currently consists of 115 commissioned police officers—including 1 chief, 2 deputy chiefs, 6 commanders, 18 sergeants, and 88 police officers—and 38 non-commissioned personnel—including 911 communications specialists who receive and coordinate all calls for service for both the Port of Seattle Fire and Police Departments and the Burlington Northern Santa Fe Railroad Police. The Department also has several specialized units, including a Marine Patrol Unit, a Dive Team, and a Commercial Vehicle Enforcement Unit to support seaport activities (Port of Seattle Police 2020).

The Transportation Security Administration, as an agency of the federal Department of Homeland Security, oversees the security efforts for all Port properties. Currently, the U.S. Coast Guard maintains responsibility for shoreline security for the Port. TSA provides support to the Coast Guard in its maritime security efforts and focuses primarily on passenger security and intermodal connectivity to ports. In partnership with the Coast Guard, TSA administers the Transportation Worker Identification Credential program, which is required for workers who need access to secure areas of the nation’s maritime facilities and vessels (TSA 2016).

Burlington Northern Santa Fe Railroad Police

The Burlington Northern Santa Fe (BNSF) Railroad Police provide police services along the BNSF railway within the study area. Systemwide, BNSF Police’s jurisdiction is 32,500 miles long and 100 feet wide, crisscrossing hundreds of local and state jurisdictions along the way. BNSF Police analyze statistical data to discover crime trends, use K-9 units and proactive uniformed patrol to combat trespassing and cargo thefts, and actively participate with SPD and the Port of Seattle Police Department to investigate crimes committed on railroad property (BNSF Railway 2021).

Performance

Seattle Police Department

Trends in Calls for Service and Response Times

In 2020, SPD received approximately 343,100 calls for service citywide, 100,000-130,000 calls lower than each of the previous 4 years. Total calls were likely lower in 2020 due to the COVID-19 pandemic. In 2019, SPD received 461,328 calls for service—approximately 66% of these were dispatched calls and 34% were on-view incidents (events that officers logged during routine patrols). Total calls for service increased by 5% from 2016 through 2019. **Exhibit 3.13-10** shows the total number of dispatched calls and on-views in the city during this time period. In comparison, the total calls for service in beats serving the study area increased by 17% (see **Exhibit 3.13-11**).

Exhibit 3.13-10 Seattle Police Department Citywide Calls for Service, 2016–2020

Year	Community Generated	Officer Generated	Total
2016	311,380 (71%)	129,496 (29%)	440,877
2017	307,904 (68%)	144,471 (32%)	452,321
2018	317,380 (69%)	142,072 (31%)	459,462
2019	306,586 (66%)	154,551 (34%)	461,328
2020	245,580 (72%)	91,364 (27%)	343,100

Note: Total calls is slightly higher than the sum of community generated (dispatched) and officer generated (on-view) calls as some calls are logged as “Unknown” for how they were received.

Source: Seattle Police Department Calls for Service Dashboard (<http://www.seattle.gov/police/information-and-data/calls-for-service-dashboard>), 2021.

Exhibit 3.13-11 Seattle Police Department Calls for Service by Area, 2016 and 2019

Area	Total Calls 2016	Total Calls 2019	Percent Change
Citywide	440,877	461,328	5%
Study Area <i>Includes beats B1, B2, B3, Q1, Q2, Q3, W1, O1, O2, O3, F1, F3, and D3.</i>	106,343	124,494	17%
Ballard <i>In beats B1, B2, & B3</i>	27,874	30,060	8%
Interbay Dravus <i>Primarily in beats Q1 & Q2</i>	14,488	15,580	8%
Interbay Smith Cove <i>Primarily in beats Q1 & Q3</i>	16,154	15,695	-3%
SODO/Stadium <i>Primarily in beats W1, O1, & O2</i>	26,726	35,283	32%
Georgetown <i>Primarily in beats F1, F3, O2, & O3</i>	24,685	35,349	43%
Other Industrial Lands North of Salmon Bay <i>In beats B2 & B3</i>	17,442	19,288	11%
Other Industrial Lands in Eastlake <i>In beat D3</i>	8,460	8,469	0%

Note: Study area total includes beats B1, B2, B3, Q1, W1, O1, O2, O3, F1, and F3.

Source: Seattle Police Department Calls for Service Dashboard (<http://www.seattle.gov/police/information-and-data/calls-for-service-dashboard>), 2021.

SPD tracks average response time for priority one calls by precinct and sector. **Exhibit 3.13-12** shows statistics from 2016 through 2020 for sectors serving the study area. Citywide, SPD met its seven-minute response time target all five years. The median response time citywide stayed

relatively constant from 2016-2019 (decreased by 1%) but increased by 11% from 2019 to 2020 (increased 36 seconds from 5 minutes 42 seconds to 6 minutes 18 seconds). Median response times within the six sectors serving the study area varied from year to year and from sector to sector, but all sectors saw an increase in median response time from 2019 to 2020. Sectors W and F saw the greatest increase in response time (nearly a minute for both) from 2019 to 2020. This was likely in part because of the closure of the West Seattle High-Rise Bridge (the high bridge) to all vehicle traffic on March 23, 2020. The Spokane St Swing Bridge (the low bridge) remained open to emergency vehicles, transit, and heavy freight at all times of the day but was not built to handle the same volumes of traffic as the high bridge (Seattle Department of Transportation 2021). Sector B in Ballard also saw a 51 second increase in median response time from 2019 to 2020.

Exhibit 3.13-12 Median Response Times for Priority One Calls Citywide and in Sectors Serving the Study Area, 2016–2020

Year	Citywide	Sector B	Sector Q	Sector K	Sector D	Sector W	Sector F	Sector O
		North Precinct	West Precinct	West Precinct	West Precinct	South Precinct	South Precinct	Southwest Precinct
2016	5:44	7:49	6:35	4:05	5:12	8:02	6:27	5:28
2017	5:40	7:34	6:27	4:13	5:10	8:00	6:28	5:16
2018	5:45	8:24	6:40	4:06	5:09	7:06	6:20	5:01
2019	5:42	8:45	6:30	4:09	4:59	6:59	5:38	4:44
2020	6:18	9:36	6:37	4:16	5:06	7:58	6:37	5:08

Note: The Seattle Police Department utilizes the median value of this dataset because it is less impacted by extreme values. Source: City of Seattle Open Data Portal, Call Data (<https://data.seattle.gov/Public-Safety/Call-Data/33kz-ixgy/data>), 2021; Seattle Police Department Calls for Service Dashboard (<http://www.seattle.gov/police/information-and-data/calls-for-service-dashboard>), 2021.

From 2016 to 2020, the Department has fallen short of meeting its seven-minute response time target for priority one calls in Sector B for all five years and for all but 2019 in Sector W.

Trends in calls for service and response time for sectors and beats serving each of the subareas are summarized below (see **Exhibit 3.13-8** above for the location of each subarea relative to police sectors and beats):

- **Ballard:** The Ballard Subarea is in Sector B in the North Precinct, and is primarily within the boundaries of beats B1 and B2. Calls for service increased by 8% in Sector B from 2016 to 2019 and the median response time increased by 23% from 2016 to 2020, with a 51 second increase in median response time from 2019 to 2020. The Department fell short of meeting its seven-minute response time target in Sector B from 2016 to 2020.
- **Interbay Dravus:** The Interbay Dravus Subarea is in Sector Q in the West Precinct, and is primarily within the boundaries of beats Q1 and Q2. Calls for service increased by 8% in these two beats from 2016 to 2019 with the greatest increases in Beat Q2 (15%). The median response time in Sector Q stayed nearly constant from 2016 to 2020 (increased by

1%). The Department met its seven-minute response time target in Sector Q from 2016 to 2020.

- **Interbay Smith Cove:** The Interbay Smith Cove Subarea is in Sector Q in the West Precinct and is primarily within the boundaries of beats Q1 and Q3. Calls for service decreased by 3% in these two beats from 2016 to 2019. The median response time in Sector Q stayed nearly constant from 2016 to 2020 (increased by 1%). The Department met its seven-minute response time target in Sector Q from 2016 to 2020.
- **SODO/Stadium:** The SODO/Stadium Subarea is in Sector O of the South Precinct and Sector W of the Southwest Precinct, and is primarily within the boundaries of beats W1, O1, and O2 (a small portion is also in sectors K and F). Calls for service increased by 32% in these three beats from 2016 to 2019 with the greatest increases in Beat O2 (66%). The average response time decreased by 6% in Sector O and by 1% in Sector W from 2016 to 2020. However, as noted above, median response time in Sector W increased by 59 seconds from 2019 to 2020, likely in part because of the closure of the West Seattle High-Rise Bridge to all vehicle traffic on March 23, 2020. The Department met its seven-minute response time target in Sector O and fell short of meeting its target in Sector W from 2016 to 2018 and in 2020 (the Department met its target in Sector W by 1 second).
- **Georgetown/South Park:** The Georgetown/South Park Subarea is in Sector O of the South Precinct and Sector F of the Southwest Precinct, and is primarily within the boundaries of beats F1, F3, O2, and O3 (a small portion is also in Sector S). Calls for service increased by 43% in these four beats from 2016 to 2019 with the greatest increases in beats O2 (66%) and O3 (62%). The average response time decreased by 6% in Sector O and increased by 3% in Sector F from 2016 to 2020. Median response time in Sector F increased by 59 seconds from 2019 to 2020, likely in part because of the closure of the West Seattle High-Rise Bridge to all vehicle traffic on March 23, 2020. The Department met its seven-minute response time target in sectors O and F from 2016 to 2020.
- **Other Industrial Zoned Lands:** Other industrial lands along the north side of Salmon Bay are within the boundaries of beats B2 and B3. Calls for service increased by 11% in these beats from 2016 to 2019 and the average response time increased in Sector B by 23% from 2016 to 2020, with a 51 second increase in median response time from 2019 to 2020. The Department fell short of meeting its seven-minute response time target in Sector B from 2016 to 2020.

Other industrial lands in Eastlake are within the boundaries of Beat D3. Calls for service in this beat did not change from 2016 to 2019 but the average response time decreased in Sector D by 2% from 2016 to 2020. The Department met its seven-minute response time target in Sector D for from 2016 to 2020.

MCPP Priorities

The Seattle Public Safety Survey collects data at the micro-community level about perceptions of crime and public safety, police-community interactions, and knowledge and understanding of the MCPPs. The top five citywide public safety concerns identified in the 2020 survey (in order) were police capacity, property crime, homelessness, drugs and alcohol, and community and public safety capacity. The top five public safety concerns in each micro-community serving the study area are listed in **Exhibit 3.13-13**—police capacity, property crime, and homelessness were among the top three for all but the South Beacon Hill MCPP.

Exhibit 3.13-13 Top 5 Safety Concerns by MCPP in the Study Area in Ranked Order, 2020

MCPP	1st	2nd	3rd	4th	5th
Ballard South	Homelessness	Property Crime	Police Capacity	Drugs & Alcohol	Community & Public Safety Capacity
Chinatown/Int'l District	Homelessness	Police Capacity	Property Crime	Drugs & Alcohol	Violent Crime
Commercial Duwamish	Police Capacity	Homelessness	Property Crime	Drugs & Alcohol	Traffic Safety
Commercial Harbor Island	Property Crime	Homelessness	Police Capacity	Traffic Safety	Drugs & Alcohol
Eastlake—West	Property Crime	Police Capacity	Homelessness	Community & Public Safety Capacity	Public Order Crime
Fremont	Police Capacity	Homelessness	Property Crime	Traffic Safety	Community & Public Safety Capacity
Georgetown	Homelessness	Property Crime	Police Capacity	Drugs & Alcohol	Community & Public Safety Capacity
Magnolia	Police Capacity	Property Crime	Homelessness	Drugs & Alcohol	Community & Public Safety Capacity
Pioneer Square	Homelessness	Police Capacity	Property Crime	Drugs & Alcohol	Violent Crime
Queen Anne	Property Crime	Police Capacity	Homelessness	Traffic Safety	Community & Public Safety Capacity
SLU/Cascade	Homelessness	Police Capacity	Property Crime	Drugs & Alcohol	Community & Public Safety Capacity
SODO	Homelessness	Property Crime	Police Capacity	Drugs & Alcohol	Public Order Crime
South Beacon Hill	Police Capacity	Property Crime	Community & Public Safety Capacity	Traffic Safety	Violent Crime
South Park	Property Crime	Police Capacity	Homelessness	Traffic Safety	Drugs & Alcohol
Wallingford	Homelessness	Property Crime	Police Capacity	Traffic Safety	Community & Public Safety Capacity

Source: Seattle Police Department Service Results Dashboard (<https://www.seattle.gov/police/information-and-data/mcpp-about/survey-results-dashboard>), 2021.

MCPP priorities for each subarea are summarized below:

- **Ballard:** The Ballard Subarea includes the Ballard South and Fremont MCPPs. The top five public safety concerns in these MCPPs as identified in the 2020 Seattle Public Safety Survey included homelessness, property crime, police capacity, and community and public safety capacity. Respondents in Ballard South also included drugs and alcohol among their top five concerns while those in Fremont included traffic safety.
- **Interbay Dravus:** The Interbay Dravus Subarea includes the Magnolia and Queen Anne MCPPs. The top five public safety concerns in these MCPPs as identified in the 2020 Seattle Public Safety Survey included police capacity, property crime, homelessness, and community and public safety capacity. Respondents in Magnolia also included drugs and alcohol among their top five concerns while those in Queen Anne included traffic safety.
- **Interbay Smith Cove:** The Interbay Smith Cove Subarea includes the Magnolia and Queen Anne MCPPs. The top five public safety concerns in these MCPPs as identified in the 2020 Seattle Public Safety Survey included police capacity, property crime, homelessness, and community and public safety capacity. Respondents in Magnolia also included drugs and alcohol among their top five concerns while those in Queen Anne included traffic safety.
- **SODO/Stadium:** The SODO/Stadium Subarea includes the following MCPPs by precinct:
 - West Precinct: Pioneer Square and Chinatown/International District
 - South Precinct: SODO and Georgetown
 - Southwest Precinct: Commercial Duwamish and Commercial Harbor Island.

The top five public safety concerns in these MCPPs as identified in the 2020 Seattle Public Safety Survey included homelessness, police capacity, property crime, and drugs and alcohol. Other top five concerns varied by MCPP: respondents in the West Precinct included violent crime, respondents in the Southwest Precinct included traffic safety, respondents in Georgetown included community and public safety capacity, and respondents in SODO included public order crime among their top five concerns.

- **Georgetown/South Park:** The Georgetown/South Park Subarea includes the Georgetown and South Beacon Hill MCPPs in the South Precinct and the Commercial Duwamish and South Park MCPPs in the Southwest Precinct. The top five public safety concerns in these MCPPs as identified in the 2020 Seattle Public Safety Survey included homelessness, property crime, police capacity, and community and public safety capacity. Drugs and alcohol were among the top five concerns in Ballard South while traffic safety was among the top five in Fremont.
- **Other Industrial Zoned Lands:** Other industrial lands along the north side of Salmon Bay are within the Fremont and Wallingford MCPPs, and other industrial lands in Eastlake are within the Eastlake—West and SLU/Cascade MCPPs. The top five public safety concerns in these MCPPs as identified in the 2020 Seattle Public Safety Survey included homelessness, property crime, police capacity, and community and public safety capacity. Respondents in the Fremont and Wallingford MCPPs also included traffic safety among their top five concerns while those in the Eastlake—West MCPP include public order crime and those in the SLU/Cascade MCPP included drugs and alcohol.

Port of Seattle Police Department

In 2020, the Port of Seattle Police Department’s patrol team responded to 106,463 calls for service jurisdiction wide (airport and seaport properties), including 55,000 self-initiated contacts (area checks, subject contacts, traffic stops, and checkpoint alarm checks). This was about 15% more calls than in 2019 (106,463 vs. 92,186; see **Exhibit 3.13-14**).

Exhibit 3.13-14 Port of Seattle Police Department Patrol Team Calls for Service, 2019–2020

Year	Calls for Service	Self-initiated
2019	92,186	61,168
2020	106,463	55,000

Source: Port of Seattle Police Department Annual Report 2020.

Schools & Libraries

Data & Methods

The information about schools and libraries was collected from:

- Seattle Public Schools
- Seattle Public Libraries
- King County Assessor Parcel Records
- Seattle Comprehensive Plan
- Seattle Land Use Code

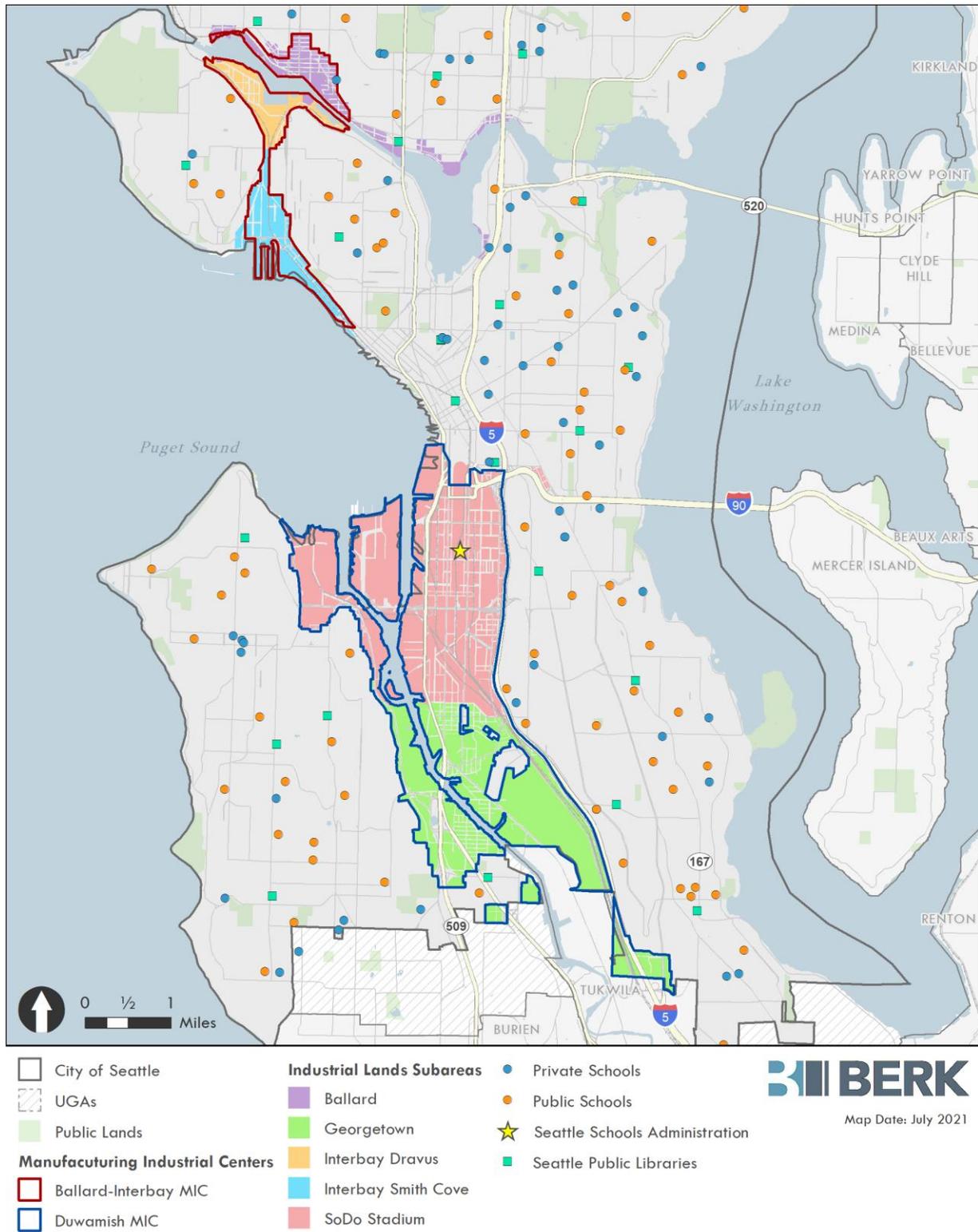
Services & Resources

The Seattle School District serves the city as a whole. It operates 106 schools and employs about 7,574 staff including about 6,173 educators that are school-based. There are about 25,528 Elementary, 12,025 Middle, and 14,828 high school students. The students are 46% white and 54% persons of color.²⁷

The Seattle School District Administrative offices are in the SODO/Stadium Subarea. See **Exhibit 3.13-15**. There are no public schools in the study area. There is one private school in Ballard. In the Secondary Study Area there are schools in proximity to industrial zones identified in relation to the nearest subareas. For the few residences in the study area, they would attend a variety of schools based on the service areas in **Exhibit 3.13-16**. Schools are allowed in existing buildings in industrial zones except in the Greater Duwamish MIC.

²⁷ Seattle Public Schools. 2020-21 Fast Facts & Figures Seattle Public Schools. https://www.seattleschools.org/UserFiles/Servers/Server_543/File/District/Departments/Communications/seattle-public-schools-quick_facts.pdf.

Exhibit 3.13-15 Schools and Libraries in or Near the Study Area



Source: King County GIS, 2021; CAI, 2021; BERK, 2021.

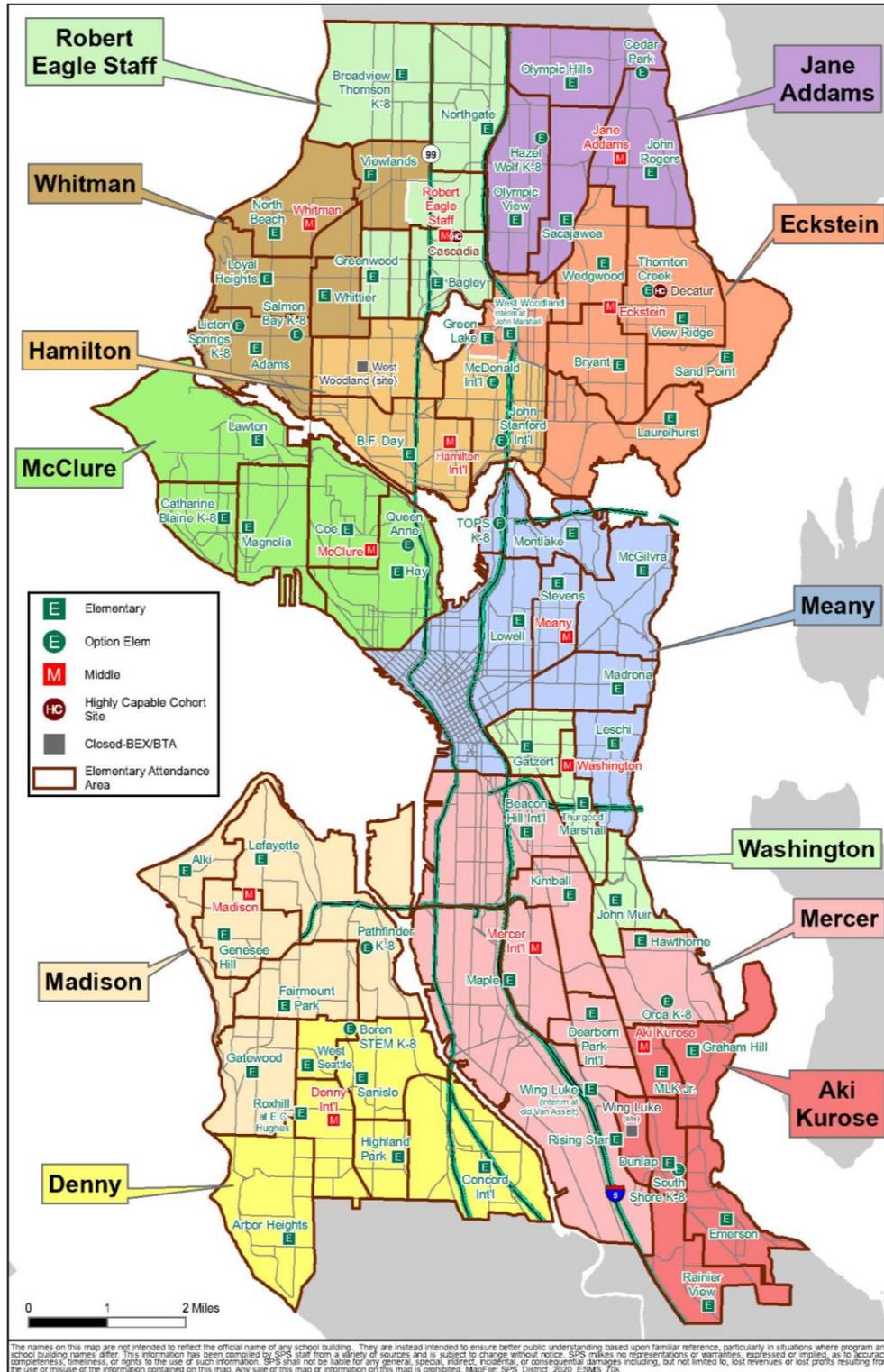
Exhibit 3.13-16 School Attendance Boundaries: Elementary and Middle Schools

2020-21



Elementary and Middle School Attendance Areas

Map Data:
2020-21
Last updated:
2/20/2020



Source: Seattle School District, 2020.

The Seattle Public Library system offers 27 locations. As of 2020, they provide access to 1.7 million print materials, 677,000 pieces of media, as well as 4.3 million e-books and 2.1 million streaming and downloadable medial. The system also offers 1,100 virtual classes, events, and activities including classes and to learn skills, find job resources and make social connections.²⁸ There are no libraries in the Primary Study Area, and several nearby in the Secondary Study area, described with the nearest subarea below. See **Exhibit 3.13-15**. The Seattle Industrial zones prohibit libraries.

Schools and libraries serving each subarea are summarized below:

- **Ballard:** The Ballard Subarea is served by BF Day Elementary and Adams Elementary Schools and Hamilton and Whitman Middle Schools based on service areas. There is one private school known as Modern Pilot, offering simulation-based flight training and curriculum, and located on Russel Avenue NW on property zoned IC-65 (M). It is operated in an industrial building on a 5,000 square foot property. The Assessor considers the property to be in an industrial use.
- **Interbay Dravus:** There are no mapped public or private schools in the Interbay Dravus Subarea. To the west is a public school, Lawton Elementary School, which is separated from the study area by topography and a strip of commercial and residential zones. The subarea is served by Lawton, Code, and Magnolia Elementary Schools and McClure Middle School. There are no libraries in the subarea.
- **Interbay Smith Cove:** There are no public or private schools or libraries in the subarea. The subarea is served by Magnolia, Code, and Hay Elementary Schools and McClure Middle School.
- **SODO/Stadium:** The John Stanford Center for Education Excellence and Seattle School District Administrative offices are in the SODO Stadium district on Lander Street on land zoned IG1 U/85. The building lies on about 6.9 acres and contains a 325,000 gross square foot building with two-thirds in office space and one third in storage/warehouse space. The district also owns a 4.3-acre parking lot to the north of the offices. There are no public or private schools or libraries in the subarea. The study area is served by Wing Luke Elementary and Mercer Middle School. The Puget Sound Community School, a private institution, lies on Dearborn Street in the International district and serves students between 11 and 18 years old (6-12 grades). North of the subarea lies the International District / Chinatown Library on Eighth Avenue S.
- **Georgetown/South Park:** There are no schools or libraries in the Georgetown/South Park Subarea. The MIC surrounds the Georgetown Urban Center/Village which contains the historic Concord International school and the South Park Library. The Georgetown/South Park Subarea is served by Concord International, Sanislo, and Wing Luke Elementary Schools and Mercer and Denny Middle Schools.
- **Other Industrial Zoned Lands:** In the Eastlake area abutting the IG1 U/45 zone on E Galer Street is a private school called the Fusion Academy offering one on one teacher/student

²⁸ The Seattle Public Library. 2021. 2020 Statistical and Financial Summaries. <https://www.spl.org/about-us/library-impact/2020-impact-report/2020-statistics>.

ratios for middle and high school students. The school is in an office building on a property zoned C1-75. In Eastlake, the industrial area is served by Montlake and Lowell Elementary Schools, and Meany Middle School. The scattered industrial areas along Salmon Bay and north Lake Union are served by BF Day, John Stanford International, and Laurelhurst Elementary Schools and Hamilton and Eckstein Middle Schools.

3.13.2 Impacts

Thresholds of significance utilized in this impact analysis include:

- Negatively affect the response times for police and/or fire and emergency medical services.
- Increase demand for special emergency services beyond current operational capabilities of service providers.
- Result in increases in students and lack of facilities unanticipated in district plans or that would reduce adopted levels of service.

Impacts Common to All Alternatives

Fire & Emergency Medical Services

Population Growth

Growth in worker and residential populations in the study area is expected to lead to an increased number of calls for emergency services. Growth is expected to occur incrementally under all alternatives, as individual development projects are constructed. The Seattle Fire Department would attempt to maintain response times consistent with or better than current performance levels as the population grows. Over time, additional staffing and equipment may be required in order to maintain performance levels.

As described under the Affected Environment, fire stations serving the study area were recently upgraded or replaced as part of the Fire Facilities and Emergency Response Levy and are not anticipated to need renovations in the near future. In addition, the Chief Seattle Fireboat at Station 3 Fisherman's Terminal was renovated as part of the levy and Station 5 (serving the downtown waterfront) is currently under construction concurrent with portions of the Seattle Waterfront project.

Any potential future fire facility, staffing, or equipment needs could be included as part of the City's annual Budget and Capital Improvement Program process.

Building Heights & Density

Existing ladder trucks at Stations 8, 10, 14, 17, and 18 and at other stations near the study area are equipped to provide services to buildings of the heights proposed under all alternatives.

Additionally, new buildings would be required to meet the Seattle Fire Code which requires sprinklers throughout. The City also applies standards for live/work units (like artists' lofts and caretakers' units) to ensure there are exits from sleeping rooms and fire-rated walls and doors between different uses. No impacts to fire services are anticipated due to increases in building height or density.

Hazardous Materials

Industrial uses often include hazardous materials or have the potential to produce hazardous waste. Hazardous materials are defined by the City of Seattle as “those that pose an unreasonable risk to the health and safety of operating or emergency personnel, the public, and the environment if not properly controlled during handling, storage, manufacture, processing, packaging, use, disposal, or transportation” (City of Seattle 2018).

Additional industrial development under all of the alternatives could increase the amount or prevalence of hazardous materials in the study area. All new development would be required to meet the Seattle Fire Code which includes provisions for hazardous materials ([Part V, Chapter 50-67](#)). Development proposals would be reviewed by the Seattle Department of Construction & Inspections as well as the SFD. Additional federal and state regulations also apply to development that includes hazardous materials or wastes—for example, the U.S. Environmental Protection Agency regulates hazardous waste in part 262 of title 40 of the Code of Federal Regulations, WSDOT regulates off-site transportation of hazardous materials, and the Washington State Department of Ecology requires additional permits and inspections for such facilities as underground storage tanks. No impacts to fire or EMS services are anticipated due to an increased amount of hazardous materials.

Construction

The Seattle Fire Department makes service calls related to inspection of construction projects and calls to respond to construction-related accidents. As such, increased construction activities associated with potential development under all alternatives could result in an increase in demand for fire services. Existing Fire Department staffing and equipment are anticipated to be sufficient to handle increased services needed for construction activities.

Transportation Network & Traffic Volumes

Use of the public right of ways is critical to SFD meeting their response goals as the Department is dependent upon the capability of the city's street network to handle traffic flows. No specific transportation projects or changes to emergency access routes are proposed under any of the alternatives, but changes to the street network over time has the potential to impact the mobility of fire response vehicles. Any street improvements must be consistent with the Seattle Fire Code Section 503 and Appendix D, which address fire apparatus access roads. Additionally, SFD reviews proposed street improvements on a project-by-project basis to identify potential negative impacts on response times. It is anticipated that these mitigation measures would

adequately address the potential impacts of future changes to the transportation network under any of the alternatives.

Traffic volumes are anticipated to increase under all of the alternatives. Travel times in the study area are expected to remain relatively consistent between 2019 and 2044 (see **Section 3.10 Transportation** and the impacts discussion under each alternative below). Regular planning by SFD is anticipated to address any needed changes to emergency access routes or any future facility, staffing, or equipment needs as a result of increased traffic volumes.

Ballard, Interbay Dravus, & Interbay Smith Cove

The Ballard Link Extension would construct three stations within the BINMIC: Ballard, Interbay (in the vicinity of Dravus Street), and Smith Cove. Transit capacity along the north-south corridor will dramatically increase compared to existing conditions making non-auto modes increasingly competitive.

SODO/Stadium & Georgetown/South Park

Terminal 5, the international marine cargo terminal operated by the Northwest Seaport Alliance (a partnership of the Ports of Seattle and Tacoma), is scheduled to open in early 2022. This opening will significantly increase the number of trucks that must use the West Seattle low bridge to reach the terminal. The opening of Terminal 5 and associated increase in truck traffic could negatively impact response times for emergency vehicles trying to access West Seattle. The City of Seattle is working closely with the Port of Seattle and Northwest Seaport Alliance to plan for more trucks on the low bridge and monitor the increase in workers traveling to the terminals for their shifts (Seattle Department of Transportation 2021, The Northwest Seaport Alliance 2021).

Police

Population Growth

Population growth in the study area may not necessarily result in increased crime and demand for police services. For example, total calls for service decreased by 3% in Beat Q3 from 2016 through 2019, while the population in the study area increased (PSRC 2020). While population growth and increases in urbanization can impact crime, many other factors are part of the equation including population characteristics, economic conditions, transportation conditions, climate, prevalent attitudes towards crime and crime reporting practices in the local population, and police department characteristics (Federal Bureau of Investigation 2013).

Since population and employment growth do not directly correlate to an increased demand for police services, none of the four growth alternatives would necessarily result in proportional increases in call volumes or incidence of major crimes. Therefore, no specific findings of adverse effects on response times or criminal investigations volumes are made. SPD will continue to analyze where best to focus its resources to respond to changes in demand for

police services regardless of which alternative is selected. Better site and building design such as with building placement, lighting, and visibility can reduce the potential for crime.

Building Heights & Density

No impacts to police services are anticipated due to increased building heights. Of the seven sectors serving the study area, Sector K consistently reported the fastest median response time for priority one calls from 2016-2020, ranging from 4 minutes 5 seconds to 4 minutes 16 seconds (see **Exhibit 3.13-11**). Sector K serves a portion of Downtown where there are many tall buildings. Conversely, other sectors serving the study area (such as Sectors B serving Ballard and Sector W) consistently reported the slowest median response time for priority one calls over the same time period.

Relative changes in population density by beat and sector may generate more workload in some areas of the city but are not anticipated to impact police service or response times under any of the alternatives. The Department's deployment model is adjusted for changes in workload. Increased city tax revenue generated by new businesses or households could help defray costs of increased police workload.

Construction

The Seattle Police Department responds to construction-related service calls such as construction site theft and vandalism. Potential construction activities under all the alternatives could result in an increase in demand for police services. Existing Departmental resources are anticipated to be sufficient to handle such an increase.

Transportation Network & Traffic Volumes

Future traffic volumes or changes to the transportation network in the study area could impact first responders' ability to respond rapidly to emergency calls. SPD's staffing model factors in response time to determine appropriate staffing levels in each precinct. The Department would likely adjust staffing levels to improve response times if future increased traffic volumes or changes to the street network negatively impact police services.

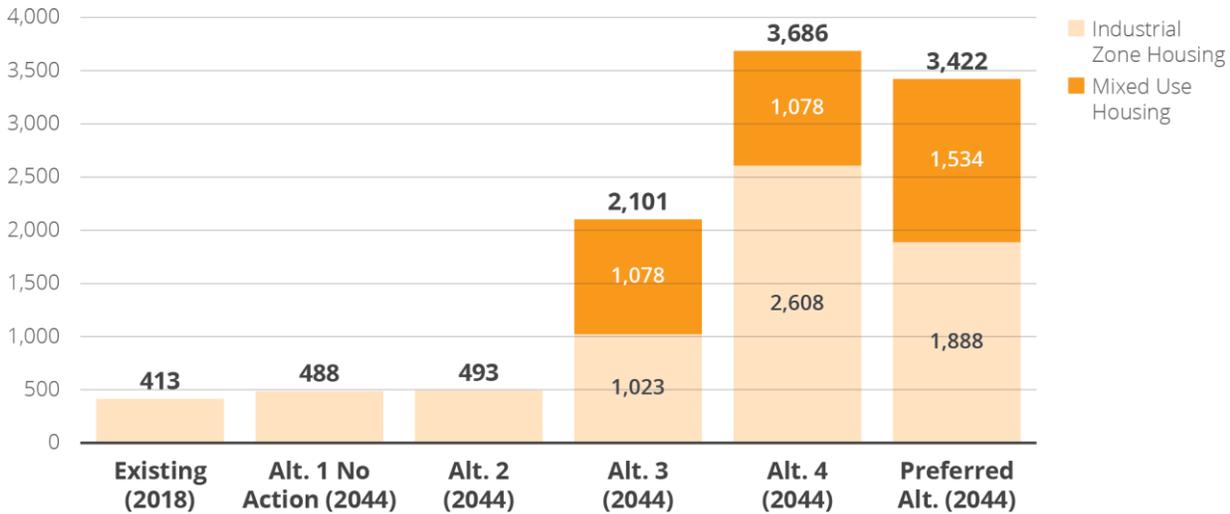
SODO/Stadium & Georgetown/South Park

As discussed under Fire & Emergency Medical Services, the opening of Terminal 5 in early 2022 and associated increase in truck traffic could negatively impact response times for emergency vehicles trying to access West Seattle. The City of Seattle is working closely with the Port of Seattle and Northwest Seaport Alliance to plan for more trucks on the low bridge and monitor the increase in workers traveling to the terminals for their shifts (Seattle Department of Transportation 2021).

Schools & Libraries

The demand for schools and libraries will be in proportion to the increase in housing under each alternative, which shows less growth in alternatives 1 and 2 and more under alternatives 3 and 4 and the Preferred Alternative. See [Exhibit 3.13-17](#).

Exhibit 3.13-17 Total Housing in Study Area by Alternative



Note: This chart was updated to include the Preferred Alternative.

Source: City of Seattle, 2022⁴; BERK, 2022⁴.

Students are anticipated to be a similar share of the future population as today. Based on the State Office of Financial Management (OFM) population, and the Office of the Superintendent of Public Instruction (OSPI), the student enrollment for fall 2020 is about 7.1% of the total population. See [Exhibit 3.13-18](#). In fall 2021, the School District saw a dip in enrollment; thus the 2020 rate is considered conservative and is retained for purposes of the EIS.

Exhibit 3.13-18 Student Generation Rate

	Number
Seattle School District Population (OFM 2020)	761,932
Enrollment OSPI 2020-2021	53,997
% of Pop	7.1%

Source: OFM, 2021; OSPI, 2021; BERK, 2021.

Based on the net change in dwellings and population, and assuming 7.1% of the population are students, the number of potential students is shown in [Exhibit 3.13-19](#). The mMost housing units and associated population are anticipated under Alternative 4 and the least under Alternative 1. The New students would have more effect on schools in Ballard, SODO/Stadium, and Georgetown/South Park.

Exhibit 3.13-19 Student Generation by Subarea based on Net Change in Population

Subarea	Alt. 1	Alt. 2	Alt. 3	Alt. 4	<u>Pref. Alt.</u>
Ballard	1	1	38	115	<u>75</u>
Interbay Dravus	1	1	11	25	<u>17</u>
Interbay Smith Cove	1	1	2	—	<u>—</u>
SODO/Stadium	4	5	29	144	<u>94</u>
Georgetown/South Park	3	3	9	35	<u>30</u>
Total: Ind Zone Housing (Caretaker/Artist)	11	12	89	319	<u>214</u>
With MIC Adjustments—Seattle Mixed-Use Zone Housing	—	—	157	157	<u>223</u>
Grand Total Students in Study Area	11	12	245	476	<u>437</u>

Source: BERK, 2022⁴.

Equity & Environmental Justice Considerations

The City of Seattle developed a Racial and Social Equity Index that combines data on race, ethnicity, and socioeconomic and health disadvantages to identify neighborhoods with large proportions of priority populations as residents. Much of the SODO/Stadium Subarea as well as the South Park neighborhood were found to have among the highest disadvantages in the city.

The Action Alternatives—especially alternatives 3 and 4—would result in more land use growth compared to Alternative 1 No Action particularly in the SODO/Stadium and South Park neighborhoods. Additional growth would increase traffic volumes which may in turn increase the response time of emergency vehicles in areas with high proportions of priority populations. However, increased development in areas with histories of long-term underinvestment could bring improved infrastructure to those neighborhoods. Development standards in areas rezoned as Industry & Innovation and Urban Industrial would require frontage improvements such as sidewalks, pedestrian lighting, and street trees that would likely result in safer, more connected, and more accessible neighborhoods.

The increase in housing in areas rezoned Seattle Mixed under alternatives 3 and 4 and under the Preferred Alternative is anticipated to generate students attending local schools in the Georgetown/South Park Subarea which has a higher proportion of disadvantaged households. The caretakers’ quarters and makers’ studios may also house families with students though less likely. Ensuring access to schools with safe travel routes would help all local students in these areas.

Impacts of Alternative 1 No Action

Alternative 1 No Action is expected to result in roughly 23,500 additional jobs in the study area compared to existing conditions. Residential development would be very minor—approximately 75 new dwellings over the study area. For both employment and residential uses, growth is expected to be highest in the SODO/Stadium and Georgetown/South Park subareas.

Fire & Emergency Medical Services & Police Services

No impacts other than those described under Impacts Common to All Alternatives are anticipated under Alternative 1 No Action. Regular planning by SFD and SPD are anticipated to address incremental increased demand for fire, emergency medical, and police services.

Traffic volume growth rates within the study area are expected to be relatively low under Alternative 1 No Action given that many facilities already operate with congestion during peak periods and new high-capacity transit options would be available, making non-auto modes increasingly competitive. Travel times in the study area are expected to remain relatively consistent between 2019 and 2044 (see [Section 3.10 Transportation](#))

Any potential future facility, staffing, or equipment needs as a result of increased demand for services, traffic volumes, or changes to the transportation network could be included as part of the City's annual Budget and Capital Improvement Program process.

Schools & Libraries

Population growth is anticipated to be the lowest under Alternative 1 at 154, and would have low demand for school and library services.

Two thirds of the small population growth would be in the SODO/Stadium and Georgetown/South Park subareas. The population would generate about 11 students. See [Exhibit 3.13-19](#).

There could be a small increase in demand at the Concord International school and the South Park Library. Other schools with minimal changes in students could be Sanislo and Wing Luke Elementary Schools and Mercer and Denny Middle Schools.

Impacts of Alternative 2

Alternative 2 would result in 10,900 more jobs ~~more~~ than Alternative 1 No Action and residential growth would remain essentially flat (80 new housing units versus 75 under Alternative 1). As with Alternative 1 No Action, most of the new growth would be concentrated in the Greater Duwamish MIC.

Fire & Emergency Medical Services & Police Services

Alternative 2 applies a mix of Industry & Innovation and Urban Industrial Zone concepts in 10% of the current MIC areas, including an estimated ¼ mile from future light rail stations. These zones introduce nodes of high-density employment and multi-modal access near transit and create thoughtful integration between the edges of Seattle’s MICs and adjacent neighborhoods. Compact growth in these areas in proximity to SFD and SPD services could result in more efficient service delivery and greater ability to meet LOS objectives than under Alternative 1 No Action.

Traffic volumes under Alternative 2 would be slightly higher than Alternative 1 No Action but the magnitude of change would be relatively small in relation to the amount of background traffic in the city. Travel times in the study area are expected to remain relatively consistent on most corridors between 2019 and 2044, with travel time increases of up to 4% over Alternative 1 No Action. One corridor—eastbound W Dravus Street between 15th Avenue W and 20th Avenue W—would also fall from LOS E under Alternative 1 No Action to LOS F under Alternative 2 (see [Section 3.10 Transportation](#)).

No other impacts aside from those described under Impacts Common to All Alternatives are anticipated under Alternative 2. Regular planning by SFD and SPD are anticipated to address incremental increased demand for fire, emergency medical, and police services. Any potential future facility, staffing, or equipment needs as a result of increased demand for services, traffic volumes, or changes to the transportation network could be included as part of the City’s annual Budget and Capital Improvement Program process.

Schools & Libraries

Impacts are very similar to Alternative 1 No Action. There are only 5 more dwellings than Alternative 1 (about 80 total new) and 10 more people (about 164 total new population). Student generation is about 12 instead of 11. See [Exhibit 3.13-19](#). Similar small demand could occur with schools and the library serving the Georgetown/South Park Subarea.

Impacts of Alternative 3

Alternative 3 would result in 33,900 more jobs ~~more~~ than Alternative 1 No Action. As with Alternative 1 No Action, most of the new employment growth would be concentrated in the Greater Duwamish MIC.

Alternative 3 also includes additional allowance for housing in the Urban Industrial Zone and new housing in focused areas removed from the MIC and placed in a mixed-use zone in Georgetown and South Park. Most of the additional 610 industry-supportive housing in industrial zones (535 more than Alternative 1 No Action) would be in the Ballard and SODO/Stadium subareas. An additional 784 dwelling units in mixed-use developments are estimated for the triangular area of Georgetown bounded by Airport Way, Corson Avenue S, and Carleton Avenue S, and 294 dwelling units are estimated for the two small areas of South

Park that would be removed from the MIC near the Duwamish River. This would result in a total of 1,048 housing units over the study time horizon on land that is removed from industrial zoning under Alternative 3.

Fire & Emergency Medical Services

Alternative 3 applies a mix of Industry & Innovation, Urban Industrial, and Mixed-Use Commercial Zone concepts in 14% of the current MIC areas, covering more land area than under Alternative 2 and including an estimated ½ mile from future light rail stations. Similar to Alternative 2, these zones introduce nodes of high-density employment and multi-modal access near transit and create thoughtful integration between the edges of Seattle’s MICs and adjacent neighborhoods. However, more industry-supportive housing would be allowed in the Urban Industrial Zone under Alternative 3 than Alternative 2; most of this housing would be in the Ballard and SODO/Stadium subareas. In addition, areas of land would be removed from the MICs in the Georgetown and South Park neighborhoods and placed in a mixed-use zone under Alternative 3. Compact growth in these areas—both inside and outside the MICs—in proximity to SFD and SPD services could result in more efficient service delivery and greater ability to meet LOS objectives under Alternative 3 than under Alternative 1 No Action or Alternative 2. New buildings would be required to meet the Seattle Fire Code, including standards for live/work units (like makers’ studios and caretakers’ units) to ensure there are exits from sleeping rooms and fire-rated walls and doors between different uses.

Traffic volumes under Alternative 3 would be higher than Alternative 1 No Action and Alternative 2—the PM peak vehicle miles traveled within the Greater Duwamish MIC would increase over Alternative 1 by roughly 2.3% and the PM peak VMT within the BINMIC would increase by roughly 4.3%. Travel times in the study area are expected to remain relatively consistent on most corridors between 2019 and 2044, with travel time increases of up to 1.5 minutes over Alternative 1. Two corridors—northbound 15th Avenue W from Magnolia Bridge to NW Leary Way and eastbound W Dravus Street between 15th Avenue W and 20th Avenue W—would also fall from LOS E under Alternative 1 No Action to LOS F under Alternative 3. southbound SR 509 between SR 99 and SR 518 would fall below WSDOT’s LOS standard for SR 509 fall from LOS D to E, and southbound I-5 from Madison Street to SR 599 is expected to experience a 6% increase in travel time compared to Alternative 1 (see [Section 3.10 Transportation](#)).

No other impacts aside from those described under Impacts Common to All Alternatives are anticipated under Alternative 3. Regular planning by SFD and SPD are anticipated to address incremental increased demand for fire, emergency medical, and police services. Any potential future facility, staffing, or equipment needs as a result of increased demand for services, traffic volumes, or changes to the transportation network could be included as part of the City’s annual Budget and Capital Improvement Program process.

Schools & Libraries

The increase in caretakers' quarters/makers' studios of 610 dwellings would primarily be in the Ballard and SODO/Stadium subareas, generating most of the potential 89 students. This could increase demand for schools, particularly BF Day, Adams, Beacon Hill, and Wing Luke.

In addition, about 1,078 dwellings are planned in the Georgetown/South Park Subarea generating about 2,210 people and 157 students. This could affect demand at the South Park Library, and particularly schools like Wing Luke (capacity 351) and Concord (capacity 333) schools. This number of students would be about 45% of an elementary school capacity. However, the plan is a 20-year plan and it is likely that not all housing would be developed at one time, and students would not start all at once and would be spread across grades.

Impacts of Alternative 4

Alternative 4 would result in 35,700 more jobs ~~more~~ than Alternative 1 No Action. As with Alternative 1 No Action, most of the new employment growth would be concentrated in the Greater Duwamish MIC.

Alternative 4 also includes the greatest allowance for housing in the Urban Industrial Zone and new housing in focused areas removed from the MIC and placed in a mixed-use zone in Georgetown and South Park. Most of the additional 2,195 industry-supportive housing in industrial zones (2,120 more than Alternative 1 No Action) would be in the Ballard and SODO/Stadium subareas. New housing in the focused areas in Georgetown and South Park that are removed from industrial zoning is the same as under Alternative 3 (1,048 housing units over the study time horizon).

Fire & Emergency Medical Services

Under Alternative 4, the potential for more efficient service delivery and greater ability of SFD and SPD to meet LOS objectives is similar to that described under Alternative 3. Alternative 4 applies a mix of Industry & Innovation, Urban Industrial, and Mixed-Use Commercial Zone concepts in 13% of the current MIC areas, including an estimated ½ mile from future light rail stations. The same areas of land would be removed from the MICs in the Georgetown and South Park neighborhoods and placed in a mixed-use zone under Alternative 4 as under Alternative 3. However, Alternative 4 includes the most industry-supportive housing in the Urban Industrial Zone of the Action Alternatives; most of this housing would be in the Ballard and SODO/Stadium subareas. New buildings would be required to meet the Seattle Fire Code, including standards for live/work units (like makers' studios and caretakers' units) to ensure there are exits from sleeping rooms and fire-rated walls and doors between different uses.

Traffic volumes under Alternative 4 would be slightly higher than Alternative 3. Associated impacts on travel times and corridor LOS are similar to those described above for Alternative 3 (see [Section 3.10 Transportation](#)).

No other impacts aside from those described under Impacts Common to All Alternatives are anticipated under Alternative 4. Regular planning by SFD and SPD are anticipated to address incremental increased demand for fire, emergency medical, and police services. Any potential future facility, staffing, or equipment needs as a result of increased demand for services, traffic volumes, or changes to the transportation network could be included as part of the City's annual Budget and Capital Improvement Program process.

Schools & Libraries

Impacts under Alternative 4 are similar to Alternative 3 except that there would be more caretakers' quarters/makers' studios at up to 2,195, with most in the SODO/Stadium and Ballard subareas. Like Alternative 3, there would be 1,078 dwellings in the Georgetown/South Park Subarea.

All together there would be an increase in population of 6,710 including 476 students. Local libraries in Ballard and South Park would likely see an increase in demand for services. Schools serving Ballard, SODO/Stadium, and Georgetown/South Park could have increased demand at 33-45% of a typical elementary school capacity (~350).

Impacts of the Preferred Alternative

The Preferred Alternative would result in 12,045 more jobs than Alternative 1 No Action, slightly more than under Alternative 2 but less than alternatives 3 and 4. Most of the new employment growth would be concentrated in the Greater Duwamish MIC within the SODO/Stadium and Georgetown/South Park subareas. Slightly more jobs would be located in the Ballard, Interbay Dravus, and Interbay Smith Cove subareas relative to other alternatives.

Total residential growth under the Preferred Alternatives is similar to but lower than Alternative 4. Most of the additional 1,475 industry-supportive housing in industrial zones (1,400 more than Alternative 1 No Action) would be in the Ballard and SODO/Stadium subareas. New housing in the focused areas in Georgetown and South Park that are removed from industrial zoning is the same as under alternatives 3 and 4. Two additional areas outside the MICs in west Ballard and Judkins Park would also be converted to mixed use zoning allowing housing under the Preferred Alternative. This would result in a total of 1,534 housing units over the study time horizon on land that is removed from industrial zoning under the Preferred Alternative (versus 1,078 under alternatives 3 and 4).

The collective change in population—including within industrial areas, areas removed from the MIC, and rezoned areas converted to mixed use zoning outside of the MIC—would equal 3,009 households, about 8% less than Alternative 4. Combined employment and residential growth under the Preferred Alternative is lower than both alternatives 3 and 4.

Fire & Emergency Medical Services & Police Services

Under the Preferred Alternative, the potential for more efficient service delivery and greater ability of SFD and SPD to meet LOS objectives is similar to that described under alternatives 3 and 4.

The Preferred Alternative applies a mix of Industry & Innovation, Urban Industrial, and Mixed-Use Commercial Zone concepts in 14% of the current MIC areas, covering more land area than any of the other Action Alternatives and including an estimated ½ mile from future light rail stations. Similar to the other Action Alternatives, these zones introduce nodes of high-density employment and multi-modal access near transit and create thoughtful integration between the edges of Seattle’s MICs and adjacent neighborhoods.

The same areas of land would be removed from the MICs in the Georgetown and South Park neighborhoods and placed in a mixed-use zone under the Preferred Alternative as under alternatives 3 and 4. Two new areas outside the MICs in west Ballard and Judkins Park would also be converted to mixed use zoning allowing housing under the Preferred Alternative (in addition to the proposed mixed use areas in the Georgetown and South Park neighborhoods under alternatives 3 and 4). Compact growth in these areas—both inside and outside the MICs—in proximity to SFD and SPD services could result in more efficient service delivery and greater ability to meet LOS objectives under the Preferred Alternative than under the other alternatives.

Traffic volumes under the Preferred Alternative would be slightly higher than Alternative 2 but lower than alternatives 3 and 4—the PM peak vehicle miles traveled within the Greater Duwamish MIC would increase over Alternative 1 by roughly 1.0% and the PM peak VMT within the BINMIC would increase by roughly 2.7%. Travel times in the study area are expected to remain relatively consistent on most corridors between 2019 and 2044, with travel time increases of up to 1 minute over Alternative 1. Two corridors—northbound 15th Avenue W from Magnolia Bridge to NW Leary Way and eastbound W Dravus Street between 15th Avenue W and 20th Avenue W—would fall from LOS E under Alternative 1 No Action to LOS F under the Preferred Alternative (see **Section 3.10 Transportation**).

No other impacts aside from those described under Impacts Common to All Alternatives are anticipated under the Preferred Alternative. Regular planning by SFD and SPD are anticipated to address incremental increased demand for fire, emergency medical, and police services. Any potential future facility, staffing, or equipment needs as a result of increased demand for services, traffic volumes, or changes to the transportation network could be included as part of the City’s annual Budget and Capital Improvement Program process.

Schools & Libraries

The Preferred Alternative has slightly fewer caretakers’ quarters/makers’ studios than Alternative 4 at up to 1,475, with most in the Ballard and SODO/Stadium subareas. Less than alternatives 3 and 4, there would be 686 dwellings in the Georgetown/South Park Subarea, but the Preferred Alternative adds mixed use dwellings in Judkins Park (284) and West Ballard (564).

With the industry supportive housing and mixed use housing, there would be an increase in population of 6,168 including up to 437 students, more than alternatives 1, 2, or 3 but less than Alternative 4. Schools serving Ballard, SODO/Stadium, and Georgetown/South Park could have increased demand at 20-65% of a typical elementary school capacity (~350). Local libraries in Ballard and South Park would likely see an increase in demand for services.

3.13.3 Mitigation Measures

Incorporated Plan Features

Fire, Emergency Medical, & Police Services

- Compact growth in proximity to SFD and SPD services could result in more efficient service delivery and ability to meet LOS objectives.

Schools & Libraries

- None.

Regulations & Commitments

Fire & Emergency Medical Services

- Rules governing fire prevention in the State of Washington and the City of Seattle are addressed in the International Fire Code (IFC) with state adopted amendments in [WAC Chapter 51-54A](#). In addition to the requirements detailed in the 2018 IFC, the City of Seattle has also adopted its own local amendments that can be found in Title 22 Subtitle VI Fire Code of the Seattle Municipal Code. All new development in the primary and secondary study areas is required to meet City of Seattle development regulations as well as the International Building Code and IFC. The Fire Code provides minimum fire and life safety standards for buildings, access roads processes, and fire protection equipment installations. Adequate fire flow to serve potential development is required under the Fire Code. Potential development would also be required to comply with code requirements for emergency access to structures.
- The Seattle Fire Department enforces and is subject to various City of Seattle regulations such as Title 22 Subtitle VI Fire Code, Title 10 Healthy and Safety, Title 11 Vehicles and Traffic, and Title 23 Land Use Code.
- The City sends plans for building construction from the Seattle Department of Construction & Inspections to the Fire Department for review of fire apparatus access and other fire code related issues.

- The City applies standards for live/work units like artists' lofts and caretakers' units to ensure there are exits from sleeping rooms and fire-rated walls and doors between different uses.
- The City of Seattle maintains a Comprehensive Emergency Management Plan (CEMP) which unifies a series of all-hazards documentation to holistically describe the doctrines, strategies, and responsibilities through which the City of Seattle's emergency management system is organized and managed. The City's Disaster Recovery Framework further addresses how the City would partner with the community and coordinate with County, State, and Federal agencies in recovering from the effects of disaster (using a massive earthquake as the premise).

Police

- The Seattle Police Department enforces and is subject to various City of Seattle regulations such as Title 10 Healthy and Safety and Title 11 Vehicles and Traffic.
- Ongoing Seattle Police Department processes to evaluate where to best focus its resources are anticipated to help address future changes in demand for police services in the study area.
- Ongoing City of Seattle capital improvement planning and budgeting efforts are anticipated to address police facility needs, including potential needs for future improvements.

Schools & Libraries

- Ongoing Seattle School District capital facilities management planning is anticipated to be sufficient to address increases in student population. The Seattle School District prepares capital plans and projects are funded by levies.
- SDOT provides a Safe Routes to School program. In addition to education, there are walkway projects to make routes safer.

Other Potential Mitigation Measures

Fire & Emergency Medical Services

- Ongoing City operational and capital facilities planning efforts are anticipated to address incremental increases and other changes in demand for fire services.
- A portion of the tax revenue generated from potential redevelopment in the study area would accrue to the City of Seattle and could be used to help fund fire services.
- The City is considering an option to replace the Magnolia Bridge with a new bridge along Armory Way connecting to Thorndyke Avenue W at W Halladay Street. Replacing the bridge could improve emergency vehicle access to the study area and potentially lower response times.

Police

- A portion of the tax revenue generated from potential redevelopment in the study area would accrue to the City of Seattle and could be used to help fund police services.
- To reduce criminal activity and calls for service, site design principles can be employed such as orienting buildings towards the street, providing public connections between buildings, and providing adequate lighting and visibility.

Schools & Libraries

- The Seattle Public Library has a strategic plan and operations plan that guide the provisions of library services.
- The II and UI zones include potential changes to streetscape standards and could enhance walking routes to schools in areas with added housing.

3.13.4 Significant Unavoidable Adverse Impacts

All studied alternatives would increase the demand for public services with alternatives 2, 3, and 4 and the Preferred Alternative increasing jobs above No Action. The increase in industrial jobs could result in a greater need for fire and emergency services. Increased non-industrial jobs would require apparatus for taller structures in the case of fire or rescue.

All alternatives, particularly alternatives 3 and 4 and the Preferred Alternative would increase housing and increase demand for school and library services.

No significant unavoidable adverse impacts to fire and emergency medical services, police, or schools and libraries are anticipated with application of mitigation measures and regular capital planning.