

PARKS HIGHWAY

Alternative Corridor PEL Study

TECHNICAL ADVISORY COMMITTEE

MEETING #1



March 8, 2022

AGENDA

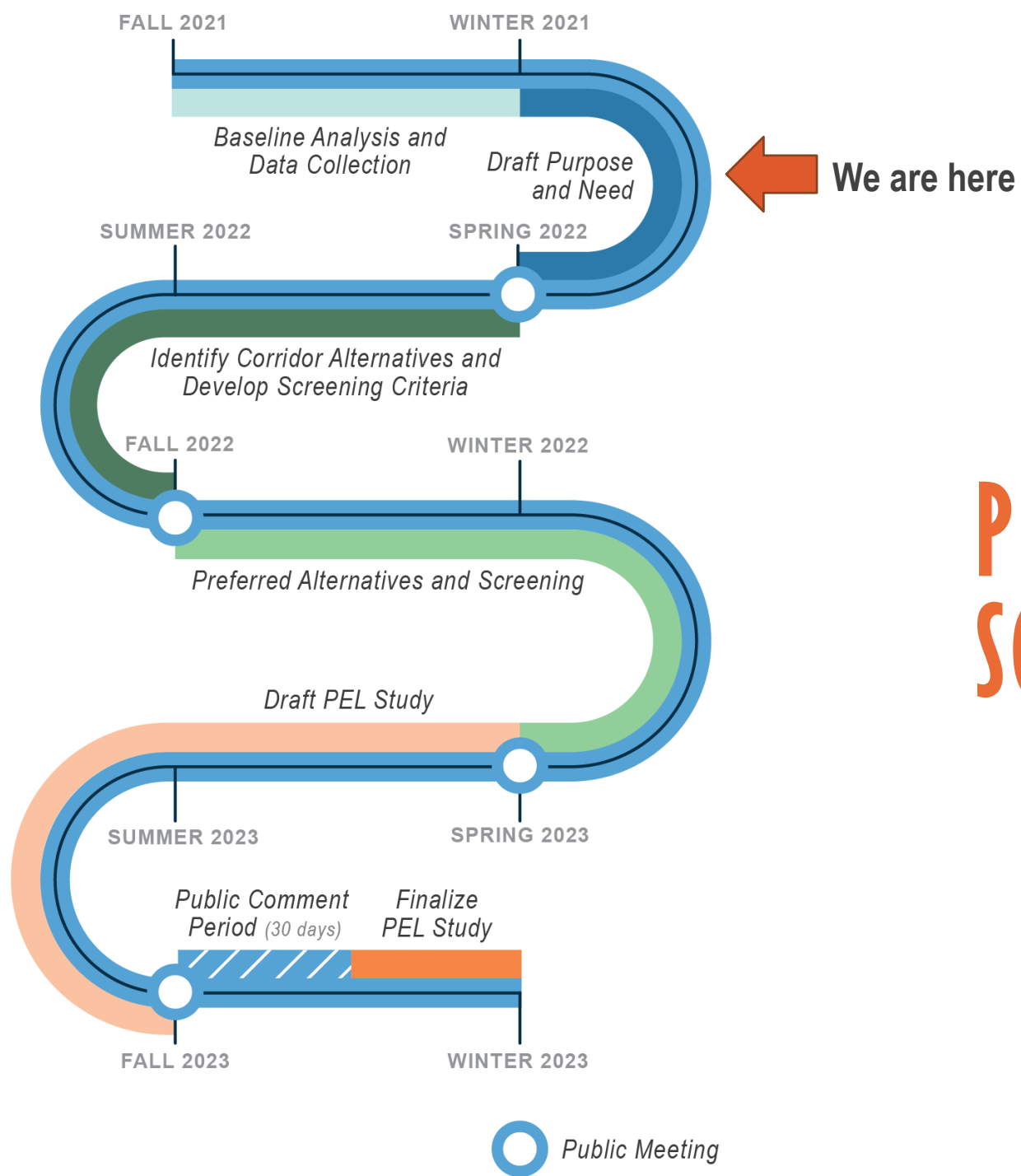
- Welcome and Introductions
- PEL Process
- Project Schedule
- Project Area and Existing Conditions
- Purpose and Need Statement
 - Breakout Rooms
 - Feedback/Group Discussion
- Wrap up and Next Steps

PLANNING AND ENVIRONMENTAL LINKAGES (PEL) PROCESS

Planning and Environmental Linkages is a collaborative and integrated approach to transportation decision-making that:

1. Considers environmental, community, and economic goals early in the transportation planning process
2. Uses the information, analysis, and products during planning to inform the environmental review process

The PEL process can ease the path as transportation programs and projects move from planning to design and implementation



PRELIMINARY SCHEDULE



HOUSTON

WASILLA

PALMER-WASILLA HIGHWAY

PARKS HIGHWAY

BIG LAKE ROAD

P R O J E C T A R E A

KNIK-GOOSE BAY ROAD

PALMER SLOUGH

K N I K A R M

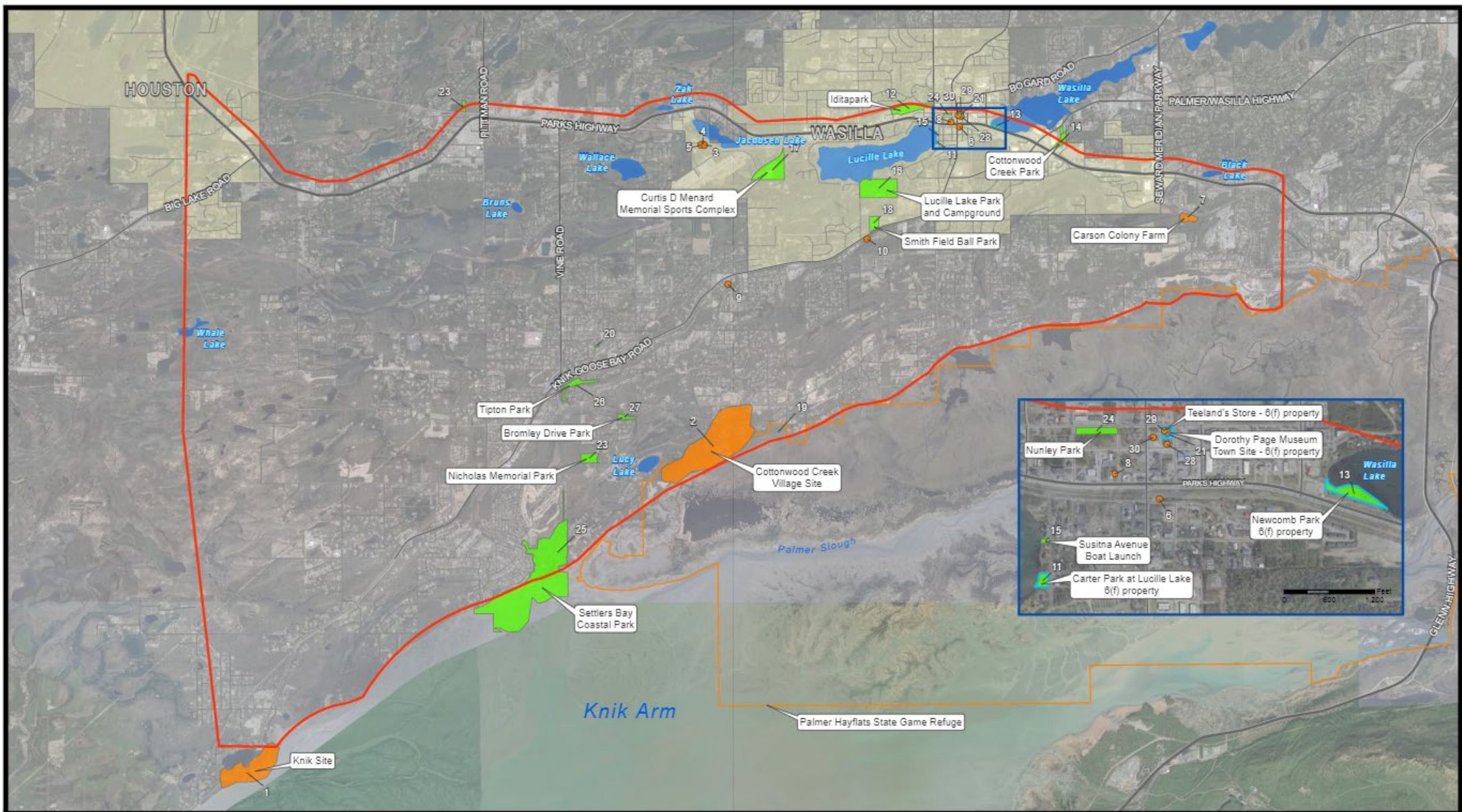
GLENN HIGHWAY





BASELINE DATA / EXISTING CONDITIONS

SECTION 4(F) & 6(F) RESOURCES



| | | |
|--------------------------------|----------------------------|-----------------------|
| Probable Limit of Alternatives | Section 4(f) Property Type | Section 6(f) Property |
| City Boundary (MSB) | Historic Site | |
| | Park | |
| | Refuge | |

* AHRs data are confidential and not for public distribution

SECTION 4(F) AND 6(F) PROPERTIES

SEC 1 - 11, 16 - 19, T 16N, R 2W; SEC 1-2, 13, 24 T 16N, R 3W
 SEC 7, 17 - 20, T 17N, R 1E; SEC 6-24, 26-32 T 17N, R 1W
 SEC 1, 7-36, T 17N, R 2W; SEC 1, 12-13, 23-26, 35-36, T 17N, R 3W

SEWARD MERIDIAN, ALASKA



STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES

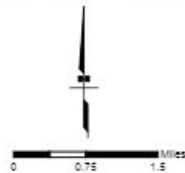
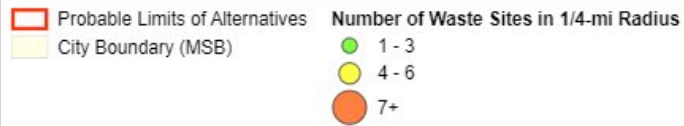
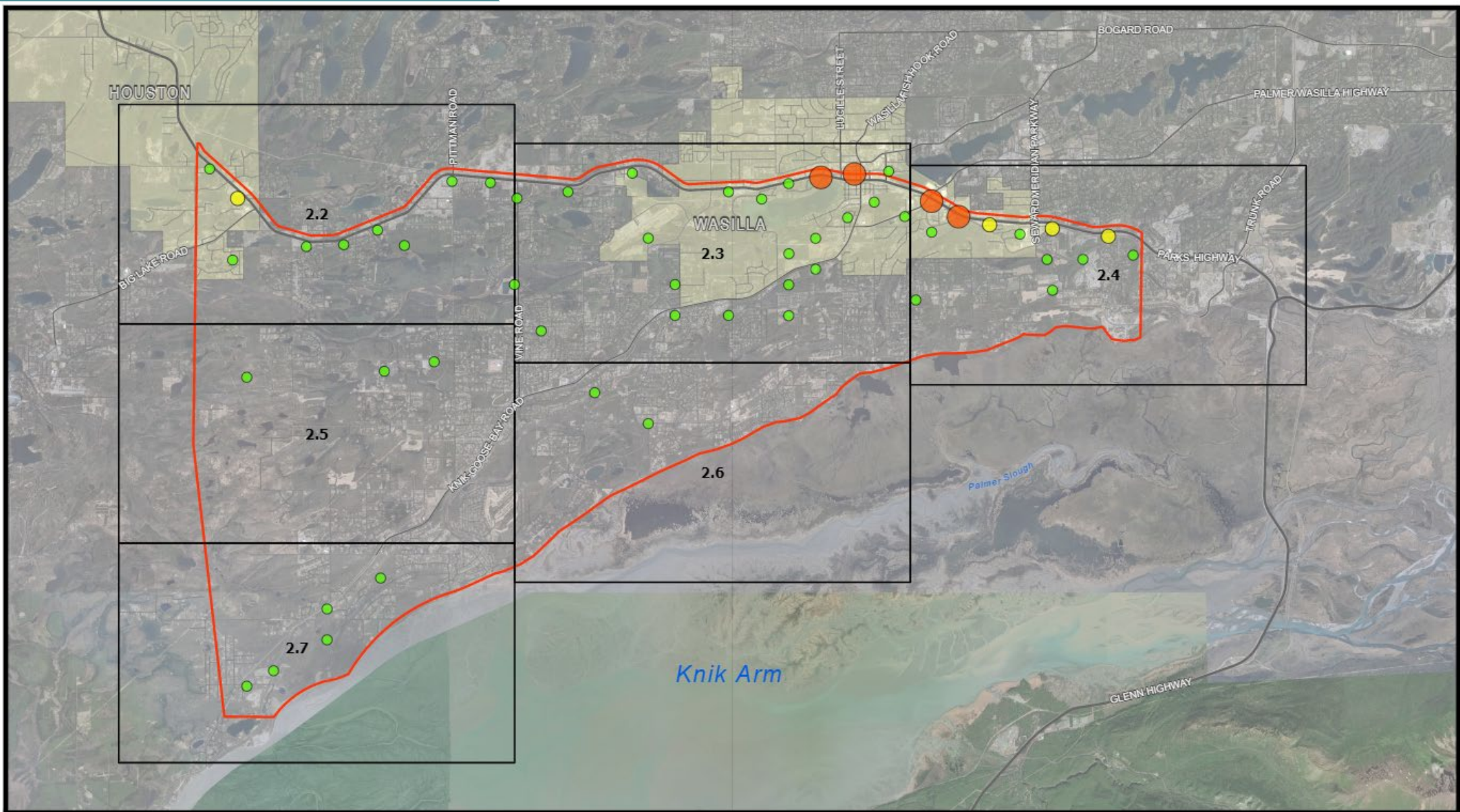
DOT&PF PROJECT NO. CFHWY00421/0A41039
 PARKS HIGHWAY ALTERNATIVE CORRIDOR PEL STUDY

MATANUSKA-SUSITNA BOROUGH, ALASKA

NOVEMBER 09, 2021

FIGURE 4

CONTAMINATED SITES



NUMBER OF REGULATED HAZARDOUS SITES & NON-REGULATED WASTE SITES

SEC 1 - 11, 16 - 19, T 16N, R 2W; SEC 1-2, 13, 24 T 16N, R 3W
 SEC 7, 17 - 20, T 17N, R 1E; SEC 6-24, 26-32 T 17N, R 1W
 SEC 1, 7-36, T 17N, R 2W; SEC 1, 12-13, 23-26, 35-36, T 17N, R 3W

SEWARD MERIDIAN, ALASKA



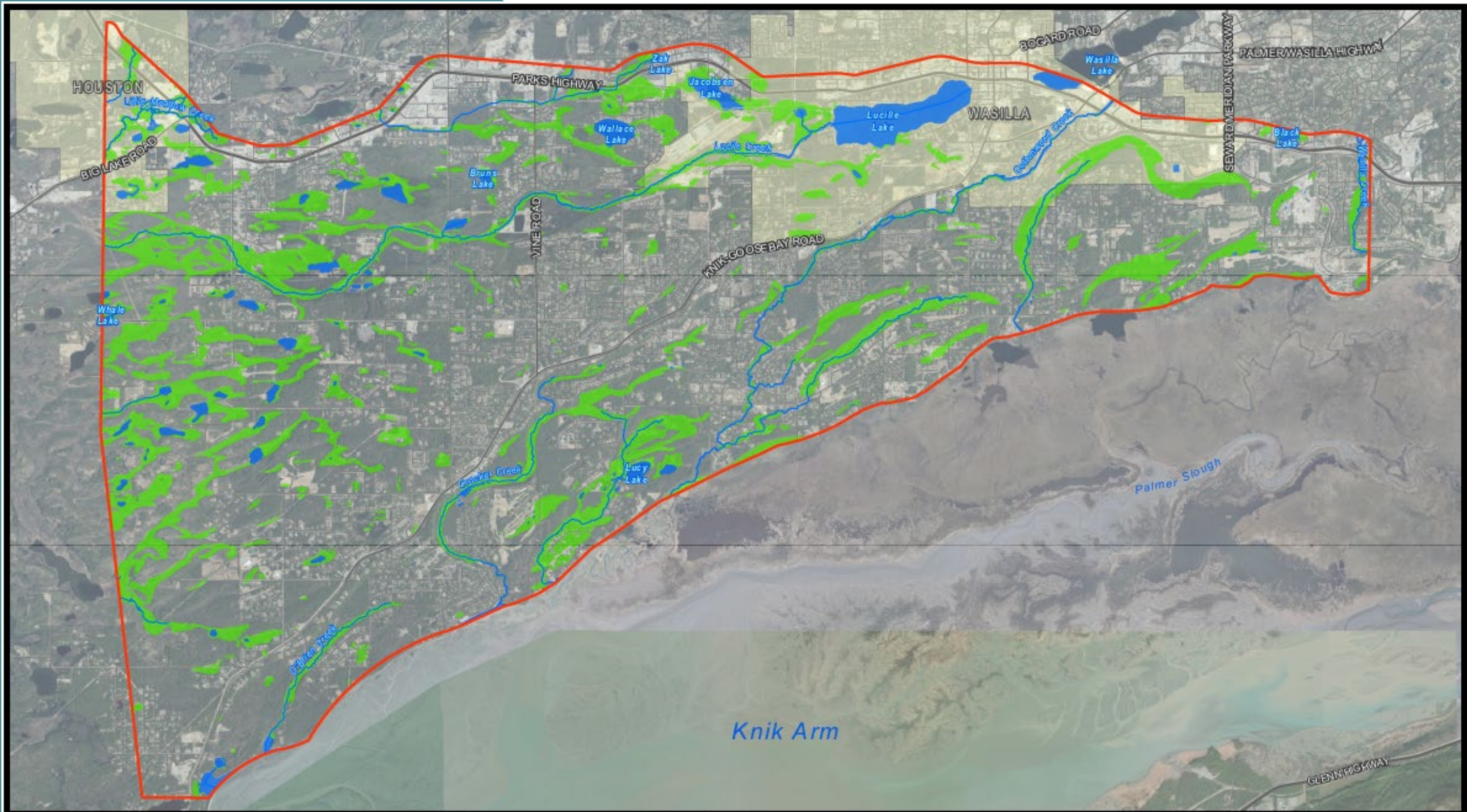
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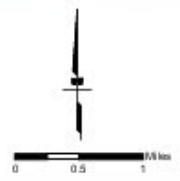
MATANUSKA-SUSITNA BOROUGH, ALASKA

| | |
|-------------------|------------|
| NOVEMBER 08, 2021 | FIGURE 2.1 |
|-------------------|------------|

WETLANDS



- Probable Limits of Alternatives
- Waterbodies and Waterways
- City Boundary (MSB)
- Wetland



WETLAND MAPPING

SEC 1 - 11, 16 - 19, T 16N, R 2W; SEC 1-2, 13, 24 T 16N, R 3W
 SEC 7, 17 - 20, T 17N, R 1E; SEC 6-24, 26-32 T 17N, R 1W
 SEC 1, 7-36, T 17N, R 2W; SEC 1, 12-13, 23-26, 35-36, T 17N, R 3W

SEWARD MERIDIAN, ALASKA



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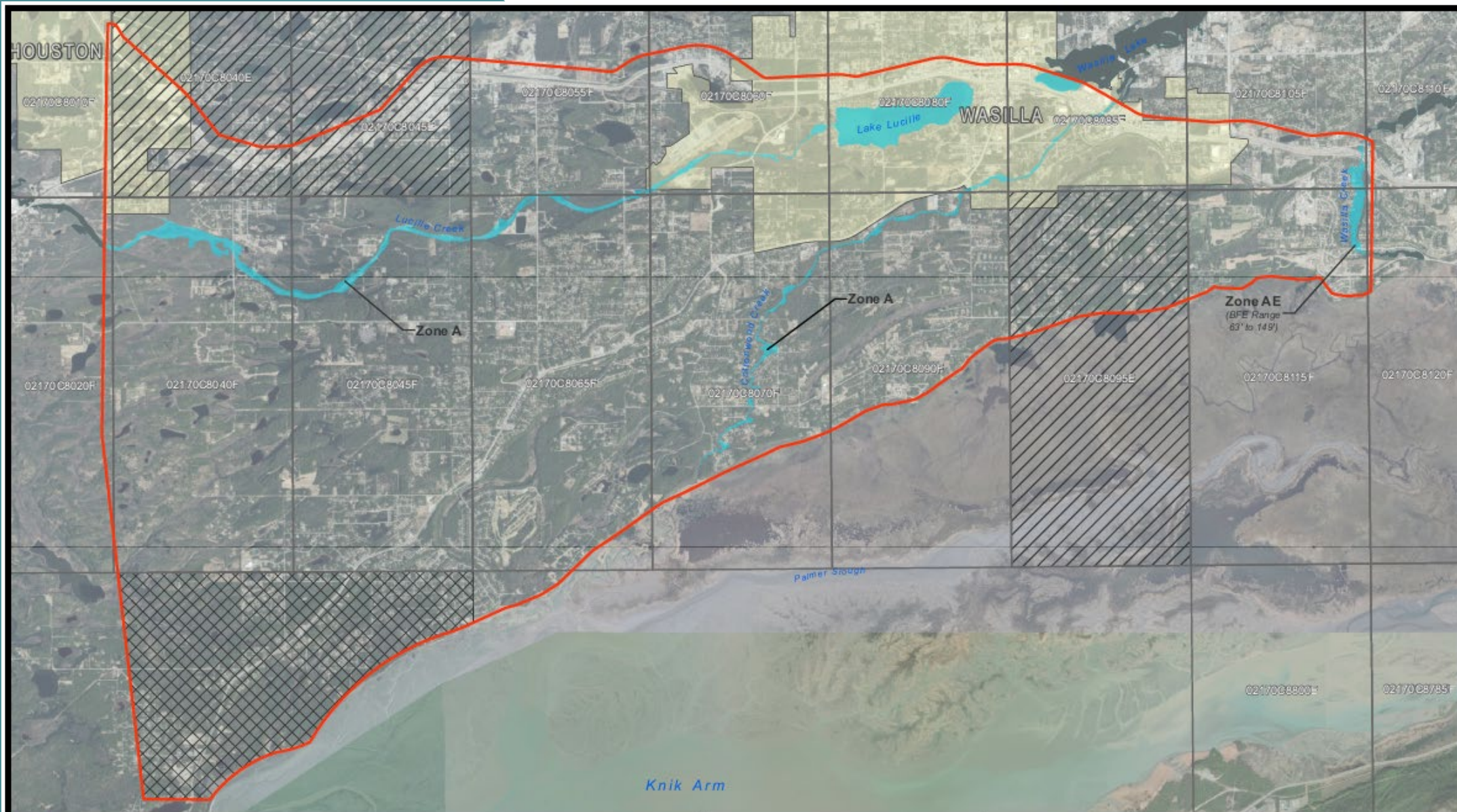
MATANUSKA-SUSITNA BOROUGH, ALASKA

FEBRUARY 02, 2022

FIGURE 2

Note: Wetland mapping is a compilation of U.S. Fish and Wildlife Service National Wetland Inventory and Cook Inlet wetland mapping. Boundaries have been modified based on aerial interpretation (i.e., roads, buildings). Boundaries shown are for planning purposes. Mapped wetlands, waterbodies, and waterways may be jurisdictional under the Clean Water Act per 33 CFR 328.3

FLOODPLAINS



| | |
|---------------------------------|--|
| Probable Limits of Alternatives | Flood Hazard Zones (FEMA) |
| City Boundary (MSB) | Zone A (without Base Flood Elevation) |
| | Zone AE (with BFE or Depth) |
| | Flood Zone Outside Project Area |
| | FIRM Panel Not Printed (No Special Flood Hazard Areas) |
| | Area Outside Flood Insurance Study |
| | FIRM Panel |

FLOODPLAIN MAP

SEWARD MERIDIAN, ALASKA

SEC 1 - 11, 16 - 19, T 16N, R 2W; SEC 1-2, 13, 24 T 16N, R 3W
 SEC 7, 17 - 20, T 17N, R 1E; SEC 6-24, 26-32 T 17N, R 1W
 SEC 1, 7-36, T 17N, R 2W; SEC 1, 12-13, 23-26, 35-36, T 17N, R 3W



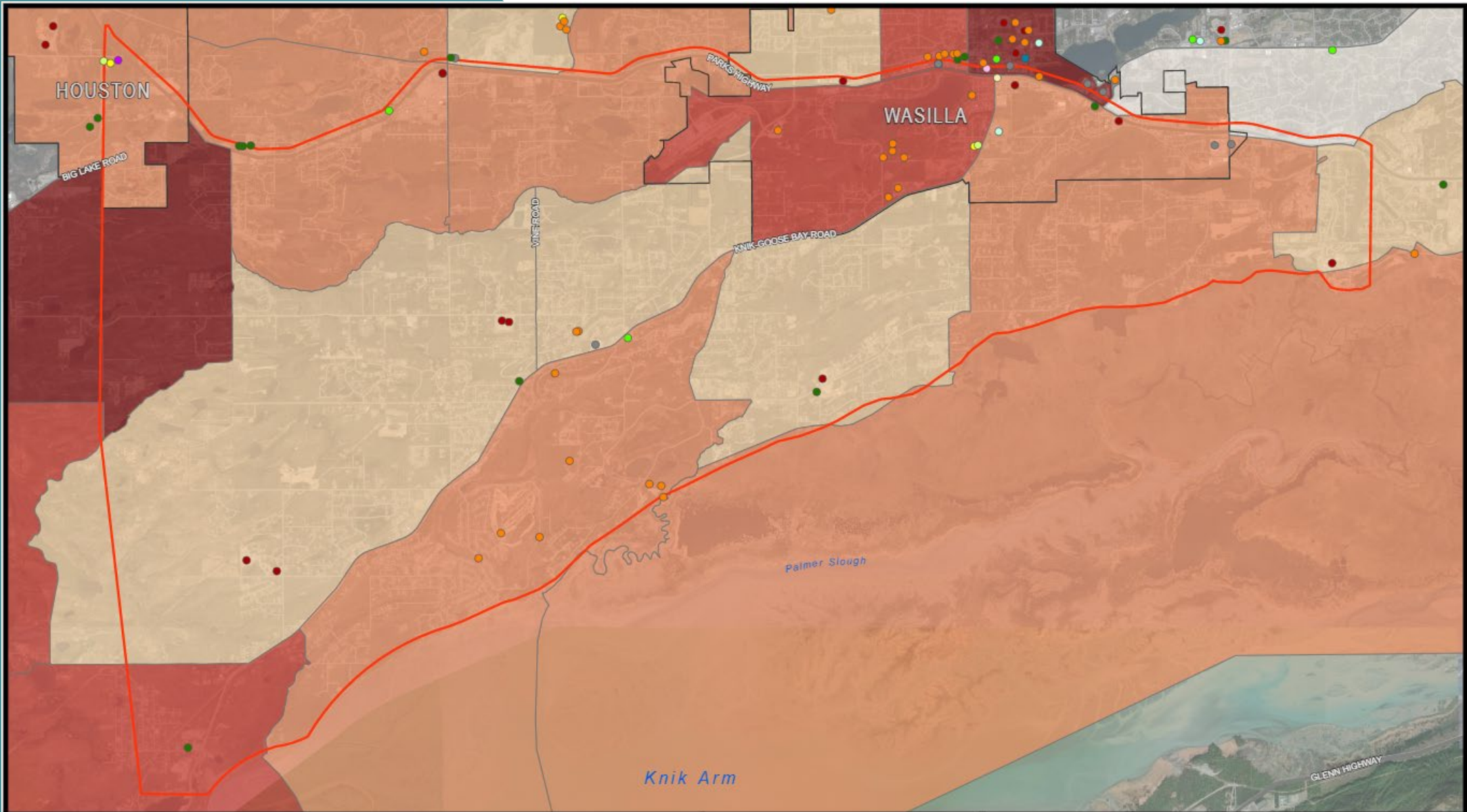
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MATANUSKA-SUSITNA BOROUGH, ALASKA

| | |
|-------------------|----------|
| FEBRUARY 11, 2022 | FIGURE 2 |
|-------------------|----------|

DEMOGRAPHICS (EJ POPULATIONS)

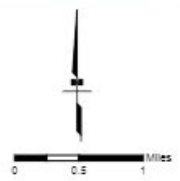


- Probable Limits of Alternatives
- City Boundary (MSB)
- US Census Block Group

- Grocery Store
- City Hall
- Community Center
- Library
- Medical
- Post Office
- Public Safety
- Senior Comm Center
- Senior Housing
- Train Depot
- Recreational
- School

- Average Pop. % Disabled, Elderly, Low Income, and POC***
- 13 - 15%
 - 15 - 17%
 - 17 - 21%
 - 21 - 24%
 - 24 - 27%

* Population represented by US Census Block Groups



**SOCIAL GROUPS:
DEMOGRAPHIC MAP**

SEC 1 - 11, 16 - 19, T 16N, R 2W; SEC 1-2, 13, 24 T 16N, R 3W
 SEC 7, 17 - 20, T 17N, R 1E; SEC 6-24, 26-32 T 17N, R 1W
 SEC 1, 7-36, T 17N, R 2W; SEC 1, 12-13, 23-26, 35-36, T 17N, R 3W

SEWARD MERIDIAN, ALASKA



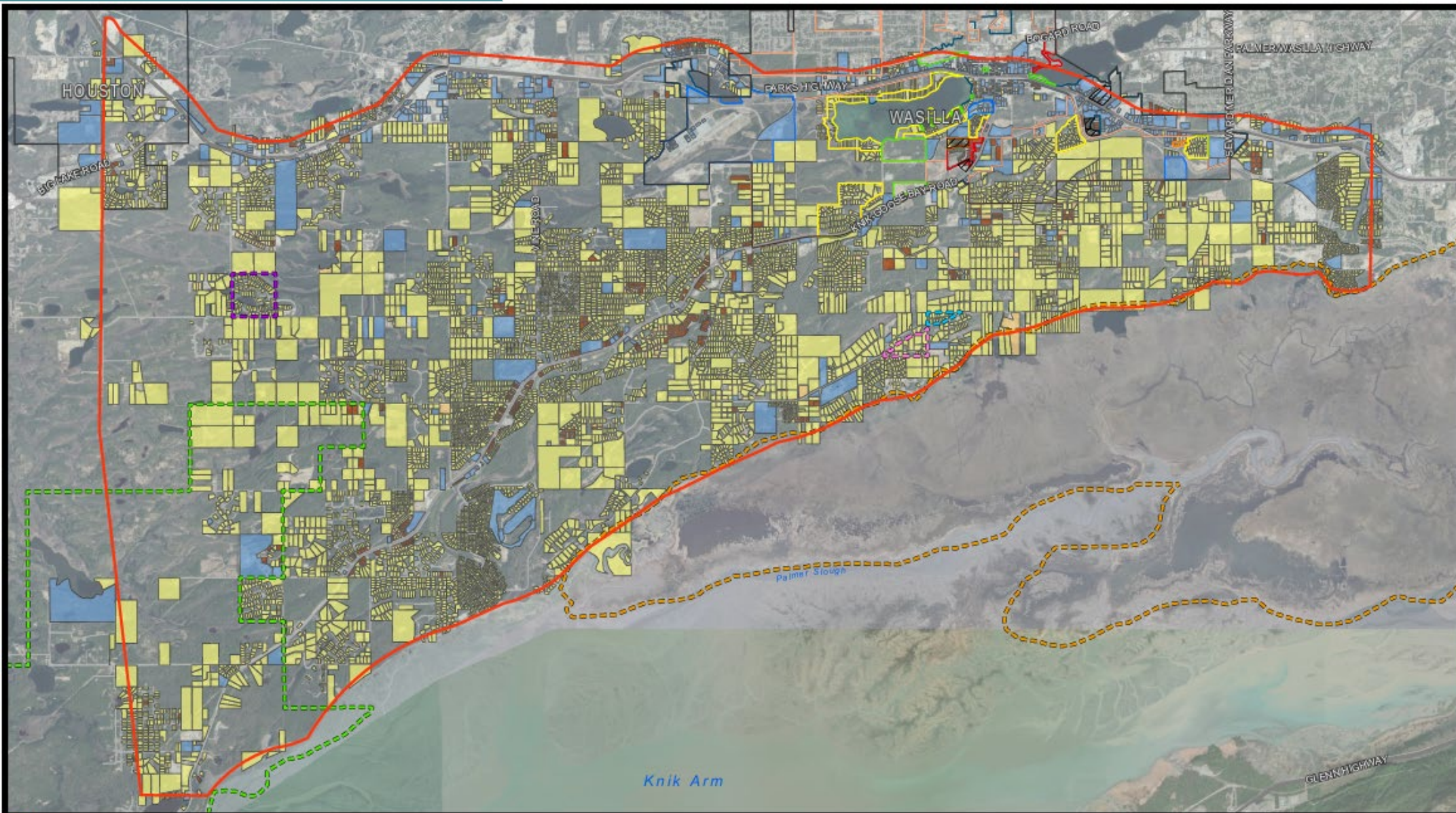
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MATANUSKA-SUSITNA BOROUGH, ALASKA

NOVEMBER 08, 2021 FIGURE 2

ZONING AND LAND USE



| | | | |
|--|---|---|---|
| <ul style="list-style-type: none"> Probable Limits of Alternatives City Boundary (MSB) | City of Wasilla Zoning <ul style="list-style-type: none"> Planned Unit Development I_Industrial P_Public R1_Single Family Residential R2_Residential RM_Multi-family Residential RR_Rural Residential C_Commercial | Land Use (MSB) <ul style="list-style-type: none"> Commercial Condominium Duplex Low-income Housing Tax Credit Multi-family Residential | Special Use Districts (MSB)* <ul style="list-style-type: none"> Dawn Lake Estates No 1 Fairview Estates Addition #1 Block 2 Lot 1 thru 22 Hay Flats Recreation Area Jack Fish Landing Subdivision Knik Sled Dog and Recreation <p><small>*Special use districts subject to regulations in Matanuska-Susitna Borough Code Title 17</small></p> |
|--|---|---|---|



**SOCIAL GROUPS:
ZONING AND LAND USE MAP**

SEC 1 - 11, 16 - 19, T 16N, R 2W; SEC 1-2, 13, 24 T 16N, R 3W
SEC 7, 17 - 20, T 17N, R 1E; SEC 6-24, 26-32 T 17N, R 1W
SEC 1, 7-36, T 17N, R 2W; SEC 1, 12-13, 23-26, 35-36, T 17N, R 3W

SEWARD MERIDIAN, ALASKA



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

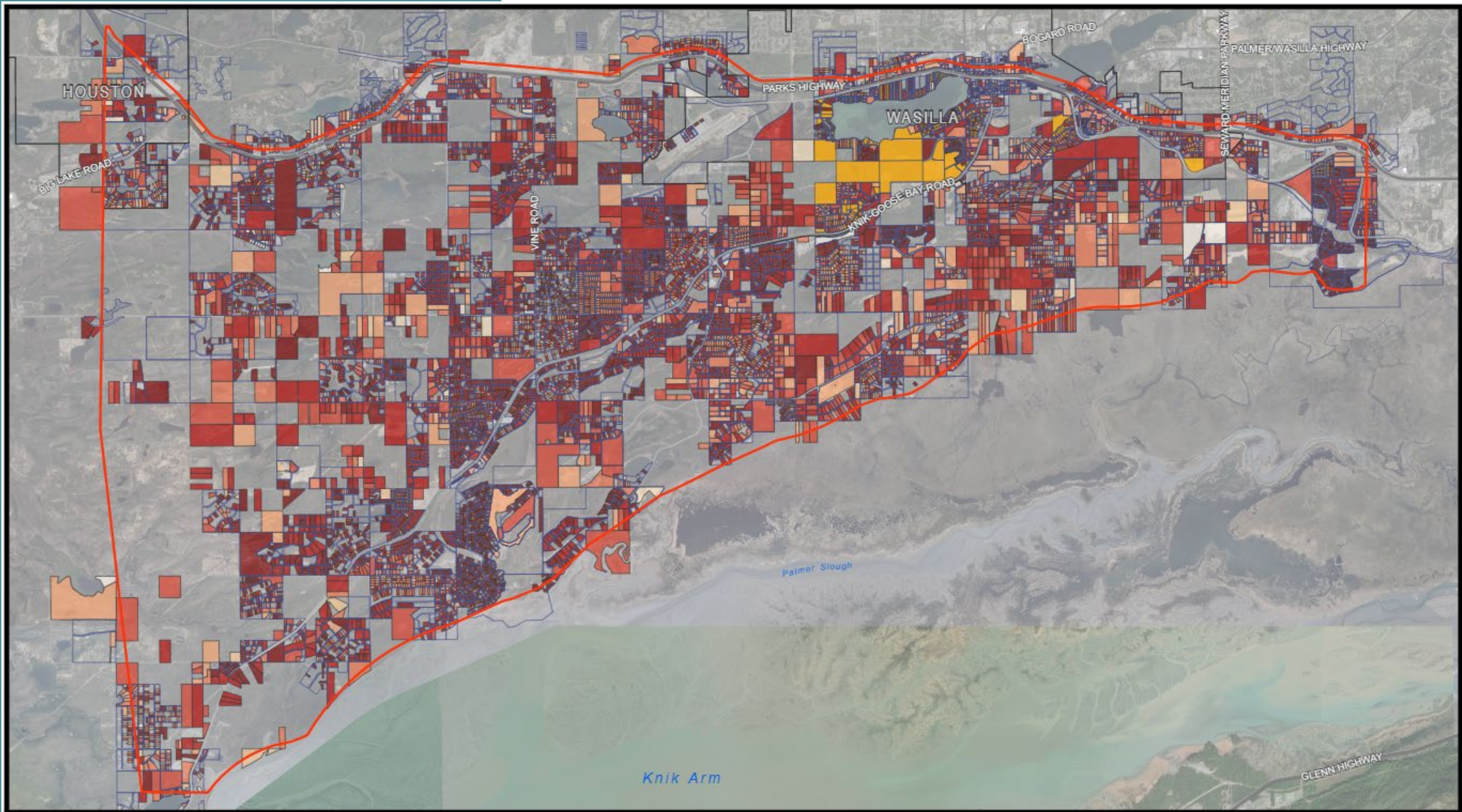
DOT&PF PROJECT NO. CFHWY00421/0A41039
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MATANUSKA-SUSITNA BOROUGH, ALASKA

FEBRUARY 17, 2022

FIGURE 4

DEVELOPMENT OVER TIME

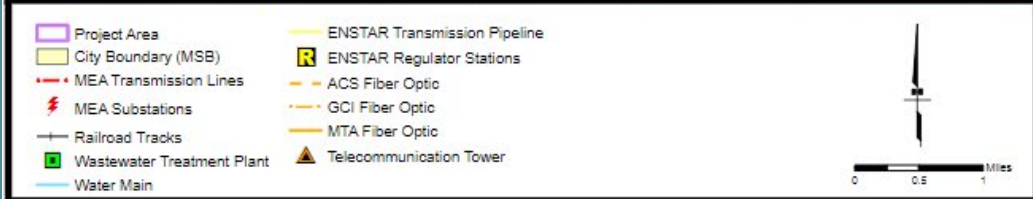
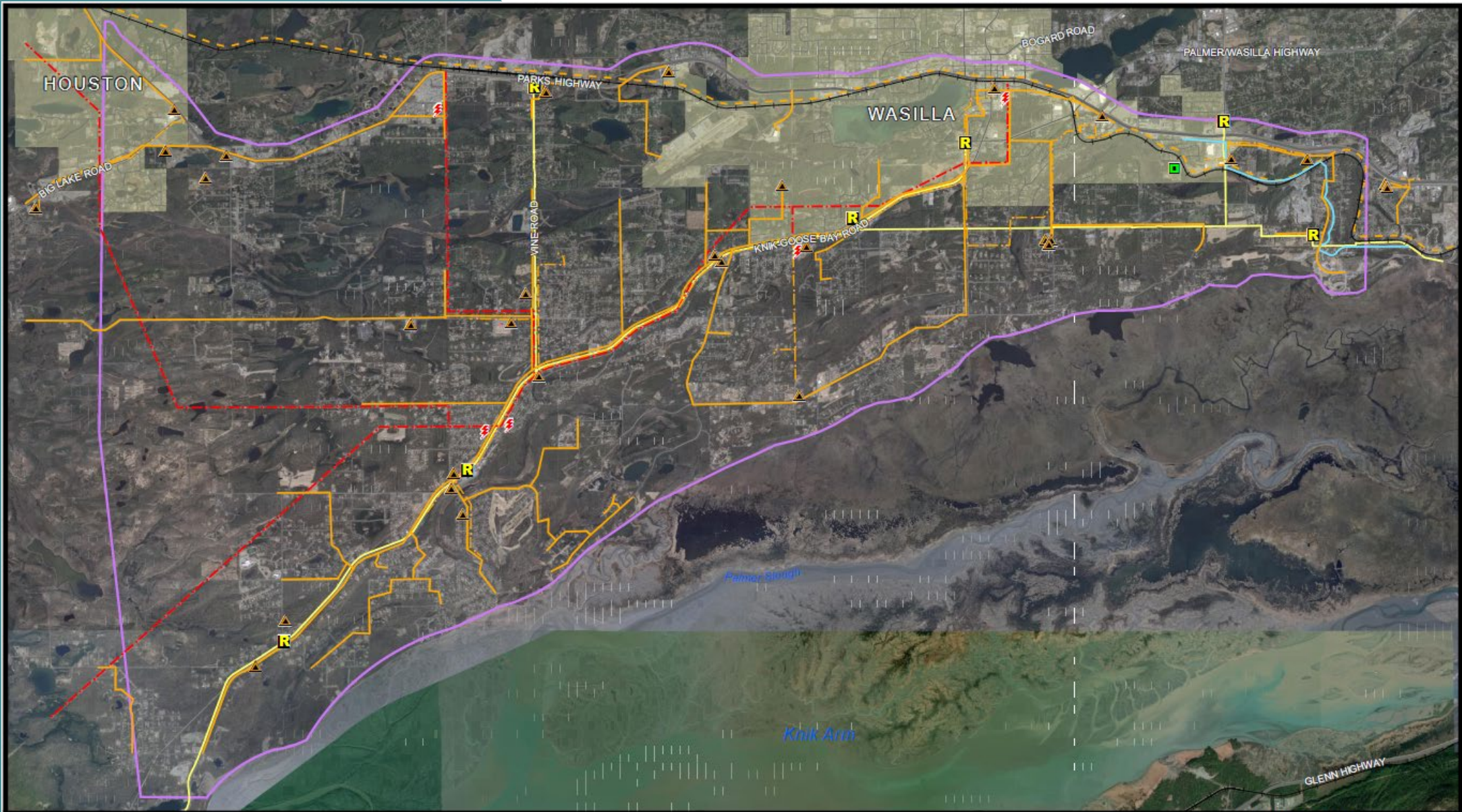


| | | | | | | | | | | | | |
|--|---|----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---|--|--|
| <p>City Boundary (MSB)</p> <p>Subdivision (MSB)</p> <p>Building-less Parcels within Residential Zone</p> | <p>Average Building Year</p> <table border="0"> <tr> <td>Pre-1950</td> <td>1981 - 1991</td> </tr> <tr> <td>1951 - 1961</td> <td>1991 - 2001</td> </tr> <tr> <td>1961 - 1971</td> <td>2001 - 2011</td> </tr> <tr> <td>1971 - 1981</td> <td>2011 - 2021</td> </tr> </table> <p>0 0.5 1 Miles</p> | Pre-1950 | 1981 - 1991 | 1951 - 1961 | 1991 - 2001 | 1961 - 1971 | 2001 - 2011 | 1971 - 1981 | 2011 - 2021 | <p>SOCIAL GROUPS: DEVELOPMENT OVER TIME MAP</p> <p>SEC 1 - 11, 16 - 19, T 16N, R 2W; SEC 1-2, 13, 24 T 16N, R 3W SEC 7, 17 - 20, T 17N, R 1E; SEC 6-24, 26-32 T 17N, R 1W SEC 1, 7-36, T 17N, R 2W; SEC 1, 12-13, 23-26, 35-36, T 17N, R 3W</p> <p>SEWARD MERIDIAN, ALASKA</p> | | <p>STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES</p> <p>DOT&PF PROJECT NO. CFHWY00421/0A41039 PARKS HIGHWAY ALTERNATIVE CORRIDOR PEL STUDY</p> <p>MATANUSKA-SUSITNA BOROUGH, ALASKA</p> <p>NOVEMBER 08, 2021</p> |
| Pre-1950 | 1981 - 1991 | | | | | | | | | | | |
| 1951 - 1961 | 1991 - 2001 | | | | | | | | | | | |
| 1961 - 1971 | 2001 - 2011 | | | | | | | | | | | |
| 1971 - 1981 | 2011 - 2021 | | | | | | | | | | | |

* Population represented by US Census Block Groups

FIGURE 6

MAJOR UTILITIES



MAJOR UTILITIES MAP

SEC 1 - 11, 16 - 19, T 16N, R 2W; SEC 1-2, 13, 24 T 16N, R 3W;
 SEC 7, 17 - 20, T 17N, R 1E; SEC 6-24, 26-32 T 17N, R 1W;
 SEC 1, 7-36, T 17N, R 2W; SEC 1, 12-13, 23-26, 35-36, T 17N, R 3W

SEWARD MERIDIAN, ALASKA



STATE OF ALASKA
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MATANUSKA-SUSITNA BOROUGH, ALASKA

| | |
|-------------------|----------|
| NOVEMBER 08, 2021 | FIGURE 2 |
|-------------------|----------|



ORIGIN/DESTINATION STUDY



104 MILLION
DATA POINTS
WERE COLLECTED

13M DURING AM PEAK
25M DURING PM PEAK



907 THOUSAND
VEHICLE TRIPS
WERE RECORDED

126K DURING AM PEAK
253K DURING PM PEAK



20.3
AVERAGE TRIP TIME
IN MINUTES

TOTAL TRIP DISTANCE
MEASURED IN MILES

17 MILLION

3M
DURING
AM PEAK

5M
DURING
PM PEAK

THAT'S EQUIVALENT TO



DRIVING AROUND
THE EARTH
700 TIMES

TOTAL TRIP TIME IN MINUTES

27 MILLION

4M
DURING
AM PEAK

9M
DURING
PM PEAK

.....
THAT'S EQUIVALENT TO
.....



DRIVING CONTINUOUSLY
FROM 1971 TO NOW

SUMMARY OF PEAK PERIOD TRIP DATA

TOTAL TRAVEL SAMPLE

50% PEAK PERIOD DISTANCE

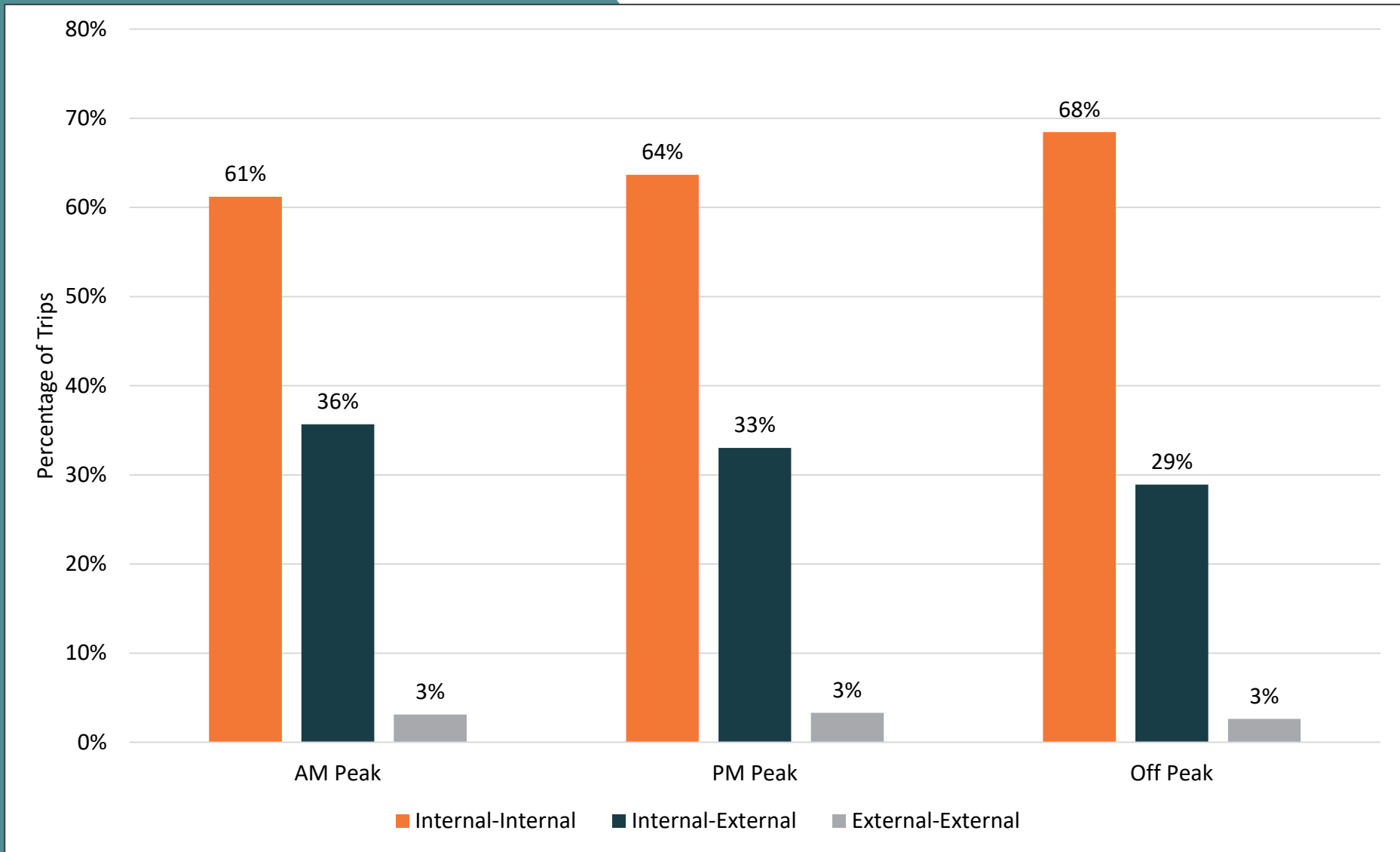
50% PEAK PERIOD TIME

40% PEAK PERIOD TRIP COUNT



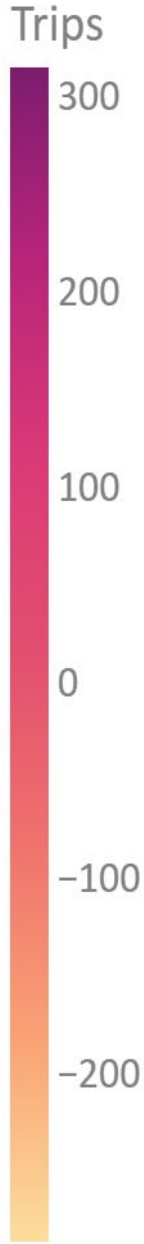
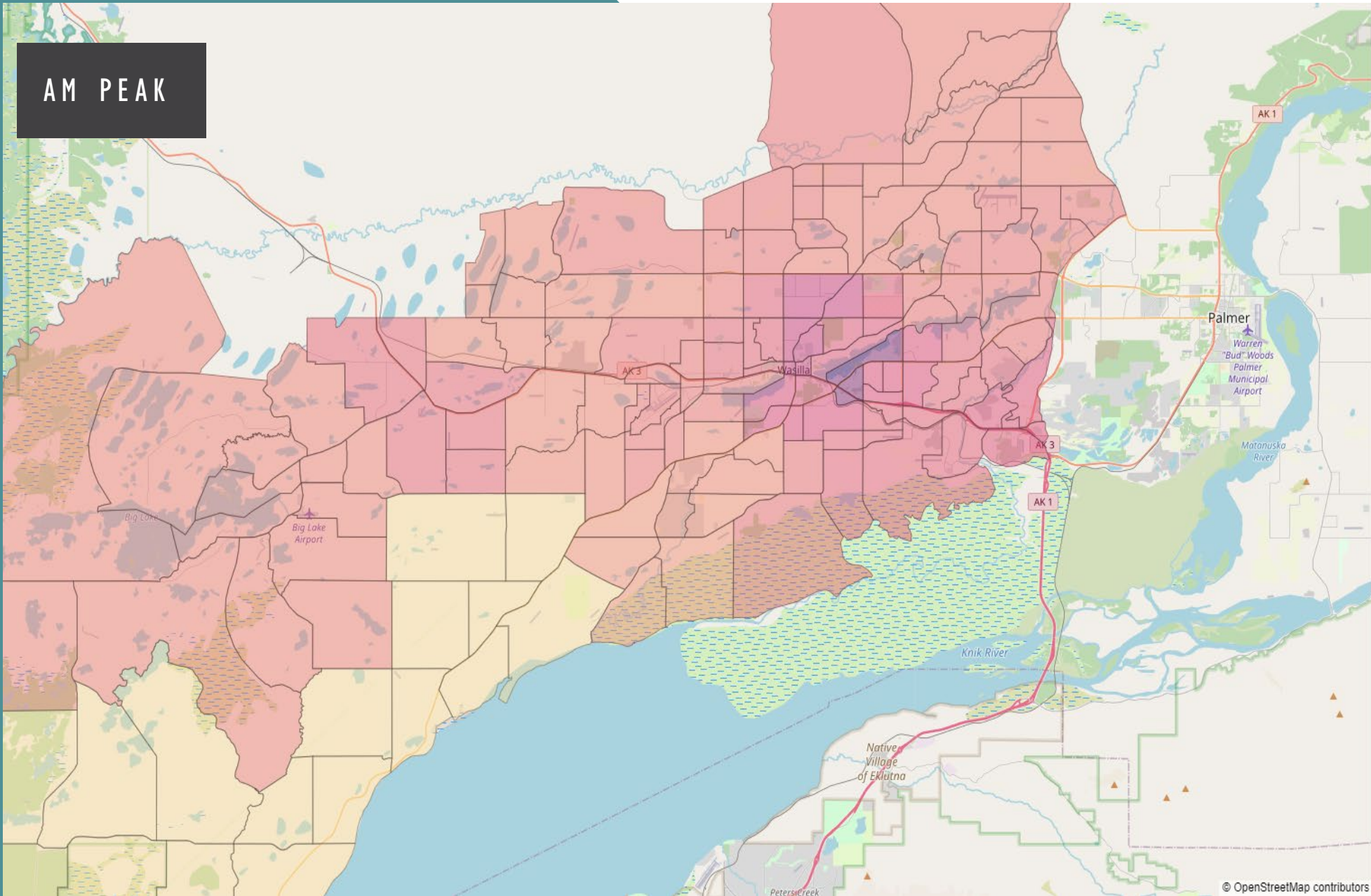
9.4
AVERAGE TRIP LENGTH
IN MILES

ORIGIN-DESTINATION TRIPS



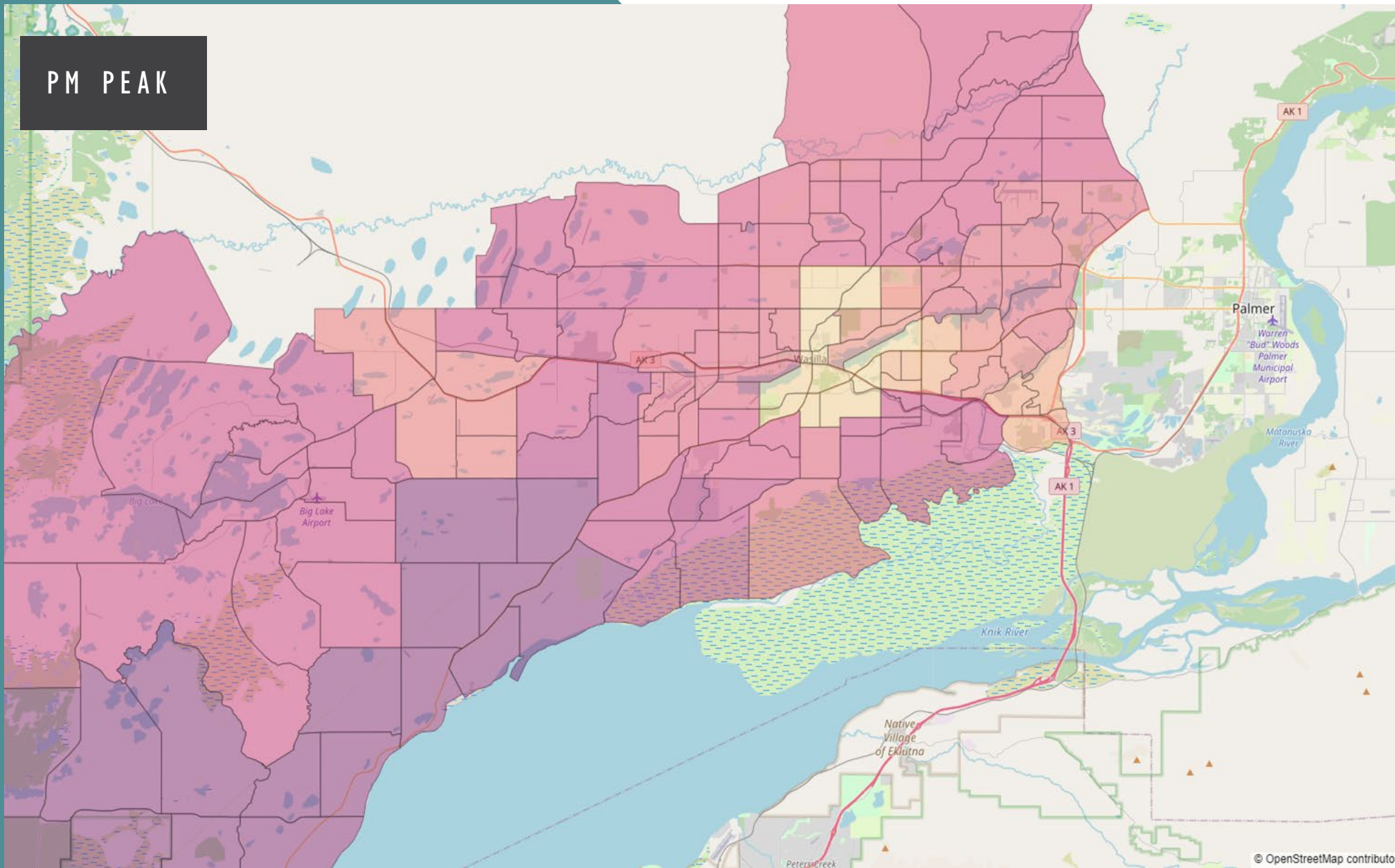
ORIGIN-DESTINATION TRIPS

AM PEAK



ORIGIN-DESTINATION TRIPS

PM PEAK



Trips





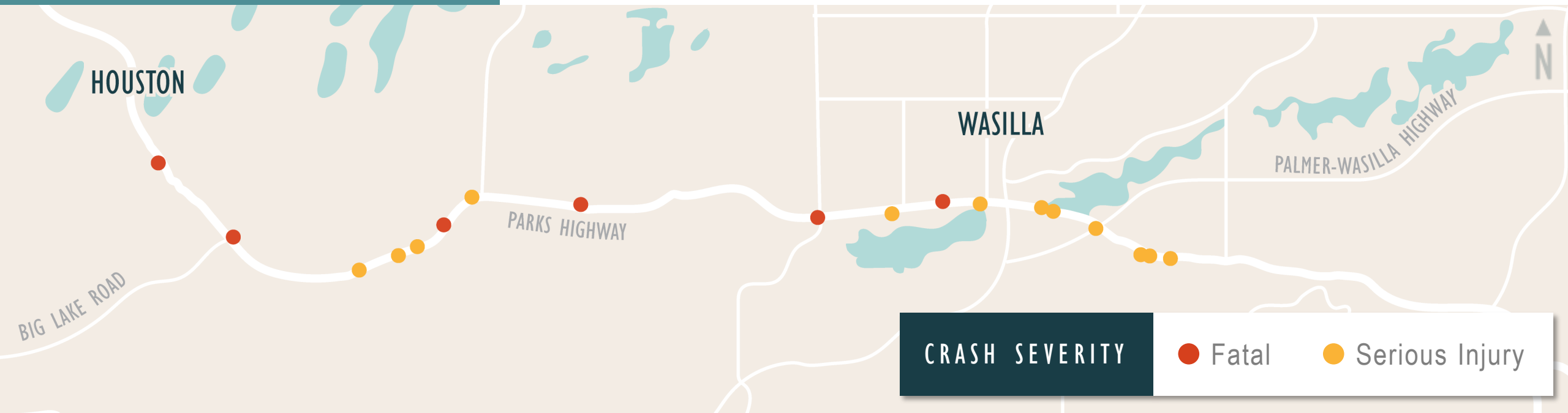
SYSTEM PERFORMANCE

SAFETY

Sources:

Email correspondence
with DOT, FARS 2019

- 6 fatalities, 25 serious injuries (2017-2019)
- Fatality rate
 - 2x controlled access facilities
 - 2x statewide interstate average
 - Statewide, principal arterial rate 2.5x interstate rate
- Serious injury rate 3x controlled access facilities
- High traffic volumes make non-motorized facilities uncomfortable, deter use

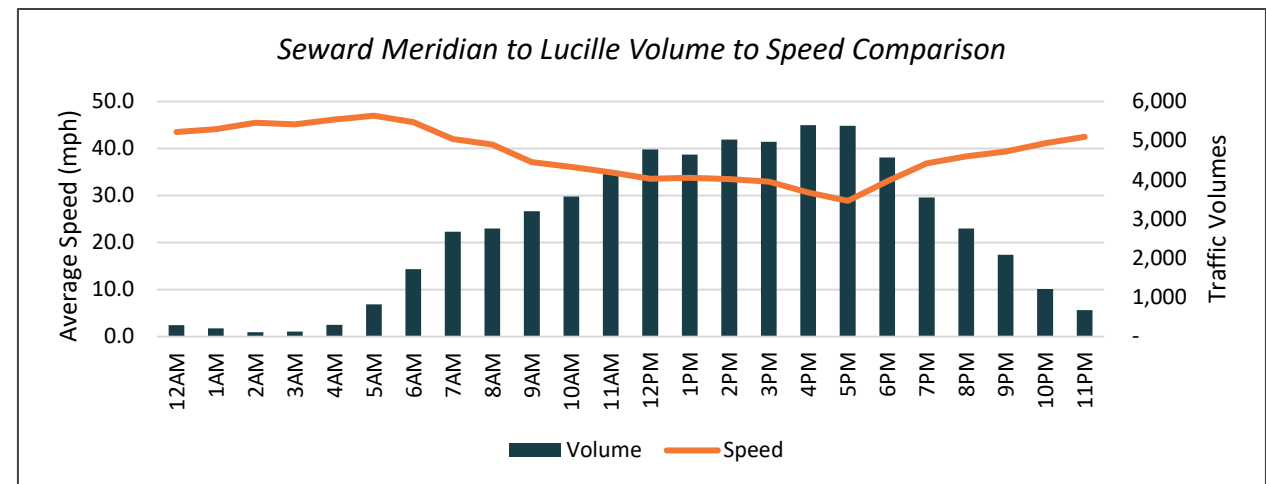
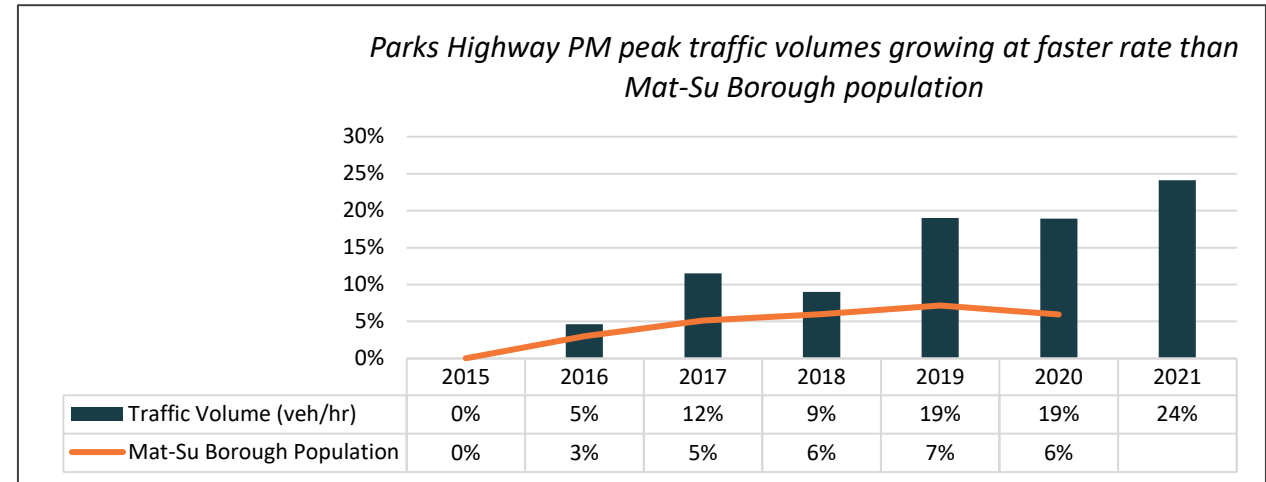


EXISTING PARKS HIGHWAY



VOLUME & SPEEDS

- 7-year trendline: peak hour volumes double by 2040, much faster than population growth
- Speeds drop by 10 mph during peak hour (Seward Meridian to Lucille)
 - 4 mins delay/trip
 - 12,000 vehicle-hours delay in May alone
- As volumes grow, more hours at lower speeds
- Freight travel relies on 50 mph average speed travel; below this creates supply chain disruptions



TRAVEL TIME RELIABILITY

- Need to allocate 20% more travel time for congested periods
 - Controlled access: 6% more time
- Trucks allocate 120% more travel time
 - Controlled access: 30% more time
- Negative impacts on local economy and freight deliveries



PAVEMENT CONDITION



- Trucks cause higher deterioration of pavement from hard stopping events and heavy axle load sitting still at red lights
- More time and resources for snow removal at intersections compared to controlled access facilities



POPULATION & TRAFFIC FORECAST

BASELINE POPULATION & TRAFFIC FORECAST

- Department of Labor (DOL) Historical Population and Growth Projections forecasts MSB growth at **1.7 percent annually to 2045**.
- A separate DOT&PF project (Mat-Su Intraregional Corridor Study) is evaluating population and traffic growth scenarios for the future.
- The DOL forecast will be used for the Purpose and Need (informed by Mat-Su LRTP high growth areas).
- Data from the Mat-Su Intraregional Corridor Study will be incorporated into the forecast as it becomes available.



**ALL THESE BASELINE CONDITIONS
HELP INFORM THE STUDY'S
PURPOSE AND NEED**

WHAT IS THE PURPOSE AND NEED?

- **Purpose:** Why the project is being proposed and the positive outcomes intended.
- **Need:** The key problems to be addressed and explanation of underlying causes of those problems.

WHY IS PURPOSE AND NEED IMPORTANT?

- Helps identify a reasonable range of project alternatives
- Creates a shared understanding of the transportation problems, objectives, and possible solutions
- Defines project scope, guides development and evaluation of alternatives
- Helps streamline environmental analysis
- Helps identify potential context sensitive solutions
- Justifies impacts and spending of funds
- Helps with project programming

EMERGING THEMES: PURPOSE & NEED



Parks Highway Function:

Local, regional, and through trips all using Parks Highway through Wasilla.



Safety:

Fatal and serious injury crash rate well above targets and levels on comparable facilities.



Delay:

Speeds reduce during peak travel times and add hours of delay to trips. As population and volumes grow, more hours of delay are likely.



Travel Time Reliability:

Delay experienced by all trips; significant delays for truck trips vs. comparable facilities.



Land Use:

Pace of land uptake for development increasing.



Economic Impact:

Travel time delay reduces supply chain reliability, impacts function of Wasilla urban core.



Population increase in the Mat-Su:

Population has grown by 20% between 2010 and 2022.



MODERATED BREAKOUT ROOMS (20 MINUTES)

Emerging Themes Discussion:

1. Do you agree? Disagree?
2. Why/Why Not?
3. Are we missing anything?

Assign a Team Captain for each room to report back



BREAK OUT ROOM REPORT BACK

SUMMARY — ROOM 1

- Consider other opportunities in Wasilla Downtown Core – consider non-motorized, land use (direction City of Wasilla wants to go, and compatibility with larger facility if it is expanded)
- Limited access freeway would take pressure off downtown, take pressure off downtown, support plans to increase density in downtown core.
- Plans for intermodal depot in gravel pit SW of Parks Highway – has support, some funding, design for intermodal hub
- Lack of room of expansion on current facility because of lakes and RR ROW
- Historic sites in downtown area that could be impacted by larger facility on downtown alignment.
- Opportunity for new facility to take these elements into account (i.e., Park and Ride Facility)
- City of Wasilla Comp Plan policies (land use and transportation) consider how these can contribute to development of alternatives
- Carefully consider ped/bike and connection to core
- (Look at comments in comment box)
- Parks/PW Highway is nearing intersection failure. It is a key intersection and decisions are needed on a solution – this project needs to emphasize it/carefully consider it. Alternative corridor needed ASAP. Significant impacts to commercial properties of this intersection.

SUMMARY — ROOM 2

- Understanding of how much delay is in corridor, and how much is projected (travel time reliability). What are the implications of this for destinations? Is delay from through traffic, or created by destinations.
- Scenarios – are we considering a scenario where there will be ongoing increase in population, or is there a possibility for slower growth, reduced growth.
- Consider multimodal use of the corridor – specifically with RR, bicycle and pedestrian
- Increased traffic = increased pressure on maintenance crews for the City of Wasilla

TECHNICAL ADVISORY COMMITTEE SCHEDULE

| Meeting # | Focus | Indicative Date |
|-----------------|---|------------------|
| Kick-off | Project overview, PEL Study process, roles of participants, partnership agreement | October 28, 2021 |
| 1 | Vision, purpose and need statement | March 8, 2022 |
| 2 | Range of alternatives, alternatives screening process, screening criteria | Fall 2022 |
| 3 | Preliminary alternative screening results and detailed alternative screening criteria | Spring 2023 |
| 4 | Detailed alternative screening results and recommended alternatives | Summer/Fall 2023 |

Project Contacts:

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- Renee Whitesell, PTP, DOWL Project Manager
(907) 865-1161
- Rachel Steer, DOWL Public Involvement
(907) 562-2000

Project Email:

parkshighwayalternative@dowl.com

Website:

Parkshighwayalternative.com



THANK YOU!