

## DATA SUMMARY

### Crash Map – Fatal and Serious Injury Crashes

#### Purpose

This data summary is an initial step in the development of the proposed alternative corridors for the Parks Highway PEL Study. It is intended to confirm data for identifying the characteristics of the existing environment for fatal and serious injury crashes in the project study area. The study area boundaries or Probable Limits of the Alternatives (PLA), where the proposed alternative highway corridors will be located, is shown in Figure 1. The PLA is broadly bordered by the Parks Highway to the north (+500-1000 feet), Hyer Road interchange to the east, West Hawk Lane to the west, and Palmer Slough to the south, and includes 43,827 acres.

This data summary includes data collection methods, analysis methods, mapping methods, assumptions and a summary of the key findings for the existing characteristics of the resource.

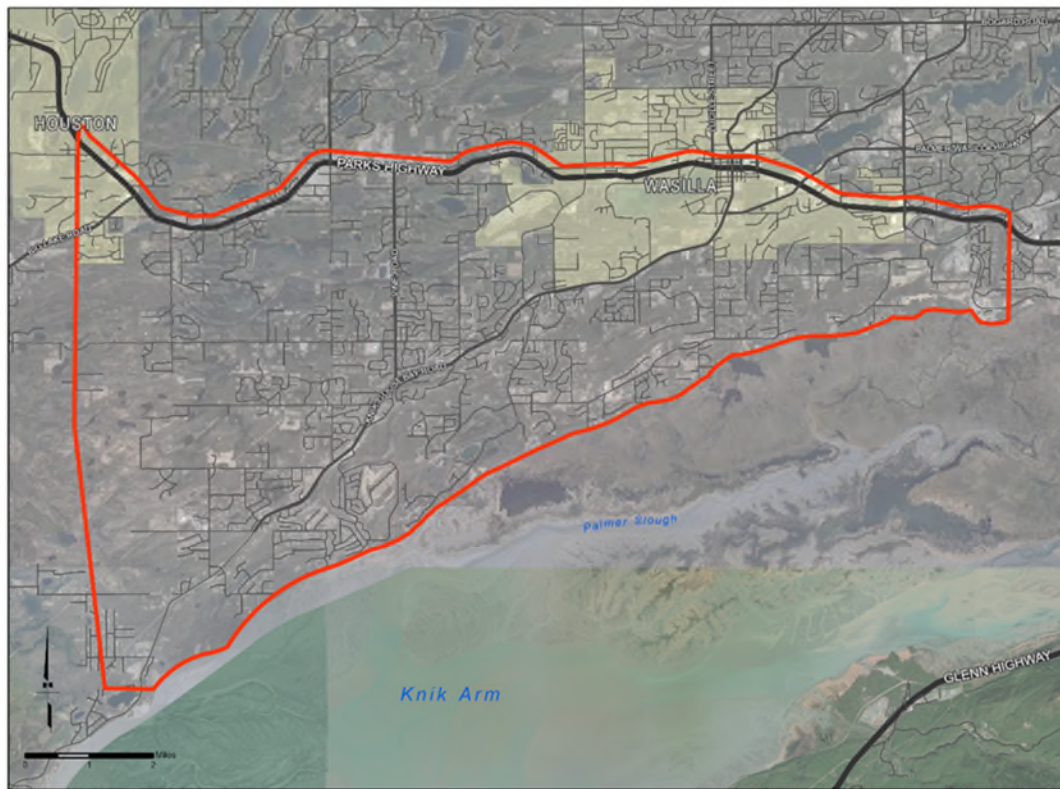


Figure 1: Probable Limits of Alternatives

## Data Collection Methods

Geocoded crash data for all study area serious injury and fatal crashes was provided by the Department of Transportation and Public Facilities (DOT&PF) for years 2013 to 2019. At the time the crash data was provided by DOT&PF staff on October 11, 2021, 2018 and 2019 crash datasets remained unofficial by the Alaska Highway Safety Office. Serious injury crashes may not be complete and are the best-known information available to DOT&PF Central Region as of October 2021. Analysis should be verified when complete 2018 and 2019 crash data is available from DOT&PF.

## Mapping Methods

- The geocoded crash data provided by DOT&PF staff was mapped via geocoding using the PHAC project figure template in ArcMap 10.7.1.
  - Base mapping layers used include Crash Severity (from the DOT&PF geocoded crash data), and Project Area, City Boundary, Functional Classification Roadway Network (from the PHAC project figure template)
- Though 2018 and 2019 serious injury and fatal crashes are presented herein, the data may be incomplete and should be verified when complete 2018 and 2019 crash data is available from DOT&PF.
  - There are two known fatal crashes included in Table 1 but are not shown on the map in Figure 2 due to no geocoding and lack of location specificity in the limited data available.
  - When complete 2018 and 2019 crash data is available, the location of these two crashes should be verified and adding to the map.
- Roadway reconstruction limits shown are for projects that occurred from 2011-2021 and were based on project descriptions provided by DOT&PF on October 11, 2021.

## Summary of Characteristics

The 2013-2019 geocoded severe and fatal crash data is shown on Figure 2 and is summarized by year in Table 1. As highlighted on Figure 2, several sections of the area roadways, including the Parks Highway west of Lucas Road, have been reconstructed during the analysis period. Crashes reported before substantial roadway reconfiguration do not reflect current roadway safety conditions. Pre-construction years will be disregarded for detailed crash rate and pattern analysis.

As displayed on Figure 2, generally the severe and fatal crashes occurred along the higher-speed, higher access corridors such as the Parks Highway and Knik-Goose Bay Road, as well as Vine Road. Crashes were concentrated on the Parks Highway between Seward Meridian Parkway and Knik-Goose Bay Road, as well as on the segment between Pitman Road and Big Lake Road, which was reconstructed in 2021.

As shown in Table 1, severe and fatal crash numbers within the PLA have remained relatively flat for the seven years represented by the data. Of the reported 152 serious injury and fatal crashes, 7 involved pedestrians and 3 involved a bicycle, most of which primarily occurred at intersections along the Parks Highway, Palmer-Wasilla Highway, Vine Road and Knik-Goose Bay Road. There were 6

crashes with live animals, and 11 crashes with roadside objects such as guard rail, traffic signs, utility poles or trees. These 152 crashes resulted in 100 minor injuries, 169 serious injuries, and 40 fatalities.

**Table 1. Crash Severity Summary Table**

| Year | Crash Severity |               | Number of Crashes |
|------|----------------|---------------|-------------------|
|      | Fatal          | Severe Injury |                   |
| 2013 | 2              | 17            | 19                |
| 2014 | 1              | 16            | 17                |
| 2015 | 4              | 22            | 26                |
| 2016 | 4              | 18            | 22                |
| 2017 | 7              | 17            | 24                |
| 2018 | 9              | 13            | 22                |
| 2019 | 8              | 14            | 22                |

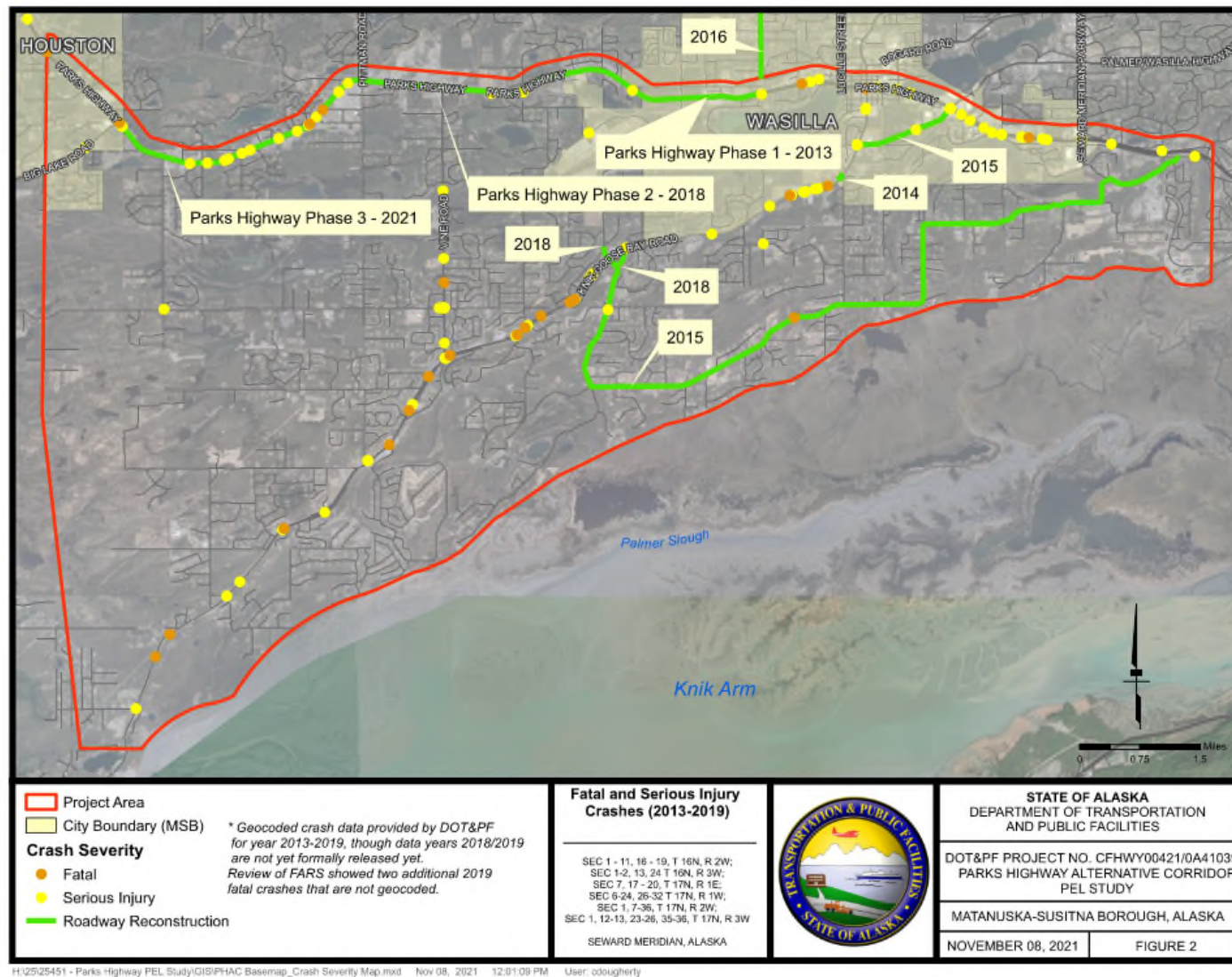


Figure 2: Fatal and Serious Injury Crash Map (2013-2019)