Hybrid SPUI

BP Exploration
Yamato Ya
Northrim Bank
Alaska DOT
CH2M Hill
36th Ave
Latouche St.
Old Seward Hwy.
Anderson's Bridal and Salon Davinci
Alaska Car & Van Rentals
Best Western Golden Lion
Turnagain Armpit
Amvets Post Two
Seward Hwy.
N

Hybrid SPUI (Single Point Urban Interchange) — See map on reverse side

The Hybrid SPUI is designed so that all the on-/off-ramps converge at a single intersection location and are controlled by one set of traffic signals at the center of the interchange between the main line embankments. Whereas a conventional SPUI typically has on/off ramps entering and exiting on the right-hand side of the highway, the "hybrid" means the on/off ramps occur on the left side (inside) of the highway main lines.

- Capital Cost: $50-$60 Million
- Property Impacts: at least 3 parcels
- Traffic Operations: Left hand on-off ramps
- Facility maintenance: More snow storage between north- and south-bound highway lanes
- Pedestrians and Bicycles: Similar bike/ped access to a typical 4-legged intersection, although slightly longer distances
- Traffic Maintenance: Functions at design Level of Service in 2035
- Driver Expectancy: Higher possible driver confusion initially, unconventional interior ramps; no north-bound on-ramps
- Environmental::Likely no impact to wetlands
- Safety: 38 conflict points (24 crossing, 14 merging)
- Long Range Plan: Interior north-bound ramps can be added as needed to accommodate future plans.

Matrix Criteria	DOT&PF Ranking	Rating Scores
Impacts to Private Property	-1	2 = Much more/much better 1 = More/Better 0 = Same -1 = Less/Worse -2 = Much less/Much worse
Pedestrians and Bicycles	1	
Driver expectancy	-.5	
Environmental	-.5	
Safety	1	
Community and Government Expectations		

How well does the **HYBRID SPUI** Alternative meet the project goals?

- Improve traffic flow in Midtown and on the New Seward Highway
- Shorten travel times to and from Midtown and U-Med
- Improve safety by reducing crash rates
- Improve safety and travel for pedestrians and bicycles

Half SPUI

Old Seward Hwy.
Yamato Ya
Northrim Bank
Alaska DOT
BP Exploration
CH2M Hill
Latouche St.
36th Ave
Anderson's Bridal and Salon Davino
Alaska Car & Van Rentals
Tumagain Armpit
Amvets Post Two
Best Western Golden Lion
Collector Distributor Road (SB)
Collector Distributor Road (NB)
University Center
Existing Access Road
University of Alaska
Hickel Investment CO
MOA Property
Collector Distributor Road (SB)
Collector Distributor Road (NB)
N

Half SPUI — See map on reverse side

A **Half SPUI** is designed so that all the on-/off-ramps converge at a single intersection location and are controlled by one set of traffic signals at the center of the interchange between the main line embankments. Whereas a full SPUI provides access from all directions, this Half SPUI only includes the southern portion (no northern access). Ramps are located on the right side of the highway.

- Capital Cost: $60-$70 Million
- Property Impacts: at least 3 parcels
- Traffic Operations: Weave distances on the Collector-Distributor (CD) roads appear to be acceptable.
- Facility maintenance: More lane miles, but straightforward maintenance
- Pedestrians and Bicycles: Unimpeded bike/ped access on the north side of 36th Avenue
- Traffic Maintenance: Functions at design Level of Service in 2035
- Driver Expectancy: Weave on CD roads requires quick movement at slow speed; earlier than expected exit ramp
- Environmental: This partial interchange would affect an area within DOT&PF right-of-way that has previously contained some landscaping improvements. Potential noise and visual impacts may result from elevating the highway.
- Safety: 44 conflict points (27 crossing, 17 merging)
- Long Range Plan: This does not allow movements to/from the north from 36th Avenue now or in the future.

Matrix Criteria	DOT&PF Ranking	Rating Scores
Impacts to Private Property	-1	2 = Much more/much better 1 = More/Better 0 = Same -1 = Less/Worse -2 = Much less/Much worse
Pedestrians and Bicycles	1.5	
Driver expectancy	-.5	
Environmental	-1	
Safety	1.5	
Community and Government Expectations		

How well does the **HALF SPUI** Alternative meet the project goals?

- Improve traffic flow in Midtown and on the New Seward Highway
- Shorten travel times to and from Midtown and U-Med
- Improve safety by reducing crash rates
- Improve safety and travel for pedestrians and bicycles

Loop Ramp Interchange

LOOP RAMP INTERCHANGE — See map on reverse side

The **Loop Ramp Interchange** is similar to other interchanges along the Seward Highway. Rather than a clover-leaf intersection, this alternative includes two loop ramps would provide south-bound highway access.

- Capital Cost: $50-$55 Million
- Property Impacts: at least 6 parcels
- Traffic Operations: Would require better signal timing at 36th Avenue and Old Seward
- Facility maintenance: More lane mileage; challenging to plow because of retaining walls
- Pedestrians and Bicycles: Reduces bike/ped conflicts—a more predictable intersection for non-motorized traffic
- Traffic Maintenance: The loop ramp may impede traffic flow because of the weaving segments (CD lanes) with the Tudor Road ramps.
- Driver Expectancy: Similar to other Seward Highway intersections; no north-bound to/from access
- Environmental: Likely no impact to wetlands
- Safety: 39 conflict points (26 crossing, 13 merging; 36 of the 39 conflicts are at the 36th/Old Seward Intersection)
- Long Range Plan: the highest demand moves needed in the future are accommodated. It is not likely that not having full ramp access will work as well in the long term.

Matrix Criteria	DOT&PF Ranking	Rating Scores
Impacts to Private Property	-2	2 = Much more/much better 1 = More/Better 0 = Same -1 = Less/Worse -2 = Much less/Much worse
Pedestrians and Bicycles	.75	
Driver expectancy	0	
Environmental	-.75	
Safety	1	
Community and Government Expectations		

How well does the **LOOP RAMP INTERCHANGE** Alternative meet the project goals?

- Improve traffic flow in Midtown and on the New Seward Highway
- Shorten travel times to and from Midtown and U-Med
- Improve safety by reducing crash rates
- Improve safety and travel for pedestrians and bicycles