HSR between Seattle, WA, and Spokane



The High-Speed Rail Corridor between Seattle Central Station and Spokane

The Stampede Pass CHSR Corridor

- This corridor is from the Seattle CHSR Central Station to Auburn, Ellensburg, Moses Lake, Ritzville, Spokane International Airport, and the current Spokane Amtrak Station.
- This corridor will shorten the rail distance between Seattle and Spokane by 62 miles.
- This corridor will reduce elevation climbs.
- This corridor will provide saving energy and reduce pollution.
- This corridor will shorten transit time and reduce corridor maintenance costs.
- This corridor will help the railroads compete in express types of freight.

The Stampede Pass Miles from Auburn to Ellensburg

- Miles from Auburn to Lester, on ground 10.09 mi, on flyovers 8.58 mi, in tunnels 20.53 mi, a total of 39.20 mi.
- Miles from Lester to Ellensburg via Easton, on ground 27.13 mi, on flyovers 5.14 mi, in tunnels 18.51 mi, a total of 47.68 mi. Easton tunnel Elevation is 2215'. This section, Easton to Ellensburg, is unsuitable for HSR.
- Miles from Lester to Ellensburg via Cle Elum, on ground 16.52 mi, on flyovers 3.62 mi, in tunnels 28.52 mi, a total of 48.66 mi. Cle Elum tunnel elevation is 2164'. This section is suitable for HSR.
- The via Easton corridor has 58 mph speed restrictions because of short radius curves. The via Cle Elum corridor is HSR with very large radiuses.

Legend



CHSR Station in Tunnel



CHSR Station on Flyovers



CHSR Station in on Ground

On ground

Cuts

Fills

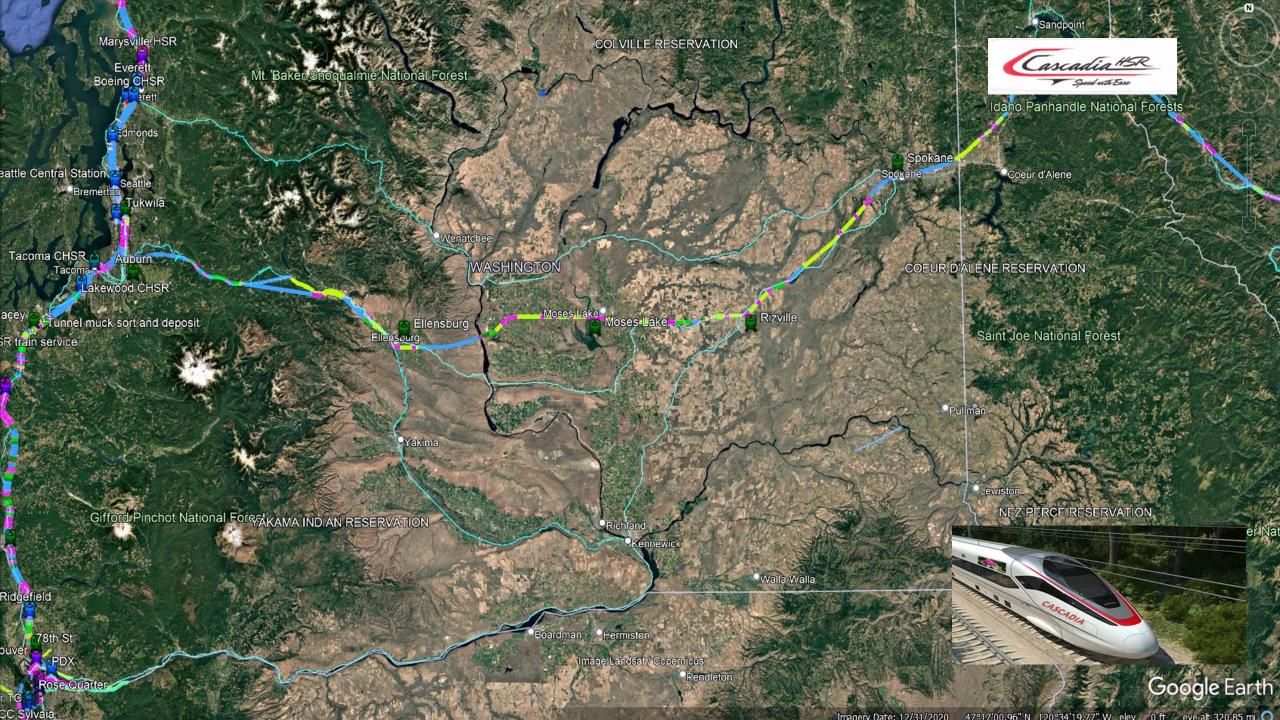
Flyovers

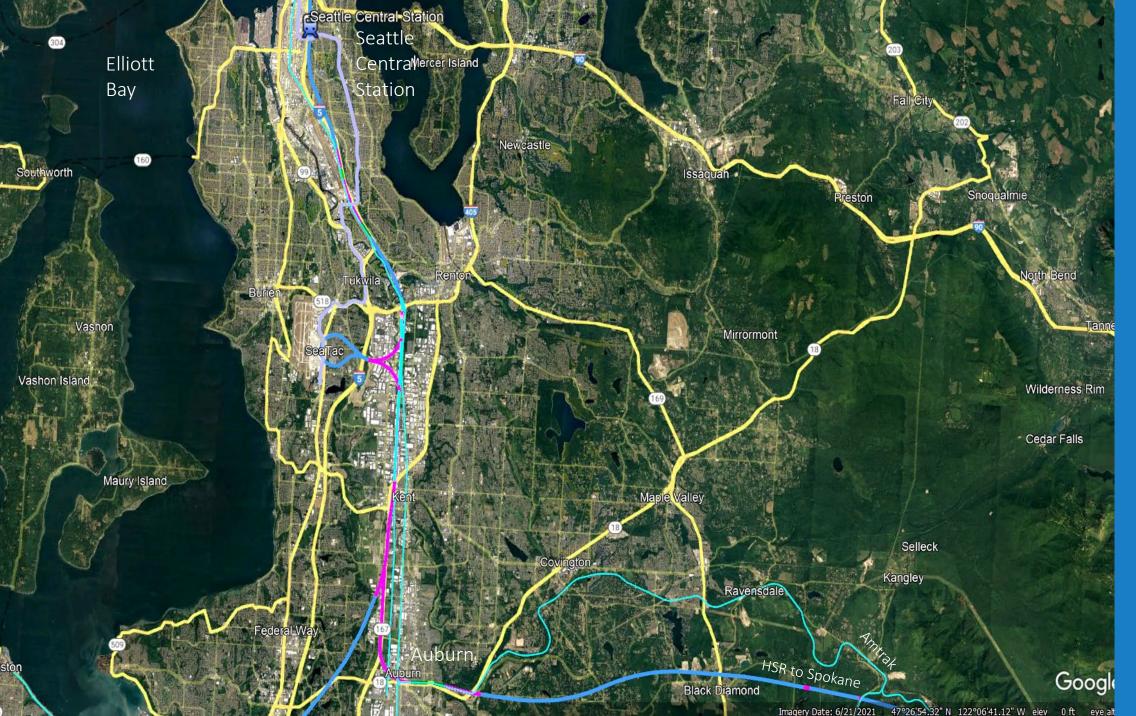
Tunnels

Existing Freight Railroads, other than BNSF and UP RR

Existing Freight Railroads, and Amtrak

HSR Legend 08 Des by R.N.

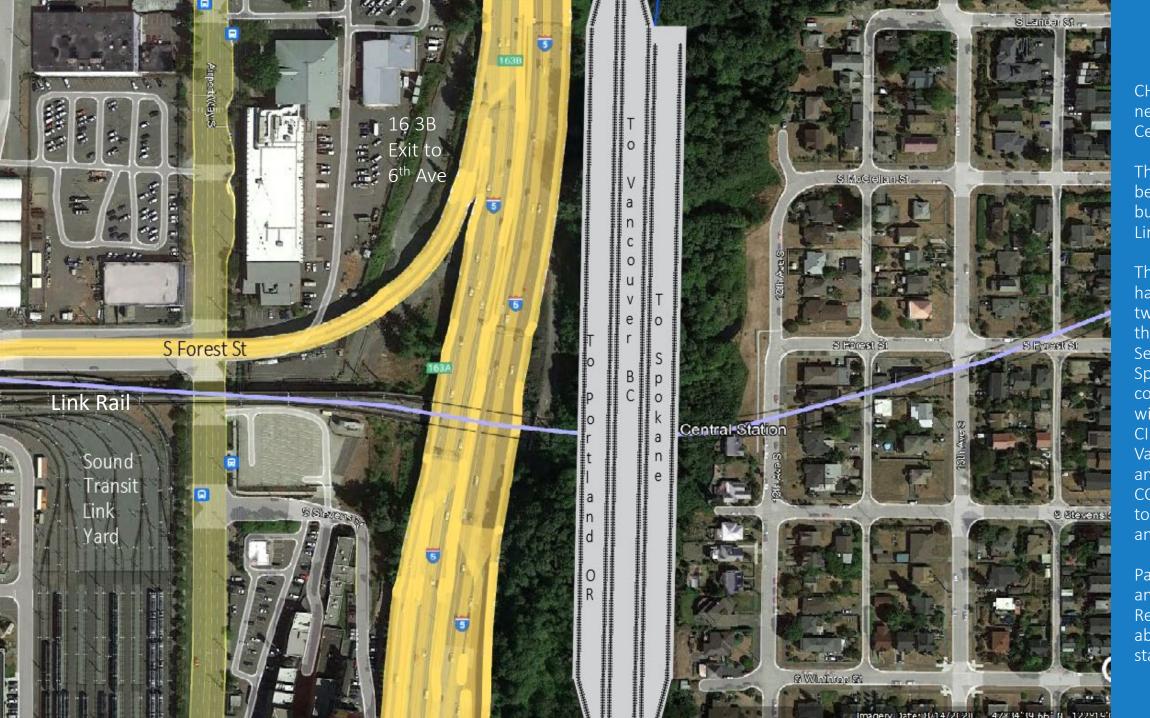




CHSR
Corridors in
the Greater
Seattle, WA,
Area

There are two HSR corridors in this region.

One is Eugene, OR, Portland, Seattle Central, WA, and Vancouver, BC. The other corridor is Seattle Central to Spokane.

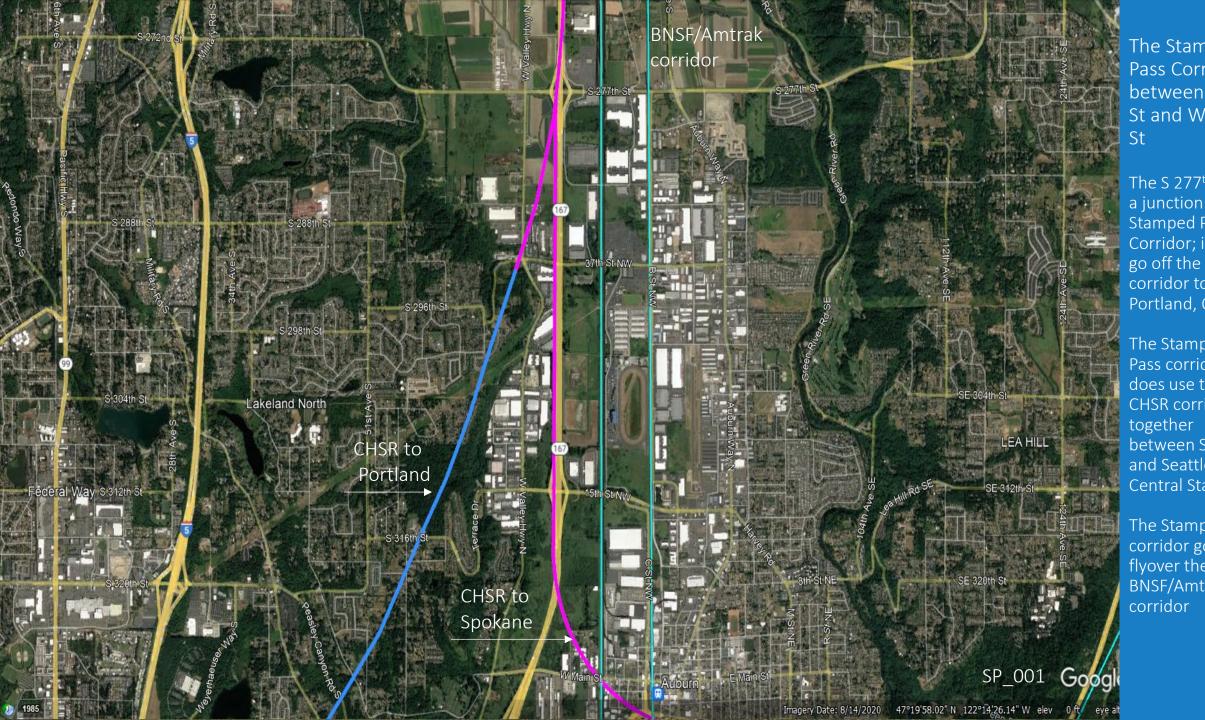


CHSR at the new Seattle Central Station

This station is below ground but above the Link-Rail Line.

The station
has six tracks;
two will serve
the proposed
Seattle to
Spokane HSR
corridor, two
will serve the
CIE to
Vancouver, BC,
and the local
CCE, and two
to Portland CIE
and local CCE.

Parking, Hotel, and Restaurant are above the station.

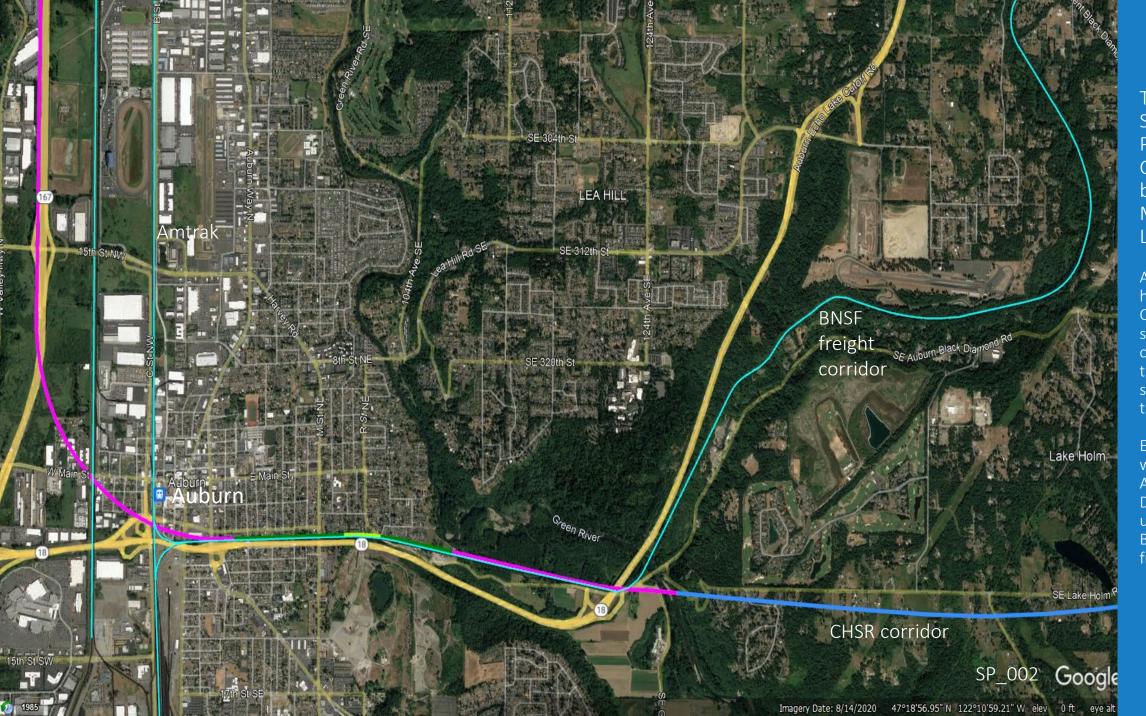


The Stampede Pass Corridor between S 277 St and W Main

The S 277th St is a junction for the Stamped Pass Corridor; it will go off the CHSR corridor to Portland, OR.

The Stampede Pass corridor does use the CHSR corridor between S 277 St and Seattle Central Station.

The Stampede corridor goes flyover the BNSF/Amtrak



The
Stampede
Pass CHSR
Corridor
between W
Main St and
Lake Holm

Auburn may have an elevated CHSR station serving commuter transit. This station has two tracks.

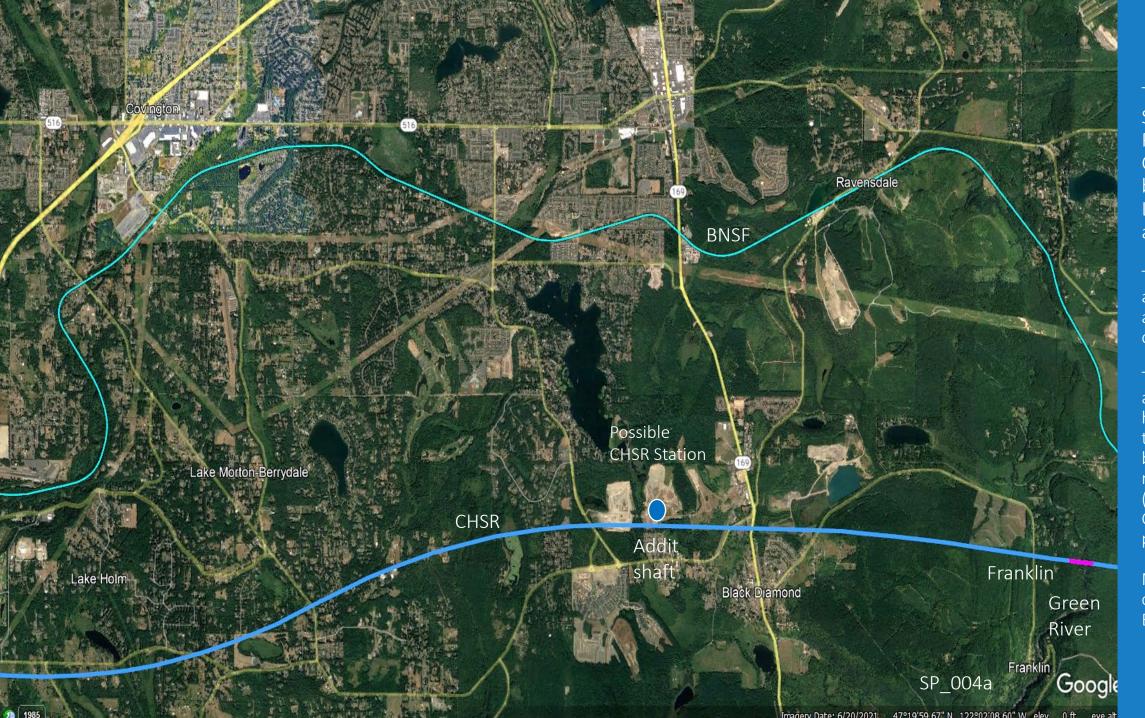
Express freight will exit at SE Auburn Black Diamond Rd and use regular BNSF/UPRR freight tracks.



The
Stampede
Pass CHSR
Corridor at
SE Auburn
Black Dimond
Rd

Here is the interchange point for the Stampede CHSR express freight with the BNSF RR to run to and from Spokane.

The SE Auburn Black Diamond Rd will get an overpass, starting at 4th St SE. Extend R St SE to the west to intersect with SE Auburn Black Dimond Rd.

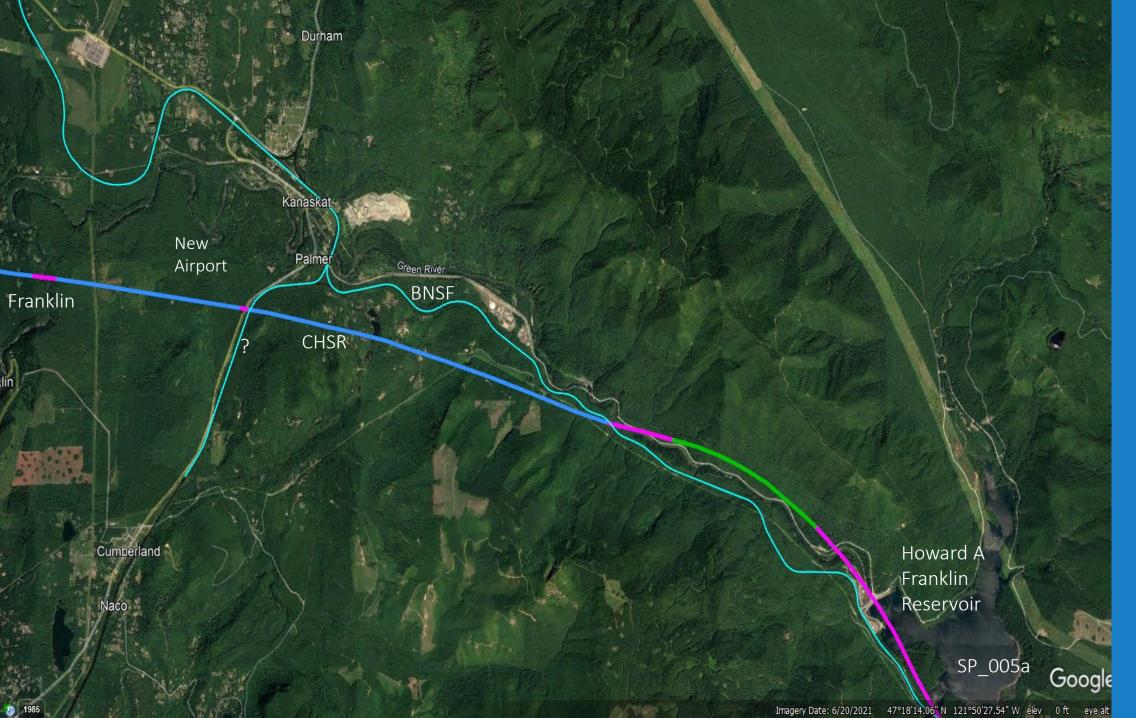


The
Stampede
Pass CHSR
Corridor
between
Lake Holm
and Franklin

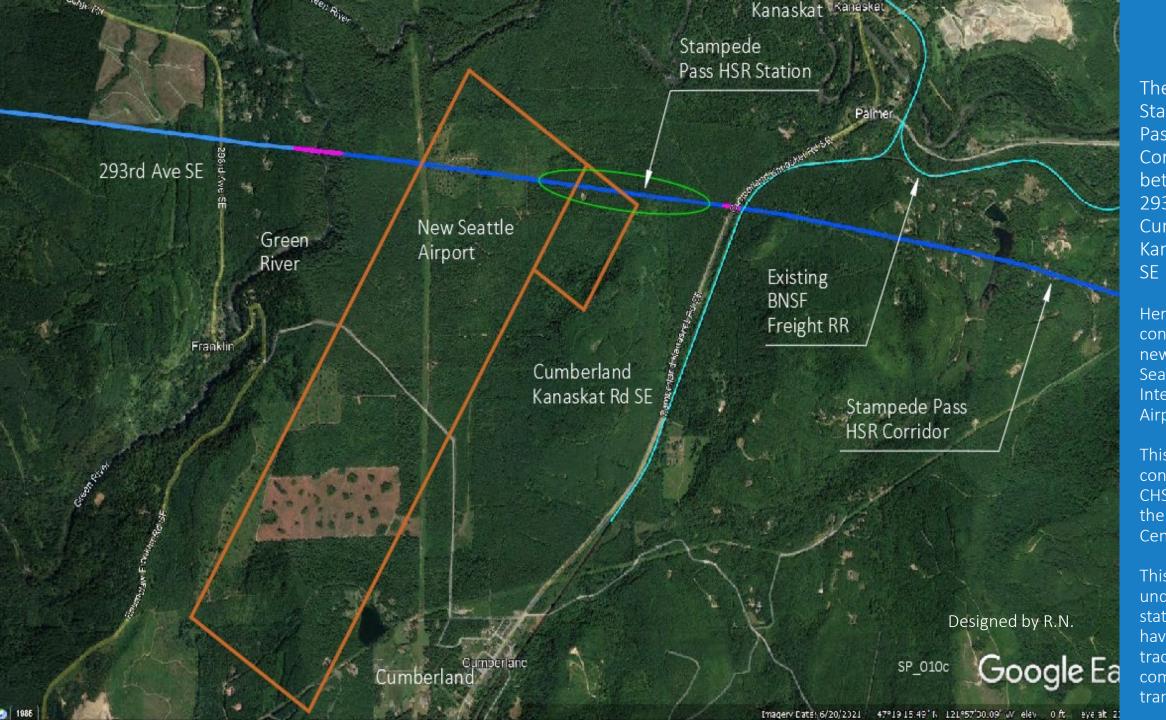
The CHSR is in a tunnel to avoid all grade crossings.

The addit shaft allows two headings for the tunnel boring machines (TBM). Later, CHSR station possibility.

Note the many curves at the BNSF corridor.



The
Stampede
Pass CHSR
Corridor
between
Franklin and
Howard A
Hanson
Reservoir



The
Stampede
Pass CHSR
Corridor
between
293rd Ave and
Cumberland
Kanaskat Rd
SE

Here we may construct the new, additional Seattle International Airport.

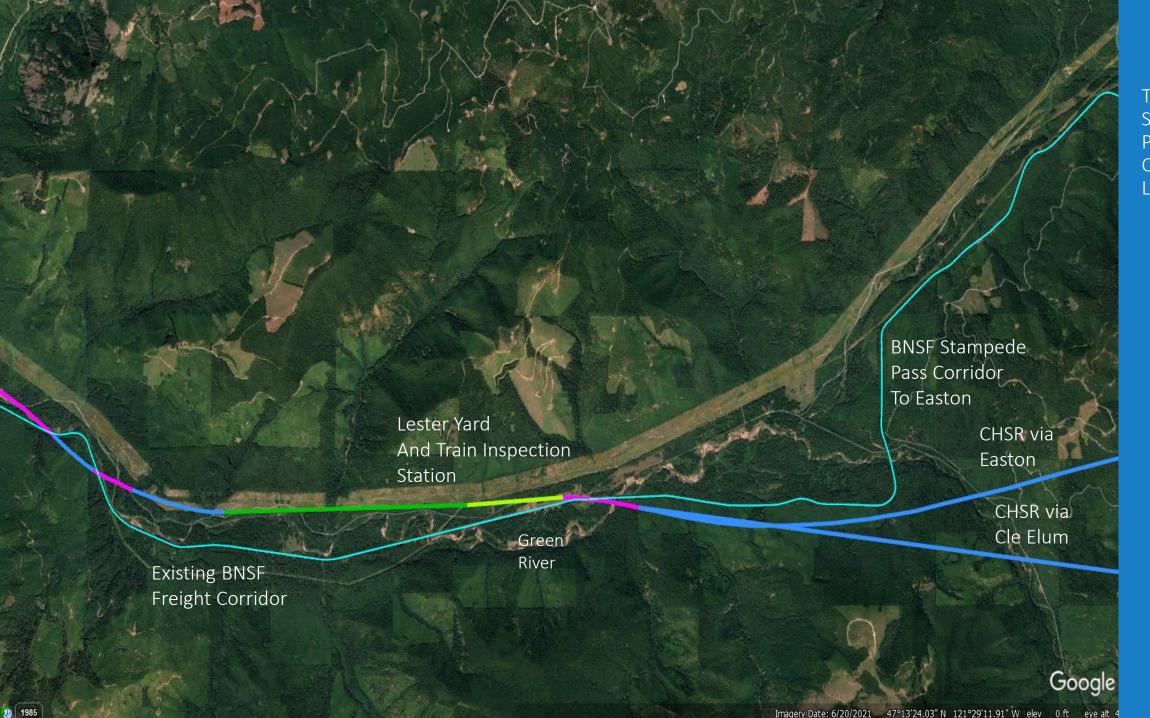
This Airport will connect via CHSR to/from the Seattle Central Station.

This underground station will have four tracks to allow commuter transit.

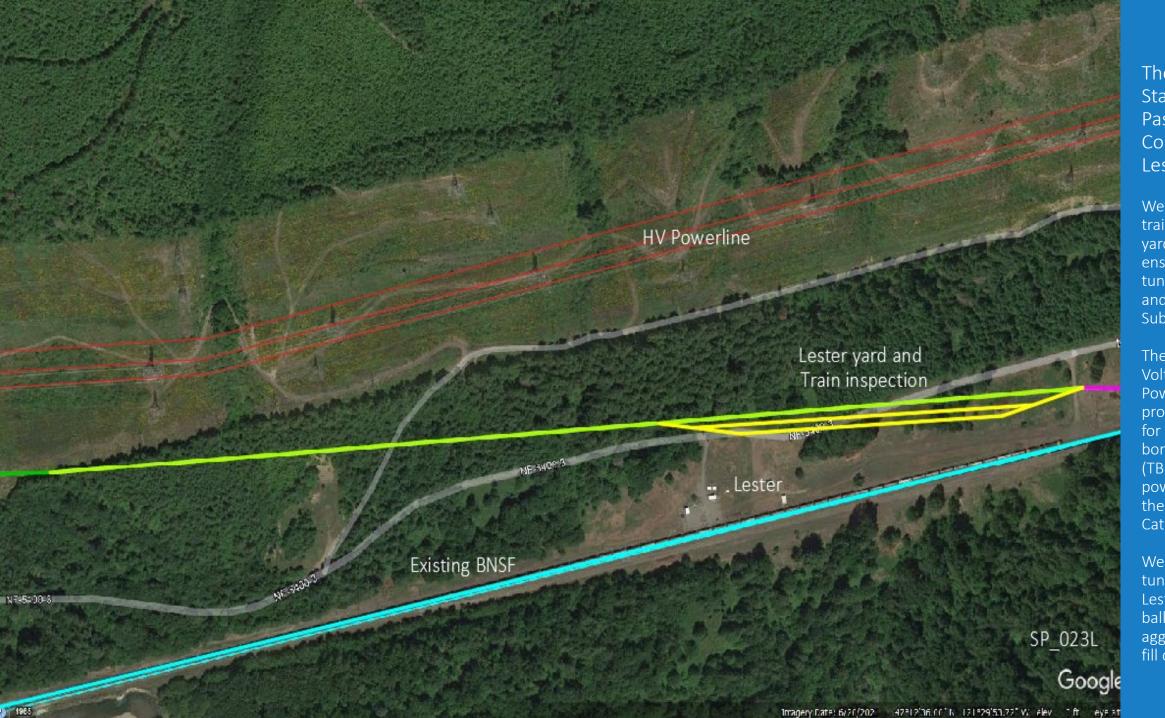


The
Stampede
Pass CHSR
Corridor
between
Howard
A Hanson
Reservoir and
5.6 miles
west of
Lester

Note the CHSR corridor curves in comparison to the existing BNSF freight corridor.



The
Stampede
Pass CHSR
Corridor at
Lester

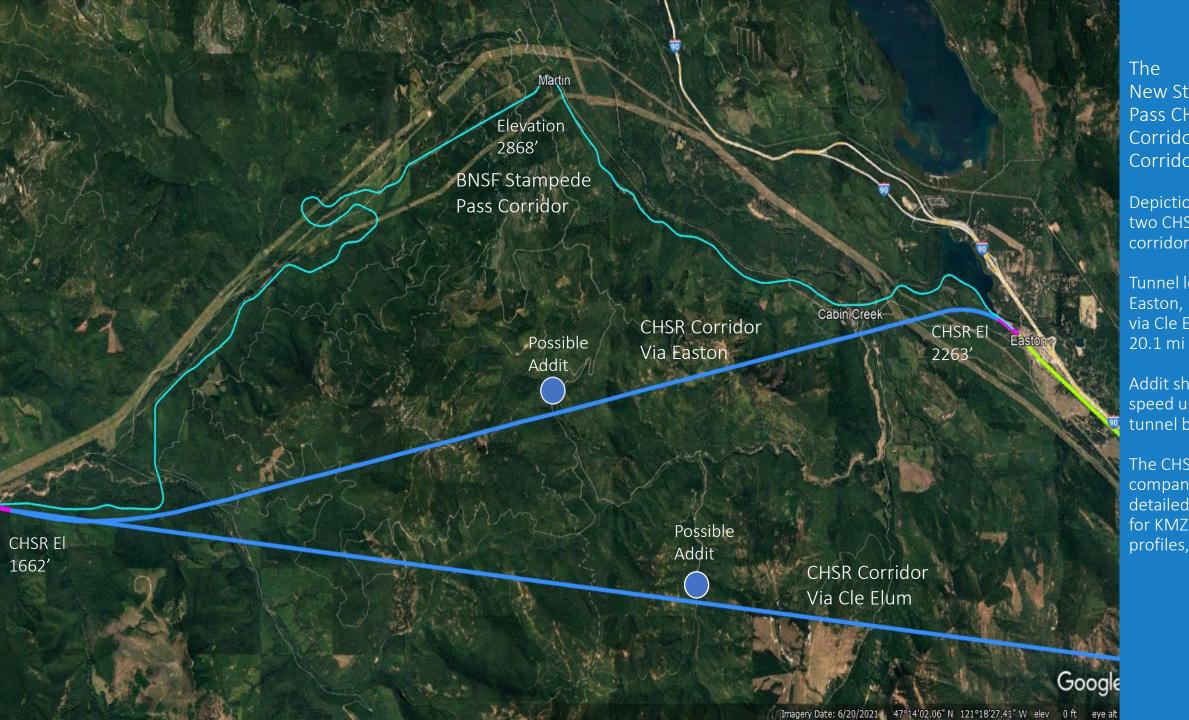


The Stampede Pass CHSR Corridor at Lester

We may have a train inspection yard at Lester to ensure safe tunnel transit and a Power Substation.

The nearby High Voltage Powerline will provide power for the tunnel boring machines (TBM) and power supply for the CHSR Catenary.

We also will sort tunnel muck at Lester for ballast, concrete aggregate, and fill deposit.



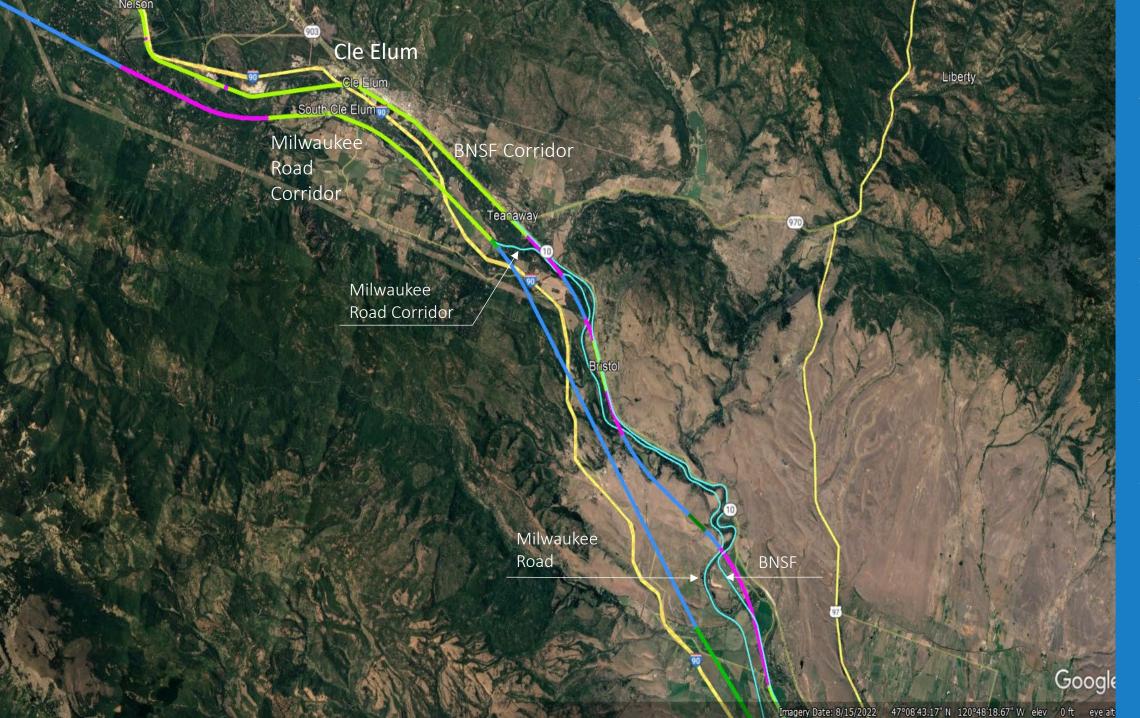
New Stampede Pass CHSR **Corridor Tunnel** Corridors

Depiction of the two CHSR corridors.

Tunnel length, via Easton, 13.9 mi; via Cle Elum,

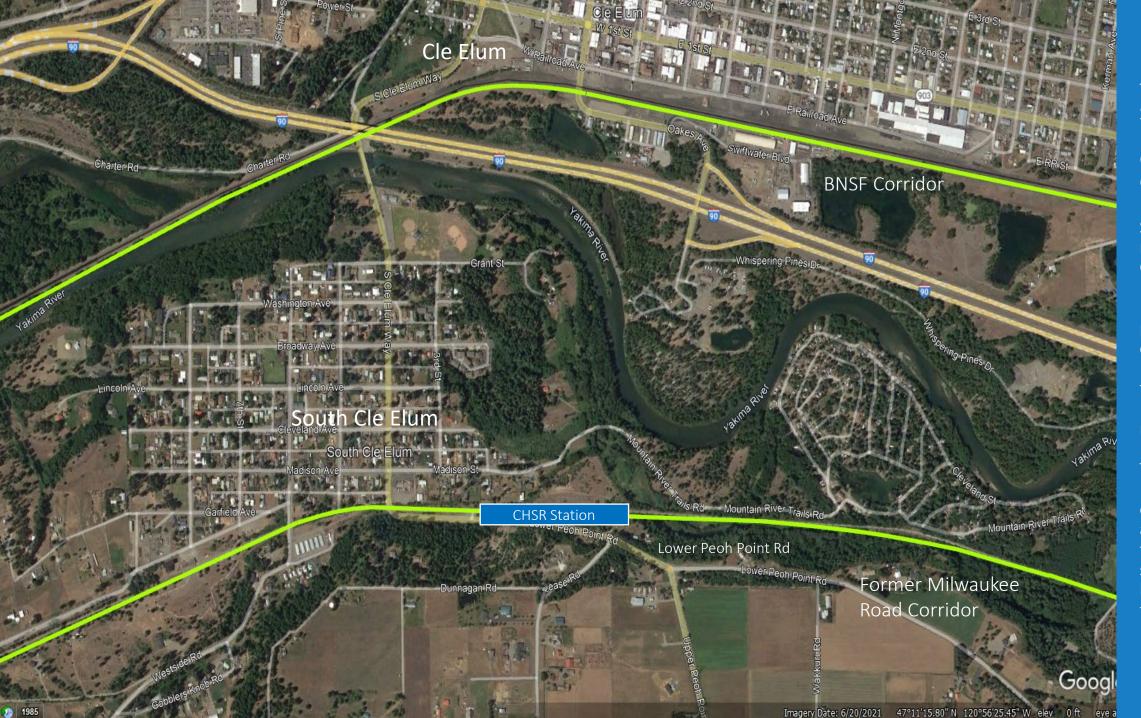
Addit shafts will speed up the tunnel boring.

The CHSR company has detailed drawings for KMZ, elevation profiles, and more.



The
Stampede
Pass CHSR
Corridor at
Cle Elum
Area

This area has two CHSR corridors; one will follow the existing BNSF corridor till Teanawaw, then on a new corridor. The other corridor will use part of the former Milwaukee Road Right-of-Way.

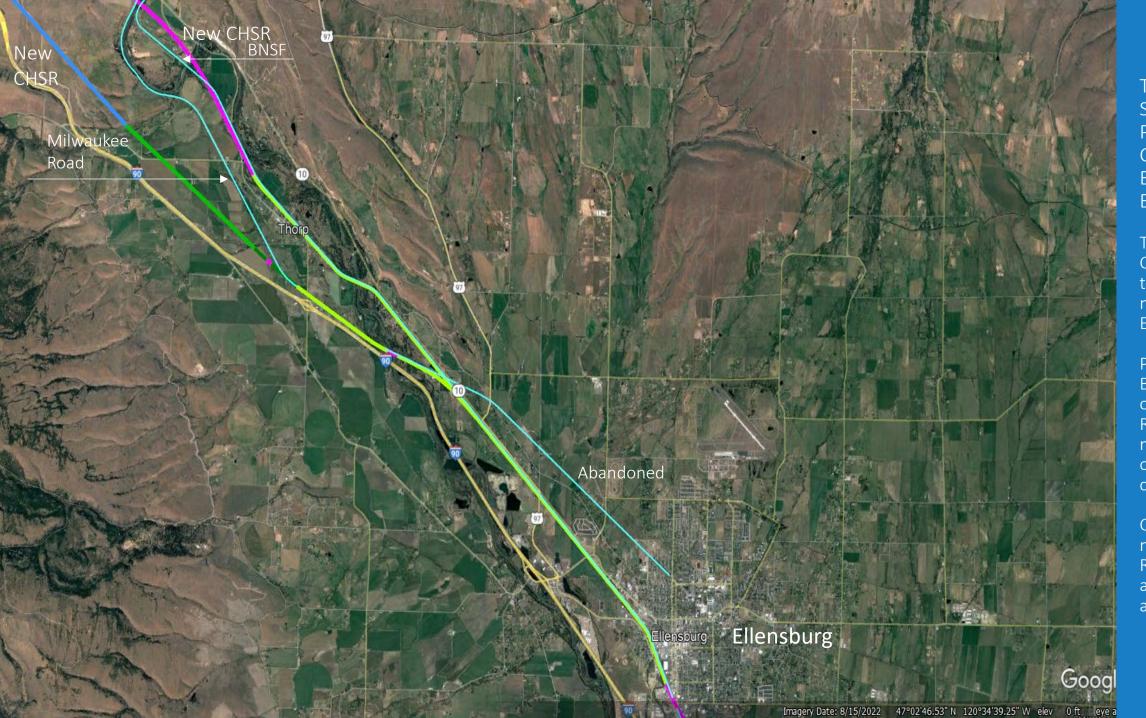


The
Stampede
Pass CHSR
Corridor at
Cle Elum City

South Cle Elum may get a new CHSR Station.

Reroute and provide an overpass from Madison Street to Lower Peoh Point Rd as needed.

The South Cle Elum station is on the ground and has four tracks. The station track length is 1300 feet.



The
Stampede
Pass CHSRC
Corridor
Entering
Ellensburg

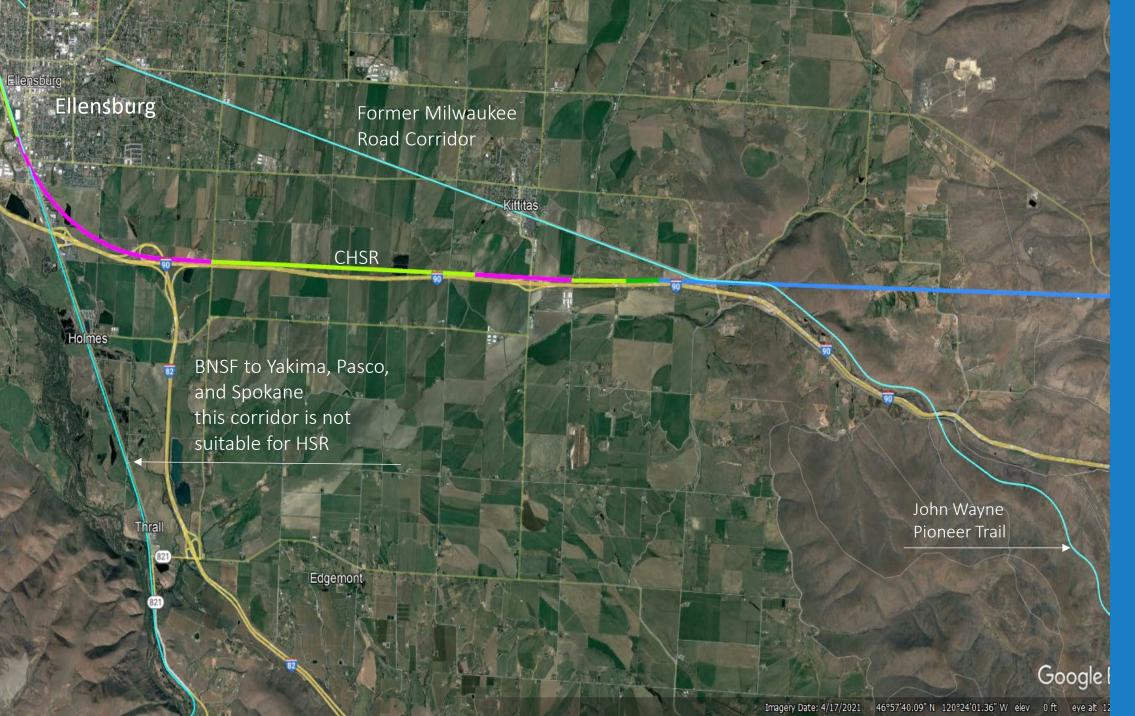
There are two CHSR corridors to 4.4 miles northwest of Ellensburg.

Part of the BNSF and part of Milwaukee Road will merge into a one-line corridor.

CHSR will use new Corridors. Route options are not decided as of now.

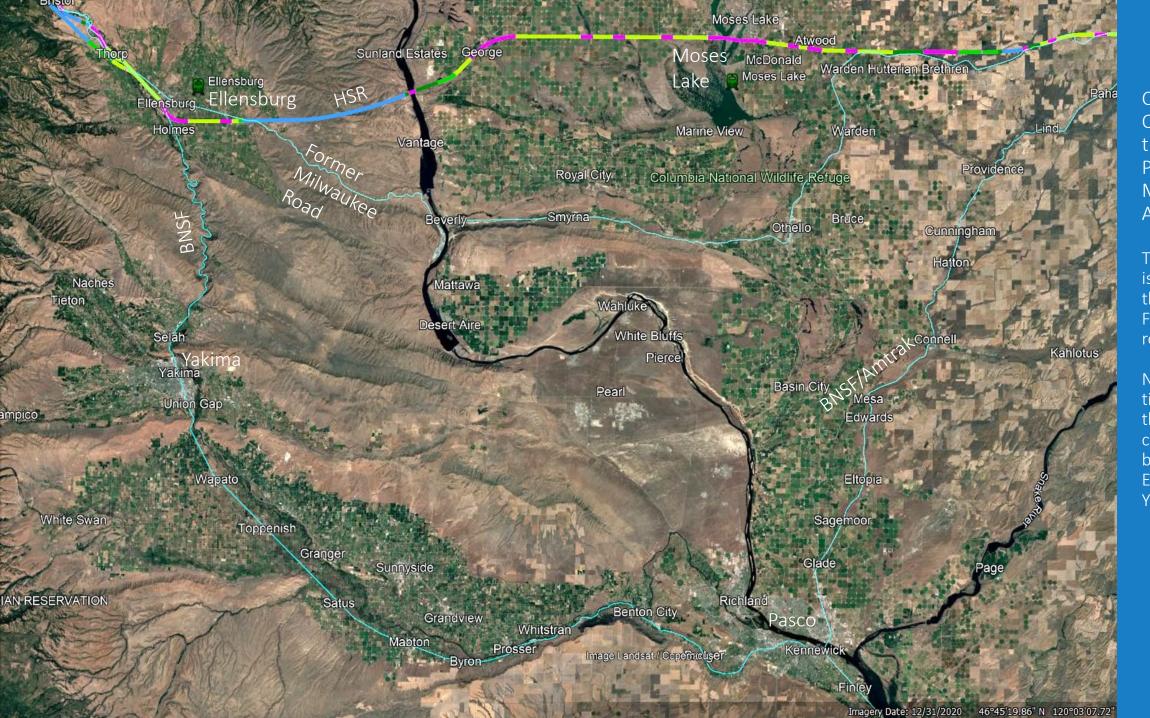
The Stampede Pass Miles from Ellensburg to Spokane

- Miles from Ellensburg to Spokane, on ground 85.76 mi, on flyovers 39.67 mi, in tunnels 33.52 mi, a total of 158.95 mi.
- Total miles from Auburn to Spokane via Easton, 248.96 mi. Total miles from Auburn to Spokane vis Cle Elum, 246.81 mi.
- Additional miles from Seattle Central to Auburn, 18.45 mi, or 267.41 mi, 265.26 mi.
- Amtrak miles from Seattle to Spokane, 329 mi, or the CHSR corridor is 62 miles shorter. Think about the corridor maintenance cost reduction, the energy savings, the emission reduction, and the travel time savings.



The
Stampede
Pass CHSR
Corridor from
Ellensburg
East

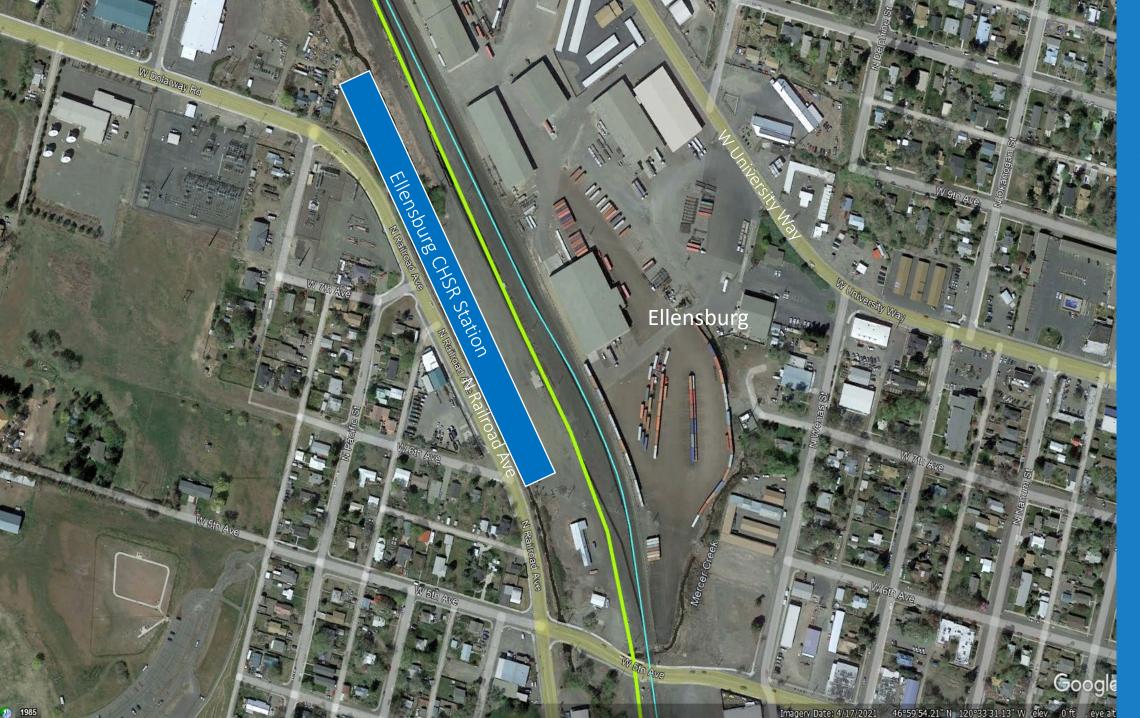
From
Ellensburg, the
CHSR will use a
new, short-cut
corridor to
Moses Lake,
Ritzville, and
Spokane. The
CHSR will cross
the Columbia
River to the
east side of the
gorge.



CHSR
Overview in
the Ellensburg,
Pasco, and
Moses Lake
Area

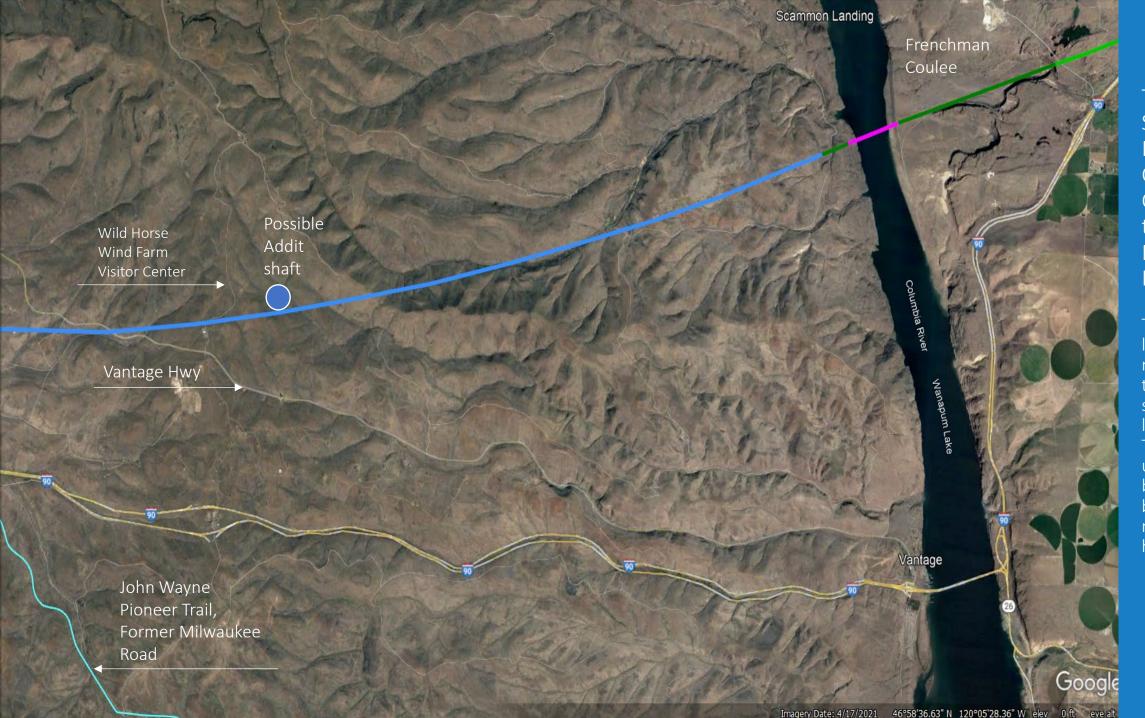
The HSR corridor is much shorter than the existing Freight/Amtrak routes.

Note the many tight curves on the BNSF corridor between Ellensburg and Yakima.



CHSR Station at Ellensburg

The CHSR station is on the ground.
The W 5th Ave will get an overpass, and so do all road crossings along the SP CHSR corridor.



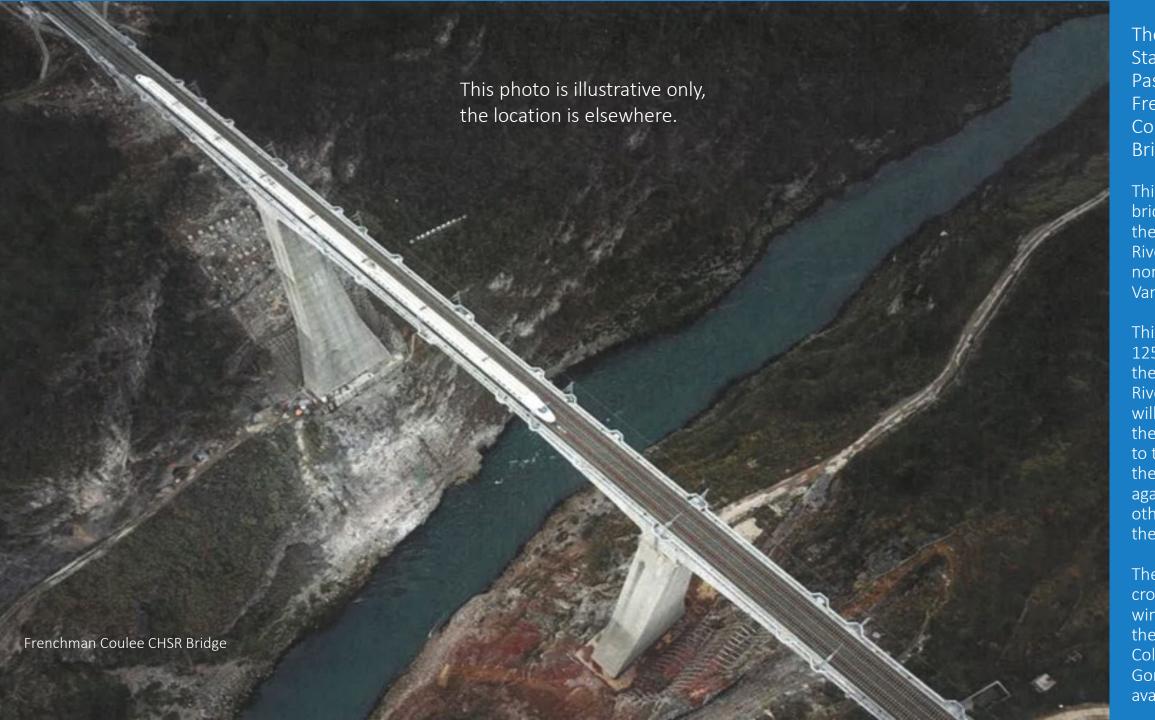
The
Stampede
Pass CHSR
Corridor
Crossing
the
Mountain
Range

The tunnel length is 17.2 miles; therefore, addit shafts are on longer tunnels. This will speed up the tunnel borings because of multi-boring heads.



The
Stampede
Pass CHSR
Corridor at
the
Columbia
River
Crossing

Here, the CHSR does cross the Columbia River from the tunnel via infill, highbridge, in-fill, and cut.

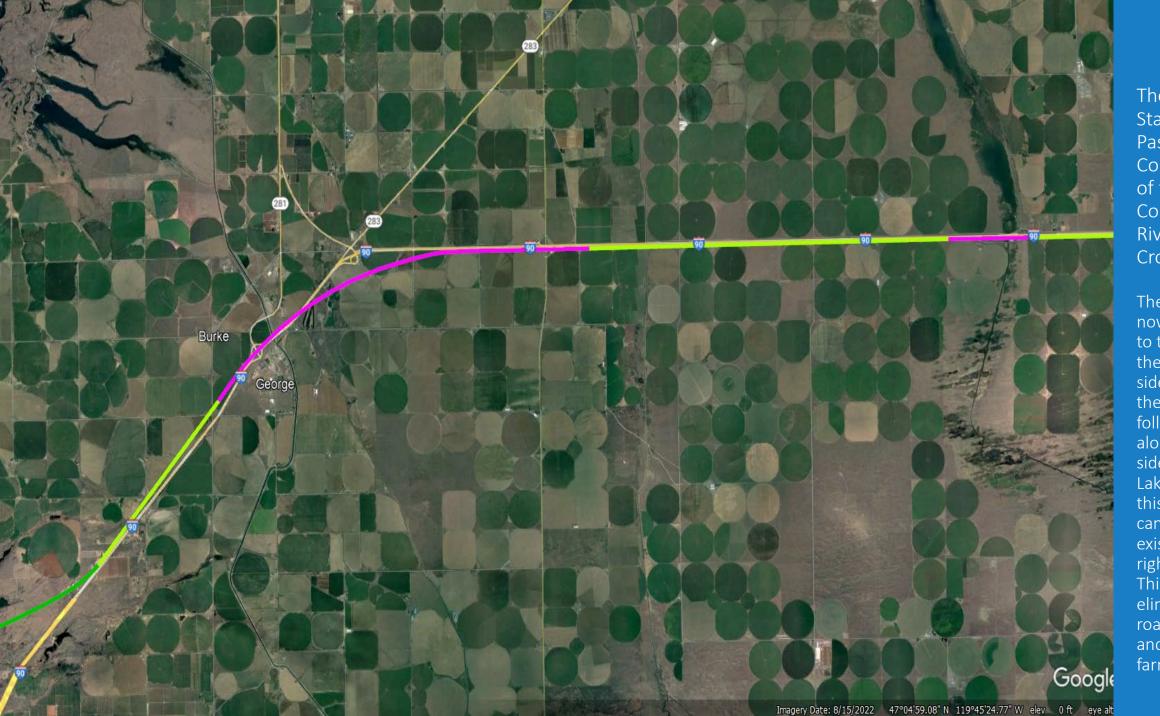


The
Stampede
Pass
Frenchman
Coulee CHSR
Bridge

This is the high bridge to cross the Columbia River, 5.4 miles north of Vantage, WA.

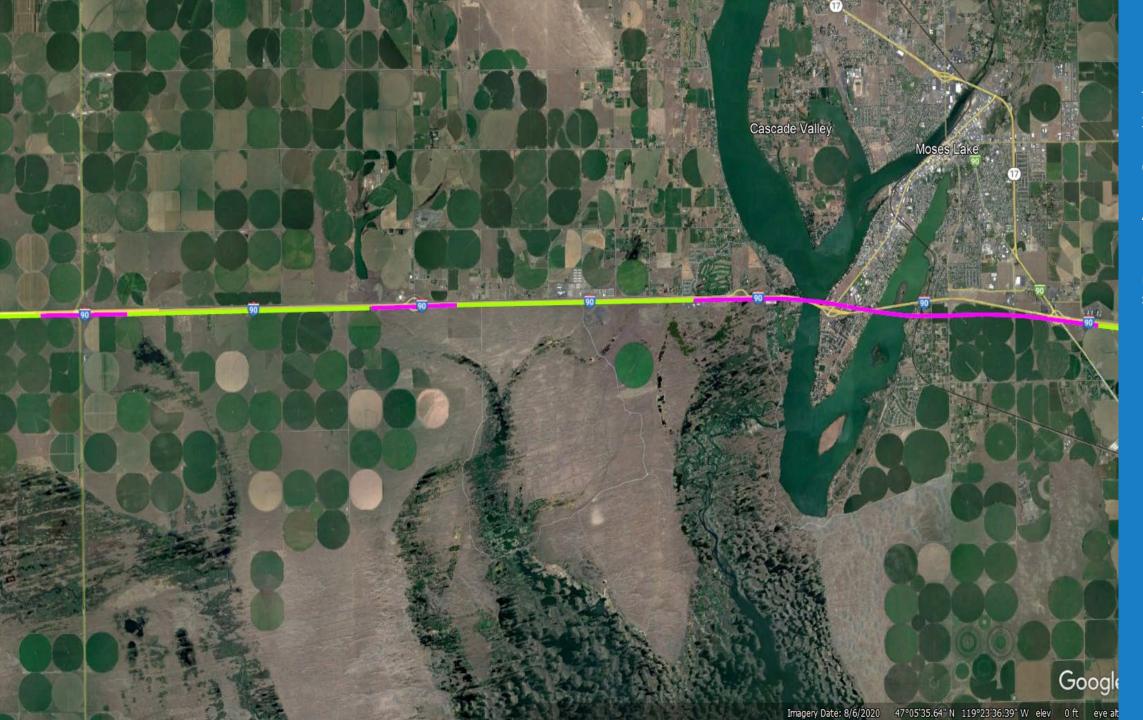
This bridge is
125 feet above
the Columbia
River, which
will eliminate
the dip down
to the river and
then climb
again on the
other side of
the river.

The plan for crosswind windbreaks for the upper Columbia Gorge is available.



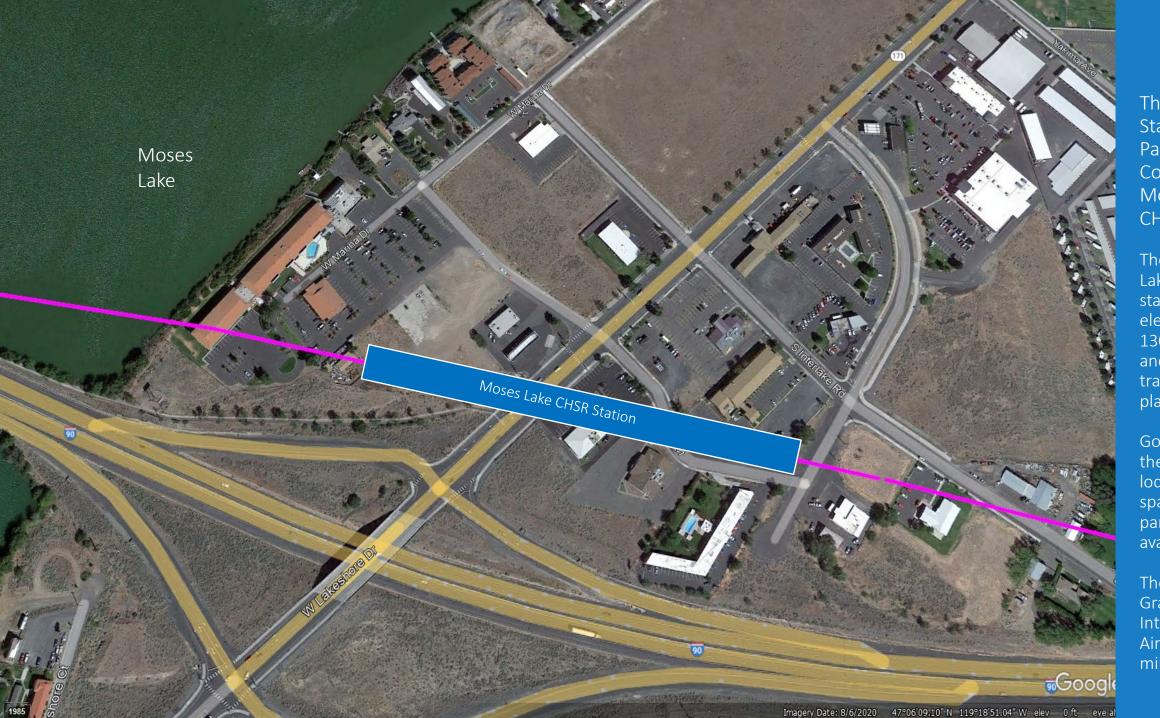
The
Stampede
Pass CHSRC
Corridor East
of the
Columbia
River
Crossing

The CHSR will now go parallel to the I-90 on the northwest side, fly over the I-90, and follow the I-90 along the south side to Moses Lake. Much of this corridor can use the existing public right-of-way. This flyover will eliminate all road crossings and protect farmland.



The
Stampede
Pass CHSRC
Corridor at
Moses Lake
Area

Moses Lake may get a CHSR station

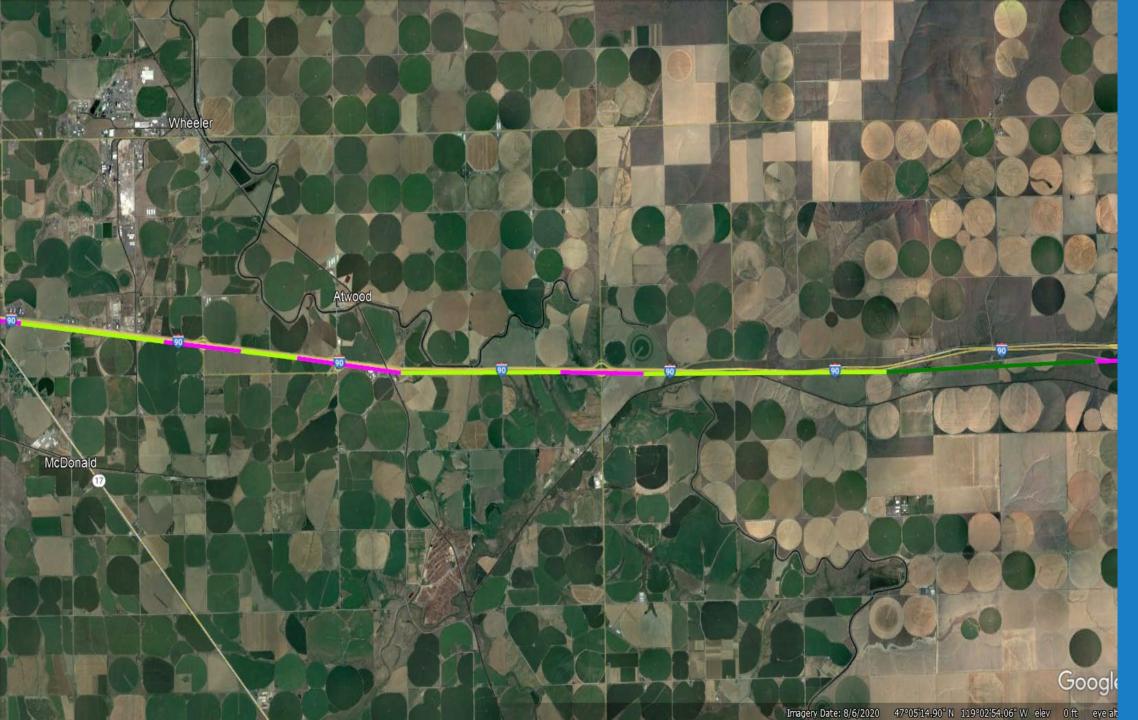


The
Stampede
Pass CHSR
Corridor at
Moses Lake
CHSR Station

The Moses
Lake CHSR
station is
elevated and is
1300 feet long
and has four
tracks at the
platforms.

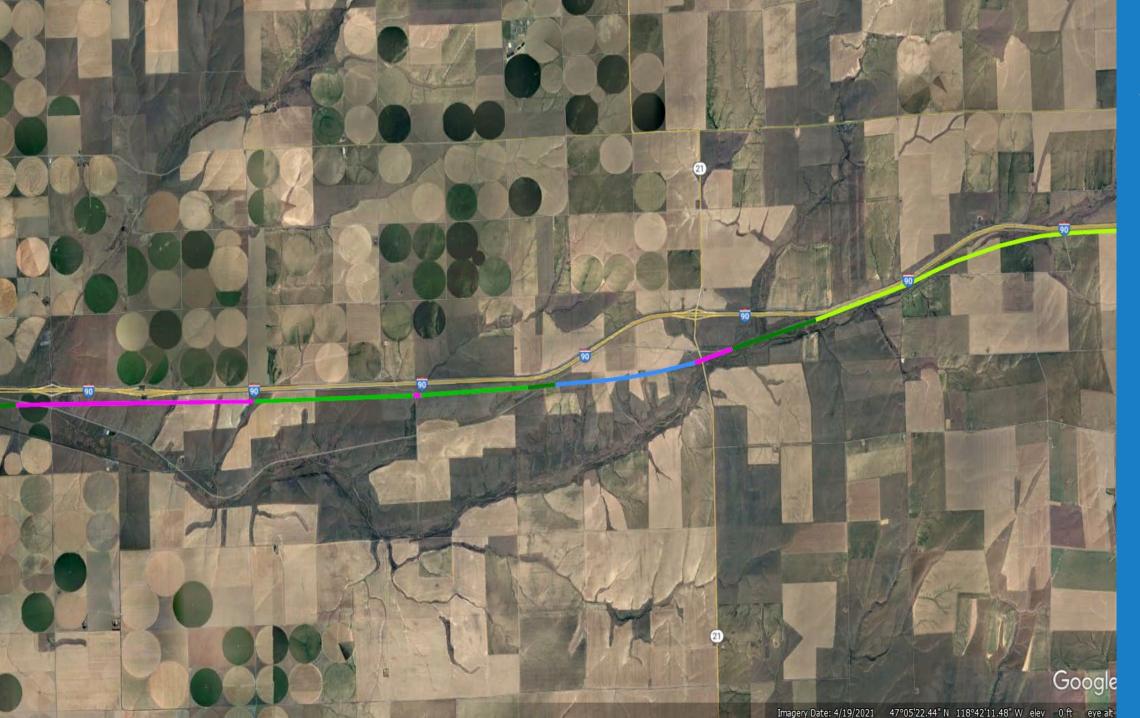
Good access to the I-90, lodging, and space for parking is available.

The distance to Grant County International Airport is 8.25 miles.



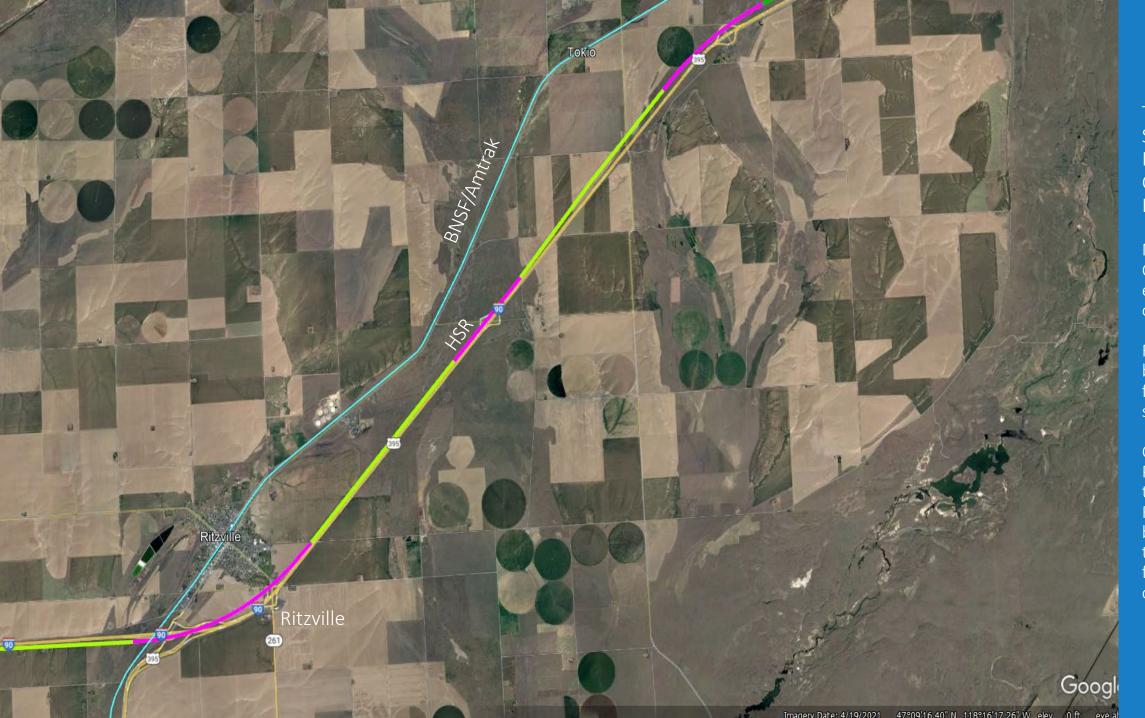
The
Stampede
Pass CHSRC
Corridor
along the
Southside of
I-90 toward
Ritzville

Most of the CHSR can use existing right—of—way.



The
Stampede
Pass CHSRC
Corridor
along the
Southside of
I-90 toward
Ritzville

Part of the CHSR can use existing right—of—way.

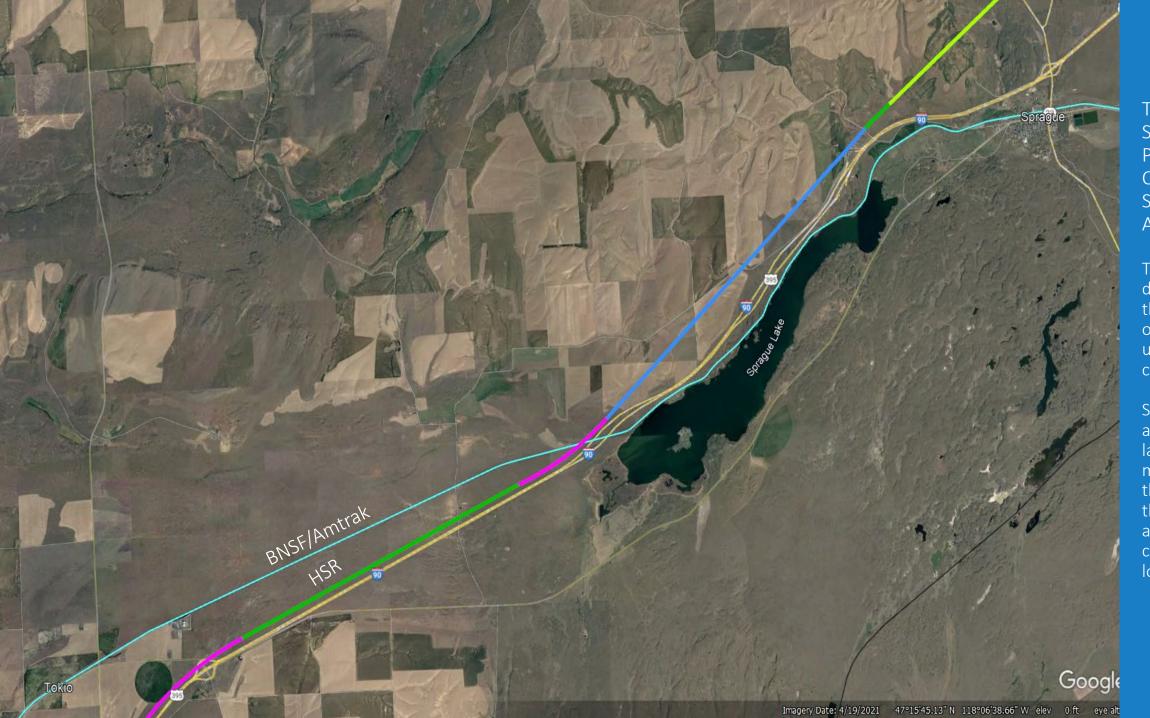


The
Stampede
Pass CHSRC
Corridor at
Ritzville

Most of the CHSR can use existing right—of—way.

Ritzville may be too small for a CHSR station.

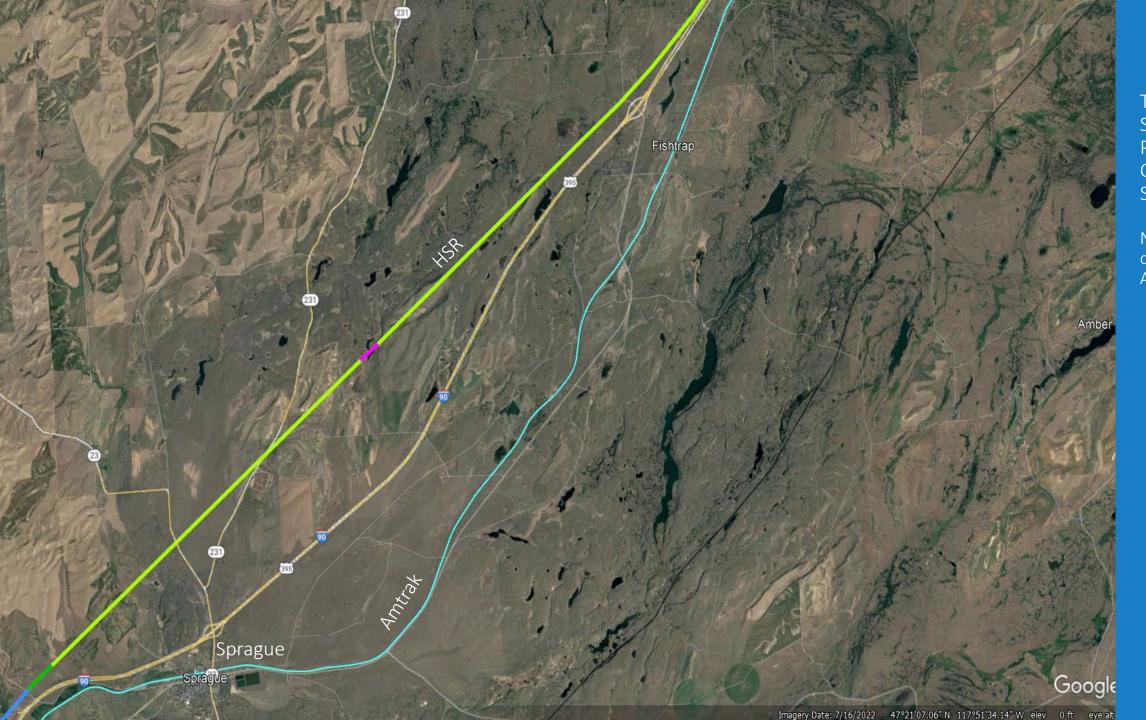
CHSR,
Portland, OR,
to Pasco, WA,
Ritzville must
be on a flyover
to prevent
freight rail
conflict.



The
Stampede
Pass CHSRC
Corridor at
Sprague Lake
Area

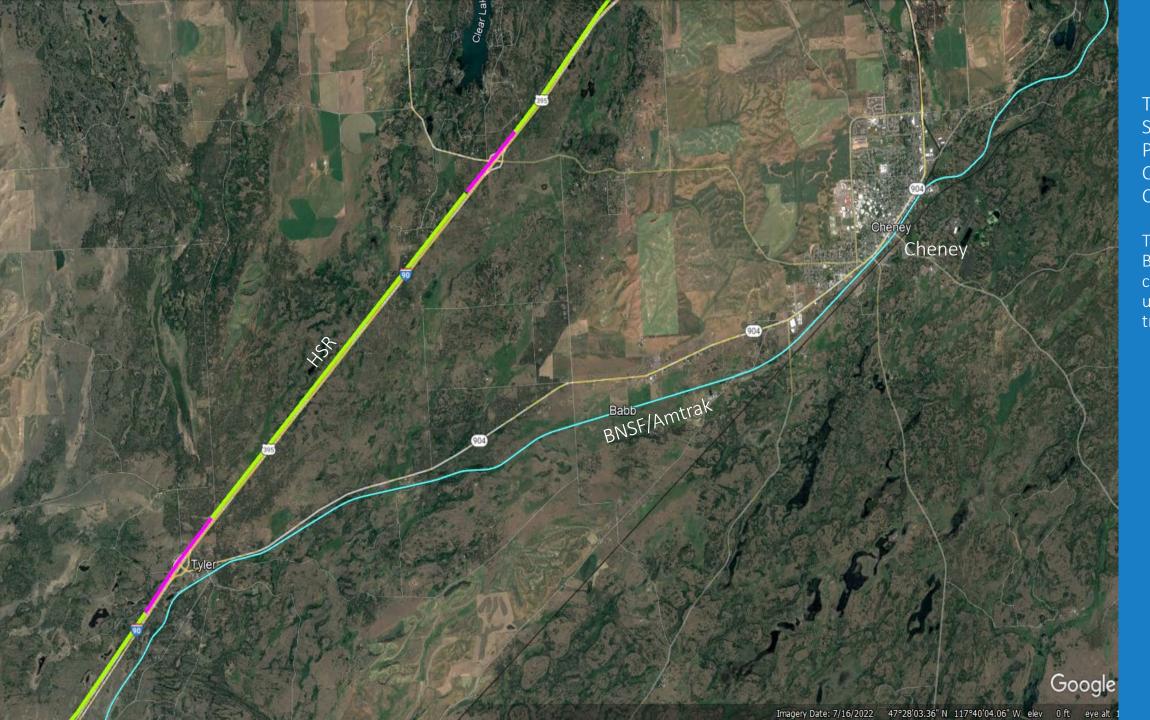
The CHSR will depart from the I-90 right-of-way and use a new corridor.

Some of the agricultural lands are marginal in this area, so that land acquisition costs may be low.



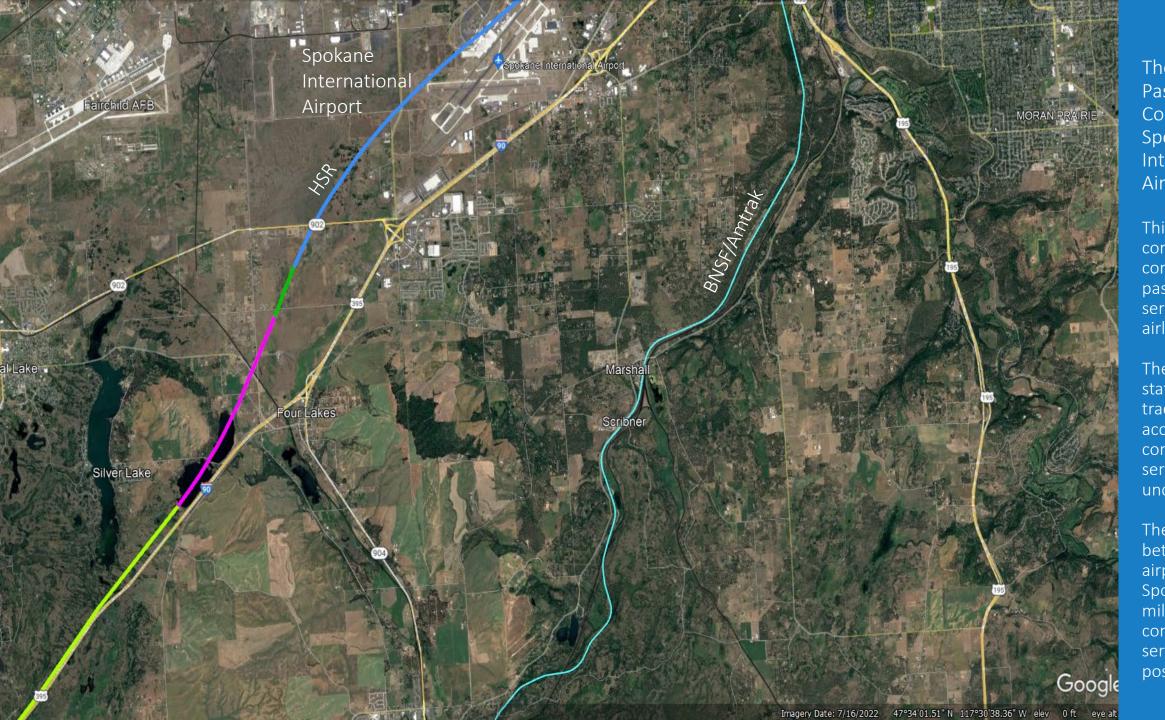
The
Stampede
Pass CHSRC
Corridor at
Sprague

Note the curves at the Amtrak route.



The
Stampede
Pass CHSRC
Corridor at
Cheney Area

The existing BNSF corridor cannot be used for HSR train speeds.

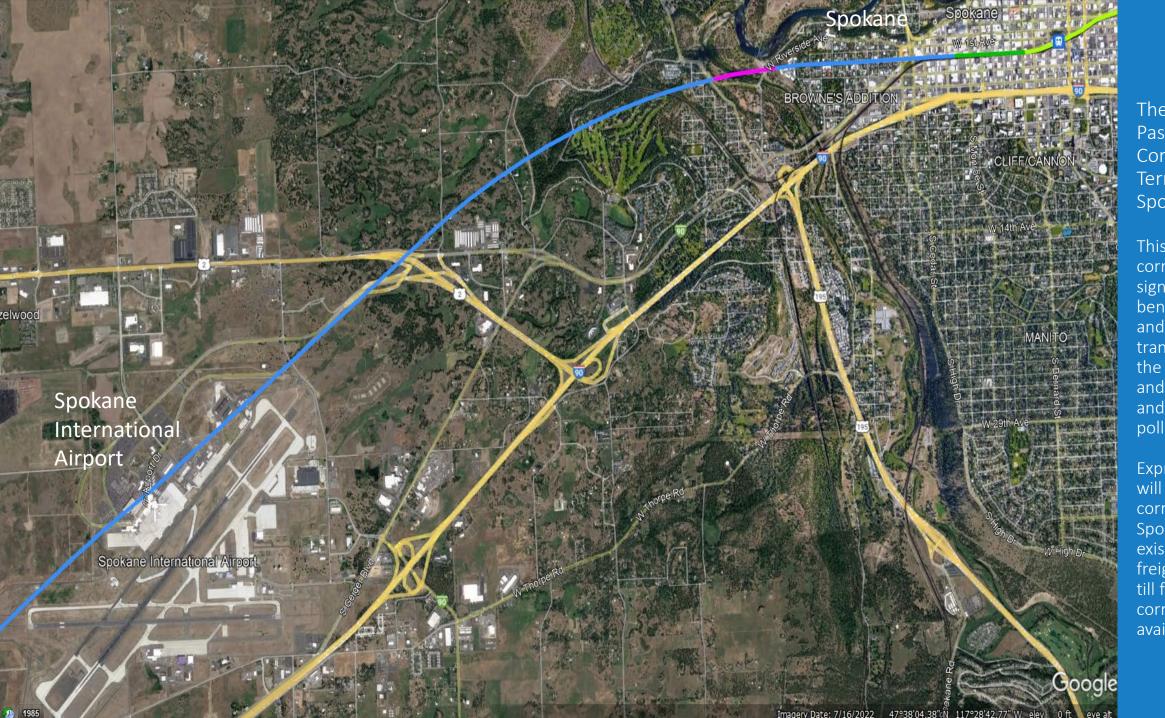


The Stampede Pass CHSR Corridor at Spokane International Airport

This new CHSR corridor will connect passenger service with the airlines.

The airport station has four tracks to accommodate commuter train service and is underground.

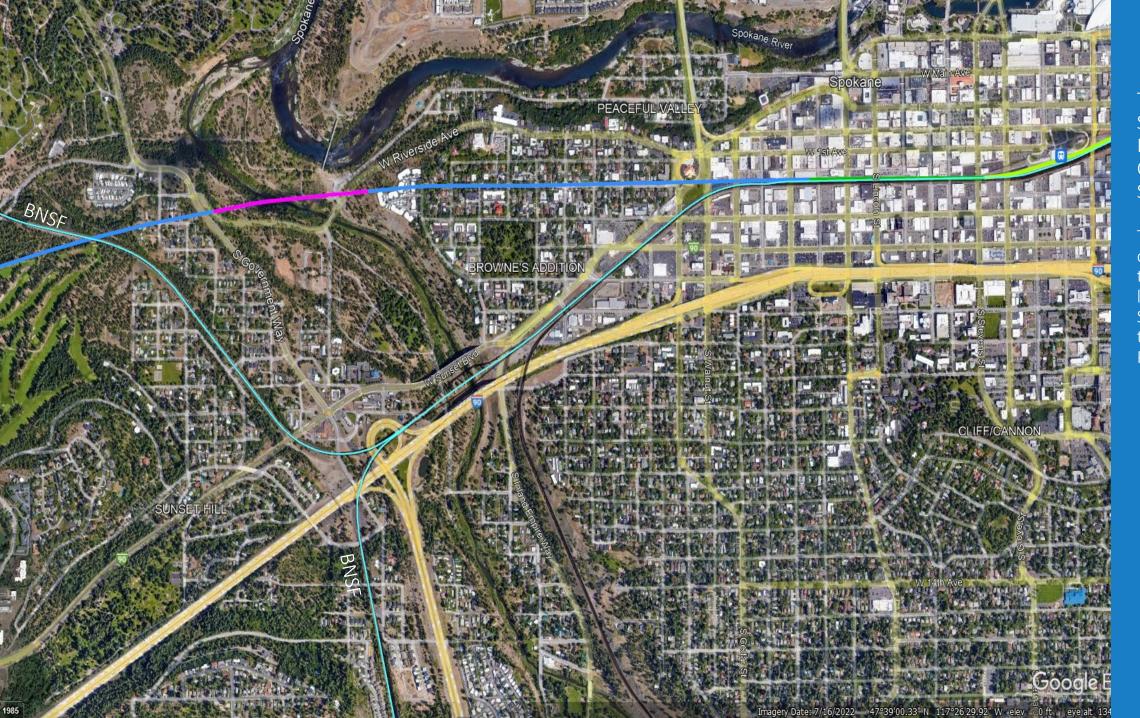
The distance between the airport and Spokane is 6 miles. Frequent commuter service is possible.



The Stampede Pass CHSRC Corridor Terminus at Spokane, WA

This CHSR corridor will significantly benefit people and express rail transit, shorten the corridor miles and travel time, and reduce air pollution.

Express freight will exit the CHSR corridor in Spokane and use existing BNSF freight corridors till future HSR corridors become available.



The
Stampede
Pass CHSRC
Corridor at
Spokane

The BNSF corridor has two Amtrak lines, one for Seattle and the other for Pasco.