APPENDIX

Nevada State Rail Plan 2021

Appendix Table of Contents

Inventory of Nevada Industry: with Sidetracks/ without Sidetracks

The Nevada Inventory of Industry—Businesses with sidetracks and nearby truckload shippers is a spreadsheet of approximately 550 rows, created with the objective of documenting all sidetracks in the State of Nevada that fall into the following categories:

- Private sidetracks owned by active and inactive rail shippers and receivers
- UP-owned in-service sidetracks that are not used for linehaul or switching operations
- Potential sidetracks that could be built by truckload users adjacent to UP right of way

The databases used as sources are (in order):

1. The SCRS (Serving Carrier Reciprocal Switching) database maintained by Railinc, which is a wholly owned subsidiary of the large U.S. railroad trade association, The Association of American Railroads. SCRS purports to itemize all private sidings in the U.S. by customer name, station name, street address, serving carrier, phone, and other information. This resource proved to be only about 70 percent accurate for Nevada but was a good starting point.
2. Google Maps: to verify the existence of sidings in SCRS, to identify sidings not listed in SCRS, and to identify facilities that appear to be handling truckload lots next to railroad rights of way.
3. Nevada county online tax maps: to identify the parcel ID numbers for specific lots where the operator of the facility is not shown on Google Maps.
4. Nevada county online property records: to find the owner, address, and acreage of specific parcels using the parcel ID number.
5. Internet search engines: to find the customer name associated with an address.
6. Web pages: to gather specific information about company products and telephone numbers.
7. Union Pacific maps, specifically ZTS maps: to acquire track numbers for UP-owned tracks and tracks designated by UP for individual customers.

The information gleaned from these databases was supplemented and confirmed when necessary by on-site visits and telephone calls. One column in the inventory lists 141 such personalized searches. Of those, 66 were personal visits to the entry shown. The other 75 were telephone calls that resulted in the verification of a qualifying entry. Driving tours and telephone calls were employed to clarify or disqualify prospective entries from the inventory.

The Nevada Inventory of Industry—Businesses with sidetracks and nearby truckload shippers, like the other datasets gathered by the NVSRP team, is intended to be continuously updated to keep pace with changing circumstances. With vigilant refinement it can be a valuable tool for supporting new and existing rail traffic.

Inventory of Nevada Industry
Businesses with Sidetracks & Nearby Truckload Shippers

Code	Region/ Inset Map SRF Ref. #	UP Hub Book Track UP ZTS #	Station	Sidetrack Owner	Street Address	City	Mfg or Xload Track in Use? yes	no	Warehouse Space (SF) Track Used	Track Unused	Track easy to build	UP Sidetracks Available
REGION 1, Clark County												
South Central Route Main Line												
O	1 L1	4-401-704	Jean	UP team track	northeast corner of Prison Road crossing							NUTS
B	1 L2	4-401-705	Jean	Letica Corp.	22520 S. Las Vegas Blvd.	Jean	Mfg					
R	1 L3		Sloan	Cal Portland	5300 Sloan Road	Las Vegas					Mfg	
R	1 L4		Sloan	Sierra Ready Mix, South Plant	13890 S. Decatur Road	Sloan					Mfg	
P	1 L5	4-401-109	Sloan	Precast Management Corp.	HQ: 3664 Susana Street	Las Vegas		Mfg				
P	1 L6	4-401-710	BlueDiamond	Certainteed Gypsum Manufacturing Inc.	Highway 159	Blue Diamond		Mfg				
b			BlueDiamond	Southwest Industrial Rigging	UP Team Track	Blue Diamond						
O	1 L7	4-401-415	Arden	UP storage track	off east end of W. Gary Ave.	Enterprise						NUTS
R	1 L8		Arden	Impact Sand & Gravel	9325 S. Jones Blvd.	Las Vegas					Mfg	
B	1 L9	4-401-716/7	Arden	Goldern Bear Oil Specialties	6400 W. Richmar	Las Vegas	Mfg					
O	1 L10	4-401-116,8	Arden	UP house tracks	Arden Rd. at W. Oleta Rd.	Las Vegas						NUTS
B	1 L11	4-401-722/4	Arden	Ken's Foods Inc.	8925 Kens Court	Las Vegas	Mfg					
O	1 L12	none	Arden	UP set out track	at S. West Wind Road	Las Vegas						NUTS
R	1 L13			Southern Glazer's Wine & Spirits	8400 S. Jones Blvd.	Las Vegas					330,000	
R	1 L14		Arden	Granello Bakery	5045 Mardon Ave.	Las Vegas					Mfg	
b			Arden	Greater Nevada Auto Auction	8801 Las Vegas Blvd. S	Las Vegas						
Boulder Branch												
R	1 M1		Boulder Jct.	Pacific Seafood	5845 S. Wynn Road	Las Vegas					Mfg	
R	1 M2		Boulder Jct.	Big D Floor Covering Supplies	4155 W. Russell Road	Las Vegas					Mfg	
B	1 M3	4-401-735/6	Boulder Jct.	Ergon Asphalt & Emulsions Inc.	3901 Ponderosa Way	Las Vegas	Mfg					
P	1 M4	4-401-737a	Boulder Jct.	Supreme Lobster & Seafood	6065 Polaris Ave.	Las Vegas				26,000		
P	1 M5	4-401-737b	Boulder Jct.	warehouse space for rent	6065 Polaris Ave.	Las Vegas				26,000		
P	1 M6	4-401-737c	Boulder Jct.	Albertson's Distribution Center	6065 Polaris Ave.	Las Vegas				26,000		
b		4-401-737	Boulder Jct.	National Wood Products	6065 Polaris Ave. Suite D	Las Vegas						
b		4-401-737	Boulder Jct.	National Moving & Storage Inc.	6065 S. Polaris Ave.	Las Vegas						
B	1 M7	4-401-738	Boulder Jct.	Ganesh LLC dba TransWorld Manufacturing	6109 Dean Martin Drive	Las Vegas	Mfg					
B	1 M7	4-401-738	Boulder Jct.	Jake's Crane & Rigging Inc. (Ganesh)	6109 Dean Martin Drive	Las Vegas						
B	1 M8	4-401-739	Boulder Jct.	Gibb Recycling/BB Recycling/LV Scrap Metal R	6100 Polaris Ave.	Las Vegas	Mfg					
R	1 M9		Boulder Jct.	Bonanza Beverage Co.	6333 Ensworth Street	Las Vegas					Mfg	
R	1 M10	4-401-744	Boulder Jct.	warehouse for lease/sale	6590 Bermuda Road	Paradise					80,000	
P	1 M11	4-401-745/6	Boulder Jct.	between Vitacost and Vololu	920 Pilot Road	Paradise		Mfg				
B	1 N1	4-401-744/5	Henderson	Ocean Spray Cranberries Inc.	1301 American Pacific Dr.	Henderson	Mfg					
P	1 N2	4-401-743	Henderson	Henderson School Board of Trustees	Gibson Business Park (no road)			Mfg				
R	1 N3	4-401-741/2	Henderson	Cassia Ranch dba Star Nursery?	125 Cassia Way	Henderson					Mfg	
B	1 N4	4-401-736	Henderson	Graham Packaging Company LP	875 American Pacific Dr.	Henderson	Mfg					
R	1 N5		Henderson	Progress Rail	860 Wigwam Parkway	Henderson					117,000	
R	1 N6		Henderson	Xtreme Manufacturing	8370 Eastgate Rd. Bldg.A	Henderson					45,000	
R	1 N7		Henderson	warehousese for lease, 4 units	8385 & 8390 Eastgate Rd.	Henderson					163,000	
B	1 N8	4-401-704	Henderson	Titanium Metals Corp. dba Timet	181 N. Water St. Gate 3	Henderson	Mfg					

Legend

B=Black Private sidetracks in use **P=Purple** Private sidetracks not in use **G=Green** UP COFC terminals **O=Orange** UP vacant sidetracks with transloading potential **R=Red** Truckload shippers on RR R-O-W: potential sidetracks
b=Blue Customers in Railinc SCRS database but not found

Mfg Manufacturing **Xld** Transload **Intmdl** Intermodal **NUTS** Not Using Track Siding

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Businesses with Sidetracks & Nearby Truckload Shippers

Code	Region/ Inset Map SRF Ref. #	UP Hub Book Track UP ZTS #	Station	Sidetrack Owner	Street Address	City	Mfg or Xload Track in Use? yes	no	Warehouse Space (SF) Track Used	Track Unused	Track easy to build	UP Sidetracks Available
B	①N9	4-401-many	Henderson	Olin Chlor-Alkali dba Pioneer Americas	245/350 4th Street	Henderson	Mfg					
B	①N10	4-401-724/6?	Henderson	Lhoist North America of Arizona Inc.	450 S. 4th Street	Henderson	Mfg					
B	①N11	4-401-732/3?	Henderson	Borman Specialty Materials	560 W. Lake Mead Pkwy.	Henderson	Mfg					
B	①N12	4-401-855/6	Henderson	Thatcher Company of Nevada	90 Business Center St.	Henderson	Mfg					
B	①M13	4-401-857	Henderson	Berry Global Inc.	800 E. Horizon Dr.	Henderson	Mfg					
R	①M14		Henderson	Americold Logistics	830 E. Horizon Dr.	Henderson					146,000	
B	①M15	4-402-859/63	Henderson	Poly-West Inc.	251 Conestoga Way	Henderson	Mfg					
B	①M16	none	Henderson	Nevada Railroad Museum	600 Yucca St.	BoulderCity	Mfg					
South Central Route Main Line continued												
P	①L15	none	Boulder Jct.	Harrington Industrial Plastics	5530 Arville Street	Paradise		Mfg				
B	①L16	4-402-850	Boulder Jct.	Desert Lumber (South Las Vegas)	5555 Arville Street	Paradise	Mfg					
R	①L17		Boulder Jct.	Western Pacific Pulp & Paper	5475 Wynn Road Suite 100	Paradise					Mfg	
b			Boulder Jct.	Dielco Crane Service Inc.	5454 Arville Street	Paradise						
R	①L18		Boulder Jct.	Nevada Ready Mix Corp.	4301 W. Hacienda Avenue	Paradise					Mfg	
R	①L19		Boulder Jct.	Nevada Beverage Company	3940 W. Tropicana Ave.	Paradise					110,000	
R	①L20		Boulder Jct.	J. Picini Flooring (dba J&R Flooring?)	4140 W. Reno Avenue	Paradise					28,000	
R	①L21	4-402-841	Boulder Jct.	Sternschnuppe LLC	3855 W. Harmon Avenue	Paradise					40,000	
R	①L22	4-402-840a	Boulder Jct.	warehouse for sale/lease	4500 Wynn Road	Paradise					75,456	
R	①L23	4-402-840b	Boulder Jct.	First Class Vending	3990 W. Naples Drive	Paradise					60,000	
R	①L24	4-402-840c	Boulder Jct.	Roofing Supply Group	3860 W. Naples Drive	Paradise					20,000	
R	①L25	4-402-831a	Boulder Jct.	vacant lot	South Valley View Blvd.	Paradise					Mfg	
R	①L26	4-402-831b	Boulder Jct.	Windriver Industrial Complex	4301 S. Valley View Road	Paradise					123,000	
R	①L27	4-402-833	Boulder Jct.	Goodman Distribution Inc.	4000 W. Harmon Ave.	Paradise					79,000	
R	①L28	4-402-832	Boulder Jct.	warehouse building with 4+ sections	4050 W. Harmon Ave.	Paradise					100,000	
b			Boulder Jct.	Rugby Architectural Bldg. Products	3585 W. Diablo Rd. Ste. 6	Las Vegas						
b			Boulder Jct.	NV Yellow Checker Star Cab Corp.	3950 W. Tompkins Ave.	Las Vegas						
b			Boulder Jct.	P&S Metals & Supply	5160 Rogers Street	Las Vegas						
b			Boulder Jct.	RW Bugbee & Associates Inc.	1005 S. Cimarron Road	Las Vegas						
b			Boulder Jct.	Garrett Furniture Co.	1640 E. Tropicana Ave.	Las Vegas						
b			Boulder Jct.	NV Energy	6226 W. Sahara Ave.	Las Vegas						
P	①L29	4-402-801a	Las Vegas	Steel Engineers Inc.	716 W. Mesquite Ave	Las Vegas		Mfg				
B	①L30	4-402-805a	Las Vegas	Nevada Ready Mix Corp.	601 W. Bonanza Road	Las Vegas	Mfg					
P	①L31	4-402-805b	Las Vegas	On Time Oil LLC	715 W. Bonanza Road	Las Vegas		Mfg				
P	①L32	4-402-801b	Las Vegas	Keenan Pipe & Supply	831 W. Bonanza Road	Las Vegas		Mfg				
P	①L33	4-402-809	Las Vegas	(Promotions) LV Review-Journal	1111 W. Bonanza Road	Las Vegas		Mfg				
P	①L34	4-402-810	Las Vegas	Xtreme Manufacturing	1415 W. Bonanza Road	Las Vegas				35,000		
b			Las Vegas	Remac Inc.	2123 W. Bonanza Road	Las Vegas						
R	①L35		Las Vegas	Outwest Meat Company	300 W. Bonanza Road	Las Vegas					51,000	
R	①L35		Las Vegas	U.S. Foods	300 W. Bonanza Road	Las Vegas					96,000	
R	①L35		Las Vegas	Bimbo Bakeries	300 W. Bonanza Road	Las Vegas					24,000	
R	①L36		Las Vegas	vacant warehouse	701 N. Main Street	Las Vegas					24,000	

Legend

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R	①L37		Las Vegas	vacant warehouse	601 N. Main Street	Las Vegas					38,152	
R	①L38		Las Vegas	Trulite Glass & Aluminum Solutions	1513 A Street	Las Vegas					Mfg	
R	①L39		Las Vegas	Liberty Salvage Materials	130 W. Owens Avenue	Las Vegas					Mfg	
R	①L40		Las Vegas	Rosen Materials	1818 Losee Road	Las Vegas					12,000	
R	①L41		Las Vegas	warehouse, available?	3108 Losee Road	Las Vegas					51,000	
R	①L42		Las Vegas	Southern Tire Mart	3426 Losee Road	Las Vegas					20,000	
B	①L43	4-402-819/20	Wann	SW Liquid Asphalt & Emulsions LLC	3752 Bruce Street	N. Las Vegas	Mfg					
b			Wann	General Building Systems Inc.	3752 N. Bruce Stree	N. Las Vegas						
P	①L44	4-402-818	Wann	building for lease	3649 Losee Road	N. Las Vegas				50,000		
b			Wann	Capital Cabinet Corp.	3645 Losee Road	N. Las Vegas						
P	①L45	4-402-876	Wann	Adesa Auto Auctions	1000 E. Gowan Road	N. Las Vegas		Mfg				
B	①L46	4-402-877	Wann	Clearwater Paper Corp.	3901 N. Donna Street	N. Las Vegas	Mfg					
R	①L47		Wann	Clearwater Paper Corp.	3750 North 5th Street	N. Las Vegas					170,000	
B	①L48	4-402-861	Wann	SA Recycling LLC	3870 Losee Road	N. Las Vegas	Mfg					
b			Las Vegas	Silver Dollar Recycling LLC	3870 Losee Road	N. Las Vegas						
b			Las Vegas	Bechtel National Inc.	2621 Losee Road	Las Vegas						
b			Las Vegas	James Truss Co., A Nevada Corp.	4220 Donovan Way	N. Las Vegas						
R	①L49		Wann	Prologis N 15 Freeway Distribution Ctr.	4140 Frehner Road	N. Las Vegas					190,000	
R	①L50		Wann	Prologis N 15 Freeway Distribution Ctr.	4140 Frehner Road	N. Las Vegas					190,000	
P	①O1	4-402-870	Wann	warehouse, space available	4550 Engineers Way	N. Las Vegas				240,000		
P	①O2	4-402-871b	Wann	Metl-Span	4700 Engineers Way	N. Las Vegas		Mfg				
P	①O3	4-402-871a	Wann	Parker Plastics	4700 Engineers Way	N. Las Vegas		Mfg				
R	①O4		Wann	7-Up RC Bottling	4610 Donovan Way	N. Las Vegas					112,000	
b			Las Vegas	Office Max Inc.	2861 Marion Drive	Las Vegas						
b			Las Vegas	State of Navada [sic]	123 E. Washington	Las Vegas						
b			Las Vegas	Circus Circus Hotel & Casino	2880 Las Vegas Blvd. S	Las Vegas						
b			Las Vegas	JW Costello Beverage Company Inc.	4370 S. Valley View Blvd.	Las Vegas						
b			Las Vegas	Hampton Distribution Companies	ML: 9600 SW Barnes Rd Ste 200	Portland						
b			Las Vegas	Amer. Intn'l. Forest Products Inc.	ML: 5560 SW 107th Ave.	Beaverton						
b			Las Vegas	General Outdoor Cleanup	2720 Pinto Lane	Las Vegas						
b			Las Vegas	Deluca Liquor & Wine	1849 W. Cheyenne Ave.	N. Las Vegas						
North Las Vegas Industrial Track (Track 700)												
B	①O5	4-402-706a	Las Vegas	Lighthouse Holdings dba L/H Logistics	4501 Mitchell Street	N. Las Vegas			100,000			
P	①O5	4-402-706b	Las Vegas	Brady Industries Inc.	4175 Arville Street	Las Vegas				100,000		
P	①O6	4-402-703	Las Vegas	Nevada Recycling	4611 Mitchell Street	N. Las Vegas		Mfg				
R	①O7		Las Vegas	Johnson Brothers Liquor Company	4701 Mitchell Street	N. Las Vegas					115,000	
R	①O8		Las Vegas	Cind-R-Lite	4745 Mitchell Street	N. Las Vegas					40,000	
B	①O9	4-402-704	Las Vegas	Suburban Propane	4520 Mitchell Street	N. Las Vegas	Mfg					
P	①O10	4-402-701	Las Vegas	Rebel Oil Company	4532 Mitchell Street	N. Las Vegas	Mfg					
P	①O11	4-402-702	Las Vegas	Worthington Armstrong Venture	4525 N. Walnut Road	N. Las Vegas				100,000		
B	①O12	4-402-707	Las Vegas	Amerigas Propane LP	4420 McGuire Street	N. Las Vegas	Mfg					

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	Region/ Inset Map	UP Hub Book Track					Mfg or Xload Track in Use?		Warehouse Space (SF)			UP Sidetracks
Code	SRF Ref. #	UP ZTS #	Station	Sidetrack Owner	Street Address	City	yes	no	Track Used	Track Unused	Track easy to build	Available
B	①O12	4-402-707	Las Vegas	Hesperia Liquid Gas Co.	4420 McGuire Street	N. Las Vegas	Mfg					
B	①O13	950	Las Vegas	Brenntag Plastics	3880 E. Craig Road	N. Las Vegas	Mfg					
B	①O14	952	Las Vegas	Basic Food Flavors, Inc.	3900/3950/4000 E. Craig Road	N. Las Vegas	Mfg					
R	①O15		Las Vegas	West Direct Oil	4581 Eaker Street	N. Las Vegas					Mfg	
Golden Triangle Industrial Track (Track 850)												
P	①O16	4-402-862	Wann	Sparks Exhibits	4975 N. Pecos Road	N. Las Vegas		Mfg				
B	①O17	4-402-863	Wann	Advanced Polybag (Nevada) Inc.	4900 Engineers Way	N. Las Vegas	Mfg					
P	①O18	4-402-856	Wann	Tri-Dim Filter Corp.	4980 Statz Street	N. Las Vegas		Mfg				
b		4-402-856	Las Vegas	Columbia River Logistics	4980 Statz Street	N. Las Vegas						
B	①O19	4-402-853/4	Wann	Desert Lumber (North Las Vegas)	4950 Berg St./2900 E. Lone Mtn. Rd.	N. Las Vegas	Mfg					
B	①O20	4-402-855	Wann	Builders Firstsource Inc.	4915 Berg Street	N. Las Vegas	Mfg					
B	①O21	4-402-857	Wann	84 Lumber Co.	2824 E. La Madre Way	N. Las Vegas	Mfg					
South Central Route Main Line continued												
B	①O22	4-402-803/4;13/	Las Vegas	CalPortland Company	4938 Donovan Way	N. Las Vegas	Mfg					
B	①O23	4-402-?	Las Vegas	Strategic Materials Inc.	4910 Donovan Way, Ste. A	N. Las Vegas	Mfg					
B	①O24	4-402-?	Las Vegas	Las Vegas Paving Corp.	4910 Donovan Way	N. Las Vegas	Mfg					
B	①O25	4-402-?	Las Vegas	Thermo Fluids (div. of Clean Harbors)	4910 Donovan Way	N. Las Vegas	Mfg					
		4-402-807/12	Las Vegas	Arrow Reload Nevada Inc.	4910 Donovan Way, Ste. A-10	N. Las Vegas						
R	①P1		Valley	Northgate Distribution Center - South	5430 Donovan Way	N. Las Vegas					677,765	
R	①P2		Valley	Northgate Distribution Center - South	5550 Donovan Way	N. Las Vegas					564,000	
R	①P3		Valley	Northgate Distribution Center - North	5840 Donovan Way	N. Las Vegas					185,000	
R	①P4		Valley	Northgate Distribution Center - North	4550 Nexus Way	N. Las Vegas					800,000	
O	①P5	4-402-410	Valley	UP storage track	parallel to Donovan Way, 50' away	N. Las Vegas						NUTS
G	①P6	4-402-401/9,11	Valley	SW Transload & Distribution Svcs. LLC	4740 E. Tropical Pkwy.	Las Vegas						Intmdl, Term
b			Valley	Nissan North America Inc.	ML: 1 Nissan Way	Franklin						
b			Valley	Volkswagen Group of America Inc.	ML: 2200 Fernando Porsche Dr.	Herndon						
b			Valley	Intermountan Rigging & Heavy Haul	ML: 961 S. Pioneer Rd.	Salt Lake City						
Valley Nellis Industrial Lead (Track 711)												
B	①P7	4-402-722/25	Valley	Ash Grove Cement Co.	4851 E. Centennial Pkwy.	Las Vegas	Mfg					
B	①P8	4-402-721	Valley	BMC West LLC	6255 Range Road	Las Vegas	Mfg					
R	①P9		Valley	Cal Portland Ready Mix Plant	5910 Range Road	Las Vegas					Mfg	
R	①P10		Valley	Northern Beltway Industrial Center	5406 El Campo Grande Ave.	North Las Vegas					240,000	
R	①P11		Valley	Northern Beltway Industrial Center	5402 El Campo Grande Ave.	North Las Vegas					200,000	
B	①P12	4-402-712/3	Valley	SA Recycling LLC	5850 N. Nellis Blvd.	Las Vegas	Mfg					
b			Valley	Silver Dollar Recycling	5000 Range Road	N. Las Vegas						
B	①P13	4-402-733/4,83	Valley	ProPetroleum Terminal	4800 El Campo Grande Ave.	Las Vegas	Mfg					
B	①P14	4-402-731/2	Valley	Rebel Oil Company	5095 E. El Campo Grande Ave.	Las Vegas	Mfg					
B	①P15	4-402-822/31	Valley	Ryze Renewables Las Vegas LLC	5233 E. El Campo Grande Ave.	Las Vegas	Mfg					
b		4-402-822/31	Valley	Biodiesel of Las Vegas Inc.	5233 E. El Campo Grande Ave.	Las Vegas						
R	①P16		Valley	Baker Commodities	5725-29 Range Road	Las Vegas					Mfg	
R	①P17		Valley	warehouse, space available	5675 East Anne Road	North Las Vegas					580,000	

Legend

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R	①P18		Valley	Bed, Bath & Beyond distribution center	5835 East Anne Road	North Las Vegas					525,000	
B	①P19	4-402-718/20	Valley	Kinder Morgan Energy Partners LP	5049 N. Sloan Lane	Las Vegas	Mfg					
b			Valley	Haycock Petroleum Co.	4825 N. Sloan	Las Vegas						
b			Valley	River City Petroleum Inc.	4915 N. Sloan Lane	Las Vegas						
Pabco Branch (private)												
B	①L51	4-402-727+	Apex	Pabco Building Products LLC	8000 E. Lake Mead Blvd.	Las Vegas	Mfg					
B	①L51	4-402-727+	Apex	Pabco Gypsum	ML: 800 E. Lake Mead Blvd.	Las Vegas						
South Central Route Main Line continued												
R	①L52		Lovell	Georgia-Pacific	11401 US Highway 91	Las Vegas					Mfg	
B	①L53	4-402-735/47	Arrolime	Lhoist North America of Arizona	12101 Las Vegas Blvd. North	North Las Vegas	Mfg					
B	①L54	4-402-739/40	Arrolime	Boral CM Services LLC	11458 US Highway 93	Las Vegas	Mfg					
b			Dry Lake	Oxbo Inc.	ML: 33341 Gilmore Rd.	Scappoose						
b			Dry Lake	Contractors Cargo Co.	ML: 500 S. Alameda St.	Compton						
O	①L55	4-402-143	Dry Lake	UP back track, double-ended siding		Dry Lake						NUTS
b			Moapa	Barnhart Crane & Rigging Co.	ML: 2163 Airways Blvd.	Memphis						
P	①L56	4-402-748/52	Moapa	Nevada Energy, Reid Gardner Generating Stat	501 Walky Kay Way	Moapa		Mfg				
Mead Lake Branch												
P	①L57	4-402-758	Arrowhead	Hidden Valley Dairy	1000 Hidden Valley Road	Moapa	Mfg					
b			Arrowhead	DG Partners (Ponderosa Dairies)	ML: 2055 N. Hwy. 168	Moapa						
B	①L58	4-402-764/9	Mead Lake	JR Simplot Co.	1551 S. Moapa Blvd.	Overton	Mfg					
South Central Route Main Line continued												
B	①L59	4-402-756/7	Moapa	Plastic Express		Moapa	Mfg					
Region 1 Totals						**Facility counts**	48	16	1	8	54	7
						Warehouse square feet			100,000	603,000	6,421,373	

Legend

B=Black Private sidetracks in use **P=Purple** Private sidetracks not in use **G=Green** UP COFC terminals **O=Orange** UP vacant sidetracks with transloading potential **R=Red** Truckload shippers on RR R-O-W: potential sidetracks
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Mfg Manufacturing **Xld** Transload **Intmdl** Intermodal **NUTS** Not Using Track Siding

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REGION 2, Lincoln County												
South Central Route Main Line												
O	②Q1	4-402-102	Farrier	UP house track, double-ended		Moapa						NUTS
O	②Q2	4-402-106	Hoya	UP house track, double-ended		Hoya						NUTS
O	②Q3	4-402-109	Vigo	UP house track, double-ended		Vigo						NUTS
O	②Q4	4-402-111	Carp	UP house track, double-ended		Carp						NUTS
O	②Q5	4-402-113	Leith	UP house track, double-ended		Leith						NUTS
O	②Q6	4-402-117	Elgin	UP house track, double-ended		Elgin						NUTS
O	②Q7	4-402-119	Elgin	UP house track, double-ended		Boyd						NUTS
O	②Q8	4-402-121	Stine	UP house track, double-ended		Stine						NUTS
O	②Q9	4-402-425/6,13(	Caliente	5 different UP tracks, 6100 feet potential xloading		Caliente						NUTS
b			Caliente	Ecology Recycling Services LLC	ML: 785 E. M Street	Colton						
O	②Q10	4-402-134	Eccles	UP house track, double-ended		Eccles						NUTS
O	②Q11	4-402-141	Acoma	UP house track, double-ended		Acoma						NUTS
O	②Q12	4-402-145	Crestline	UP house track, double-ended		Crestline						NUTS
Region 2 Totals						**Facility counts**	0	0		0	0	12
						Warehouse square feet				0	0	
REGION 4, I-80 Corridor												
Overland Main Line (former Southern Pacific)												
O	④J1	2-205-154	Parran	UP setout track	400' dirt road from Hwy 95	Parran						NUTS
O	④J2	2-205-158	Ocala	UP setout track	1.4 mi dirt rd from Hwy 95	Ocala						NUTS
O	④J3	2-205-161	Toy	UP setout track	850' dirt road from Frontage	Toy						NUTS
O	④J4	2-205-162	Granite Point	UP setout track	400' dirt road from Frontage	Granite Point						NUTS
O	④J5	2-205-765	Lovelock	Oreana Energy LLC	leased UP track on NV Blvd	Lovelock						In Use
P	④J6	2-205-766a	Lovelock	Nevada Soy Products	550 Industrial Parkway	Lovelock		Mfg				
B	④J7	2-205-766b	Lovelock	Tolsa West Coast Corp.	35 McDougal Ind'l Complex Rd	Lovelock	Mfg					
P	④J8	2-205-766c	Lovelock	C Punch Ranch Inc.	25 McDougal Ind'l Complex	Lovelock		Mfg				
O	④J9	2-205-575	Colado	UP setout track	350' n of Coal Canyon Rd. xing	Colado						NUTS
B	④J10	2-205-770/1/2	Colado	Eagle Pitcher (EP) Minerals LLC	150 Coal Canyon Rd.	Lovelock	Mfg					
O	④J11	2-205-579	Humboldt	UP setout track	650' nw of Frontage Road	Humboldt						NUTS
B	④J12	4-412-811/3	Winnemucca	Winnemucca Farms Inc.	1 Potato Pl. Unit 1	Winnemucca	Mfg					
B	④J13	4-412-814	Winnemucca	Ron's Seed & Supply	710 S. Grass Valley Rd.	Winnemucca	Mfg					
O	④J14	4-412-818/20	Winnemucca	UP team track & circus ramp track	s of S. Bridge Street xing	Winnemucca						NUTS
P	④J15	4-412-725a	Winnemucca	Sexton & Sons d/b/a Mezotrace	415 Wellington Street	Winnemucca		Mfg				
B	④J16	4-412-825b	Winnemucca	Great Basin Agriculture	950 East 4th Street	Winnemucca	Mfg					
b			Winnemucca	Dustbusters Enterprises Inc.	ML: 108 Meadow Ln., Evanston WY	Evanston						
b			Winnemucca	Stanislaus Farm Supply Co.,	ML: 624 E. Service Rd, Modesto CA	Modesto						
O	④J17	4-412-801	Tule	UP spur track	575' n of N. Coyote Road	Tule						NUTS
O	④J18	4-412-803	Golconda	UP spur track	parallel to Stanford Road	Golconda						NUTS
O	④J19	4-412-135	Mote	UP spur track	0.9 mi n of I-80 ramps on paved road	Mote						NUTS

Legend

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B	④J20	4-412-844/5	Battle Mtn.	M-I Drilling Fluids (Schlumberger?)	2 N. 2nd Street	Battle Mtn.	Xld					
B	④J21	4-412-843	Battle Mtn.	Flyers Energy	345 N. 1st Street	Battle Mtn.	Mfg					
b			Battle Mtn.	Interstate Oil Co.	ML: 50 Lillard Dr.	Sparks						
O	④J22	4-412-842	Battle Mtn.	UP team track	N. 1st Street	Battle Mtn.						NUTS
P	④J23	4-412-842	Battle Mtn.	Atlas Towing Service, Inc.	1339 Clydesdale Rd.	Battle Mtn.		Mfg				
O	④J24	4-412-850	Hilltop	UP team track	Muleshoe Road	Battle Mtn.						NUTS
O	④J25	4-412-852/3	Imco	MI Drilling Fluids (Schlumberger?)	1979 Frontage Road	Battle Mtn.					Mfg	
B	④J26	4-412-856/7	Argenta	Baker Hughes Oilfied Opns. Inc.	Frontage Rd., 13 mi. east of Battle Mtn.		Xld					
O	④J27	4-412-150	Mosel	UP team track	I-80 Frontage Road	Mosel						NUTS
B	④J28	4-412-854/868	Jayhawk	Saconix LLC/Dunphy Terminal	I-80 Frontage Road	Battle Mtn.	Xld					
O	④J29	4-412-858/9	Jayhawk	UP tracks	500' from T-S Road	Jayhawk						NUTS
R	④J30	4-412-158	Beowawe	UP house trk could swap with x-over	Highway 306 bisects	Beowawe					Mfg	
B	④J31	4-412-865/6	Barth	Saga Exploration	217 Cedar	Carlin	Mfg					
O	④J32	4-412-875	Carlin	UP house track	10th Street easterly	Carlin						NUTS
B	④J33	4-412-878	Carlin	Carlin Rail Terminal LLC	2001 Chestnut Street	Carlin	Mfg					
P	④J34	4-412-879	Carlin	Southwest Energy	Chestnut Street	Henderson		Xld				
R	④J35		Carlin	Modern Concrete Inc.	Chestnut Street	Carlin					Mfg	
b			Carlin	Komatsu Mining Corp.	4450 P&H Drive	Elko						
B	④J36	4-412-493,5	Vivian	Midstream Energy Partners (USA) LLC	3001 Chestnut Street	Carlin	Xld					
B	④J37	4-412-894	Vivian	Graymont Western US Inc.	3263 Chestnut Street	Carlin	Xld					
B	④J38	4-412-880	Vivian	Univar USA Inc.	3863 Chestnut Street	Carlin	Mfg					
B	④J39	4-412-881	Vivian	Lemm Corporation--Operations	4141 Old Highway 40	Carlin	Mfg					
B	④J40	4-412-771	Elko	Tricon Wear Solutions d/b/a Tricon Metals	1355 W. Idaho Street	Elko	Mfg					
B	④J41	4-412-473	Elko	Humboldt Lbr. d/b/a Franklin Bldg. Supply	1335 W. Idaho Street	Elko	Mfg					
R	④J42	4-409-766	Elko	Blach Distributing Co.	131 W. Main Street	Elko					Mfg	
O	④J43	4-409-585	Elko	Union Pacific Railroad Co. Inc.	5200 Union Pacific Way	Elko						NUTS
b			Elko	Shilon Corp.	ML: 10190 Haven St.	Las Vegas						
B	④J44	4-409-721/2	Osino	Northeastern NV Regional Railport	8800 E. Idaho Street	Elko	Xld					
B	④J45	4-409-?/?	Osino	National Oilwell Varco LP	9006 E. Idaho Street	Elko	Mfg					
R	④J46		Osino	SAS Global Corp.	9102 E. Idaho Street	Elko					Mfg	
B	④J47	4-409-723/4	Osino	Pacific Steel & Recycling	9250 E. Idaho Street	Elko	Mfg					
b			Osino	County of Elko Nevada	571 Idaho Street	Elko						
O	④J48	4-409-102	Halleck	UP spur track	abuts Highway 229	Halleck						NUTS
O	④J49	4-409-110	Deeth	UP house track	between Star Valley Rd & Starr Land	Deeth						NUTS
O	④J50	4-409-720	Wells	UP house track	N. Metropolis Road & 8th Street	Wells						NUTS
O	④J51	4-409-507	Wells	UP spur track	parallel to 7th St. & Ruby Ave.	Wells						NUTS
O	④J52	4-409-110	Moor	UP runaround	3500' dirt roads to I-80 ramps	Moor						NUTS
O	④J53	4-409-530	Cobre	UP setout track	3000' dirt road to Montello Rd.	Cobre						NUTS
O	④J54	4-409-130	Montello	UP house track, double-ended	off Montello Road	Montello						NUTS
O	④J55	4-409-531	Tacoma	UP setout track	375' NW of Tacoma Road	Tacma						NUTS

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Central Corridor Main Line (former Western Pacific)												
R	④K1		Wendover	Propane of Wendover	460 Mesa Street	W.Wendover					Mfg	
R	④K2		Wendover	City of West Wendover Landfill	1875 Florence Way	W.Wendover					Mfg	
B	④K3	4-404-530	Pilot	Graymont Western US Inc.	15 miles NW of Wendover Pilot Exit 398		Mfg					
O	④K4	4-404-528	Clifside	UP set out track	1 mi n to Frontage Road	Clifside						NUTS
O	④K5	4-404-526	Silver Zone	UP set out track	2 mi e to Frontage Road	Silver Zone						NUTS
O	③K6	4-404-126	Shafter	UP storage track	off BLM Road 1091	Shafter						NUTS
O	④K7	4-404-510	Ruby	UP set out track	7000' nw to Highway 93	Ruby						NUTS
R	④K8		Wells	Great Basin Beverage	534 Pacific Ave.	Wells					Mfg	
O	④K9	4-404-108	Deeth	UP set out track, 1/2 on Spratlin's property	off Starr Lane	Deeth						NUTS
O	④K10	4-404-105	Elburz	UP set out track	2 mi from Frontage Road	Elburz						NUTS
O	④K11	4-404-503	Elburz	UP spur track	2 mi from Frontage Road	Elburz						NUTS
B	④K12	4-404-701	Osino	Silver State Rock Products	6060 Last Chance Rd.	Elko	Mfg					
B	④K13	4-412-781	Elko	Ash Grove Cement Co.	320 Union Pacific Way	Elko	Mfg					
R	④K14		Elko	Theissen Team USA	1840 Sharp Access Road	Elko					Mfg	
R	④K15		Elko	Modern Concrete Inc.	1770 Sharp Access Road	Elko					Mfg	
			Elko	Al Park Petroleum Inc.	275 12th Street	Elko						
O	④K16	4-412-575	Hunter	UP spur track	off Maggie Creek Ranch Rd	Hunter						NUTS
R	④K17		Carlin		off Chestnut St. btwn Univar & Graymont						Mfg	
B	④K18	4-412-762	Beowawe	Thomas Petroleum	ML: 923 Spruce St.	Carlin	Mfg					
B	④K19	4-412-755/61	Dunphy	Halliburton Energy Services Inc.	ML: 912 Dunphy Ranch Rd	Battle Mtn.	Xld					
B	④K20	4-412-753/4	Dunphy	Newmont NV Energy Investment LLC	914 Dunphy Ranch Rd	Battle Mtn.	Mfg					
B	④K20	4-412-753/4	Dunphy	Newmont USA Ltd.	230 Dunphy Ranch Road	Battle Mtn.						
O	④K21	4-412-550	Kampos	UP storage track	1 mile west of T-S road	Kampos						NUTS
O	④K22	4-412-742/3	Rennox	Dyno Nobel Inc.	1 Hwy 305 AptS	Battle Mtn.	Mfg					
P	④K23	4-412-740/1	Rennox	Sierra Chemical Company	Rock Creek Rd. (tax map: Parcel A Chem Map)	Rennox		Mfg				
P	④K24	4-412-739	Rennox	Dyno Nobel Inc.	Rock Creek Rd. (tax map: 1 Hwy 305 AptS)	Battle Mtn.		Mfg				
B	④K25	4-412-720/4+1	Valmy	NV Energy	Stone House Exit	Interstate 80	Mfg					
O	④K26	4-412-726	Valmy	UP spur track	off Treaty Hill Road	Valmy						NUTS
O	④K27	4-412-410	Red House	UP storage track	off Red House Ranch Road	Red House						NUTS
B	④K28	4-412-504	Golconda	Southwest Energy LLC	Mobley Ranch Rd.	Golconda	Xld					
B	④K29	4-412-703,6	Golconda	Graymont Western US Inc.	205 Mobley Ranch Rd.	Golconda	Mfg					
B	④K30	4-412-704/5	Golconda	Diamond Plastics Corp.	1000 Eden Valley Rd.	Golconda	Mfg					
B	④K31	4-412-711a	Winnemucca	Amerigas Propane LP	Golconda Street ofc.: 4855W.WinnemuccaBlvd	Winnemucca	Mfg					
P	④K32	4-412-711b	Winnemucca	building for lease	78 Sonoma Street	Winnemucca				11,000		
O	④K33	4-412-701	Winnemucca	UP house track	off north end of Gould Street	Winnemucca						NUTS
O	④K34	4-412-705	Winnemucca	UP team track	along Gould Street	Winnemucca						In Use
B	④K35	4-412-712	Winnemucca	JR Simplot Co.	140 Pacific Ave.	Winnemucca	Mfg					
B	④K36	4-412-704/713	Winnemucca	Min-Ad Inc.	4210 Jungo Road	Winnemucca	Mfg					
B	④K37	4-412-714/5, 9	Winnemucca	Transwood Inc.	3109 Desert Gen Rd.	Winnemucca	Mfg					
B	④K38	2-204-716/8	Marcus	Cyanco	5505 Cyanco Dr.	Winnemucca	Xld					

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O	④K39	2-204-515	Raglan	UP MofW track	700 feet east of Pipeline Line Road	Raglan						NUTS
O	④K40	2-204-516	Gaskell	UP spur track	1.4 mi on dirt roads to Jungo Road	Gaskell						NUTS
O	④K41	2-204-517	Jungo	UP double-ended house track	200 feet south of Jungo Road	Jungo						NUTS
O	④K42	2-204-519	Antelope	SE leg of former WP wye track	3,500 feet NW of Highway 49	Antelope						NUTS
O	④K43	2-204-521	Floka	UP spur track	1.3 mi on dirt roads from Hwy. 49	Floka						NUTS
R	④K44		Sulphur	Hycroft Resources & Development Inc	54980 Jungo Road (54 mi. w of Winnemucca)	Sulphur					Mfg	
O	④K45	2-204-523	Ronda	UP spur track	100 feet south of UP dirt access rd.	Ronda						NUTS
O	④K46	2-204-525	Cholona	UP spur track	100 feet south of UP dirt access rd.	Cholona						NUTS
O	④K47	2-204-527	Trego	UP spur track	4,000 feet from Jungo Rd. on dirt roads	Trego						NUTS
O	④K48	2-204-015	Gerlach	UP double-ended house trac,	2,200 feet SW of Hwy. 447 crossing	Gerlach						NUTS
Empire Branch, private (out-of-service since 2011?)												
P	④K49	2-204-720	Empire	Empire Mining Company LLC	NV Highway 447 Mi. Marker 68	Empire		Mfg				
Central Corridor continued												
O	④K50	2-204-535	Phil	UP spur track	100 feet south of UP dirt access rd.	Phil						NUTS
O	④K51	2-204-536	Reynard	UP spur track	900 feet south of UP dirt access rd.	Reynard						NUTS
O	④K52	2-204-537	Sano	UP spur track	100 feet west of UP dirt access rd.	Sano						NUTS
O	④K53	2-204-538	Sand Pass	UP double-ended spur track	1/2 mile from Surprise Valley Rd.	Sand Pass						NUTS
Modoc Line Stub												
P	④K54	2-204-152	Flanigan	property for sale	280 Flanigan Road	Reno/Washoe		Mfg				
Central Corridor continued												
O	④K55	2-204-539	Flanigan	UP spur track	1 miles west of Flanigan Road	Flanigan						NUTS
Region 4 Totals						**Facility counts**	36	9		1	12	52
						Warehouse square feet				11,000	0	
REGION 5, Fernley/Fallon												
Overland Main Line												
R	⑤A21		Vista	vacant new construction	12475 Mustang Road	Sparks					550,000	
b			Vista	Chicken Hawk Transport LLC	ML: 235 London Drive	McCarran						
B	⑤G1	2-205-525	Patrick	UP bad order spur		McCarran						NUTS
B	⑤G2	2-205-720/1	Wunotoo	Mars Petcare US Inc.	500 Waltham Way	Sparks	Mfg					
Tahoe-Reno Industrial Center (Innovation Park), lead #1 (Track 710)												
R	⑤G3		Wunotoo	Bi-Nutraceuticals	625 Waltham Way, Ste. 101	McCarran					100,000	
R	⑤G4		Wunotoo	Symbia Logistics d/b/a NV Dist. Svcs.	625 Waltham Way, Ste. 104	McCarran					300,000	
P	⑤G5	2-205-712	Wunotoo	Ach Foam Technologies	775 Waltham Way	Lockwood				300,000		
P	⑤G6	2-205-714	Wunotoo	Steel City Erecting	1799 Waltham Way	McCarran				330,000		
R	⑤G7	2-205-?	Wunotoo	vacant lot, 2300' of level RR frontage	1025 Waltham Way	McCarran					Mfg	
P	⑤G8	2-205-716	Wunotoo	Ardagh Metal Packaging	900 Waltham Way	McCarran		Mfg				
Overland Main Line continued												
P	⑤G9	2-205-718	Wunotoo	Nevada Energy	1799 Waltham Way	McCarran		Mfg				
P	⑤G10	2-205-724/5	Wunotoo	Duraflex International	160 Wunotoo Road	Sparks		Mfg				
R	⑤G11	2-205-?	Wunotoo	vacant parcel with turnout in place	? Waltham Way	McCarran					Mfg	

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b			Wunotoo	Tahoe Reno Industrial Center LLC	8600 Technology Way	Reno						
Tahoe-Reno Industrial Center (Innovation Park), lead #2 (Track 722)												
P	⑤G12	not shown	Wunotoo	Ryse Renewables? (trks on TRIC prop)	615 Peru Drive	McCarran		Mfg				
B	⑤G13	2-205-719	Patrick	James Hardie Bldg. Products Inc.	3000 Waltham Way	Sparks	Mfg					
B	⑤G14	2-205-790/1	Patrick	Golden Gate Set Petrol. Partners of Nevada LL	500 Ireland Drive	Sparks	Mfg					
R	⑤G15		Patrick	Tire Rack	3300 Waltham Way	McCarran					585,000	
R	⑤G16		Patrick	PPG Architectural Coatings	201 Ireland Drive	Sparks					495,000	
B	⑤G17	2-205-333/4	Patrick	PPG Industries (Reno Plant)	500 Pittsburgh Ave.	McCarran	Mfg					
B	⑤G18	2-205-?	Patrick	Truckee Tahoe Lumber Co.	1800 USA Parkway	Sparks	Mfg					
R	⑤G19		Patrick	Chart Industries	1995 Peru Drive	McCarran					Mfg	
R	⑤G20		Patrick	Schluter Systems, Inc.	100 Germany Circle	McCarran					150,000	
R	⑤G21		Patrick	Bush Ind. Inc.	2555 USA Pkwy.	McCarran					750,000	
R	⑤G22		Patrick	Propak Corporation	2777 USA Pkwy.	McCarran					800,000	
R	⑤G23		Patrick	Battery Systems	3410 Peru Drive	McCarran					200,000	
R	⑤G24		Patrick	Fulcrum Bioenergy (bio-refinery)	? Peru Drive under const.	McCarran					Mfg	
R	⑤G25		Patrick	Aqua Metals	2500 Peru Drive	McCarran					125,000	
Overland Main Line continued												
B	⑤G26	2-205-728/9	Clark	EP Minerals LLC	640 Clark Staton Rd.	Sparks	Mfg					
O	⑤A22	2-205-533	Thisbee	UP setout track	1/2 mi east of I-85 ramps	Thisbee						NUTS
O	⑤A23	2-205-737	Fernley	UP coach track	1000 ft. from Logan Lane	Fernley						NUTS
B	⑤A24	2-205-738/9	Fernley	Nevada Cement Company LLC	1290 W. Main St.	Fernley	Mfg					
O	⑤A25	2-205-748/9	Fernley	UP, former Musket transload site	825 Commerce Center Drive	Fernley						NUTS
O	⑤A26A	2-205-759	Fernley	Union Pacific	between lead track & W. Main St.	Fernley						NUTS
R	⑤A26B		Fernley	Rheo Minerals	260 Logan Lane	Fernley					Mfg	
B	⑤A24	2-205-743	Fernley	Valley Joist Inc.	255 Logan Road	Fernley	Mfg					
B	⑤A25	2-205-742	Fernley	Rice Lake Weighing Systems	265 Logan Lane	Fernley	Mfg					
B	⑤A26C	2-205-745/6	Fernley	Imerys Minerals California Inc.	100 Front Street	Fernley	Mfg					
B	⑤A27	2-205-756/7	Fernley	Paramount Nevada Asphalt Co.	425 Logan Lane	Fernley	Mfg					
b			Fernley	Wade Development Company Inc.	ML: 5525 Kietzke Lane, Ste. 102	Reno						
Louisiana Pacific lead (Track 750)												
B	⑤H1	2-205-751	Fernley	Johns Manville Corp.	325 Industrial Drive	Fernley	Mfg					
B	⑤H2	2-205-752	Fernley	Fortifiber Corp.	300 Industrial Drive	Fernley	Mfg					
B	⑤H3	2-205-?	Fernley	Essential Industries	15 Salvadore Drive	Fernley	Mfg					
B	⑤H4	2-205-753	Fernley	RMAX Operating LLC	210 Lyon Drive	Fernley	Mfg					
R	⑤H5		Fernley	warehouse for sale	190 Resource Drive	Fernley					183,435	
B	⑤H6	2-205-747/754	Fernley	Agru America Inc.	238 Lyon Drive	Fernley	Mfg					
B	⑤H7	2-205-780/1	Fernley	Deceuninck North America LLC	240 Nevada Pacific Blvd.	Fernley	Mfg					
R	⑤H8		Fernley	21st Century Environmental Mgmt.	2095 Newlands Dr.	Fernley						
P	⑤H9	2-205-776/7	Fernley	vacant lot for sale	2185 Newlands Dr.	Fernley		Mfg				
R	⑤H10		Fernley	warehouse for lease	2275 Newlands Dr.	Fernley					256,000	
R	⑤H11		Fernley	warehouse for sale	2375 Newlands Dr.	Fernley					337,500	

Legend

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Mfg Manufacturing **Xld** Transload **Intmdl** Intermodal **NUTS** Not Using Track Siding

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R	⑤H12		Fernley	Amazon	1600 E. Newlands Dr.	Fernley					550,000	
B	⑤H13	2-205-258	Fernley	Trex Company Inc.	1800 E. Newlands Dr.	Fernley	Mfg					
B	⑤H14	2-205-782/3	Fernley	Agru America Inc.	2000 E. Newland Dr.	Fernley	Mfg					
B	⑤H15	2-205-755	Fernley	Quad Graphics Inc.	2200 E. Newlands Dr.	Fernley		Mfg				
B	⑤H16	2-205-767/8/9	Fernley	The Sherwin-Williams Co.	1891 Duffy Road	Fernley	Mfg					
R	⑤H17		Fernley	warehouse for sale, 115,200 s.f.	385 Stanley Drive	Fernley					118,000	
Overland Main Line continued												
B	⑤A28	2-205-760/1	Darwin	Western Nevada Rail Park LLC	11000 Reno Highway	Fernley	Xld					
b			Darwin	Cody Group Inc.	ML: 527 E Weber Canyon Rd	Oakley						
B	⑤A29	2-205-105?	Hazen	Omaha Track Inc.	1006 Nevada Street	Hazen	Mfg					
O	⑤A30	2-205-570	Hazen	UP MofW track	Old Lincoln Highway	Hazen						NUTS
Fallon Branch												
P	⑤A31	2-205-840-4	Fallon	Falcon Ridge Investment Co.		Hazen		Xld				
B	⑤A32	2-205-850	Fallon	New Millennium Bldg. Systems	8200 Woolery Way	Fallon	Mfg					
B	⑤A33	2-205-849/851	Fallon	Wheeling Corrugating Company	8090 Woolery Way	Fallon	Mfg					
B	⑤A34	2-205-852	Fallon	Rocky Mountain Agronomics	500 Gummow Drive	Fallon	Mfg					
B	⑤A35	2-205-853	Fallon	Mills Farm & Industrial	Venturacci Lane, UP Team Track	Fallon	Mfg					
B	⑤A36	2-205-856	Fallon	SS Hert Trucking Inc.	380 N. Taylor Street	Fallon	Xld					
B	⑤A37	2-205-861/2	Fallon	Kents Supply Center Inc.	260 N. Maine Street	Fallon	Mfg					
b			Fallon	Dicaperl Minerals Corp. (Dicalite?)	7525 Rockwood Place	Fallon						
b			Fallon	JM Gomes Ranch Inc.	3025 Allen Road	Fallon						
b			Fallon	Dodge Brothers Inc.	455 Dodge Lane	Fallon						
b			Fallon	Storms Oasis Dairy LLC	7770 Flying K Ranch Lane	Fallon						
b			Fallon	Department of the Navy	4755 Pasture Road	Fallon						
b			Fallon	Perazzo Brothers Dairy	6555 Stillwater Road	Fallon						
b			Fallon	HFI Enterprises	1450 McLean Road	Fallon						
Mina Branch (north end)												
B	⑤A38	2-205-866/7	Diatom	Safety-Kleen Systems Inc.	22211 Bango Road	Fallon	Xld					
B	⑤A39	2-205-870	Diatom	former EP Minerals? Newmont?	? Farm District Road	Diatom		Mfg				
B	⑤A40	2-205-873	Appian	300 ft vacant track, mostly UP property	west of 3645 Lemon Street	Silver Springs						NUTS
B	⑤A41	2-205-875	Appian	NV Wood Preserving (see below)	1680 Spruce Street	Silver Springs		Mfg				
B	⑤A42	2-205-874	Appian	Art Wilson Co. d/b/a ACG Materials	1850 E. Spruce Street	Silver Springs	Mfg					
Region 5 Totals						**Facility counts**	30	9		2	20	7
						Warehouse square feet				630,000	5,499,935	

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REGION 6, Reno/Sparks												
Reno Branch (former N-C-O Rwy, then Western Pacific)												
B	⑥A1	2-204-700	Peavine	LP Terminal LLC	19975 S. Reno Park Blvd.	Reno	Mfg					
P	⑥A2	2-204-700	Peavine	Industrial Wood Products	19955 S. Reno Park Blvd.	Reno		Mfg				
b			Peavine	Cornerstone Propane Partners	9662 N. Virginia Street	Reno						
Leareno Industrial Lead (to Stead off of Reno Branch)												
R	⑥B1		Leareno	warehouse, 400,000 sf, vacant portions	12995 Echo Court	Reno					400,000	
P	⑥B2	2-204-724	Leareno	General Motors	6565 Echo Avenue	Reno				385,000		
P	⑥B3	2-204-722c	Leareno	Pacific Western Timbers	14551 Industry Cir. (last 10 docks)	Reno				180,000		
P	⑥B4	2-204-722b	Leareno	Warehouse Services	14551 industry Cir. (2nd 20 docks)	Reno				225,000		
P	⑥B5	2-204-722a	Leareno	ITS Logistics	14551 industry Cir. (1st 40 docks)	Reno				405,000		
R	⑥B6		Leareno	Birdrock Brands, Distribution Center	14525 Industry Cir., Suite 100	Reno					189,500	
R	⑥B7		Leareno	Hubert Company, Western D.C.	14525 Industry Cir., Suite 500	Reno					145,000	
R	⑥B8	2-204-729	Leareno	Geofortis Processing & Logistics LLC	0 Industry Cir. (but lot on Cocoa Ave.)	Reno					Mfg	
R	⑥B9		Leareno	Itronics Metalurgical Inc.	14305 Cocoa Avenue	Reno					Mfg	
R	⑥B10		Leareno	Waste Mgmt. (former Refuse Inc.)	13890 Mt. Anderson St.	Reno					Mfg	
R	⑥B11		Leareno	vacant bldg.	13805 Mt. Anderson St.	Reno					60,000	
R	⑥B12		Leareno	A&B Precision Metals	13715 Mt. Anderson St.	Reno					Mfg	
R	⑥B13		Leareno	ACH Foam Technologies	13695 Mt. Anderson St.	Reno					Mfg	
B	⑥B14	2-204-719/20	Leareno	Hidden Valley Manufacturing	12150 Moya Blvd.	Reno	Mfg					
R	⑥B15		Leareno	partly vacant + Pods Moving & Storage	12040 Moya Blvd.	Reno					30,000	
B	⑥B16	2-204-718	Leareno	Performance Pipe/Spirolite Corp.	14381 Lear Blvd.	Reno	Mfg					
P	⑥B17	2-204-715	Leareno	Star Logistics Trucking Co.	14331 Lear Blvd.	Reno		Mfg				
R	⑥B18		Leareno	Daimler Trucks, annex to 14444 Lear	14291 Lear Blvd.	Reno					130,000	
P	⑥B19	2-204-715/6/7	Leareno	LSC Communications US	14100 Lear Blvd.	Reno				105,000		
P	⑥B20	2-204-721	Leareno	Veca West Inc.	ML: 14250 Lear Blvd.	Reno		Mfg				
R	⑥B21	2-204-710	Leareno	JC Penney Corp. Inc.	1111 Stead Blvd.	Reno					1,375,000	
R	⑥B22		Leareno	Sierra Packaging & Converting	11005 Stead Blvd.	Reno					Mfg	
Reno Branch continued												
B	⑥A3	2-204-741	Panther	Ferrellgas LP	7757 N. Virginia Street	Reno	Mfg					
B	⑥A4	2-204-745	Panther	Amerigas Propane LP	7700 N. Virginia Street	Reno	Mfg					
P	⑥A5	2-204-747/8	Panther	Rosen Materials	7970 Security Circle	Reno		Mfg				
P	⑥A6	2-204-746	Panther	Kappes Cassiday & Associates	7950 Security Circle	Reno		Mfg				
R	⑥A7		Panther	Radians	880 N. Hills Blvd.	Reno					155,000	
R	⑥A8		Panther	US Foods	850 N. Hills Blvd.	Reno					62,500	
R	⑥A9		North Reno	GNG Logistics	1080 Standard Street, Suite A	Reno					50,000	
R	⑥A10		North Reno	Sierra Pallet	400 Western Road	Reno					62,000	
P	⑥C1	2-204-791b	North Reno	Bender Group (gen'l warehousing)	345 Parr Circle	Reno				200,000		
P	⑥C2	2-204-791a	North Reno	Trend Offset Printing	365 Parr Circle	Reno		Mfg				
P	⑥C3	2-204-706	North Reno	Glasfloss Ind. Inc.	300 Parr Circle	Reno				110,000		
P	⑥C4	2-204-703	North Reno	ZLine Kitchens	350 Parr Circle	Reno				55,000		

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P	⑥C5	2-204-701	North Reno	Bender Group (gen'l warehousing)	205 Parr Blvd.	Reno				190,000		
R	⑥C6		North Reno	Reno Iron Works	333 E. Parr Circle	Reno					Mfg	
P	⑥C7	2-204-797/8	North Reno	for lease/sale (former Packer Term.)	200 Parr Blvd.	Reno				11,266		
P	⑥C8	2-204-758a/b	North Reno	Workpak Flexible Packaging LLC	300/350 Parr Blvd.	Reno		Mfg				
P	⑥C9	2-204-758c	North Reno	Bender Group (gen'l warehousing)	380 Parr Blvd.	Reno				50,000		
P	⑥C10	2-204-757	North Reno	Sears Repair & Redistribution Center	400 Parr Blvd.	Reno				175,000		
B	⑥C11	2-204-810	North Reno	High Desert Truss & Lumber	500 E. Parr Blvd.	Reno	Mfg					
O	⑥C12	2-204-811	North Reno	UP "ramp track," double-ended team track	500 E Parr Blvd.	Reno						NUTS
			North Reno	Standard Motors Prod.	305 Western Road	Reno						
			North Reno	Vaughn Materials Co. Inc.	2400 Valley Road	Reno						
R	⑥A11		North Reno	Timber Guys LLC, d/b/a Capital Plywood	1955 Timber Way	Reno					45,000	
B	⑥A12	2-204-933	Reno	Schnitzer Steel Ind. Inc.	490 Valley Road	Reno	Xld					
P	⑥A13	2-206-180	Reno	Martin Iron Works Inc.	530 E 4th Street	Reno		Mfg				
O	⑥A14	2-206-886a	Reno	UP team track, double-ended	White Fir Street	Reno						NUTS
Overland Main Line (Cal-P, former Central Pacific, then Southern Pacific)												
P	⑥A15	2-206-885/6b	Reno	Twisted Metal Works	130 Woodland Avenue	Reno				60,000		
R	⑥A16		Reno	Waste Management of NV	1390 E. Commercial Row	Reno					Mfg	
R	⑥A17		Reno	Hunt & Sons (formerly Casazza Oil)	1575 E. Commercial Row	Reno					Mfg	
B	⑥A18	2-206-830	Reno	Reno Salvage Co, New Metals Div	333 Toano Street Reno 89512	Reno	Mfg					
b			Reno	Reno Gazette Journal	955 Kuenzli	Reno						
b			Reno	Porsche Cars North America Inc.	ML: One Porsche Dr	Atlanta						
b			Reno	NV Energy	6100 Neil Road	Reno						
b			Reno	Gruners Furniture Inc.	9095 S. Virginia St.	Reno						
b			Reno	US Postal Service	2000 Vassar St.	Reno						
b			Reno	Ennis Furniture Co.	1350 Neil Way	Reno						
b			Reno	Custom Glass	1095 E 2nd Street	Reno						
b			Sparks	FN Logistics LLC	ML: 12710 Thuderbolt Dr.	Reno						
b			Sparks	Pronghorn Transload LLC	ML: 12710 Thuderbolt Dr.	Reno						
R	⑥A19		Sparks	RMC Nevada Inc.	333/350 Galleti Way	Sparks					Mfg	
G	⑥D1	2-205-800/1	Sparks	UP intermodal tracks	1151 Nugget Avenue	Sparks						In Use, Term
B	⑥D2	2-205-769	Sparks	Kinder Morgan Liquid Terminals	301 Nugget Ave.	Sparks	Xld					
O	⑥D3	2-205-766/7	Sparks	Sparks Yard, team tracks	S. Stanford Way	Sparks						NUTS
R	⑥D4		Sparks	warehourse for lease (158,000 s.f.)	240 S. Stanford Way	Sparks					158,000	
P	⑥D5	2-205-761	Sparks	Colonial Van & Storage	150 S. Stanford Way	Sparks				140,000		
R	⑥D6		Sparks	Geodis Logistics LLC	251 S. McCarran Blvd.	Sparks					200,000	
R	⑥D7		Sparks	New West Distributing	325 E. Nugget Avenue	Sparks					162,000	
R	⑥D8	2-205-822a	Sparks	warehouse for lease	1555 Crane Way	Sparks					50,000	
R	⑥D9	2-205-822b	Sparks	warehouse for lease	1575 Crane Way	Sparks					50,000	
B	⑥D10	2-205-817	Sparks	Nexxt Rail LLC	1490 Hymer Ave.	Sparks	Xld					
R	⑥D11	2-205-815	Sparks	Truckee Tahoe Lumber Co.	1550 Hymer Ave.	Sparks					20,000	
B	⑥D12	2-205-816	Sparks	Western Metals Recycling LLC	1325 Hymer Ave.	Sparks	Mfg					

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P	⑥D13	2-205-814	Sparks	warehouse for sale	1280 Icehouse Ave.	Sparks				75,000		
R	⑥D14		Sparks	2 buildings for sale	555 Dermoday Way	Sparks					91,773	
B	⑥D15	2-205-770/1	Sparks	Cashman Equipment Company	620 Glendale Ave.	Sparks		Mfg				
B	⑥D16	2-205-811	Sparks	Suburban Propane Partners LP	400 Wolverine Way, Ste. A	Sparks	Mfg					
R	⑥D17		Sparks	Pallet Broker	250/350 Wolverine Way	Sparks					Mfg	
B	⑥D18	2-205-810	Sparks	Amerigas Propane LP	655 S. Stanford Way	Sparks	Mfg					
R	⑥D19	2-205-752/3	Sparks	Jensen Precast	625 Bergin Way	Sparks					Mfg	
Sparks West Running Track (Track 160)												
R	⑥D20	2-205-773	Sparks	Fernco Inc. West	855 Linda Way	Sparks					Mfg	
R	⑥D21		Sparks	The Pillow Factory	900 Southern Way	Sparks					25,000	
R	⑥D22		Sparks	Calvada Food Sales	950 Southern Way	Sparks					20,000	
P	⑥D23	2-205-772	Sparks	Encompass Group LLC warehouse	1000 Southern Way	Sparks				55,000		
P	⑥D24	2-205-775a	Sparks	vacant	1150 Southern Way	Sparks				20,000		
B	⑥D25	2-205-775b	Sparks	South/Win Ltd.	1280 Southern Way	Sparks	Mfg					
R	⑥D26	2-205-776	Sparks	Just Refiners USA Inc.	540/620 Greg Street	Sparks					Mfg	
R	⑥D27		Sparks	bldg. half vacant, w. side towards RR	1475 Linda Way	Sparks					60,000	
P	⑥D28	2-205-777	Sparks	Paterson Paper	545/625 Greg Street	Sparks		Mfg				
P	⑥D29	2-205-778	Sparks	Paterson Paper	550 Coney Island Drive	Sparks		Mfg				
R	⑥D30		Sparks	Basalite	345/355 Greg Street	Sparks					Mfg	
P	⑥D31	2-205-782	Sparks	French Gourmet	245 Coney Island Drive	Sparks				66,000		
P	⑥D32	2-205-781b	Sparks	Blue Frog Screen Printing	345 Coney Island Drive	Sparks		Mfg				
P	⑥D33	2-205-781a	Sparks	Innovative Cabinets & Design	445 Coney Island Drive	Sparks		Mfg				
P	⑥D34	2-205-780	Sparks	Ranshu Parts Co.	525 Coney Island Drive	Sparks				275,000		
P	⑥D35	2-205-785	Sparks	vacant warehouse	725 Greg Street	Sparks				73,000		
P	⑥D36	2-205-785	Sparks	partially vacant whse., 226k s.f.	1285 Southern Way	Sparks				226,000		
P	⑥D37	2-205-786	Sparks	MicroMetl	905 Southern Way	Sparks		Mfg				
Overland Main Line continued												
R	⑥E1	2-205-751	Sparks	Tom Duffy Wholesale Products	656 Dunn Circle	Sparks					30,000	
P	⑥E2	2-205-750	Sparks	Leach Logistics	810/830 E. Glendale Ave.	Sparks				73,000		
Sparks East Running Track (Track 130)												
P	⑥E3	2-205-730a	Sparks	Hodel-Natco Ind.	800 E. Glendale Ave.	Sparks				46,000		
P	⑥E4	2-205-730b	Sparks	Store Supply Warehouse	800 E. Glendale Ave.	Sparks				40,000		
P	⑥E5	2-205-731a	Sparks	Frito-Lay Inc.	980 Packer Way	Sparks				33,000		
P	⑥E6	2-205-731b	Sparks	Legend, Inc.	988 Packer Way	Sparks				30,000		
B	⑥E7	2-205-732/4	Sparks	Plastic Spec. & Tech. d/b/a ColoRite	909 E. Glendale Ave.	Sparks	Mfg					
P	⑥E8	2-205-734b	Sparks	Online Tech Stores	1001 E. Glendale Ave.	Sparks				63,000		
R	⑥E9	2-205-736	Sparks	vacant whse., east end	1400 S. McCarran Blvd.	Sparks					570,000	
B	⑥E10	2-205-746	Sparks	The HC Companies Inc.	550 Spice Island Drive	Sparks	Mfg					
P	⑥E11	2-205-747	Sparks	Across International	600 Spice Island Drive	Sparks				53,000		
R	⑥E12		Sparks	Geodis Logistics LLC	620 Spice Island Drive	Sparks					175,000	
B	⑥E13	2-206-749	Sparks	Reno/Carson Lumber	680 Spice Islands Dr.	Sparks	Mfg					

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P	⑥E14	2-206-130end	Sparks	Watts Regulator	750 Spice Island Dr.	Sparks						
R	⑥E15		Sparks	vacant building for lease	850 Spice Island Dr.	Sparks					85,000	
P	⑥E16	2-206-748a	Sparks	Bimbo D.C./Sara Lee Food Service	950 United Circle	Sparks				29,000		
B	⑥E17	2-206-748b	Sparks	vacant warehouse (1/2 with Bimbo)	956/958 United Circle	Sparks				29,000		
R	⑥E18		Sparks	vacant portion of building	960 United Circle	Sparks					70,000	
P	⑥E19	2-205-741	Sparks	ArcBest	1755 Purina Way	Sparks				128,000		
R	⑥E20	2-205-742	Sparks	Advanced	1750 Purina Way	Sparks					130,000	
B	⑥E21	2-206-740	Sparks	Sims Group USA Corp.	1655 Franklin Way/1690 Deming Way	Sparks	Mfg					
B	⑥E22	2-206-744	Sparks	Lehigh Southwest Cement Co.	1465 East Greg	Sparks	Mfg					
B	⑥E23	2-206-743	Sparks	Waste Mgmt. Recycling Center	1455/1555 E. Greg Street	Sparks		Mfg				
B	⑥E24	2-205-737/8/9	Sparks	Conagra Brands	1055 E. Greg Street	Sparks	Mfg					
Overland Main Line continued												
B	⑥E25	2-205-721	Sparks	Dura-Line Corp.	1284/1285 E. Glendale Ave.	Sparks	Mfg					
P	⑥E26	2-205-722a,c	Sparks	other space in 1141 E. Glendale Ave.	1141 E. Glendale Ave.	Sparks				360,000		
B	⑥E27	2-205-722b	Sparks	LSC Communications d/b/a BNSF QDC	1141 E. Glendale Ave.	Sparks	Mfg					
B	⑥E28	2-205-720	Sparks	PDM Steel Service Centers Inc.	1210/1213/1250 Kleepe Lane	Sparks	Mfg					
P	⑥E29	2-205-125	Sparks	Tommy's Grandstand	830 Meredith Way	Sparks				28,000		
P	⑥E30	2-205-715	Sparks	warehouse for lease	1450 Kleppe Lane	Sparks				42,600		
GM lead (Track 120)												
R	⑥F1	2-206-703	Sparks	McKillican American Inc.	1802 Brierley Way	Sparks					Mfg	
R	⑥F2		Sparks	multiple occupants	55 Vista Boulevard	Sparks					115,000	
R	⑥F3	2-206-705a	Sparks	vacant warehouse (1/2 still CES Machine)	45 Vista Blvd., Ste. 101 (1/2? Bldg)	Sparks					170,000	
R	⑥F4	2-206-705b	Sparks	ProLogis	255 Vista Blvd.	Sparks					96,000	
R	⑥F5	2-206-704b	Sparks	American Tire Distributors Inc.	250 Lillard Dr. #100	Sparks					115,000	
R	⑥F6	2-206-704a	Sparks	Southern Wine & Spirits	250 Lillard Dr. #101A	Sparks					147,000	
R	⑥F7		Sparks	Allstates Warehousing & Distribution	350 Lillard Drive, Suite 171	Sparks					150,000	
B	⑥F8	2-206-707	Sparks	Geodis Logistics LLC	450 Lillard Drive	Sparks				300,000		
B	⑥F9	2-206-708	Sparks	ITS Logistics	555 Vista Blvd.	Sparks				620,000		
B	⑥F10	2-206-709	Sparks	Associated Bag Company	550 Lillard Blvd.	Sparks				87,000		
B	⑥F11	2-206-710	Sparks	Laddawn Inc.	659/550/540 Lillard Drive	Sparks	Mfg					
R	⑥F12		Sparks	J. Hofert Company	1755 E. Prater Way	Sparks					83,000	
R	⑥F13		Sparks	Coca-Cola Bottling Company	675 Cola Court	Sparks					78,000	
R	⑥F14		Sparks	vacant lot	0 E. Prater Way	Sparks					Mfg	
b			Sparks	Morrey Distributing Co.	1850 E Lincoln Way	Sparks						
Overland Main Line continued												
B	⑥A20	2-205-701/2	Vista	Thatcher Company of Nevada Inc.	2302 Larkin Circle	Sparks						
Region 6 Totals						**Facility counts**	24	15		37	53	4
						Warehouse square feet				5,042,866	5,554,773	

Legend

B=Black Private sidetracks in use **P=Purple** Private sidetracks not in use **G=Green** UP COFC terminals **O=Orange** UP vacant sidetracks with transloading potential **R=Red** Truckload shippers on RR R-O-W: potential sidetracks
b=Blue Customers in Railinc SCRS database but not found

Mfg Manufacturing **Xld** Transload **Intmdl** Intermodal **NUTS** Not Using Track Siding

Inventory of Nevada Industry
Businesses with Sidetracks & Nearby Truckload Shippers

Code	Region/ Inset Map SRF Ref. #	UP Hub Book Track UP ZTS #	Station	Sidetrack Owner	Street Address	City	Mfg or Xload Track in Use? yes	no	Warehouse Space (SF) Track Used	Track Unused	Track easy to build	UP Sidetracks Available
REGION 7, Mina Branch												
Mina Branch (south end)												
O	⑦I1		Wabuska	UP Prevett team track, double-ended	1/2 mi west of 95 Alt.							NUTS
O	⑦I2		Wabuska	UP former wye	immediately west of 95 Alt.							NUTS
O	⑦I3	2-205-881	Wabuska	UP team track, double-ended, 900 ft.	N. Highway 95Alt.	Yerington						In Use
P	⑦I4	2-205-879	Wabuska	Itronics Metalurgical, Inc.	N. Highway 95 Alt.	Mason Valley		Mfg				
P	⑦I5	2-205-885/6/7	Wabuska	Sierra Pacific Power (NV Energy)	1000 Sierra Way	Yerington		Mfg				
P	⑦I6	past MP 331.12	Thorne	Hawthorne Army Depot	United States Army	Hawthorne	Mfg					
Region 7 Totals						**Facility counts**	1	2		0	0	3
						Warehouse square feet				0	0	
					Totals of all Regions	**Facility counts**	139	51	1	48	139	85
						Warehouse square feet			100,000	6,286,866	17,476,081	

Legend

B=Black Private sidetracks in use **P=Purple** Private sidetracks not in use **G=Green** UP COFC terminals **O=Orange** UP vacant sidetracks with transloading potential **R=Red** Truckload shippers on RR R-O-W: potential sidetracks
b=Blue Customers in Railinc SCRS database but not found

Mfg Manufacturing **Xld** Transload **Intmdl** Intermodal **NUTS** Not Using Track Siding

Nevada Truckload Shippers

Truckload Quantity Shippers (573) that are not located adjacent to a rail line

Name	Address	City	ZIP	Phone	Region
Flowers Baking Co. Of Henderson	501 Conestoga Way	Henderson	89002	(702) 567-6401	1
Poly West	251 Conestoga Way	Henderson	89002	(702) 207-5600	1
Alpha Video Surveillance	900 West Warm Springs Rd #101	Henderson	89011	(702) 990-1454	1
Bassett Direct Furniture Warehouse	470 Mirror Court	Henderson	89011	(702) 914-2179	1
Bon Tool	Suite #, 108 W Warm Springs Road	Henderson	89011	(702) 558-3752	1
Creative Tent International	451 Mirror Court #101	Henderson	89011	(702) 789-2620	1
Deslauriers	900 West Warm Springs Road Building C	Henderson	89011	(702) 568-9177	1
EFCO Corporation	451 Mirror Court #103	Henderson	89011	(702) 564-9176	1
Geary Pacific Supply	900 West Warm Springs Rd #107	Henderson	89011	(844) 695-3517	1
Goodman Distribution Inc	751 W Warm Springs Rd #155	Henderson	89011	(702) 558-2183	1
GT Ventures LLC	#104, 4045, 470 Mirror Court	Henderson	89011	(702) 605-3991	1
Jimenez Arms	7380 Eastgate Rd #150	Henderson	89011	(877) 241-9938	1
Makaboo	451 Mirror Court #105	Henderson	89011	(866) 746-1596	1
Metalwest	451 Mirror Court	Henderson	89011	(702) 566-3551	1
Ocean Spray	7600 Commercial Way	Henderson	89011	(702) 568-8850	1
Patriot Exhibit Services	451 Mirror Court e106	Henderson	89011	(702) 538-7967	1
Procaps Laboratories	430 Parkson Road	Henderson	89011	(888) 888-2876	1
ReadyLIFT Suspension	7490 Commercial Way	Henderson	89011	(702) 410-2300	1
Res Exhibit Services	7420 Commercial Way	Henderson	89011	(800) 482-4049	1
Salus Uniforms	7390 Eastgate Road #170	Henderson	89011	(702) 260-4658	1
Samara Bags	7391 Eastgate Road #130	Henderson	89011	514-726-0777	1
Silver Springs Water	480 Mirror Court #109	Henderson	89011	(702) 897-4853	1
Sourcewell Nutrition	751 W Warm Springs Rd #100	Henderson	89011	(702) 715-8241	1
Sunshine Minting	7600 Eastgate Road	Henderson	89011		1
Vegas Valley Winery	7360 Eastgate Rd Suite 123	Henderson	89011	(702) 823-4065	1
Wells Enterprises-Henderson Ice Cream Plan	1001 Olsen Street	Henderson	89011		1
Artificial Grass Liquidators	150 Cassia Way # 100	Henderson	89014	(702) 766-7882	1
Berry Plastics	1055 American Pacific Dr #150	Henderson	89014	(702) 800-4328	1
Canamould Nevada	150 Cassia Way	Henderson	89014	(702) 629-3777	1
Core Mark International	855 Wigwam Parkway	Henderson	89014	(702) 876-5220	1
Dana Kepner	180 Cassia Way # 500	Henderson	89014	(702) 566-4101	1
Good Spirits Distributing	880 Wigwam Pkwy Suite 130	Henderson	89014	(702) 567-5007	1
High Impact Sign & Design	820 Wigwam Pkwy #100	Henderson	89014	(702) 736-7446	1
KCI USA	180 Cassia Way #510	Henderson	89014	(702) 888-3428	1
Maintenance Supply HQ	880 Wigwam Pkwy # 140	Henderson	89014	(702) 558-2200	1
Mars Retail Group	1 Sunset Way	Henderson	89014	(702) 458-8864	1
Progress Rail Services Corporation	860 Wigwam Parkway	Henderson	89014		1
Rakuten Super Logistics Fulfillment Center	880 Wigwam Pkwy	Henderson	89014	(866) 955-7793	1
Scott Drake Enterprises	130 Cassia Way # 100	Henderson	89014	(702) 853-2060	1
YourDeals.Vegas	16 Sunset Way #120	Henderson	89014	(800) 603-0004	1
Americold Logistics	830 East Horizon Drive	Henderson	89015	(702) 566-5810	1
Berry Plastics	800 East Horizon Drive	Henderson	89015	(702) 564-7770	1
Do It Best Corp	1450 West Pioneer Blvd	Mesquite	89027	(702) 346-2161	1
Primex Plastics Corporation	752 Turtleback Road	Mesquite	89027	(702) 346-7100	1
American Locker	4170-103 Distribution Cir	North Las Vegas	89030	(800) 828-9118	1
Bake Mark USA	2570 Kiel Way	North Las Vegas	89030	(702) 642-4500	1
Bake Mark USA	2570 Kiel Way	North Las Vegas	89030	(702) 642-4500	1
Basic Food Flavors	3950 E Craig Road	North Las Vegas	89030	(702) 643-0043	1
Biofloral USA	2711 East Craig Road B	North Las Vegas	89030	(702) 485-3711	1
Brady Linen Services	2501 Losee Rd	North Las Vegas	89030	(702) 642-0914	1
Brady Linen Services	1 W Mayflower Ave	North Las Vegas	89030	(702) 639-2500	1
Brady Linen Services	2501 Losee Road	North Las Vegas	89030	(702) 642-0914	1
Bunzl Distribution	4151 Industrial Center Dr	North Las Vegas	89030	(702) 644-2900	1
C B Motor Sports	3888 Civic Center Drive	North Las Vegas	89030	(702) 643-5110	1
Caesars Entertainment Laundry	100 W Carey Ave	North Las Vegas	89030	(702) 639-6100	1
CertainTeed Gypsum	3838 Civic Center Drive	North Las Vegas	89030	(702) 643-1181	1
Christie Lites Las Vegas	4325 Corporate Center Dr	North Las Vegas	89030	(702) 222-0363	1
Clark County Election Department	965 Trade Drive	North Las Vegas	89030	(702) 455-6552	1
Clearwater Paper Corporation	755 E Gilmore Ave	North Las Vegas	89030		1
Clearwater Paper Corporation	3901 Donna Street	North Las Vegas	89030	(702) 657-2400	1
Cold Storage Solutions	3840 Civic Center Dr	North Las Vegas	89030	(702) 940-3800	1
Czarnowski	4150 Industrial Center Dr #650	North Las Vegas	89030	(702) 891-0181	1

Truckload Quantity Shippers (573) that are not located adjacent to a rail line

Name	Address	City	ZIP	Phone	Region
Derse	3200 E Gowan Rd Suite 115	North Las Vegas	89030	(702) 895-9998	1
Dottys		North Las Vegas	89030	(702) 531-7173	1
DRS Product Returns	4031 Market Center Drive	North Las Vegas	89030	(610) 327-1133	1
Encompass	4031 Market Center Dr #301	North Las Vegas	89030	(800) 432-8542	1
Fastenal/Beno's Flooring	4310 Loose Road	North Las Vegas	89030		1
Firestone Building Products	4272 Corporate Center Dr	North Las Vegas	89030	(702) 880-8012	1
Foster West Corporation/Solar Industries	4336 Losee Road	North Las Vegas	89030		1
Frito-Lay DC Vegas	1209 Trade Drive	North Las Vegas	89030	(269) 830-4791	1
Global Industrial	3700 Bay Lake Trail	North Las Vegas	89030	(702) 333-4212	1
Goodwill Clearance Center and Donation Site	280 W Cheyenne Ave	North Las Vegas	89030	(702) 214-2008	1
Harney & Sons Tea Corporation	3850 Civic Center Dr	North Las Vegas	89030	(702) 367-0888	1
HD Supply White Cap	4171 Distribution Cir Ste 107	North Las Vegas	89030	(702) 639-0380	1
Hostess	4030 Industrial Center Dr	North Las Vegas	89030		1
Impact XM	4265 Corporate Center Dr	North Las Vegas	89030	(877) 867-8868	1
Infinity Air	580 W Cheyenne Ave Set. 70	North Las Vegas	89030	(702) 489-6452	1
Joto Paper	705-4031 Industrial Center Dr	North Las Vegas	89030	(800) 565-5686	1
Jumper Man Party Rentals	3870 Civic Center Dive	North Las Vegas	89030	(702) 387-5867	1
LAS2 - Amazon Returns Center	3837 Bay Lake Trail	North Las Vegas	89030	(888) 280-3321	1
Lift-All Company	2629 E Craig Rd # L	North Las Vegas	89030	(702) 639-3900	1
LIOHER	(702) 507-0503	North Las Vegas	89030	(702) 507-0503	1
Liquidity Services Warehouse	3010 E Alexander Rd #1001	North Las Vegas	89030	(702) 727-2438	1
Mac's Delivery Service	2740 Losee Rd	North Las Vegas	89030	(702) 639-0343	1
Moen	4335 Arcata Way	North Las Vegas	89030	(702) 644-1082	1
Monster Cable Products	3837 Bay Lake Trail	North Las Vegas	89030	(702) 589-7000	1
Next Level Door & Millwork	2711 E Craig Road	North Las Vegas	89030	(702) 641-8100	1
Paccar Parts Division	4141 Distribution Circle	North Las Vegas	89030	(702) 399-7820	1
Palm Tree Warehouse	4345 Corporate Center Dr	North Las Vegas	89030		1
Park Pro Playgrounds	3878 Civic Center Dr	North Las Vegas	89030	(702) 254-4111	1
PLI Card Marketing Solutions	1220 Trade Dr # 101	North Las Vegas	89030	(702) 352-1773	1
Pride Mobility	3200 E Gowan Rd #101	North Las Vegas	89030	(702) 651-0110	1
Quantum Western America	3200 E Gowan Rd #10	North Las Vegas	89030	(702) 651-0110	1
Ruby Has	3717 Bay Lake Trail #101	North Las Vegas	89030	(888) 627-6963	1
SCP Distributors	580 W Cheyenne Ave building C	North Las Vegas	89030	(702) 871-5006	1
Service Partners	4030 Industrial Center Dr Ste 503	North Las Vegas	89030	(702) 792-9400	1
Shetakis Wholesalers	3840 Civic Center Dr A	North Las Vegas	89030	(702) 940-3663	1
Silver State Specialties	4030 Industrial Center Dr Suite 502	North Las Vegas	89030	(702) 383-8191	1
Southern Tire Mart	3420 Losee Rd	North Las Vegas	89030	(702) 643-0712	1
Superior Meat	3840 Civic Center Dr	North Las Vegas	89030	(702) 558-4969	1
Tapia Brothers	1035 W Cheyenne Avenue	North Las Vegas	89030	(702) 644-2323	1
Technibilt	4030 Industrial Center Dr #500	North Las Vegas	89030		1
The Home Depot Pro Institutional	4031 Industrial Center Dr #701	North Las Vegas	89030	(866) 412-6726	1
Torque Converter Rebuilders	3880 Civic Center Drive	North Las Vegas	89030	(702) 222-9038	1
Victory Wholesale Grocers	4151 Market Center Dr # 400	North Las Vegas	89030	(702) 643-5299	1
Water Shark Systems	3828 Civic Center Dr Suite 110	North Las Vegas	89030	(866) 605-1190	1
Wayfair	4031 Industrial Center Dr ste 100	North Las Vegas	89030		1
Western Group Packaging	3330 E Gowan Road	North Las Vegas	89030	(702) 751-2899	1
Clearwater Paper Corporation	3750 North 5th Street	North Las Vegas	89032		1
D & T Custom Audio Accessories	2750 W Brooks Avenue	North Las Vegas	89032		1
Flavor Consultants	2875 Coleman Street	North Las Vegas	89032	(702) 643-4378	1
Nevada Wine Agents	1849 W Cheyenne Ave	North Las Vegas	89032	(702) 895-7592	1
Saratoga Foods	2790 Coleman Street	North Las Vegas	89032		1
Show Group Production Services	2845 Coleman St # A	North Las Vegas	89032	(702) 270-4240	1
Sin City Auto Wraps	3040 Simmons St Suite # 103	North Las Vegas	89032	(702) 631-9280	1
US Foods	1685 W Cheyenne Ave	North Las Vegas	89032	(702) 636-3663	1
Weller Truck Parts	3824, 2985 Coleman Street Suite North	North Las Vegas	89032	(702) 638-8222	1
Cole Kepro	4170 Distribution Circle	North Las Vegas	89039	(702) 633-4270	1
Color Gamut Digital Imaging	1550 Executive Airport Dr Suite 140	Henderson	89052	(702) 269-6989	1
Kroger Distribution Warehouse	1775 Executive Airport Drive	Henderson	89052	(702) 765-0099	1
Levi Strauss	501 Executive Airport Drive	Henderson	89052	(702) 269-8700	1
Smith's Warehouse	1775 Executive Airport Drive	Henderson	89052	(702) 301-2669	1
The Countertop Factory	1520 Executive Airport Drive	Henderson	89052	(562) 944-2450	1
Angelica	1080 Mary Crest Rd	Henderson	89074	(702) 257-0323	1
Farmer Brothers	1051 Mary Crest Rd ste j	Henderson	89074	(702) 737-7224	1

Truckload Quantity Shippers (573) that are not located adjacent to a rail line

Name	Address	City	ZIP	Phone	Region
Hoodlum Steelworks	1065 American Pacific Dr #120	Henderson	89074	(702) 494-9443	1
Nationwide Power	1060 Mary Crest Rd	Henderson	89074	(800) 868-2780	1
Parpro	194 Gallagher Crest Rd	Henderson	89074		1
Pierson Productions	190 Gallagher Crest Rd	Henderson	89074	(702) 262-2229	1
Quality Custom Distribution Services	1051 Mary Crest Rd	Henderson	89074	(702) 832-3040	1
Ritz Safety	1065 American Pacific Dr #140	Henderson	89074	(702) 558-4194	1
TH Foods	160 Gallagher Crest Rd	Henderson	89074	(815) 636-9500	1
AG Light & Sound	4660 Berg St Suite 130	North Las Vegas	89081	(631) 471-3700	1
Amazon Fulfillment Center LAS6	4550 Nexus Way	North Las Vegas	89081		1
Archway	4855 Engineers Way	North Las Vegas	89081	(702) 648-6600	1
Arrow Tru-Line	3115 East Lone Mountain Road Ste. 1500	North Las Vegas	89081	(702) 632-3900	1
Comoto Fulfillment Center for RevZilla, Cycle	4060 Frehner Road	North Las Vegas	89081	(877) 792-9455	1
Custom Building Products	3115 E Lone Mountain Rd # 1000	North Las Vegas	89081	(702) 583-4974	1
Dashes Direct	4201 E. Lone Mountain Road	North Las Vegas	89081	(702) 643-3626	1
Drop Shade	2547 E Washburn Road	North Las Vegas	89081	(702) 456-7742	1
Feiss	3035 E Lone Mountain Rd # 1500	North Las Vegas	89081	(702) 396-8100	1
GigaCrete	4550 Engineers Way #101	North Las Vegas	89081	(702) 643-6363	1
Honest Company	5550 Donovan Way	North Las Vegas	89081	(888) 862-8818	1
Hosoda Brothers	4500 Andrews St # G	North Las Vegas	89081	(702) 644-0300	1
Image Exhibit Services	2643, 4980 Statz St #150	North Las Vegas	89081	(702) 657-0600	1
JLG parts distibution	4140 Frehner Road	North Las Vegas	89081		1
Jones Fiber Products	4450 North Walnut Road	North Las Vegas	89081	(702) 319-6400	1
L C Industries	3115 E Lone Mountain Rd #1400	North Las Vegas	89081	(702) 643-9955	1
LKQ	3370 East Lone Mountain Road	North Las Vegas	89081	(702) 789-4000	1
Marmaxx Distribution Center	4100 E Lone Mountain Road	North Las Vegas	89081	(702) 643-3224	1
Metl-Span	4700 Engineers Way # 103	North Las Vegas	89081	(702) 633-5290	1
Northgate Distribution Center	4490 N Lamb Blvd & I-15	North Las Vegas	89081	(602) 732-4210	1
Orbus Exhibit & Display Group	4850 Statz Street	North Las Vegas	89081	(702) 633-9292	1
P & R Paper Supply	2855 E Lone Mountain Rd #130	North Las Vegas	89081	(702) 818-2491	1
Phoenix Auto Cores	2567 E Washburn Rd	North Las Vegas	89081	(702) 632-3159	1
Raymond Handling Solutions	2555 E Washburn Rd	North Las Vegas	89081	(702) 651-6480	1
Reliable Steel	4724 Mitchell St # B	North Las Vegas	89081	(702) 642-8390	1
Sparks	4975 N Pecos Rd	North Las Vegas	89081	(702) 476-5658	1
Spoon Exhibit Services	3917 E Lone Mountain Rd # D	North Las Vegas	89081	(702) 643-7775	1
Tri-Dim Filter Corporation	4980 Statz St #130	North Las Vegas	89081		1
VDC	5430 Donovan Way	North Las Vegas	89081		1
Wayland SW Wire Rope & Rigging	4401 McGuire Street	North Las Vegas	89081	(702) 632-3039	1
Deco West	80 N Mojave Road	Las Vegas	89101	(702) 644-8839	1
Reyes Coca-Cola Bottling	230 N Mojave Rd	Las Vegas	89101	(702) 437-7300	1
Universal Laundry & Linen	240 Spectrum Blvd	Las Vegas	89101	(702) 452-4363	1
Pebble Stone Coatings	3210 W Desert Inn Rd	Las Vegas	89102	(702) 243-7866	1
Pilkington North America	3205 Polaris Ave	Las Vegas	89102	(702) 367-2136	1
Thomas Floors	3212 West Desert Inn Road	Las Vegas	89102	(702) 871-4842	1
Direct Wholesale Las Vegas	3625 W Harmon Ave suite d	Las Vegas	89103	(702) 768-2245	1
VER	4155 W Russell Rd e	Las Vegas	89103	(702) 895-9777	1
Wholesale Granite Countertops Las Vegas	4050 W Harmon Ave	Las Vegas	89103	(702) 749-6698	1
Bimbo Bakeries USA	300 W Bonanza Rd	Las Vegas	89106	(702) 464-6800	1
Costco Business Center	222 S M.L.K. Blvd	Las Vegas	89106	(702) 384-6247	1
El Tiempo	1111 W Bonanza Rd	Las Vegas	89106	(702) 477-3846	1
Las Vegas Review-Journal	1111 W Bonanza Rd	Las Vegas	89106	(702) 383-0211	1
Nifty Nickel Publications	1111 W Bonanza Rd	Las Vegas	89106	(702) 224-5500	1
Outwest Meat	300 W Bonanza Rd	Las Vegas	89106	(702) 876-9000	1
US Foods	300 W Bonanza Rd	Las Vegas	89106	(702) 876-9000	1
View Neighborhood Newspapers	1111 W Bonanza Rd	Las Vegas	89106	(702) 383-0388	1
Agiliti	7061 W Arby Ave	Las Vegas	89113	(702) 914-2601	1
Agiliti	7061 West Arby Avenue	Las Vegas	89113	(702) 914-2601	1
Aramsco	7001 West Arby Ave #130	Las Vegas	89113	(702) 946-1055	1
Aries Technology	6365 Montessouri St	Las Vegas	89113	(702) 207-7070	1
Arroyo North Business Center	6560 S Tioga Way	Las Vegas	89113	(702) 597-1852	1
Arroyo South Business Center	7200 Warm Springs Road	Las Vegas	89113	(702) 597-1852	1
BriovaRx	8350 Briova Drive	Las Vegas	89113	(866) 618-6741	1
Campus Club School Uniforms- South	7575 W Sunset Rd	Las Vegas	89113	(702) 360-0555	1
Cort Furniture Rental	6625 Arroyo Springs St Suite 130	Las Vegas	89113	(702) 822-7368	1

Truckload Quantity Shippers (573) that are not located adjacent to a rail line

Name	Address	City	ZIP	Phone	Region
Destinations by Design	7608 W Teco Ave	Las Vegas	89113	(702) 798-9555	1
In-n-Out Warehouse	6450 Montessouri St	Las Vegas	89113	(800) 786-1000	1
Inovatex	6625 Arroyo Springs St #100	Las Vegas	89113	(702) 761-2600	1
JS Products	6445 Montessouri St	Las Vegas	89113	(800) 255-7011	1
Landsberg Orora	6625 Arroyo Springs St #140	Las Vegas	89113	(702) 430-9730	1
Shipp Distribution	6630 Arroyo Springs #100	Las Vegas	89113	(702) 207-4477	1
6755 Speedway Blvd Suite A-102	6775 Speedway Blvd	Las Vegas	89115	(702) 430-5160	1
All American Convention Services	3125 Marco St, Las Vegas	Las Vegas	89115	(702) 563-1981	1
Alliance Plastic	4680 Calimesa Street	Las Vegas	89115	(702) 643-0133	1
Amazon LAS5 Sort Center	4410 Nexus Way	Las Vegas	89115		1
Amazon LAS7	6001 E Tropical Pkwy	Las Vegas	89115		1
Amazon Sort Center LAS5	4410 Nexus Way	Las Vegas	89115		1
American Barbell	2695 Suit 120, N Lamb Blvd	Las Vegas	89115	(888) 473-0108	1
American Tire Distributors	3101 N Lamb Blvd # 110	Las Vegas	89115	(702) 452-1444	1
AMSOIL Distribution Center	6140 N Hollywood Blvd Suite 106	Las Vegas	89115	(877) 822-4206	1
Art Guild	4490 Nexus Way #101	Las Vegas	89115	(856) 853-7500	1
ASTOUND Large Facility	5675 E Ann Rd Suite 101	Las Vegas	89115	(702) 462-9718	1
Bed Bath & Beyond E Commerce Center	5835 E Ann Road	Las Vegas	89115	(725) 201-6100	1
Beyond the Racks	4031 N Pecos Road	Las Vegas	89115	(702) 643-5170	1
CCSD FOOD SERVICE DEPT	6350 E Tropical Parkway	Las Vegas	89115	(702) 799-8123	1
CJ Pony	2730 N Lamb Blvd	Las Vegas	89115	(702) 680-1701	1
Clearwater Paper	4775 E Cheyenne Ave #110	Las Vegas	89115	(702) 643-3238	1
Competitive Components	4031 N Pecos Rd #107	Las Vegas	89115	(702) 399-4060	1
Creative Foam Shapes	6775 Speedway Blvd M103	Las Vegas	89115	(702) 270-6572	1
Curtis 1000	4151 N Pecos Rd # 203	Las Vegas	89115	(800) 537-5667	1
Dr Pepper Snapple Group	4215 Corporate Center Drive	Las Vegas	89115		1
Fanatics	4490 Nexus Way	Las Vegas	89115	(702) 936-5110	1
Fellowes	3051 Marion Dr # 105	Las Vegas	89115	(702) 948-3100	1
Flexaust	4584 Calimesa Street	Las Vegas	89115	(702) 227-6881	1
Four Seasons Building Products	4601 E Cheyenne Ave Unit 115	Las Vegas	89115	(702) 657-8857	1
Franchise Warehouse	4114 N Pecos Rd	Las Vegas	89115		1
GDB International	6755 Speedway Blvd Suite A-102	Las Vegas	89115		1
GE Transportation	5406 E El Campo Grande Avenue	Las Vegas	89115	(702) 293-2205	1
Genssi HQ	4150 N Pecos Rd suite B	Las Vegas	89115	(702) 956-0506	1
Glass and Growlers	80 N Mojave Rd #190	Las Vegas	89115	(702) 644-8879	1
Global Transmission Parts	6160 N Hollywood Blvd Suite #108	Las Vegas	89115	(844) 298-6404	1
Goodman Distribution	4464 Calimesa Street	Las Vegas	89115	(702) 651-0621	1
GuineaDad	6255 N Hollywood Blvd Suite 150	Las Vegas	89115		1
Harmon Face Values	5402 E El Campo Grande Avenue	Las Vegas	89115	(702) 644-1079	1
HD Supply Facilities Maintenance	4825 E Cheyenne Ave	Las Vegas	89115	(800) 431-3000	1
IB Roof Systems	2965 Lincoln Road	Las Vegas	89115	(800) 426-1626	1
InProduction	4340 N Lamb Blvd Suite 120	Las Vegas	89115	(702) 643-8141	1
International Truck & Engine	3101 N Lamb Blvd # 100	Las Vegas	89115	(702) 632-0884	1
Iron Born Offroad	6180 N Hollywood Blvd #106	Las Vegas	89115	(702) 524-5202	1
J D International Lighting	4305 N Lamb Blvd	Las Vegas	89115	(702) 644-3002	1
Johnstone Supply Distribution Center	4875 E Cheyenne Ave # 100	Las Vegas	89115	(702) 322-9821	1
Jones Fiber Products	4588 E Craig Road	Las Vegas	89115	702.319.6400	1
KapStone Container Corp		Las Vegas	89115		1
Kichler	4750 N Lamb Blvd # 100	Las Vegas	89115	(702) 643-7292	1
Kroger Nevada consolidation center	2695 N Lamb Blvd	Las Vegas	89115		1
Lacer Motorsports	6180 N Hollywood Blvd	Las Vegas	89115	(702) 816-7143	1
Lakeview Cheese	3030 N Lamb Blvd #114	Las Vegas	89115	(702) 233-2439	1
Las Vegas Exhibit Rentals	6120 N Hollywood Blvd #107	Las Vegas	89115	(702) 789-0103	1
Living Spaces	2720 Lincoln Road	Las Vegas	89115		1
Lux Lounge EFR - Las Vegas Event Furniture F	6120 N Hollywood Blvd #109	Las Vegas	89115	(888) 247-4411	1
Meadow Gold Dairy	6350 E Centennial Parkway	Las Vegas	89115	(702) 399-6455	1
Metals USA	4601 E Cheyenne Ave	Las Vegas	89115	(800) 586-4686	1
Motion Industries	6180 N Hollywood Blvd # 110	Las Vegas	89115	(702) 651-9490	1
National Tire Wholesale	4031 N Pecos Rd #105	Las Vegas	89115	(702) 632-0975	1
Navistar	3101 N Lamb Blvd	Las Vegas	89115	(702) 895-7089	1
Nevada Assembly Service	4031 N Pecos Rd #107	Las Vegas	89115	(702) 633-5331	1
Nevada Beverage	4250 E Cheyenne Ave	Las Vegas	89115		1
Nevada RV	6957 Speedway Blvd #108	Las Vegas	89115	(844) 763-1200	1

Truckload Quantity Shippers (573) that are not located adjacent to a rail line

Name	Address	City	ZIP	Phone	Region
PAC Worldwide Corporation	4601 E Cheyenne Ave # 105	Las Vegas	89115	(800) 535-0039	1
Pacific Paper Tube	2695 N Lamb Blvd	Las Vegas	89115	(888) 377-8823	1
Premium Waters	3355 N Lamb Blvd	Las Vegas	89115	(702) 820-7491	1
Priority Wire & Cable	4025 E Cheyenne Ave Suite 100	Las Vegas	89115	(800) 945-5542	1
Priority Wire & Cable	3489, 2970 N Lamb Blvd # 113	Las Vegas	89115	(702) 696-0001	1
Pro Towels	4588 E Craig Road Suite 200	Las Vegas	89115	(702) 342-5542	1
Progressive Alloy Steel Unlimited	6335 N Hollywood Blvd Suite 130	Las Vegas	89115	(702) 405-2710	1
Providence Outdoor Living	Providence Outdoor Living	Las Vegas	89115		1
RC Willey Nevada Distribution Center	4300 Flossmoor Street	Las Vegas	89115	(702) 632-3650	1
Redburn Tire Company	3921 N Pecos Road	Las Vegas	89115		1
Restaurant Week Las Vegas	4190-4186 Pic Dr	Las Vegas	89115		1
Reusable Revolution	4151 N Pecos Rd #200	Las Vegas	89115	(866) 806-2072	1
RevUp Graphics	6160 N Hollywood Blvd STE 107	Las Vegas	89115	(702) 951-5750	1
RW Garcia	4780 N Lamb Blvd	Las Vegas	89115	(702) 960-0200	1
Safeguard Industries	6335 N Hollywood Blvd Suite 140	Las Vegas	89115	(888) 936-0752	1
Safelite AutoGlass	4601 E Cheyenne Ave Ste 113	Las Vegas	89115	(702) 289-4689	1
sbyke	6160 N Hollywood Blvd	Las Vegas	89115	(702) 778-5295	1
Scholastic Book Fairs	6255 N Hollywood Blvd Suite #110	Las Vegas	89115	(702) 399-2285	1
SEPHORA Distribution Center	6260 E Ann Road	Las Vegas	89115	(725) 726-2458	1
Sherwin-Williams Product Finishes	4168 N Pecos Rd Ste 105	Las Vegas	89115	(702) 366-7043	1
Silver Service Refreshment	6255 N Hollywood Blvd Unit 125	Las Vegas	89115	(702) 242-8155	1
Silverhooks	4151 N Pecos Rd #200	Las Vegas	89115	(866) 926-3223	1
Simplicity Office Systems	6120 N Hollywood Blvd # 110	Las Vegas	89115	(702) 632-2966	1
SOFIDEL America US Las Vegas	3515 Las Vegas Blvd North	Las Vegas	89115		1
Structure Exhibits	4548 Calimesa Street	Las Vegas	89115	(888) 633-4162	1
STV Motorsports	6160 N Hollywood Blvd #106	Las Vegas	89115	(702) 701-7101	1
Sun Delivery	4025 E Cheyenne Ave	Las Vegas	89115	(336) 472-5000	1
Supercar Systems	6120 N Hollywood Blvd #104	Las Vegas	89115	(530) 500-0005	1
Sysco Las Vegas	6201 E Centennial Parkway	Las Vegas	89115	(702) 632-1800	1
TemperPack Technologies	4390 Flossmoor St #400	Las Vegas	89115		1
Three Square	4220 N Pecos Rd	Las Vegas	89115	(702) 644-3663	1
Trend Nation	4151 N Pecos Rd #200	Las Vegas	89115	(702) 435-0076	1
Ugly Snuglies	2880 N Lamb Blvd	Las Vegas	89115	(844) 249-2996	1
VMInnovations	5675 E Ann Road	Las Vegas	89115	(323) 559-9496	1
von Drehle Corporation - Production Facility	4200 Flossmoor Street	Las Vegas	89115	(702) 644-5065	1
Walker Outlet Warehouse on Cheyenne	4150 E Cheyenne Ave	Las Vegas	89115	(702) 384-9302	1
World Pack Distribution Center	2880 N Lamb Blvd	Las Vegas	89115	(855) 507-1518	1
Xtreme Electric Vehicles	2821 N Marion Dr #111	Las Vegas	89115	(702) 800-7342	1
RumbleOn Fulfillment Center	6335 N Hollywood Blvd #125	North Las Vegas	89115	(702) 659-9130	1
4Wall Entertainment	3165 W Sunset Rd #100	Las Vegas	89118	(702) 263-3858	1
Acrylic Tank Manufacturing	3451 W Martin Ave C	Las Vegas	89118		1
Albertsons Liquor Warehouse	6065 Polaris Ave	Las Vegas	89118	(702) 895-7661	1
All-Wall Equipment	6561 W Post Rd	Las Vegas	89118	(800) 929-0927	1
Amazon DLV1	3165 W Sunset Rd Suite 120	Las Vegas	89118		1
American Olean / Marazzi Sales Service Cent	6975 S Decatur Blvd #100	Las Vegas	89118	(702) 248-3040	1
American Olean / Marazzi Sales Service Cent	6975 S Decatur Blvd #100	Las Vegas	89118	(702) 248-3040	1
Aristocrat	3300 Birtcher Dr	Las Vegas	89118	(702) 263-1497	1
Big D Floor Covering Supplies	4155 W Russell Rd ste b	Las Vegas	89118	(702) 736-4500	1
Brady	7055 Lindell Road	Las Vegas	89118	702-876-3990	1
Carpets N More	4580 W Teco Ave	Las Vegas	89118	(702) 458-9999	1
CEP	3540 Birtcher Dr	Las Vegas	89118	(702) 312-0703	1
Chefs warehouse	4248 W Post Rd	Las Vegas	89118	(702) 247-7700	1
Coastal International	5475 S Wynn Rd #400	Las Vegas	89118	(702) 645-4300	1
CORT Events	3455 W Sunset Rd Suite A	Las Vegas	89118	(888) 710-2525	1
Crate and Barrel	7015 Corporate Plaza Drive Suite 170	Las Vegas	89118	(702) 739-6772	1
Creel Printing	6330 W Sunset Rd	Las Vegas	89118	(702) 735-8161	1
Daltile Tile & Stone Gallery	3455 W Sunset Rd Ste G	Las Vegas	89118	(702) 871-8453	1
Dawn Food Products	7055 S Decatur Blvd # 110	Las Vegas	89118	(702) 876-9946	1
Dawn Food Products	7055 S Decatur Blvd # 110	Las Vegas	89118	(702) 876-9946	1
Eagle Promotions	4575 W Post Rd #100	Las Vegas	89118	(702) 388-7100	1
Freeman Audio Visual	3325 W Sunset Rd A	Las Vegas	89118	(702) 263-1484	1
Freeman Expo	6555 West Sunset Road	Las Vegas	89118	(702) 579-1400	1
GES	4702, 7000 S Lindell Road	Las Vegas	89118	(702) 515-5500	1

Truckload Quantity Shippers (573) that are not located adjacent to a rail line

Name	Address	City	ZIP	Phone	Region
Graybar Electric Supply	7055 S Decatur Blvd Suite 100	Las Vegas	89118	702-889-5444	1
Hotel Restaurant Furniture Liquidators	3585 W Diablo Dr #6	Las Vegas	89118	(702) 449-1011	1
Las Vegas Artificial Lawns	6975 S Decatur Blvd	Las Vegas	89118	(702) 365-8873	1
Main Electric Supply	6425 S Jones Blvd Suite 101	Las Vegas	89118	(702) 805-5052	1
Marshall Retail Group	3755 W Sunset Rd suite a	Las Vegas	89118	(702) 385-5233	1
Montroy Sign & Graphic Products - Las Vega	5385 Wynn Road	Las Vegas	89118	(800) 666-8769	1
NMR Events	5475 Wynn Rd #200	Las Vegas	89118	(702) 933-3025	1
Origin Acoustics	6975 S Decatur Blvd Suite 140	Las Vegas	89118	(844) 674-4461	1
ORR Safety	5385 Wynn Rd b	Las Vegas	89118	(702) 566-1030	1
Pacific Seafood	5845 Wynn Rd E	Las Vegas	89118	(702) 566-8670	1
Patriot Gaming & Electronics West Coast	3350 W Ali Baba Ln k	Las Vegas	89118	(702) 597-1676	1
Pepsi	6500 West Sunset Road	Las Vegas	89118	(702) 362-7000	1
PinkCherry Wholesale	6165 S Valley View Blvd suite d	Las Vegas	89118	(888) 740-7465	1
Production Resource Group	6050 S Valley View Blvd	Las Vegas	89118	(702) 942-4774	1
Renewal by Andersen	5175 W Diablo Dr #110	Las Vegas	89118	(702) 270-4545	1
Rincon Technology	6670 S Valley View Blvd	Las Vegas	89118		1
Rugby Architectural Building Products	4545 W Diablo Dr B	Las Vegas	89118	(702) 248-0050	1
Seamless Flooring	5175 W Diablo Dr	Las Vegas	89118	(702) 431-7900	1
Shepard Exposition Services	5845 Wynn Road Suites A, B, C, D	Las Vegas	89118	(702) 507-5278	1
Skyline Exhibits Las Vegas	6975 S Decatur Blvd #170	Las Vegas	89118	(702) 216-9012	1
Southshore Fine Linens	6521 W Post Rd #2	Las Vegas	89118	(702) 463-1475	1
Southwest Hardwood Floors, Inc.	5175 W Diablo Dr # 109	Las Vegas	89118	(702) 850-8511	1
Western Pacific Pulp & Paper	5475 Wynn Rd #100	Las Vegas	89118	(702) 262-6307	1
Bonanza Beverage	6333 Ensworth St	Las Vegas	89119	(702) 361-4166	1
Closet World	6672 Spencer St Suite 1000	Las Vegas	89119	(800) 434-6018	1
E-Cig Distributors	1100 Palms Airport Dr	Las Vegas	89119	(855) 698-7110	1
Foliot Furniture	7000 Placid Street	Las Vegas	89119	(702) 385-2010	1
Frontier Radio	212 Carpenters Union Way # 800	Las Vegas	89119	(702) 739-2940	1
Get Fresh	6745 Escondido St	Las Vegas	89119	(702) 897-8522	1
Lv Power Max 2000		Las Vegas	89119	(702) 637-0464	1
Shelby Performance Parts	6405 Ensworth St	Las Vegas	89119	(702) 405-3500	1
Veritiv	845 E Pilot Rd	Las Vegas	89119	(702) 896-4500	1
Vitacost	840 E Pilot Rd	Las Vegas	89119	(800) 381-0759	1
Amazon Prime Now	3650 E Post Rd	Las Vegas	89120	(888) 280-4331	1
Action Home Appliance Liquidation Center	7570 Dean Martin Dr #608	Las Vegas	89139	(702) 778-5290	1
Aramark Uniform Services	101 South Pavilion Circle	Las Vegas	89139	(702) 577-2397	1
Aramark Uniform Services	8298 Arville St	Las Vegas	89139	(702) 577-2397	1
Assured Document Destruction	8050 Arville Street #105	Las Vegas	89139	(702) 614-0001	1
Bedtime Mattress Corporation Inc	7570 Dean Martin Drive	Las Vegas	89139	(702) 641-9200	1
Bella Grande Entrances	7485 Dean Martin Dr STE 107	Las Vegas	89139	(702) 732-3440	1
Brick and Mortarless Furniture	7650 Dean Martin Dr Suite 102	Las Vegas	89139	(702) 809-0778	1
Builders Design Group	7570 Dean Martin Drive #601	Las Vegas	89139	(702) 616-0494	1
Cover It Window Fashions	7570 Dean Martin Dr #601	Las Vegas	89139	(702) 897-1314	1
DAWGS Footwear	4120 W Windmill Ln #106	Las Vegas	89139	(702) 260-1060	1
E. B. Bradley Co.	4120 W Windmill Ln Ste 103	Las Vegas	89139	(702) 818-2320	1
Elmco Silver State	7850 Dean Martin Dr #504	Las Vegas	89139	(702) 871-1966	1
Ernest Packaging Solutions	3930 W Windmill Ln #110	Las Vegas	89139	(888) 744-7221	1
Fortessa	4120 W Windmill Ln # 104	Las Vegas	89139	(703) 787-0357	1
Global Cash Access	5855, 4120 W Windmill Ln # 101	Las Vegas	89139	(702) 951-9517	1
Goodwill Clearance Center and Donation Site	7570 Dean Martin Dr #605	Las Vegas	89139	(702) 906-2205	1
Horizon Distributors	8298 Arville Street, #101	Las Vegas	89139	(702) 362-4224	1
I G M Solutions Inc	7445 Dean Martin Drive	Las Vegas	89139	(702) 629-2222	1
Ken's Food	8925 Kens Court	Las Vegas	89139	(702) 932-6400	1
Las Vegas Home Gallery – Richmond Americ	7770 Dean Martin Drive	Las Vegas	89139	(877) 420-1868	1
Las Vegas Review Journal	4280 W Windmill Lane	Las Vegas	89139	(702) 407-2620	1
LMG	7060 Windy Street	Las Vegas	89139	(702) 407-7200	1
Monark Premium Appliance	7370 Dean Martin Dr #401	Las Vegas	89139	(702) 798-6060	1
New Life Office	7850 Dean Martin Dr #505	Las Vegas	89139	(702) 213-9513	1
Quest Events	3930 W Windmill Ln Ste. 160	Las Vegas	89139	(702) 270-0534	1
Solotech	7465 Dean Martin Dr Suite 108	Las Vegas	89139	(702) 614-8882	1
Steelhead Productions	4220 W Windmill Ln #100	Las Vegas	89139	(702) 405-0190	1
Trigg Laboratories, Inc.	4220 W Windmill Ln Suite #140	Las Vegas	89139	(702) 957-4400	1
Vegas Furniture	7850 Dean Martin Dr #507	Las Vegas	89139	(702) 886-0242	1

Truckload Quantity Shippers (573) that are not located adjacent to a rail line

Name	Address	City	ZIP	Phone	Region
Turano Nevada Baking Company	490 East Bruner Avenue	Henderson	89502	(702) 936-8877	1
Daehan Solution	1600 East Newlands Road	Fernley	89408	(734) 857-1430	5
MSC Industrial Supply	2300 East Newlands Road	Fernley	89408	(800) 645-7270	5
Polaris Industries	1755 Nevada Pacific Parkway	Fernley	89408		5
Stericycle Environmental Solutions	2095 East Newlands Road	Fernley	89408	(775) 575-2760	5
Bi Nutraceuticals	625 Waltham Way	McCarran	89434	(310) 669-2100	5
PPG Architectural Coatings	201 Ireleand Drive	McCarran	89434	(775) 343-1012	5
ADI	695 Vista Blvd	Sparks	89434	(775) 355-5050	5
Amazon	555 Milan Drive	Sparks	89434		5
Benco Dental	625 Waltham Way, Suite 107	Sparks	89434	(775) 343-1831	5
Chewy.com McCarran Warehouse	385 Milan Drive	Sparks	89434	(775) 221-7220	5
Cintas	250 Vista Blvd	Sparks	89434		5
Complemar	200 Vista Blvd	Sparks	89434	(775) 355-6800	5
Ernest Packaging Solutions	360 Lillard Drive	Sparks	89434	(775) 829-9700	5
Fort Dearborn	295 Lillard Drive	Sparks	89434	(775) 359-1703	5
Henry Schein	255 Vista Blvd	Sparks	89434	(775) 352-3700	5
Hose Master	750 Vista Blvd	Sparks	89434	775-360-2947	5
Jet.com	235 East Sydney Drive	Sparks	89434	(855) 538-4323	5
Keefe Supply	55 Vista Blvd #101	Sparks	89434	(775) 355-7006	5
Laddawn	650 Lillard Drive	Sparks	89434	(775) 284-7452	5
Menezes Brothers	500 Menezes Way	Sparks	89434	(775) 342-0414	5
Merit Brass	200 Vista Blvd #106	Sparks	89434	(800) 726-9800	5
Metric & Multistandard	750 Vista Blvd #403	Sparks	89434	(775) 355-7200	5
Monsoon Pacific	350 Lillard Drive #151	Sparks	89434	(775) 356-8725	5
Mor Furniture for Less Warehouse	250 Vista Blvd #108	Sparks	89434	(775) 828-4646	5
NOW Foods	575 Vista Blvd	Sparks	89434	(888) 669-3663	5
PetSmart Distribution Center 41	1200 Venice Way	Sparks	89434		5
Pfizer Inc	1802 Brierley Way	Sparks	89434	(775) 353-5800	5
Radial	2777 USA Parkway	Sparks	89434		5
Tesla Warehouse	1200 Venice Way	Sparks	89434	(775) 352-5700	5
Thrive Market	700 Milan Drive #101	Sparks	89434	(855) 419-9919	5
Uinsource	750 Vista Blvd	Sparks	89434		5
Veritiv	750 Vista Blvd #401 & 402	Sparks	89434	(775) 358-0510	5
Via Seating	205 Vista Blvd #101	Sparks	89434	(800) 433-6614	5
Walmart Distribution Center	2195 Nevada 439	Sparks	89434	(775) 356-5000	5
Food Bank of Northern Nevada	550 Italy Drive	Sparks	89437	(775) 331-3663	5
Zulily	3200 USA Parkway	Sparks	89437	(877) 779-5615	5
Ritemade Paper Converters	900 North Hills Blvd	Reno	85906		6
InMusic Brands	12995 Echo Court	Reno	89056	(775) 677-9800	6
Urban Outfitters	12055 Moya Blvd	Reno	89056	(775) 971-1303	6
AmerisourceBergen	1195 Trademark Drive #102	Reno	89251		6
Angie's BoomChickaPop Reno	1025 Sandhill Road c	Reno	89251	(775) 236-0509	6
Aramark Uniform Services	1195 Trademark Drive # 103	Reno	89251	(775) 852-1122	6
Barnes & Noble Distribution Center	12660 Old Virginia Road	Reno	89251	(775) 327-6500	6
Bloch For Dancers	1170 Trademark Drive # 112	Reno	89251	(775) 824-2550	6
Dipaco Dtech	12693 Old Virginia Road	Reno	89251	(800) 648-4720	6
International Game Technology	9295 Prototype Drive	Reno	89251	(775) 448-7777	6
Krone North America	1190 Trademark Drive #107	Reno	89251	(775) 358-0907	6
LACO	1150 Trademark Drive	Reno	89251	(775) 461-2960	6
Lincoln Electric Cutting Systems	1170 Trademark Drive #101	Reno	89251	(775) 673-2200	6
Macpherson's	8770 Technology Way	Reno	89251	(775) 853-8700	6
Natures Bakery	1150 Trademark Dr Suite #101	Reno	89251	(775) 883-2253	6
Pacific Cheese	8950 Double Diamond Parkway	Reno	89251	(775) 852-7200	6
Pfizer Inc	1170 Trademark Drive # 111	Reno	89251	(775) 850-9244	6
Springs Global	1190 Trademark Drive #108	Reno	89251	(775) 358-8778	6
Superior Products Outlet Center	12663 Old Virginia Road	Reno	89251	(775) 329-0003	6
US Foods Culinary Equipment & Supplies	12663 Old Virginia Road	Reno	89251	(775) 329-0003	6
Vericom Global Solutions	1150 Trademark Dr Suite #102b	Reno	89251	(865) 671-4455	6
C & M Food Distributing	7935 Sugar Pine Court	Reno	89253	(775) 787-3020	6
Aervoe	1100 Mark Circle	Gardnerville	89410	(775) 782-0100	6
Starbucks Roasting Plant	2525 Starbucks Way	Minden	89423	(775) 267-6143	6
Accent Food Services	978 E Greg Street	Sparks	89431	(775) 323-3224	6
Apria Healthcare	1395 Greg St #113	Sparks	89431	(775) 352-7742	6

Truckload Quantity Shippers (573) that are not located adjacent to a rail line

Name	Address	City	ZIP	Phone	Region
Barone Distribution	2225 East Greg Street	Sparks	89431	(775) 359-1554	6
Berlin Packaging	1385 Greg St Suite 102	Sparks	89431	(800) 363-9822	6
Bimbo Bakeries USA	855 East Greg Street #105	Sparks	89431	(775) 359-8661	6
Bonanza Produce	1925 Freeport Blvd	Sparks	89431	(775) 358-2442	6
Brooks Equiptment	960 East Greg Street	Sparks	89431	(800) 826-3473	6
Camelot Party Rentals	152 Coney Island Drive	Sparks	89431	(775) 355-9004	6
Clean Harbors Environmental	1200 Marietta Way	Sparks	89431	(775) 624-8060	6
Damon Packaging	822 Packer Way	Sparks	89431	(775) 331-3200	6
Dreyer's Grand Ice Cream	1800 Deming Way	Sparks	89431	(775) 356-6556	6
DSG	945 Spice Island Drive	Sparks	89431	(775) 358-5003	6
Eiko Limited	1485 Southern Way	Sparks	89431	(775) 355-7733	6
Elite Spice	1225 East Greg Street # 102	Sparks	89431		6
Fracht	1400 S McCarran Blvd	Sparks	89431		6
Genova Products	1455 Linda Way	Sparks	89431	(775) 358-8566	6
Hodell-Natco Industries	880 E Glendale Avenue	Sparks	89431	(775) 358-2638	6
Intelligent Lifecycle Solutions	962 East Greg Street	Sparks	89431	(775) 391-1319	6
Jenny Service	150 Greg Street # 101	Sparks	89431	(775) 358-8585	6
Laguna Manufacturing	716 Spice Island Drive	Sparks	89431	(775) 358-4200	6
Landsberg Orora	150 East Greg Street #104	Sparks	89431	(775) 826-5833	6
LoKa Tile Group	972 East Greg Street	Sparks	89431	(775) 359-4388	6
Micro Metl Corporation	905 Southern Way	Sparks	89431	(775) 356-9181	6
Nelson Electric Co	1410 Freeport Blvd	Sparks	89431	(775) 358-0643	6
Nevada Nanotech Systems	1395 Greg St #102	Sparks	89431	(775) 972-8943	6
New West Distributing	325 Nugget Ave #101	Sparks	89431	(775) 355-5500	6
nvision Glass	667 Spice Islands Dr #101	Sparks	89431	(775) 336-2881	6
Perfect Equiptment	1498 Kleppe Lane	Sparks	89431	(775) 359-4200	6
Petra-1	996 United Circle	Sparks	89431	(775) 356-9501	6
Racetech Seats	750 Spice Islands Drive	Sparks	89431	(775) 351-2250	6
Refrigeration Supplies Distributor	1650 Hymer Ave	Sparks	89431	(775) 329-1067	6
Riddio Construction	2225 East Greg Street #105	Sparks	89431	(775) 359-9933	6
Sage Electronics	625 Spice Islands Drive	Sparks	89431		6
Sanofi Aventis	655 Spice Islands Dr # 101	Sparks	89431	(775) 356-7799	6
Sears Outlet	350 Glendale Ave Suite 100	Sparks	89431	(775) 358-5800	6
Silver State Petroleum	2225 East Greg Street #103	Sparks	89431	(775) 355-6706	6
Simco Imported Shoes	1480 Kleppe Lane	Sparks	89431	(775) 359-4200	6
Store Supply Warehouse	860 E Glendale Avenue	Sparks	89431	(775) 358-6765	6
Strategic Equipment & Supply	1280 Southern Way	Sparks	89431	(775) 358-2709	6
Tool Source Warehouse	550 Coney Island Drive	Sparks	89431	(775) 358-5122	6
Treehouse Foods	1055 E Greg Street	Sparks	89431	(775) 359-4000	6
Tyres International	1425 Hulda Court	Sparks	89431	(775) 356-9040	6
Universal Industries	1840 Deming Way	Sparks	89431	(775) 359-4378	6
Watts Regulator	780 Spice Islands Drive	Sparks	89431	(775) 825-9288	6
Wesco	1161 E Glendale Avenue	Sparks	89431	(775) 353-5417	6
West Pack Industries	2225 East Greg Street #107	Sparks	89431	(775) 351-2345	6
Western Pacific Distributors	1201 E Glendale Avenue	Sparks	89431	(775) 355-0800	6
Clasen Quality Chocolate	699 Hawco Court	Spanish Springs	89441	(877) 459-4500	6
Fluid Research	95 Distribution Drive	Spanish Springs	89441	(800) 600-3675	6
Mishimoto Automotive	38 Isidor Court #160	Spanish Springs	89441	(877) 466-4744	6
Velux America	38 Isidor Court #102	Spanish Springs	89441	(775) 424-4052	6
Breakthru Beverage	100 Distribution Drive	Sparks	89441	(775) 331-3400	6
Cleaners Supply	46 Isidor Court #104	Sparks	89441	(775) 351-1210	6
Leviton Manufacturing Co	96 Isidor Court	Sparks	89441	(775) 424-4500	6
Massimo Zanetti Beverage	46 Isidor Court	Sparks	89441	(775) 424-1500	6
Parts Unlimited	45 Isidor Court	Sparks	89441	(775) 425-0700	6
Swanson Health Products	46 Isidor Court	Sparks	89441	(800) 824-4491	6
Wurth West Distribution Center	150 Circuit Court	Sparks	89441	(775) 425-8501	6
7C'S Manufacturing	3895 Corsair St # D	Reno	89502	(775) 829-1717	6
Alhambra Water	1312 Capital Blvd Suite 104	Reno	89502	(800) 201-6218	6
Gary Platt Manufacturing	4643 Aircenter Circle	Reno	89502	(775) 824-0999	6
Great Basin Brewing Company	1155 S Rock Blvd #490	Reno	89502	(775) 856-1177	6
ITR America	4875 Aircenter Circle #105	Reno	89502	(775) 636-9426	6
K P Aviation	1316 Capital Blvd bldg 101	Reno	89502	(775) 852-1174	6
Lawson Products	1381 Capital Blvd	Reno	89502	(775) 856-1381	6

Truckload Quantity Shippers (573) that are not located adjacent to a rail line

Name	Address	City	ZIP	Phone	Region
Leisure Supply	4965 Energy Way	Reno	89502	(775) 856-4300	6
Milbank Manufacturing Co	4649 Aircenter Cir # 102	Reno	89502	(775) 827-6766	6
Model Dairy	500 Gould Street	Reno	89502	(775) 788-7900	6
MoldMan Systems	4649 Aircenter Circle #101	Reno	89502	(775) 332-1600	6
Mt Rose Drinks	822 Packer Way	Reno	89502		6
Natural Organics Inc	4660 Aircenter Circle	Reno	89502	(775) 828-8188	6
Nordic Cold Chain Solutions	4689 Aircenter Cir #104	Reno	89502	(866) 427-1919	6
Pepsi Bottling Group	355 Edison Way	Reno	89502	(775) 856-1387	6
Pet Squeak	1135 S Rock Blvd #330	Reno	89502		6
Petedge	3875 Corsair Street	Reno	89502	(775) 825-1156	6
Ranpak Corp	4681 Aircenter Circle	Reno	89502		6
Rittal	655 Edison Way	Reno	89502	(937) 399-0500	6
Sampco	575 Reactor Way	Reno	89502	(775) 356-3636	6
Seven-Up Bottling	1000 Terminal Way	Reno	89502	(775) 322-3456	6
Sierra Meat & Seafood	1330 Capital Blvd	Reno	89502	(775) 322-4073	6
Silver State Volleyball Club	4675 Aircenter Circle	Reno	89502	(775) 825-5400	6
Snow Lion	1312 Capital Blvd #103	Reno	89502	(775) 502-3500	6
Tessco Technologies	4755 Aircenter Circle	Reno	89502	(800) 472-7373	6
TKO Motorsports	1316 Capital Blvd # 103	Reno	89502	(775) 857-1913	6
Tool Source Warehouse	5360 Capital Court	Reno	89502	(775) 358-5122	6
US Granite Nevada	5350 Capital Court	Reno	89502	(775) 857-4700	6
Vogue Linen Supply	4940 Brookside Court	Reno	89502	(775) 356-8894	6
Wooster Brush	4960 Joule Street	Reno	89502	(775) 856-1950	6
Worldwide Fittings	5350 Capital Ct # 106	Reno	89502	(775) 857-3022	6
ACH Foam Technologies	13695 Mt Anderson Street	Reno	89506	(775) 343-3400	6
Almo Distributing Nevada	9085 Moya Blvd	Reno	89506	(267) 350-2738	6
Anixter	990 North Hills Blvd	Reno	89506	(775) 677-7200	6
Barnes Distribution	12755 Moya Blvd	Reno	89506	(775) 335-1120	6
Belnick	6650 Echo Ave Suite A	Reno	89506	(775) 677-0460	6
Better World Books	14525 Industry Cir Suite 200	Reno	89506	(800) 894-0242	6
Burrows Packaging Division	6650 Echo Ave	Reno	89506	(775) 356-8046	6
CCP Industries	6995 Resource Dr # 107	Reno	89506		6
Cold Chain Technologies	6640 Echo Ave	Reno	89506	(775) 971-1500	6
Contec	9175 Moya Blvd	Reno	89506		6
Daimler Trucks NA	14444 Lear Blvd	Reno	89506	(775) 971-5000	6
Fulfillment Works	900 North Hills Blvd	Reno	89506	(888) 717-7511	6
GM Customer Care & Aftersales	6565 Echo Avenue	Reno	89506	(775) 677-7400	6
Hedwin Corporation	9175 Moya Blvd # D	Reno	89506	(775) 677-9403	6
Hubert Western Distribution Center	14525 Industry Cir #500	Reno	89506	(513) 367-8879	6
HV Manufacturing	12150 Moya Blvd	Reno	89506	(775) 677-0900	6
id Tech	945 North Hills Blvd	Reno	89506		6
JCPenney Logistics Center	1111 Stead Blvd	Reno	89506	(775) 972-2000	6
Legend Valve & Fitting	12995 Echo Ct # F	Reno	89506	(775) 677-7957	6
National Cart	305 Western Road	Reno	89506	(775) 355-0899	6
SA Automotive	6645 Echo Ave Suite B	Reno	89506		6
Sally Beauty Supply	9975 Moya Blvd	Reno	89506	(775) 677-6300	6
Sherwin-Williams Distribution Center	12090 Sage Point Court	Reno	89506		6
Thrift Books	880 North Hills Blvd	Reno	89506	(775) 473-1660	6
Uniters NA / Palladio US	990 North Hills Blvd	Reno	89506	(800) 601-6458	6
Urban Outfitters	6640 Echo Ave	Reno	89506	(775) 412-7934	6
Veka West	14250 Lear Blvd	Reno	89506	(775) 972-4090	6
Volvo Parts North America	10991 Lear Blvd # 103	Reno	89506	(775) 971-1100	6
Yajima USA	6640 Echo Ave Suite C	Reno	89506	(775) 336-4422	6
QPB	10990 Lear Blvd Suite 101	Reno	89506		6
Petco Distribution Center #600	9050 North Red Rock Road	Reno	89508	(775) 453-7816	6
American Musical Supply	450 Maestro Drive	Reno	89511		6
Arrow Electronics	665 Maestro Drive # 100	Reno	89511	(775) 334-2800	6
Bake Mark USA	5455 Louie Lane	Reno	89511	(775) 850-8500	6
GTG Packaging	650 Innovation Drive	Reno	89511	(775) 355-0233	6
Lambro Industries-California	665 Maestro Drive	Reno	89511	(775) 358-8322	6
S K Food Group	5555 Quail Manor Ct # 100	Reno	89511	(775) 284-2629	6
Slakey Brothers	650 Innovation Drive	Reno	89511	(775) 359-7106	6
Sysco Corporation	640 Maestro Drive Unit # 111	Reno	89511	(775) 851-3188	6

Truckload Quantity Shippers (573) that are not located adjacent to a rail line

Name	Address	City	ZIP	Phone	Region
The AMES Companies	3450 Airway Drive	Reno	89511	(775) 853-4863	6
Koyo Corporation of USA	640 Maestro Dr # 103	Reno	89511	(775) 852-4493	6
Chesapeake Spice	8760 Technology Way	Reno	89521	(775) 954-0872	6
Imperial Supplies	12845 Old Virginia Road	Reno	89521	(775) 852-9200	6
Garlock Printing & Converting	127 Woodland Ave	Reno	89523	(800) 473-1328	6
Nutrient	110 Woodland Ave #8909	Reno	89523	(877) 633-6637	6
Patagonia Service Center	8550 White Fir Street	Reno	89523	(775) 747-1887	6

Note - TRIC ZIP Code is 89437 and 89434

Nevada Active Mines 2019

Nevada Active Mines 2019

FID	ID_NUM	NAME	OPERATOR	COMMODITY	COUNTY	Y_U83N	X_U83E
0	1	Aurora Mine (reprocessing)	Hecla Mining Co.	Gold, silver	Esmeralda	4240220	334720
1	2	Bald Mountain Mine (open pit)	KG Mining (Bald Mountain), Inc.	Gold, silver	White Pine	4422307	624496
2	3	Borealis Mine (leaching old pads)	Borealis Mining Co., LLC	Gold, silver	Esmeralda	4250000	347250
3	4	Chukar (underground mine)	Newmont Mining Corp.	Gold, silver	Eureka	4514625	565713
4	5	Coeur Rochester Mine (open pit)	Coeur Rochester, Inc.	Silver, gold	Pershing	4460022	402550
5	6	Cortez Hills (open pit)	Barrick Cortez, Inc.	Gold, silver	Lander	4446701	533501
6	7	Cortez Hills (underground mine)	Barrick Cortez, Inc.	Gold, silver	Lander	4446420	533387
7	8	Cortez Pipeline Mine (open pit)	Barrick Cortez, Inc.	Gold, silver	Lander	4455317	524233
8	9	Denton-Rawhide Mine (open pit)	Rawhide Mining, LLC	Gold, silver	Mineral	4319430	379657
9	10	Emigrant Mine (open pit)	Newmont Mining Corp.	Gold, silver	Elko	4496802	586981
10	11	Exodus Mine (underground)	Newmont Mining Corp.	Gold, silver	Eureka	4530175	553868
11	12	Fire Creek Mine (underground)	Hecla Mining Co.	Gold, silver	Lander	4479271	529591
12	13	Florida Canyon Mine (open pits)	Alio Gold (US), Inc.	Gold, silver	Pershing	4492602	395130
13	14	Hollister Mine (underground mine)	Hecla Mining Co.	Gold, silver	Elko	4550620	536640
14	15	Gold Hill Mine (open pit)	Round Mountain Gold Corp.	Gold, silver	Nye	4291260	495570
15	16	Gold Quarry (open pit)	Newmont Mining Corp.	Gold, silver	Eureka	4515151	565991
16	17	Goldstar (formerly West Genesis) (open pit)	Newmont Mining Corp.	Gold, silver	Eureka	4533815	552725
17	18	Goldstrike Arturo Mine Project (open pit)	Barrick Goldstrike Mines, Inc. (joint venture with Premier Mines Ltd., 40%)	Gold, silver	Eureka	4543001	548221
18	19	Goldstrike Betze-Post (open pit)	Barrick Goldstrike Mines, Inc.	Gold, silver	Eureka	4537038	551878
19	20	Goldstrike Meikle Mine (underground mine)	Barrick Goldstrike Mines, Inc.	Gold, silver	Elko	4539278	551865
20	21	Hycroft Mine (open pits)	Hycroft Resources and Development, Inc.	Gold, silver	Humboldt	4526602	358640
21	22	Jerritt Canyon Mine (underground mines)	Jerritt Canyon Gold LLC (joint venture with Sprott Mining Inc., 80%; Whitebox Asset Management, 20%)	Gold, silver	Elko	4579621	583571
22	23	Leeville Mine (underground mine)	Newmont Mining Corp.	Gold, silver	Eureka	4531532	556645
23	24	Lone Tree Complex (leaching old pads)	Newmont Mining Corp.	Gold, silver	Humboldt	4520101	482251
24	25	Lone Tree Mine (Brooks Pit) (open pit)	Newmont Mining Corp.	Gold, silver	Humboldt	4518782	479712.1
25	26	Long Canyon Mine (open pit)	Newmont Mining Corp.	Gold	Elko	4539742	708395
26	27	Marigold Mine (open pits)	SSR Mining	Gold, silver	Humboldt	4507224	485220
27	28	Midas Mine (underground mine)	Hecla Mining Co.	Gold, silver	Elko	4565942	518521
28	29	Mineral Ridge Mine (open pits)	Mineral Ridge Gold LLC	Gold, silver	Esmeralda	4183158	437800
29	30	Pan Mine (open pits)	Fiore Gold, Ltd.	Gold, silver	White Pine	4349710	609300
30	31	Pete-Bajo Mine (underground mine)	Newmont Mining Corp.	Gold, silver	Eureka	4528190	559441
31	32	Phoenix Mine (open pits)	Newmont Mining Corp.	Gold, copper, silver	Lander	4488081	488921
32	33	Robinson Mine (open pits)	KGHM International, Ltd.	Copper, gold, molybdenum, silver	White Pine	4347450	674222
33	34	Round Mountain Mine (open pit)	Round Mountain Gold Corp.	Gold, silver	Nye	4283750	493240
34	35	Ruby Hill Mine (leaching old pads)	Ruby Hill Mining Co., LLC	Gold, silver	Eureka	4375649	587385
35	36	Silverstar (formerly Genesis) (open pit)	Newmont Mining Corp.	Gold, silver	Eureka	4533745	553720
36	37	Sterling Mine (pemritted open pit)	Coeur Rochester, Inc.	Gold	Nye	4075340	532100
37	38	Sunrise Gold Placer Mine	Sunrise Minerals LLC	Gold	Pershing	4509602	419820
38	39	Turquoise Ridge Joint Venture (underground m	Barrick Gold Corp. (joint venture with Newmont Mining Corp., 25%)	Gold	Humboldt	4562779	479465
39	40	Twin Creeks Mine (open pit and underground m	Newmont Mining Corp.	Gold, silver	Humboldt	4566061	485471
40	41	Adams Claim Gypsum Mine	Art Wilson Co.	Gypsum, limestone	Lyon	4345271	267860
41	42	Amargosa Clay Operation (IMV Pits)	Lhoist North America of Arizona	Clay	Nye	4034845	568580
42	43	Apex Landfill Pit	Las Vegas Paving Corp.	Aggregate	Clark	4027000	691000
43	44	Apex Lhoist Quarry	Las Vegas Paving Corp.	Aggregate, sand	Clark	4026900	687340
44	45	Apex Lhoist Quarry	Lhoist North America	Limestone, dolomite	Clark	4026900	687340
45	46	Argenta Mine	Baker Hughes Oilfield Operations, Inc.	Barite	Lander	4498100	523540
46	47	Basalite Dayton Pit	Basalite Concrete Products, LLC	Sand, gravel	Storey	4357606	282597
47	48	Basalt Mine	Grefco Minerals, Inc.	Diatomite	Esmeralda	4205478	393380
48	49	Beatty Quarry	Kalamazoo Materials, Inc.	Landscape rock	Nye	4094750	521840
49	50	Bella Vista Pit	A and K Earthmovers	Rock, sand	Washoe	4371320	265930
50	51	Bing Materials Pit	Bing Materials Co.	Sand, gravel	Douglas	4308700	261500
51	52	Black and Red Cinder Pits	Cinderlite Trucking, Inc.	Cinder, landscape rock	Carson City	4346880	264860
52	53	Blanco Mine	Vanderbilt Minerals Corp.	Clay	Esmeralda	4196340	425740
53	54	Blue Diamond Hill Mine	Gypsum Resources, LLC	Gypsum, limestone	Clark	3994300	643650
54	55	Blue Diamond Pit	Las Vegas Paving Corp.	Sand, gravel	Clark	3986500	659800
55	56	Boehler Pit	Staker Parson Co.	Sand, gravel	Elko	4522100	606780
56	57	Boulder Ranch Quarry	CTC Crushing LLC	Sand, gravel	Clark	3978450	687100
57	58	Buff-Satin Mine (stockpile)	Vanderbilt Minerals Corp.	Clay	Pershing	4454650	385140
58	59	Churchill Mine	Nevada Cement Co.	Limestone	Churchill	4427500	349540
59	60	Cinder Cone Pit	Allied Building Materials, Inc./Cind-R-Lite Co.	Cinder	Nye	4060140	543740
60	61	Clark Mine	EP Minerals, LLC	Diatomite	Storey	4381500	295120
61	62	Colado Mine	EP Minerals, LLC	Diatomite, perlite	Pershing	4460730	352910
62	63	Dayton Materials (Mustang Pit)	3D Concrete, Inc.	Aggregate, sand	Lyon	4346000	277000
63	64	Donovan Pit	R.T. Donovan Co., Inc.	Decomposed granite	Washoe	4395000	270000
64	65	El Dorado Quarry	Portable Aggregate Producers, LLC	Sand, gravel	Clark	3980374	687952
65	66	Elburz Pit	Vega Construction and Trucking Co.	Sand, gravel	Elko	4533600	622900
66	67	Empire Mine	Empire Mining Co.	Gypsum	Pershing	4485750	304800
67	68	Fernley Operation Mine	EP Minerals, LLC	Diatomite	Churchill	4410158	332267
68	69	Fernley Quarry	Nevada Cement Co.	Limestone	Lyon	4380020	310490
69	70	Gamebird Pit	Wulfenstein Construction Co., Inc.	Sand, gravel	Nye	4001996	599697.5
70	71	Golden Valley Pit	A and K Earthmovers	Aggregate	Washoe	4388960	259020
71	72	Goni Pit	Cinderlite Trucking Corp.	Decomposed granite, sand, grave	Carson City	4344430	263820
72	73	Greystone Mine	M-I Swaco	Barite	Lander	4457850	510540
73	74	Gypsum Mountain Mine	Silver State Minerals, LLC	Gypsum	Pershing	4448381	382857
74	75	Hazen Pit	EP Minerals, LLC	Diatomite	Lyon/Churchill	4377320	320220
75	76	Heart of Nature Alum/Sulfur Mine	Heart of Nature, LLC	Alum, sulfur	Esmeralda	4195570	441510
76	77	Henderson Community Pit	Various (Bureau of Land Management manages pit)	Sand, gravel	Clark	3980500	687800
77	78	Huck Salt	Huck Salt Co.	Salt	Churchill	4346860	374550
78	79	Lima Nevada Gypsum Mine	H. Lima Nevada LLC	Gypsum	Clark	4006000	692840
79	80	Lockwood Quarry	Granite Construction Co.	Aggregate	Washoe	4377267	271751
80	81	Lone Mountain	Las Vegas Paving Corp.	Aggregate	Clark	4012520	648880
81	82	Lone Mountain	Mel Clark, Inc.	Sand, gravel	Clark	4008000	650340
82	83	Lone Mountain	Nevada Ready Mix Corp.	Sand, gravel	Clark	4013180	650790
83	84	Lone Mountain	Wells Cargo, Inc.	Sand, gravel	Clark	4013069	649059.9
84	85	Lone Mountain Community Pit	Various (Bureau of Land Management manages pit)	Sand, gravel	Clark	4013220	648880
85	86	Mesquite Community Pit	BJ Rees's Enterprise	Sand, gravel	Clark	4074700	760420
86	87	Mesquite Community Pit	Various (Bureau of Land Management manages pit)	Sand, gravel	Clark	4074700	760420
87	88	MIN-AD Mine	MIN-AD, Inc.	Dolomite	Humboldt	4525800	440120
88	89	Money Pit	Southern Nevada Liteweight, Inc.	Silica sand	Clark	3961020	665500
89	90	Mount Moriah Quarry	Mount Moriah Stone Quarries, LLC	Building stone, landscape rock	White Pine	4343795	751603
90	91	Mountain Springs Mine	M-I Swaco	Barite	Lander	4462620	496480
91	92	Mustang Quarry	Sierra Nevada Construction, Inc.	Aggregate	Washoe	4379650	273880
92	93	Nassau (Section 8) Mine (stockpile)	American Colloid Co.	Clay	Pershing	4453880	388920
93	94	Nevada Barth Iron Mine	Saga Exploration Co.	Iron ore	Eureka	4492240	562180
94	95	New Discovery Mine	Vanderbilt Minerals Corp.	Clay	Nye	4081905	520520
95	96	Nightingale Pit	Imerys Filtration Minerals, Inc.	Diatomite	Churchill	4422800	321060
96	97	PABCO Apex Quarry	Pacific Coast Building Products, Inc.	Gypsum	Clark	4009484	691057

Nevada Active Mines 2019

FID	ID_NUM	NAME	OPERATOR	COMMODITY	COUNTY	Y_U83N	X_U83E
97	98	Pahrump Community Pit	Various (Bureau of Land Management manages pit)	Sand, gravel	Nye	4004300	596780
98	99	Paiute Pit	CEMEX Construction Materials Pacific, LLC	Sand, gravel	Washoe	4391040	304400
99	100	Pilot Peak Quarry	Graymont Western US., Inc.	Limestone	Elko	4522627	731144
100	101	Pole Line Pit	Boulder Sand and Gravel, Inc.	Sand, gravel	Clark	4009352	678819
101	102	Popcorn Mine	EP Minerals, LLC	Perlite	Churchill	4344290	345870
102	103	Premier Chemicals, LLC, Mine	Premier Chemicals, LLC	Magnesite	Nye	4302120	422900
103	104	Rainbow Quarries	Las Vegas Rock, Inc.	Landscape rock, sand, gravel	Clark	3974880	638780
104	105	Relief Canyon Quarry	Nevada Cement Co.	Limestone	Pershing	4449781	401478
105	106	Rilite Aggregate	Rilite Aggregate Co.	Sand, rock	Washoe	4365881	266702
106	107	River Canyon III	Joy Engineering	Aggregate	Storey	4379781	286375
107	108	Rocks Road Pit	Desert Engineering	Sand, gravel	Lyon	4312626	316830.3
108	109	Sexton Mine	Nutritional Additives Corp.	Dolomite	Pershing	4522140	438740
109	110	Sierra Ready Mix Quarry	Sierra Ready Mix, LLC	Sand, gravel	Clark	3953030	653740
110	111	Sierra Stone Quarry	CEMEX Construction Materials Pacific, LLC	Aggregate	Storey	4372283	274829
111	112	Silver Peak Operations	Rockwood Lithium, Inc.	Lithium carbonate	Esmeralda	4178350	443700
112	113	Simplot Silica Products Pit	J. R. Simplot Co.	Silica sand	Clark	4039110	727470
113	114	Sloan Quarry	Aggregate Industries	Crushed stone	Clark	3978918	661472
114	115	South Jean Pit	Service Rock Products	Sand, gravel	Clark	3955100	657120
115	116	Spanish Springs Quarry	Martin Marietta Materials, Inc.	Aggregate, decomposed granite	Washoe	4395944	266114
116	117	Spring Mountain Pit	Wells Cargo, Inc.	Sand, gravel	Clark	3990171	657163
117	118	Tenacity Perlite Mine	Wilkin Mining and Trucking Co., Inc.	Perlite	Lincoln	4157600	675240
118	119	Terraced Hill Clay (Flanigan) Mine	Nevada Cement Co.	Clay	Washoe	4455060	261500
119	120	Tracy Pit	BJ Rees's Enterprise	Sand, gravel	Washoe	4383361	284683
120	121	Trico Pit	Gopher Construction Co.	Aggregate	Storey	4382000	283800
121	122	Wade Sand Pit	Granite Construction Co.	Sand	Washoe	4388890	305170
122	123	Wulfenstein (BLM) Pit	Wulfenstein Construction Co., Inc.	Sand, gravel	Nye	4004300	596800
123	124	Bonanza Opal Mine	Bonanza Opal Mines, Inc.	Precious opal	Humboldt	4633240	327520
124	125	Gemfield Gems	Gemfield Gems	Chalcedony	Esmeralda	4176832	474068
125	126	Lone Mountain Turquoise Mine	Lone Mountain Mining, LLC	Turquoise	Esmeralda	4201200	463200
126	127	May Turquoise Mine	Red Widow Mine Co.	Turquoise	Lander	4466496	527135.9
127	128	Rainbow Ridge Opal Mine	Rainbow Ridge Opal Mines, Inc.	Opalized wood, precious opal	Humboldt	4628820	332830
128	129	Royal Peacock Opal Mine	Royal Peacock Opal Mine, Inc.	Precious opal	Humboldt	4628180	326360
129	130	Beowawe	Terra-Gen Power, LLC	Electricity	Lander	4489415	532398
130	131	Blue Mountain	AltaRock Energy	Electricity	Humboldt	4538407	404447
131	132	Brady Hot Springs	Ormat Nevada, Inc.	Electricity	Churchill	4407088	327912
132	133	Brady Hot Springs	Olam Spices and Vegetables, Inc.	Vegetable dehydration	Churchill	4406553	327273
133	134	Burdette (Galena 3)	Ormat Nevada, Inc.	Electricity	Washoe	4363504	263276
134	135	Desert Peak II	Ormat Nevada, Inc.	Electricity	Churchill	4402148	332634
135	136	Dixie Valley	Terra-Gen Power, LLC	Electricity	Churchill	4424433	426925
136	137	Don A. Campbell, Don A. Campbell II	Ormat Nevada, Inc.	Electricity	Mineral	4299493	384894
137	138	Elko Hot Springs	Elko County School District	Space Heating	Elko	4521706	604406
138	139	Galena 1	Ormat Nevada, Inc.	Electricity	Washoe	4364213	263433
139	140	Galena 2	Ormat Nevada, Inc.	Electricity	Washoe	4361796	261800
140	141	Jersey Valley	Ormat Nevada, Inc.	Electricity	Pershing	4448142	458876
141	142	McGinness Hills, McGinness Hills II, III	Ormat Nevada, Inc.	Electricity	Lander	4382385	507530
142	143	Moana Hot Springs	Avalon Geothermal, LLC	Space heating	Washoe	4374819	258439
143	144	Moana Hot Springs	Peppermill Casinos, Inc.	Space heating	Washoe	4375822	258958
144	145	Patua	Cyrq Energy	Electricity	Churchill	4383471	321797
145	146	Salt Wells	Enel North America, Inc.	Electricity	Churchill	4352375	364296
146	147	San Emidio	Ormat Nevada, Inc.	Electricity	Washoe	4472701	296269
147	148	Soda Lake Nos. 1, 2	Cyrq Energy	Electricity	Churchill	4380171	341112
148	149	Steamboat II, III	Ormat Nevada, Inc.	Electricity	Washoe	4363738	262756
149	150	Steamboat Hills	Ormat Nevada, Inc.	Electricity	Washoe	4361484	261630
150	151	Stillwater 2	Enel Stillwater, LLC	Electricity	Churchill	4378439	366194
151	152	Tungsten Mountain	Ormat Nevada, Inc.	Electricity	Churchill	4391619	440784
152	153	Tuscarora	Ormat Nevada, Inc.	Electricity	Elko	4590782	570913
153	154	Wabuska	Open Mountain Energy	Electricity	Lyon	4337262	311667
154	155	Bacon Flat	Grant Canyon Oil and Gas, LLC	Oil	Nye	4258061	622592
155	156	Blackburn	Grant Canyon Oil and Gas, LLC	Oil	Eureka	4453769	573200
156	157	Eagle Springs	Kirkwood Oil and Gas, LLC	Oil	Nye	4273541	627598
157	158	Ghost Ranch	Kirkwood Oil and Gas, LLC/Makoil, Inc.	Oil	Nye	4272319	627902
158	159	Huntington	Noble Energy, Inc.	Oil	Elko	4474961	607223
159	160	Grant Canyon	Grant Canyon Oil and Gas, LLC	Oil	Nye	4256983	624095
160	161	Kate Spring	Western General/Makoil, Inc.	Oil, gas	Nye	4271057	627115
161	162	Sand Dune	Kirkwood Oil and Gas, LLC	Oil	Nye	4272249	627722
162	163	Sans Spring	Grant Canyon Oil and Gas, LLC	Oil	Nye	4258648	617622
163	164	Tomera Ranch	Tomera Oil Fields, LLC	Oil	Eureka	4485941	574331
164	165	Trap Spring	Makoil, Inc./Frontier Exploration Co.	Oil	Nye	4274130	617171

Connect Rail Nevada Catalogued Groups

ConnectRailNevada Catalogued Groups in Contact Database-520 Contacts

- Geographic Zones
  - Overall
  - Region 1 - Southern Nevada [Clark County]
  - Region 2 - Lincoln County
  - Region 3 - Ely-North to W. Wendover [White County; some Elko County]
  - Region 4 - I-80 Corridor, Lovelock to Wendover [Elko; Eureka, Lander; Humboldt; Pershing]
  - Region 5 - TRIC-Fernley-Fallon-Silver Springs [Washoe; Storey; Douglas; Lyon; Churchill]
  - Region 6 - Carson City-Reno
  - Region 7 – So. of Silver Springs-Wabuska-Yerington-Hawthorne [Mineral, Esmeralda]
  - Region 8 - Beatty – Pahrump-[Nye County]
- IntelliConference Invite List
- Interviewees
- Nevada Academics
- Nevada Agriculture
- Nevada Architects, Urban Planners
- Nevada Citizen Groups
- Nevada Civil Engineering Companies
- Nevada Developers
  - Fernley - Hazen - Silver Spring
- Nevada Distribution Companies
- Nevada DOT
- Nevada Energy
- Nevada Federal Gov't
  - Congressional Delegation
- Nevada Foundations
- Nevada Funding
- Nevada High Speed Rail Authority
- Nevada Investors
- Nevada Journalists
- Nevada Lenders
- Nevada Lobbyists
- Nevada Mining

Nevada MPOs/RPOs

Nevada Planning

Nevada Project Sponsors

Nevada Rail Consultants

Nevada Rail Growth Projects

Nevada Rail Suppliers

Nevada Railroad Materials + Services

Nevada Railroad Societies

Nevada Railroad Staff

Nevada Realtors

Nevada Regional Development Authorities

Nevada Shippers

- Nevada Agriculture
- Nevada Energy
- Nevada Waste and Recycling

Nevada State & Local Government

- Caliente
- Ely
- Las Vegas
- Nevada High Speed Rail Authority

Nevada Transportation Service Providers

Nevada Tribes

Nevada Utilities

NNDA-Northern Nevada Development Authority

SLUPAC-State Land Use Planning Advisory Council

NVSRP Stakeholder List

NVSRP Stakeholder List

First Name	Last Name	Affiliation
Weston	Adams	Western States Contracting
Lamar	Aiazzi	Nevada Intercity Passenger Railroad Co.
Randel	Aleman	Encore Commercial Real Estate
Judie	Allen	Lander County
Mark	Anderson	Nevada Industry Excellence
Delmo	Andreozzi	Elko County
Brett	Andrews	Interstate Oil
Ron	Annesley	Nevada Copper, Inc.
Katie	Armstrong	State of Nevada
Chris	Ault	Economic Development Authority of Western Nevada
Kristen	Averyt	Nevada Department of Conservation and Natural Resources
Ray	Bacon	Nevada Manufacturers Association
James	Barbee	Churchill County
Kellie	Bartley	Top Rail Solutions, Inc.
Mark	Bassett	Nevada Northern Railway
Donna	Bath	Silver Lion Farms
Kimon	Beckmann	EP Minerals
Jodi	Bectel	Clark County
Michelle	Beecher	City of Ely Nevada
Brian	Beffort	Sierra Club Toiyabe Chapter
Robert	Bilbray	Laughlin Economic Development Corporation
Buddy	Borden	University of Nevada Cooperative Extension
Jim	Bowen	Geofortis Processing & Logistics LLC
Roger	Bowers	Nevada Northern Railway
Gerry	Bowers	Nevada Gold
Douglas	Boyle	University of Nevada, Reno
Jared	Brackenbury	Lincoln County Commissioners
Mark	Brady	Nevada Governor's Office of Energy
Ray	Breedlove	Citizen
Jenny	Brekhus	Reno City Council
Bruce	Breslow	Nevada Strategies
Kyla	Bright	Lander County
Michael	Brown	Nevada Governor's Office of Economic Development
Ian	Bullis	White Pine County
Bill	Calderwood	White Pine County
Joe	Campos	Blockchains, Inc.
Scott	Carey	Nevada Division of State Lands
Lucy	Carnahan	Fallon Chamber of Commerce
Eileen	Christensen	BEC Environmental, Inc.
Zeny	Cieslikowski	Expeditors International
Art	Clark	Lander County
Stephen	Clarke	QuanVerge Inc.
Mark	Costa	Nevada Department of Transportation
Curtis	Coulter	Coulter Harsh Law
Tim	Crowley	Lithium Nevada Corporation
Husein	Cumber	Florida East Coast Industries
Amy	Cummings	Regional Transportation Commission (RTC) of Washoe County
Matthew	Cunningham	Hudbay Minerals

NVSRP Stakeholder List

First Name	Last Name	Affiliation
Jason	Daily	Savage
Jenine	Dalrymple	Southwestern Energy
Ron	Damele	Eureka County
Dillon	Davidson	State of Nevada Department of Agriculture
Corrado	De Gasperis	Comstock Mining, Inc.
Kirk	DeJesus	Kinder Morgan
Jack	Desai	Hawthorne Best
Barry	Devlin	Gold Resource Corporation
Dale	Diulus	Salt River Materials Group
Ken	Dixon	City of Caliente
Scott	Dockter	U.S. Mine Corp.
Daniel	Doenges	Regional Transportation Commission (RTC) of Washoe County
Jason	Doering	SMART-TD
Graham	Dollarhide	Nevada Department of Transportation
Charles	Donohue	Nevada Division of State Lands
Eric	Dougherty	Gemfield Resources, LLC (Waterton Global Resource Management)
Matthew	Duplantis	Link Industrial Properties
Michele	Duttlinger	Cyanco Company LLC
Tim	Dyhr	Nevada Copper, Inc.
Roy	Edgington	City of Fernley
Fred	Elenbaas	Citizen
Kenneth	Elgan	Esmeralda County Sheriff
Sherry	Ely-Mendes	Pyramid Lake Paiute Tribe
Paul	Enos	Nevada Trucking Association
Dominique	Etchegoyhen	State of Nevada Department of Conservation & Natural Resources
Darren	Eyre	CRS Consulting Engineers
Tyson	Falk	ioneer Ltd.
Lee	Farris	Landwell/Basic Remediation Company
James	Faulds	University of Nevada, Reno
George	Fennemore	Citizen
Marco	Fiorello	Allied Plasma, Inc.
Jeff	Fontaine	Lincoln County Regional Development Authority
David	Foster	RAIL Solution
Jim	French	Humboldt County
Michael	Fuess	Nevada Department of Transportation
Nick	Gaeta	Tesla
Jim	Gee	Regional Transportation Commission (RTC) of Washoe County
John	Gianoli	Nevada Northern Railway Foundation
Mike	Giles	City of Lovelock
Lance	Gilman	L. Lance Gilman Real Estate
Jeremy	Gilpin	Greater Commercial Lending
Dirk	Goering	Carson Area Metropolitan Planning Organization
J.J.	Goicoechea	Board of Eureka County Commissioners
Sheryl	Gonzales	Western Nevada Development District
Herb	Grabell	Kidder Mathews
Tyre	Gray	Nevada Mining Association
Thomas	Gray	Virginia & Truckee Railroad
Vince	Griffith	Reno Engineering Corp.

NVSRP Stakeholder List

First Name	Last Name	Affiliation
Vinson	Guthreau	Nevada Association of Counties
Maureen	Haney	Union Pacific Railroad
Johnny	Hargrove	NV Energy
Jerry	Harris	Southwestern Energy
Matthew	Harris	Avison Young
Tom	Harris	University of Nevada
Earl	Harrison	U.S. Mine Corp.
Andrew	Haskin	Northern Nevada Development Authority
Nick	Haven	Tahoe Regional Planning Agency
Christopher	Hayward	Dicalite Management Group, Inc.
Chris	Hegg	Mineral County Commissioners
Alicia	Heiser	City of Winnemucca
Emily	Hendrickson	Round Mountain Gold Corp.
Rick	Hendrix	Robinson Mine
Rob	Herr	City of Henderson
Steven	Hert	SS Hert Trucking
Patricia	Herzog	Nevada Governor's Office of Economic Development
Varlin	Higbee	Lincoln County Commissioners
Jim	Hill	Premier Magnesia, LLC
Christine	Hoferer	Mineral County Commissioners
Rob	Hooper	Northern Nevada Development Authority
Daphne	Hooper	City of Fernley
Miranda	Hoover	Capitol Partners
David	Hornsby	Empire Mining Co. LLC
Tony	Hsieh	DTP
Martin	Huenes	Nevada Gold
Corey	Hunt	Tolles Development Company
Gary	Hunter	Railroad Industries Incorporated
Michael	Ingram	Dicalite Management Group, Inc.
Scott	Jarvis	City of Henderson
Michael	Johnson	Churchill County Planning
Margaret	Johnston	City of Carlin
Scott	Jolcover	Comstock Mining, Inc.
Ron	Kaminkow	Railroad Workers United
John	Kaseroff	Nevada Hay Growers Association
Mike	Kazmierski	Economic Development Authority of Western Nevada
Vida	Keller	Lyon County Commissioner District 2
John	Key	itronics
Ralph	Keyes	Esmeralda County Commissioners
Jim	Kingzett	GRID
Alexandra	Kingzett	GRID
Paul	Kinne	Panattoni Development
Marilyn	Kirkpatrick	Clark County
Andrew	Kjellman	Regional Transportation Commission of Southern Nevada
Jason	Klimek	Tesla
Marty	Knauss	City of Laughlin
Darryl	Lacey	Nye County NWRPO
Kim	Lee	Salt River Materials Group

NVSRP Stakeholder List

First Name	Last Name	Affiliation
Jennifer	Lee	City of Ely Nevada
Justin	Lichter	Industrial Realty Group
Michelle	Lindsay	NV Energy
Heidi	Lusby-Angvick	Pershing County Economic Development Authority
Anne	Macquarie	Sierra Club Toiyabe Chapter
Madison	Mahon	City of Carlin
Mark	Maloney	Regional Transportation Commission (RTC) of Washoe County
Lucia	Maloney	Carson Area Metropolitan Planning Organization
Paul	Marcinko	Union Pacific Railroad
Cadence	Matijevich	State of Nevada Department of Agriculture
Julie	Maxey	Nevada Department of Transportation
John	McCafferty	Union Pacific Railroad
Nancy	McCormick	Economic Development Authority of Western Nevada
Rich	McKay	Eureka County
Courtney	Mckimmey	Nevada Lieutenant Governor
Dave	Mendiola	Humboldt County
Mark	Menezes	Menezes Brothers
Randy	Messer	Advanced Carbonate Technologies, LLC
Amy	Miller	Northern Nevada Development Authority
Tom	Miller	Miller Industrial Properties
Paul	Miller	Nye Co & Esmeralda Regional Economic Dev Authority (NCREDA)
Cash	Minor	Elko County
Jan	Morrison	Humboldt Development Authority
Joe	Mortenson	Lyon County
Dave	Mough	ioneer Ltd.
Sheldon	Mudd	Northeastern Nevada Regional Development Authority
Sean	Mueller	Symbia
John	Muntean	University of Nevada, Reno
Mark	Nixon	Board of Mineral County Commissioners
Kyle	Noyes	Winnemucca Farms Inc.
Herb	Okada	Southwest Transload
Brian	Oneal	Savage
Ron	Opfer	Coldwell Banker Premier Realty
Austin	Osborne	Storey County
Jennifer	Ott	State of Nevada Department of Agriculture
Jeff	Page	Lyon County
Mark	Paris	Landwell/Basic Remediation Company
Dean	Patterson	Churchill County Planning
Keith	Pearson	Lincoln County Commissioners
Kirk	Peterson	Friends of Nevada Wilderness
John	Peterson	Hawthorne Army Depot
Ross	Pfautz	Mark IV Capital
Lee	Plemel	Carson City
Todd	Poland	Top Rail Solutions, Inc.
Bob	Potts	Nevada Governor's Office of Economic Development
Neil	Prenn	Mine Development Associates Inc.
Garth	Price	Mineral County Commissioners
Colby	Prout	Nevada Association of Counties

NVSRP Stakeholder List

First Name	Last Name	Affiliation
Rob	Pyzel	Lyon County
Brett	Rabe	Lithium Nevada Corporation
Craig	Raborn	Regional Transportation Commission of Southern Nevada
Meg	Ragonese	Nevada Department of Transportation
Bert	Ramos	Lander County
John	Ramous	Dermody Properties
Tyler	Reddington	BNSF
John	Restrepo	RCG Economics
Doug	Roberts	Panattoni Development
Chuck	Roberts	Silver State Millwork LLC
Nathan	Robertson	City of Ely Nevada
Victor	Rodriguez	Nellis Air Force Base
Jonathan	Rodriguez	City of Henderson
Pat	Rogers	General Moly Inc.
Drew	Roschli	Roschli Rail Consulting
Steve	Rowe	City of Caliente
Sean	Rowe	Mineral County District Attorney
Heath	Rushing	New Nevada Resources
Tyler	Samson	Moapa Band of Paiutes
Brad	Schnepf	Marnell Properties
Jenna	Schonlau	Lithium Nevada Corporation
Jonetta	Schrick	Nellis Air Force Base
Ronald	Sheehan	Avison Young
Melanie	Sheldon	Governor's Office of Economic Development
Barry	Simcoe	Friends of the Nevada State Railroad Museum
Jared	Smith	Las Vegas Global Economic Alliance
Elaine	Spencer	Virginia & Truckee Railroad Commission
Ellery	Stahler	Nevada Division of State Lands
Dagny	Stapleton	Nevada Association of Counties
Derek	Starkey	City of Fernley
Frederick	Steinmann	University of Nevada, Reno
Dan	Stewart	Nevada Gold
Robert	Stokes	Elko County
Nelson	Stone	T.Y. Lin International
Richard	Stone	City of Winnemucca
Tom	Sullivan	Nevada Copper, Inc.
Robert	Summerfield	City of Las Vegas
Jolene	Supp	City of Wells
Michael	Sussman	Strategic Rail Finance
Michael	Sutphin	Tesla
Ken	Tavener	ITS Logistics
Glenn	Taylor	Citizen
Garrett	TerBerg	Clark County
Stan	Thomas	Economic Development Authority of Western Nevada
Bill	Thompson	Nevada Department of Transportation
Jake	Tibbitts	Eureka County
Robin	Titus	State of Nevada
Amber	Torres	Walker River Paiute

NVSRP Stakeholder List

First Name	Last Name	Affiliation
Tim	Tucker	TOT, LLC
Perry	Ursem	Las Vegas Global Economic Alliance
Lindsay	Van Meter	BNSF
Nick	Vander Poel	Capitol Partners
Rosemary	Vassiliadis	Clark County Department of Aviation
Jasmine	Vazin	Sierra Club Toiyabe Chapter
Marco	Velotta	City of Las Vegas
Ben	Viljoen	Nevada Rand LLC
Mike	Visher	State of Nevada Commission on Mineral Resources
Tatjana	Vukovic	Nevada Governor's Office of Economic Development
Frank	Wagener	Round Mountain Gold Corp.
Patsy	Waits	Nevada Association of Counties
Lorayn	Walser	Nevada Governor's Office of Energy
Michael	Warren	Union Pacific Railroad
Justin	Watkins	Nevada Conservation League
Chris	Wessel	Western Regional Water Commission
Ryan	Wheeler	Nevada Department of Transportation
John	Whitney	Itronics Inc.
Harvey	Whittemore	Abbey, Stubbs & Ford, LLC
De	Winsor	Esmeralda County
Beth	Xie	Regional Transportation Commission of Southern Nevada
Alexi	Zawadzki	Lithium Nevada Corporation

NVSRP IntelliConference Synthesis

NVSRP

IntelliConference Responses

Round One-April 2020

PART 1

PART 2

Note: Aggregate stakeholder totals on multiple choice selections may vary by 2-3%, as some tabulations were conducted as late IntelliConference participants were accommodated.

PART 1

IntelliConference Response Digest

Stakeholder responses in brief

Introduction

Over two weeks in in early April 2020, 81 Nevada transportation and planning-related stakeholders participated in the Opening NVSRP online IntelliConference. The responses were on the whole thoughtful and well-developed.

This Digest version, Part 1, is highly condensed to offer the reader an overview of Round One of the IntelliConference. The longer Summary version, Part 2 offers the reader a wider range of stakeholder perspectives

You can also use this Digest version to find your way to specific areas of interest. The *links in blue* will lead you to the page containing the wider set of stakeholder responses in the Summary version.

2. Which of the following describes your general impression of the presentation?

- o **I understood it and, in general, it helped me grasp the work the NVSRP is undertaking.**
- o **Some parts made sense, but not others.**
- o **I understood the presentation but have some immediate disagreements with what it communicated.**
- o **I'll add an important idea that I think the presentation missed.**
- o **I find that I'm not that interested in these issues**
- o **I'll use the space below to share thoughts not categorized above.**

	Tallied	Understood	Some parts not others	Have disagreements	I have an important Idea to add	Not interested	Will share otherwise
Presentation							
	Number of Stakeholders	45	1	0	7	0	2

3. QUESTION: In reference to the question above, please share your comments about the NVSRP presentation.

SAMPLING OF STAKEHOLDER RESPONSES

Much of the stakeholder group communicated favorably about the presentation:

> "The presentation was effective in presenting the key points of the process that will culminate into the Rail Plan. Clear, precise and thorough."

Two in the favorable group brought up Covid-19 concerns as it relates to the subjects at hand:

> "There could be transportation changes from experience of the COVID-19."

- LESS FAVORABLE

There were a few who were eager to wade more substantially into the subject matter. One commented:

> "I think the intro is a bit too generic. It would help me if we had more specifics and examples of what is meant by 'Enhanced Rail' and how it can deliver the benefits listed."

As well a stakeholder offered an alternative viewpoint on the presentation's characterization of Nevada's last rail plan.

> "Parts of the 2012 Plan were implemented. I would not agree that it was 'shelved'. This is the challenge with NDOT sponsoring the rail plan… We can discuss how this plan will be transformative without criticizing past efforts."

See more Question 3 stakeholder responses

4. QUESTION: What rail-related benefits are most important to Nevada? Please prioritize as High, Medium or Low:

- Mitigation of environmental impacts, particularly emission-related air quality
- Relieving highway traffic congestions
- Improvement of supply chain efficiency
- Moving goods as safely as possible

	Benefits:	Environmental	Congestion	Supply chain	Goods movement safety
Stakeholder choices					
	Highest	38	19	25	34
	Medium	11	23	24	17
	Lower	3	12	4	2

5. QUESTION: In thinking about the above list, do you have any additional thoughts to share?

STAKEHOLDER RESPONSES

Quite a few stakeholders pointed to an interrelatedness of the set of benefits.

> "Through attainment of some or all of the stated goals, the overall transportation system will benefit and will have a ripple effect on the performance, quality, and benefits of the system."

Others placed heavier emphasis on economic opportunity:

> "Heavy rail transport in Nevada may allow new manufacturing industries to develop to offset the economic contribution to the service and entertainment industries.

The subject of rail-served economic opportunity was addressed from another perspective:

> "The creation of rail-served economic opportunity is not really the role of NDOT."

An equal portion of stakeholders emphasized environmental concerns…

"Of all, the highest priority will be to create a system that does not create negative impacts upon our environment."

One stakeholder was less concerned about Nevada's environment:

"Pollution is not much of an issue in most of the state, the Las Vegas Valley being the only exception really. "

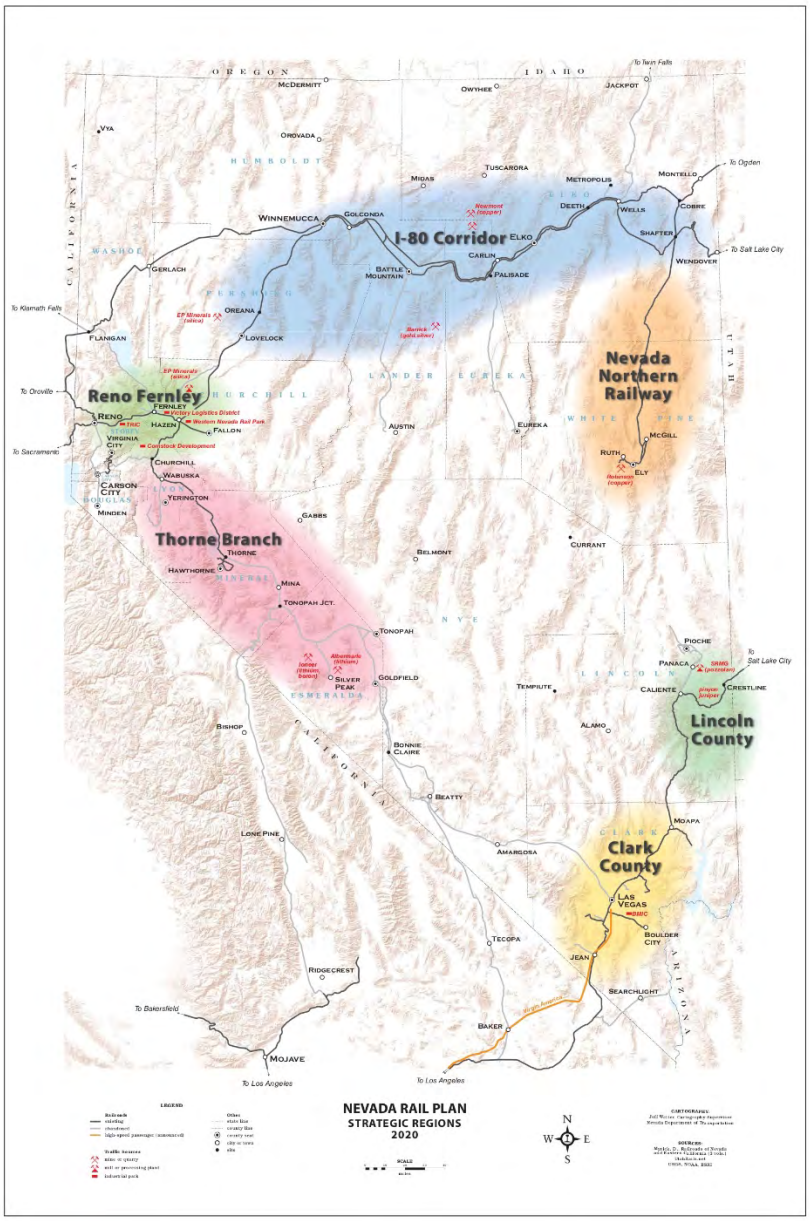
See more Question 5 stakeholder responses

7. QUESTION: What industries that rail serves are the highest priority for the rail plan?

- Mining materials
- Building products
- Construction aggregates
- Warehousing/ Distribution
- Food & Beverage
- Agriculture
- Energy
- Manufacturing

		Mining Materials	Building Products	Construction Aggregates	Warehousing/ Distribution	Food & Beverage	Agriculture	Energy	Manufacturing
Priorities									
	Highest	71%	73%	36%	39%	57%	16%	35%	24%
	Medium	24%	18%	52%	49%	37%	37%	47%	43%
	Lower	6%	10%	12%	12%	6%	47%	18%	33%

8. Can we make improvements to this six-region planning framework? Is any part of Nevada left out of the 6 regions that could benefit in the short term from rail?



STAKEHOLDER RESPONSES

Many participants indicated that they were in basic agreement with the region map but offered numerous suggestions for improvement.

9. What do you consider the top two regions for prioritization regarding implementing rail?

- Clark County
- Lincoln County
- Nevada Norther Railway: Ely – W. Wendover
- I-80 Corridor: Lovelock to Wells
- Reno – Sparks – Fernley – Fallon – Silver Springs

Tallied						
Counties:	Clark	Lincoln	Nevada Northern Railway: Ely-W. Wendover	I-80 Corridor: Lovelock to Wells	Reno-Sparks—Fernley—Fallon—Silver Springs	Thorne Branch: Lyon-Mineral—Esmeralda
Selected	26	3	5	16	37	16

10. Please share the reasoning for your choices

IN ORDER OF TOTAL STAKEHOLDER PREFERENCE

- RENO – SPARKS – FERNLEY – FALLON – SILVER SPRINGS

Reno-Sparks was the most selected, followed by Clark and the I-80 corridor. Similar to Clark, answers consistently made references to population, industry and economic activity. Reno was cited as topography-challenged in regards to rail by one respondent.

- CLARK COUNTY

The vast majority of those who chose Clark County as one of their two choices also chose Reno as their other choice. Most repeated reason had to do with population density, industry hubs, economic centers.

- I-80 CORRIDOR: LOVELOCK TO WELLS

The case for this region was made by highlighting its agricultural assets.

- THORNE BRANCH: LYON – MINERAL– ESMERALDA

Many who called for greater rail development in this area referred to mining activity.

- LINCOLN COUNTY

A few stakeholders drew attention the mineral resources in Lincoln County that could be leveraged by rail infrastructure.

See more Question 10 stakeholder responses

11. QUESTION: Agree or disagree: Expanding Nevada's use of rail for freight movement will be dependent on how effectively land near existing tracks is preserved for rail-served development

- o Agree
- o Disagree
- o Undecided

Tallied		
	Agree	40
	Disagree	1
	Undecided	12
	No Response	26

12. Please share any thoughts you have about the statement you previously read: "Expanding Nevada's use of rail for freight movement will be dependent on how effectively land near existing tracks is preserved for rail-served development."

Many stakeholders seem to agree with the statement's basic premise:

> "Land that is near or adjacent to existing rail lines should be prioritized for rail uses."

Numerous stakeholders pointed out Nevada's relationship to the federal government.

> "Rural Nevada is over 90% public lands, understanding the BLM process and including in future BLM planning (RMP process) is imperative."

See more Question 12 stakeholder responses

13. If an enhanced rail system depends on how the land along the tracks is used, who should be responsible for that oversight?

- The oversight needs to happen at the state level
- This is a county or local matter
- There does not need to be any oversight in this matter
- I'm not sure
- This issue doesn't matter to me

Tallied						
	The oversight needs to happen at the state level	This is a county or local matter	There does not need to be any oversight in this matter	I'm not sure	This issue doesn't matter to me	No Response
	17	24	1	12	0	25

14. Please share your thoughts about the previous question: "If an enhanced rail system depends on how the land along the tracks is used, who should be responsible for that oversight?"

Of the stakeholders who chose to explain their responses here, there was a near split down the middle of those would call for state oversight, and the next group below who preferred to think of these matters best handled at the county of local levels.

15. If the efficiency of a supply chain is dependent on the transportation system, then what contributions do you think NDOT, MPOs and other agencies can make to that efficiency?

The major theme that emerged from the responses to this question was a call for multi-level collaboration.

> "Data sharing and communication will be key in having alignment between various planning documents that lead to on the ground decision making."

Several other stakeholders drew a relationship between transportation and economic opportunity.

"NDOT can help with the needed planning as it is doing now. Developing rail in Nevada needs to be recognized as an important factor in economic development. That brings GOED into the picture. Also NDOT can assist in securing federal grants for track improvement projects."

Another stakeholder draws distinctions around agency responsibilities:

"NDOT does not oversee rail operations and cannot own a railroad by state law. Likewise, NDOT does not have a role in land use policy setting or administration."

In distinct contrast, another suggested a wider role for NDOT

"Planning, oversight, acquisition of land if necessary."

See more Question 15 stakeholder responses

16. Designing smarter supply chains on a statewide basis often involves more thoughtful land-use policies that make better use of transportation infrastructure. Do you have concerns that you would want addressed in how those protocols are developed and implemented? What are they?

The question was designed to help stakeholders examine the relationship (or lack thereof) between transportation infrastructure and land use. It inspired a wide range of responses from which a consistent theme did not emerge.

"First/last mile connectivity and availability of loading/staging areas in the right locations is something that will need to be thought-out.

Another, in the same subject territory, suggested a more top-down approach:

"Needs to be a true master plan that receives buy-in from all stakeholders (and others impacted that may not participate) and that is implemented at all levels."

And another suggested that the multi-level approach could be assisted by an informative tool.

"Development of a tool kits or other resources that can help local governments make more informed polices and decisions that are aligned with state and local goals may help drive action."

Another stakeholder communicated disagreement with the question's premise:

"State DOT and MPOs can provide data analysis and policy direction.

Transportation agencies are not involved in land-use decisions. A more coordinated effort between County land-use decisions, economic development and transportation would be helpful."

17. What are the top needs for passenger rail service around the state?

- Onboard Las Vegas
- Tahoe passenger
- Reno to Tahoe-Reno Industrial Center
- South Reno to Reno
- North Valleys to Reno
- Minden to Reno
- Las Vegas to Reno

Tallied								
		Onboard Las Vegas	Tahoe Passenger	Reno to Tahoe-Reno Industrial Center	South Reno to Reno	North Valleys to Reno	Minden to Reno	Las Vegas to Reno
Priorities	Highest	20	25	5	27	6	10	6

18. Please add any comments you have regarding Nevada's passenger rail needs.

GENERAL COMMENTS

Some stakeholders took the opportunity to champion advancement of passenger rail in the state.

"Passenger rail needs to be elevated in priority in the state rail plan…."

One stakeholder favoring enhancement of Nevada's passenger rail suggests starting with existing infrastructure:

"Notice I've marked them all high priority, but perhaps Minden/Carson/Reno/North Valleys/TRIC are the top priority because along a lot of these routes there is existing ROW, existing track, or both"

Others voiced viability concerns:

"I believe the biggest challenge is the end user. Unless there is support from the end user to utilize passenger rail instead of a vehicle, then passenger rail will struggle."

Another wanted to remind other stakeholders of the state's long-term plan:

"The legislature passed SB 254 with goals for zero carbon by 2050 that include transportation, electric passenger rail should be in any planning activities to minimize air transport."

REGIONAL COMMENTS

There were numerous comments that detailed particular regional needs.

See more Question 18 stakeholder responses

19. QUESTION: What should the state's responsibility be regarding passenger rail?

- The state should be in the passenger rail industry
- Local government should be responsible for passenger rail service
- Passenger service should be privately owned/ operated
- Amtrak should take responsibility
- Passenger rail should be a public private partnership
- None of the above

Tallied							
	The state should be in the passenger rail industry	Local government should be responsible for passenger rail service	Passenger service should be privately owned/ operated	Amtrak should take responsibility	Passenger rail should be a public private partnership	None of the above	No Response
	5	2	4	2	30	8	28

20. Should the state invest in passenger rail?

- Yes
- No
- Undecided

Tallied		
	Yes	20
	No	10
	Undecided	21
	No Response	28

PART 2

IntelliConference Response Synthesis

Stakeholder responses in depth

Introduction

Over two weeks in in early April 2020, 79 Nevada transportation and planning-related stakeholders participated in the Opening NVSRP online IntelliConference. The responses were on the whole thoughtful and well-developed. Following is a synthesis of the overall input, with key comments organized by major themes, opposing voices, and outlier opinions that brought a fresh perspective. Comments that call for response and/or follow-up are also identified.

2. Which of the following describes your general impression of the presentation?

- o I understood it, and in general it helped me grasp the work NVSRP is undertaking.
- o Some parts made sense, but not others.
- o I understood the presentation but have some immediate disagreements with what it communicated.
- o I'll add an important idea that I think the presentation missed.
- o I find that I'm not that interested in these issues
- o I'll use the space below to share thoughts not categorized above.

	Tallied	Understood	Some parts not others	Have disagreements	I have an important Idea to add	Not interested	Will share otherwise
Presentation							
	Number of Stakeholders	45	1	0	7	0	2

3. In reference to the question above, please share your comments about the NVSRP presentation.

STAKEHOLDER RESPONSES

Much of the stakeholder group communicated favorably about the presentation:

"The presentation was effective in presenting the key points of the process that will culminate into the Rail Plan. Clear, precise and thorough."

"This is the type of blueprint that meets the needs of both shippers and transportation providers alike. Very easy to consume and understand."

Of the group that expressed a favorable impression one voiced a suggestion that offered concern others may have not spoken:

"The presentation was a good overview. It would be helpful to know if any constraints have been placed on the project/plan and if there are any underlying assumptions we should know about as we continue through this process."

Two in the favorable group brought up Covid-19 concerns as it relates to the subjects at hand:

"The presentation was great but since it was done, we are experiencing the COVID-19 virus problem. I know for many ag products there are transportation bottle necks. Primarily the workforce not being at shipping nodes to load and unload shipments. However, this panel could address how rail can help the current situation but also assist in making the shift from closure of the economy to opening up the economy more efficient. There could be transportation changes from experience of the COVID-19."

- LESS FAVORABLE

There were a few who were eager to wade more substantially into the subject matter. One such commented:

"I think the intro is a bit too generic. It would help me if we had more specifics and examples of what is meant by "Enhanced Rail" and how it can deliver the benefits listed.
I think it would be very helpful to include some examples of what has been achieved elsewhere from modern integrated rail and inter-modal transport. This should include some example metrics and data showing improvements on factors such as:

1) end-to-end time and cost
2) total value of goods in transit
3) transport disruption and impact on both time-critical and bulk transport. "

Another stakeholder wrote:

"The presentation was fine but seemed like more of a sales pitch than actual content on what's been developed or learned so far in the process or how the process will use this information for the plan development. The presentation stated the number of stakeholder meetings and information gathered, but no maps, or summary of what has been gathered/learned so far. "

As well a stakeholder offered an alternative viewpoint on the presentation's characterization of Nevada's last rail plan.

"Parts of the 2012 Plan were implemented. I would not agree that it was "shelved". This is the challenge with NDOT sponsoring the rail plan. We cannot implement it. However, our role is to provide information and cooperation to inform others of potential opportunities. The prior plan helped identify and support several siding improvements, for example. I realize that is relatively minor, but we can discuss how this plan will be transformative without criticizing past efforts."

- FOCUSED SUBJECT MATTER COMMENTS

Several responses spoke directly to particular content portions of the presentation. We moved these comments further into the Inquiry where the related subjects were discussed.

4. QUESTION: What rail-related benefits are most important to Nevada? Please prioritize as High, Medium or Low:

- Mitigation of environmental impacts, particularly emission-related air quality
- Relieving highway traffic congestions
- Improvement of supply chain efficiency
- Moving goods as safely as possible

	Benefits:	Environmental	Congestion	Supply chain	Goods movement safety
Stakeholder choices					
	Highest	38	19	25	34
	Medium	11	23	24	17
	Lower	3	12	4	2

5. In thinking about the above list, do you have any additional thoughts to share?

STAKEHOLDER RESPONSES

Quite a few stakeholders pointed to an interrelatedness of the set of benefits.

"Through attainment of some or all of the stated goals, the overall transportation system will benefit and will have a ripple effect on the performance, quality, and benefits of the system."

"All five of these are core to focus on improving rail in Nevada."

Others placed heavier emphasis on economic opportunity:

"Heavy rail transport in Nevada may allow new manufacturing industries to develop to offset the economic contribution to the service and entertainment industries. Diversification of business types and occupational path growth disciplines increase the competitive nature of the state's economy. Smart-growth in the future will be critical."

The subject of rail-served economic opportunity was addressed from another perspective:

> "The creation of rail-served economic opportunity is not really the role of NDOT. While this could be a benefit of an enhanced rail system in the state and it's good to note if stakeholders support that, other factors should be bigger priorities from NDOT's perspective."

And then another equal portion of stakeholders emphasized environmental concerns, approaching the subject from a few different angles:

> "Of all, the highest priority will be to create a system that does not create negative impacts upon our environment."

> "I ranked emission reduction as a high priority due to recent GHG thresholds as well as having two areas of the state in non-attainment/maintenance."

> "Another measure that might be worth noting is the wear and tear on the roadways. You could potentially link that with environmental impacts to be a sustainability measure or add to the list separately."

In terms of environmental considerations, one stakeholder was less concerned:

> "Pollution is not much of an issue in most of the state, the Las Vegas Valley being the only exception really. It would be nice to relieve some of the truck traffic on our rural two-lane roads."

Another questioned the nature of congestion relief:

> "Congestion relief would be great, however, the shift of some goods from truck to rail may just increase total demand and congestion is likely to remain the same (just like adding lanes to the freeway doesn't help - just increases demand)."

Other stakeholders took the opportunity to relate particular challenges related to specific industries and state regions.

> "Nevada must have a comprehensive approach to a dual-use transportation system between Nevada and California, and an intercity network between Nevada's three major population-industrial centers (Reno and Las Vegas and Elko), as well as urban commuter, utilizing hydrogen powered trainsets, for Reno and Las Vegas on existing freight track infrastructure."
>
> "Lincoln County in particular has rail siding properties available for a relativity low development cost of improving existing roadways for rail access, primarily the Crestline siding area southeast of Panaca. Elimination of or improving the flooding hazard for the rail line through the Clover Creek/Meadow Valley Wash area in Lincoln County would greatly lower the long-term safety, reliability and maintenance of that rail line."
>
> "In White Pine and Elko Counties moving the copper concentrate and millions of gallons of diesel fuel off of the highways would reduce the maintenance cost with the highways. It would also take advantage of the efficiencies of rail over truck helping to stabilize the economics of the mine."
>
> "With respect to the supply chain efficiencies, typical logistics or supply chain users rarely demand rail served properties. As noted above, outside of the Fernley area, there is a serious lack of develop-able rail served sites in the Reno Sparks MSA. While access to rail served sites in Fernley is nice, access develop-able rail sites in the larger population center of Reno/Sparks could prove to be a major obstacle from an access to labor standpoint."

- OTHER SUBJECTS

A few other stakeholders mentioned covid-19 in their responses, suggesting that the near future economy would have to be a factor in this content area, and suggesting that lessons could be learned and applied for similar future pandemic situations.

Another stakeholder added to the priority list:

> "Rural development opportunity is also a high priority."

7. What industries that rail serves are the highest priority for the rail plan?

- o Mining materials
- o Building products
- o Construction aggregates
- o Warehousing/ Distribution
- o Food & Beverage
- o Agriculture
- o Energy
- o Manufacturing

	Tallied	Mining Materials	Building Products	Construction Aggregates	Warehousing/ Distribution	Food & Beverage	Agriculture	Energy	Manufacturing
Priorities									
	Highest	36	37	18	20	29	8	18	12
	Medium	12	9	26	25	19	19	24	22
	Lower	3	5	6	6	3	24	9	17
	No Response	28	28	29	28	28	28	28	28
Total Responses:		79	79	79	79	79	79	79	79
	Percentage Including Non-responses	Mining Materials	Building Products	Construction Aggregates	Warehousing/ Distribution	Food & Beverage	Agriculture	Energy	Manufacturing
Priorities									
	Highest	46%	47%	23%	25%	37%	10%	23%	15%
	Medium	15%	11%	33%	32%	24%	24%	30%	28%
	Lower	4%	6%	8%	8%	4%	30%	11%	22%
	No Response	35%	35%	37%	35%	35%	35%	35%	35%

	Percentage Not Including Non-responses	Mining Materials	Building Products	Construction Aggregates	Warehousing/ Distribution	Food & Beverage	Agriculture	Energy	Manufacturing
Priorities									
	Highest	71%	73%	36%	39%	57%	16%	35%	24%
	Medium	24%	18%	52%	49%	37%	37%	47%	43%
	Lower	6%	10%	12%	12%	6%	47%	18%	33%

8. Can we make improvements to this six-region planning framework? Is any part of Nevada left out of the 6 regions that could benefit in the short term from rail?

STAKEHOLDER RESPONSES

Many participants indicated that they agreed with the region map but there were numerous comments. They didn't lend themselves to grouping, so any comment beyond an indication of agreement is included below.

"Yes, Nevada Intercity has planned a high-speed, dual-use rail route between the Reno Region and Las Vegas-Clark County. The six-region planning framework entirely ignores Esmeralda and Nye Counties where our plan does not."

"Clark County should include the Laughlin area and the connection to the rail line south of that area."

"Should it ever come to pass, a rail link between Clark County and Northern Nevada would be a game changing event for the state of Nevada in terms of both freight and passenger rail."

"Would like rail link between Washoe and Clark Counties"

"Thorne to Clark?"

"McDermott Area, Owyhee Area, Goldfield Area, Beatty Area, Pahrump Area"

"Tahoe Area should be included. Areas north of Reno and all the way US 95 south to Las Vegas should be included. There is a big empty space in the center of Nevada. Has central Nevada been considered?"

"I understand that there is an old dilapidated rail line running from Wells to Twin Falls, Idaho (along US93). With all of the growth in Southern Idaho and rural

Nevada's natural connection with that area, I think the idea of resurrecting that line should be on the table. Further, a rail line in this area would reduce traffic accidents and annual death rates significantly - we either need a 4 lane through there or a rail line - otherwise it will remain a very dangerous stretch of road."

"Palisade to Eureka for movement of mining and agriculture products. Our State Routes are being tremendously impacted by heavy loads on trucks, a rail system would greatly alleviate these impacts. This is a central corridor that will continue to see tremendous growth in mining with just the currently permitted projects and those undergoing NEPA analysis. While access to the Nevada Northern may be an option, 5-6 mountain summits (depending on origin) are a problem and most truck traffic may elect to not use this option."

"I would suggest changing the scope of the Reno-Fernley region to be more like the Reno-Fernley-Churchill County region.

The region map implies that 1/3 of the length of the existing Thorne Branch is in the Reno-Fernley region."

"Should Reno Fernley be extended to include Fallon?"

"Really feel improvements to the Thorne Branch should be a high priority given the number of mining companies impacted. I believe you have captured the main 6 regions for rail."

"This looks great. We tore down the rail infrastructure in Ely with the closure of the copper mine and smelter. Now with electric cars and etc and with probable expansion of the economy as we address the COVID-19 crisis. This are with the push of green energy and its isolation could be a focal point for inclusion in the clean energy cluster."

"The focus on these 6 regions, gives the impression that NV exists in isolation and these regions only communicate with each other - when its probably that the opposite is closer to what drives logistics within the state. We need to understand the actual logistical flows through and within the state, and to optimize for that."

"For example, and from my own experience, I see the Reno/Fernley region booming but largely because this area serves out of state demand to the West with materials from both the east and West."

"Can we get rail from Las Vegas to Hawthorne? And then north to Oregon and Washington? To take a load off the north -south rail system in California?"

"Thorne to Clark is a big void"

"North south rail connecting the Thorne branch to Clark County along sh 95."

"No box is provided for answering question 7 - Answer - any business that rail serves is important. If you are developing a rail park you consider them all. User interest will define your overall project."

"I think this is pretty well covered--not sure if there would be reason to look into Vegas-Ely or Elko-Twin Falls/Boise."

"I am not sure if it can be accomplished due to lack of large entitled sites and topography, but from my standpoint the lack of significantly sized rail sites in Reno/Sparks is a concern."

"Is there any consideration with respect to linking Clark county/ Southern NV with the north. You have a gap between the Thorne Branch and Clark County as well as Lincoln County to NV Northern RR."

"Previous studies (Freight Plan and I-11) have highlighted the importance of connecting Clark County to the rest of the state. It may not be a big priority but should be considered."

"There is a gap between the Reno-Fernley and the I-80 corridor bubbles. Unfortunately, that bubble is the Churchill Hazen Business Park (CHIP). CHIP is a 20,000-acre industrial park at final build-out and has key rail lines running through its park and area of future development. EKAY Economics shows this as having extremely high potential for the future industrial rail project and job creation for three counties. It consists of 3 and half sections of land along and South of Highway 50 and 18,000 acres of land (much of it checkerboarded around rail lines) going North and East to meet up with Highway 95 and I-80. It is Churchill Counties future for jobs and economic development!"

"Future connection to Carson City."

"I believe that adding rail spurs and ports in the I-80 Corridor will be helpful to the mining industry throughout that region. I also believe that this will make a great economic impact for the region in the sense that this will attract a more diverse workforce to the area."

9. What do you consider the top two regions for prioritization regarding implementing rail?

- Clark County
- Lincoln County
- Nevada Norther Railway: Ely – W. Wendover
- I-80 Corridor: Lovelock to Wells
- Reno – Sparks – Fernley – Fallon – Silver Springs

Tallied						
Counties:	Clark	Lincoln	Nevada Northern Railway: Ely-W. Wendover	I-80 Corridor: Lovelock to Wells	Reno-Sparks--Fernley--Fallon--Silver Springs	Thorne Branch: Lyon-Mineral--Esmeralda
Selected	26	3	5	16	37	16
No Response	59					
Total Responses	162					
Percentage Including Non-Responses						
Counties:	Clark	Lincoln	Nevada Northern Railway: Ely-W. Wendover	I-80 Corridor: Lovelock to Wells	Reno-Sparks--Fernley--Fallon--Silver Springs	Thorne Branch: Lyon-Mineral--Esmeralda
Selected	16%	2%	3%	10%	23%	10%
No Response	36%					
Percentage Not Including Non-Responses						
Counties:	Clark	Lincoln	Nevada Northern Railway: Ely-W. Wendover	I-80 Corridor: Lovelock to Wells	Reno-Sparks--Fernley--Fallon--Silver Springs	Thorne Branch: Lyon-Mineral--Esmeralda
Selected	25%	3%	5%	16%	36%	16%

*Notes: Some people only answered with 1 selection and others answered with more than 2. All were included in calculations.

10. Please share the reasoning for your choices

IN ORDER OF TOTAL STAKEHOLDER PREFERENCE

- RENO – SPARKS – FERNLEY – FALLON – SILVER SPRINGS

Reno-Sparks was the most selected, followed by Clark and the I-80 corridor. Similar to Clark, answers consistently made references to population, industry and economic activity. Reno as topography-challenged is also mentioned by one respondent. A typical explanation:

> "These are Nevada's urbanized areas and the economic hubs of the State with significant connections to neighboring cities and the national network."

> "Donner Pass closures in the winter greatly affect the northern Nevada businesses."

- CLARK COUNTY

The vast majority of those who chose Clark County as one of their two choices also chose Reno as their other choice. Most repeated reason had to do with population density, industry hubs, economic centers.

> "These are Nevada's urbanized areas and the economic hubs of the State with significant connections to neighboring cities and the national network."

Another stakeholder shared the following:

> "NIPR's plan to re-establish passenger rail between Las Vegas and the_ actual_ L.A. Basin on existing BNSF and UP freight track must be a high priority due to the very large populations it would serve, and the national attention it would attract. As stated in conversations with the State Rail Coordinator, the PTC system NIPR would create for this service would allow facilitate our planned urban commuter overlay for the Las Vegas Valley, and permit rapid implementation of a badly needed urban commuter overlay for the Reno Region (Reno-Sparks-Fernley-Fallon-Silver Springs). The required track improvements would set the stage for improvements to the Thorne Branch (Mina Subdivision), and the eventual extension of track between the Reno Region and Las Vegas."

- I-80 CORRIDOR: LOVELOCK TO WELLS

> "These are regional areas in need of economical assistance as well as the areas of available minerals, agriculture and livestock that will provide the necessary raw materials for marketable products."

One stakeholder made the case for the region along with its neighboring regions this way:

"Northeastern Nevada continually entertains RFI's from prospective companies - 30% of which request direct or indirect rail access - a factor we simply cannot supply at the moment. Further, with emerging industries taking off on the east side of the state (particularly White Pine County), we see enormous potential for growth. Quite frankly, between the abundance of land, local stakeholder interest in economic development, and all of the industrial opportunities that are emerging within the Northeastern region as a whole (Lithium, Hemp, Indoor Ag, Copper, etc.) we contend that the ROI produced from the bolstering of these rail lines would be tremendous - simply put - more bang for the buck."

- THORNE BRANCH: LYON – MINERAL– ESMERALDA

Many who called for greater rail development in this area referred to mining activity.
For instance:

"The Thorne Branch is key to opening possible expansion further south. This will help the mining companies as well as starting the process of possibly opening a North-South Rail Corridor in Nevada."

Another made a topographical point:

"Because there was rail between these two regions in the past, with the way we view supply chain today (vs the past) it makes sense to reconnect the North to the South. There isn't much land throughout the U.S. where you have a landscape that isn't either over developed, protected or faced with extreme landscape conditions. Nevada is perfect because of it gentle slopes and lack of development."

- LINCOLN COUNTY

A few stakeholders drew attention to Lincoln County:

"Lincoln county has mineral resources that cannot be economically developed due to the lack of rail infrastructure"

11. Expanding Nevada's use of rail for freight movement will be dependent on how effectively land near existing tracks is preserved for rail-served development

- Agree
- Disagree
- Undecided

Tallied		
	Agree	40
	Disagree	1
	Undecided	12
	No Response	26
Total Responses:		79
Percentage Including Non-responses		
	Agree	51%
	Disagree	1%
	Undecided	15%
	No Response	33%
Percentage Not Including Non-responses		
	Agree	75%
	Disagree	2%
	Undecided	23%

12. Please share any thoughts you have about the statement you previously read: "Expanding Nevada's use of rail for freight movement will be dependent on how effectively land near existing tracks is preserved for rail-served development."

Many stakeholders seem to agree with the statement's basic premise:

> "I believe that expanding the use of rail for freight will highly depend on how effective we are by strategically preserving land suitable for rail-served development. As I previously stated, it is important that we plan for diversified workforce development in and around our towns/cities that have roadway connection in opposite directions of the running railway. These hubs can enhance the freight system greatly. So, I should say that the Success of expanding Nevada's use of rail for freight movement will depend on how well we plan for rail-served development moving forward."

"Land that is near or adjacent to existing rail lines should be prioritized for rail uses."

> "A rail line is useless if there are no means to access it."

> "It's just common sense."

Numerous stakeholders pointed out Nevada's relationship to the federal government.

> "Rural Nevada is over 90% public lands, understanding the BLM process and including in future BLM planning (RMP process) is imperative."

> "There are private, federal and tribal lands along the Thorne Line where rail uses should be allowed or designated to facilitate development of rail facilities. We found it a barrier to development at Wabuska, a site that should not require a use permit, but rather zoned for rail. If local jurisdictions want rail service, they should identify optimum sites and zone them for rail. Potential sites located on federal land adjacent to rail should identified in Resource Management Plans and designated for disposal (sale into private ownership)."

> "One example is the extensive constraints the BLM regulations place on access and use of land where access is needed"

On the subject of statewide planning a stakeholder contributed:

"As a land use planner, I have observed many instances where costly facilities are squandered by poor land use planning. Uses are encouraged that do no need the facility, or ineffectively use the facility. The result is that the effectiveness of the facility to operate is degraded over time, until land uses that DO need the facility cannot reasonably gain access to it."

Another looks to the need for new levels of coordination between freight and passenger rail.

"Preserving existing ROW, and planning for rail served warehousing, and manufacturing is a good idea. However, expanding freight rail service should go hand-in-hand with passenger service on those same tracks. Dual-use planning would also result in rail-served residential communities planning. Right now, freight railroads are seeing a permanent decline in revenue due to the U.S.'s move away from coal based electrical generation. In addition, many companies look at trucking as their primary means to move goods and materials, so precision scheduled railroading would have to be implemented to increase on-time service and allow for passenger operations without conflicting with freight."

13. If an enhanced rail system depends on how the land along the tracks is used, who should be responsible for that oversight?

- The oversight needs to happen at the state level
- This is a county or local matter
- There does not need to be any oversight in this matter
- I'm not sure
- This issue doesn't matter to me

Tallied						
	The oversight needs to happen at the state level	This is a county or local matter	There does not need to be any oversight in this matter	I'm not sure	This issue doesn't matter to me	No Response
	17	24	1	12	0	25
Total Responses:	79					
Percentage Including Non-responses						
	The oversight needs to happen at the state level	This is a county or local matter	There does not need to be any oversight in this matter	I'm not sure	This issue doesn't matter to me	No Response
	22%	30%	1%	15%	0%	32%
Percentage Not Including Non-responses						
	The oversight needs to happen at the state level	This is a county or local matter	There does not need to be any oversight in this matter	I'm not sure	This issue doesn't matter to me	
	31%	44%	2%	22%	0%	

14. Please share your thoughts about the previous question: "If an enhanced rail system depends on how the land along the tracks is used, who should be responsible for that oversight?"

Of the stakeholders who chose to explain their responses here, there was a near split down the middle of those would call for state oversight, and the next group below who preferred to think of these matters best handled at the county of local levels.

THE OVERSIGHT NEEDS TO HAPPEN AT THE STATE LEVEL

"I'm not typically in favor of significant state oversight; however, access to and benefits from rail can't be driven by deep pocket commercial development, potentially excluding some industry. Call it equal access."

"Because there are so many cities, counties, regions within the state, that the planning could be impacted if not centralized at the highest level."

Others in this group tempered their call for state oversight, suggesting a collaborative approach:

"This should be a joint effort of federal, state, county, local government and private industry in order to be a successful venture.

Federal, (BLM) should be involved primarily because the environmental issues may need to be streamlined in order to expedite the timelines involved. Otherwise the paperwork and/or legislation involved will take decades before a shovel full of earth can be moved to make it happen.

The only alternative to that is doing all projects on local government owed property and existing rights of way."

THIS IS A COUNTY OR LOCAL MATTER

Some in this group favored a more localized approach to planning:

"I believe that local master plans should control the development to fit the local community plans."

"Counties should have ultimate responsibility for the land along the tracks based solely on the fact that they have the ability to control the growth in their counties."

But others in this group shared suggestions that leaned toward a hybrid approach.

"Land use is a local matter. However, decisions should happen in coordination with state partners in order to make a inter-county/regional/statewide network functional."

"I believe that this should be a state and local mater. Just as we have state wide land use plans, and county/local land use plans that mirror the state yet stay true to the localities. Working together through a state master land use plan, and then creating local land use plans based off of the states would be the best route in my opinion. However when it comes down to what businesses are approved to locate to the area, it should be left up to the localities."

THERE DOES NOT NEED TO BE ANY OVERSIGHT IN THIS MATTER

An outlier perspective:

"Landowners must be allowed to develop as they choose. The last thing we need is an increase in regulatory oversite. County Zoning codes are the only vehicle that could address this, and this must be done in an open forum."

I'M NOT SURE

A few stakeholders voiced their acknowledgement of the question's complex set of considerations.

"I believe that land that is rail serviceable is important to preserve, I don't believe the Government should tell someone how they have to develop their property."

15. If the efficiency of a supply chain is dependent on the transportation system, then what contributions do you think NDOT, MPOs and other agencies can make to that efficiency?

The major theme that emerged from the responses to this question was a call for multi-level collaboration.

> "Continue ongoing communications and planning collaboratively in partnerships to anticipate greater efficiency and how agencies can contribute towards that. Ongoing evaluations and assessment to ensure system is achieving its goals/outcomes and correct and adjustment as is needed."

> "Data sharing and communication will be key in having alignment between various planning documents that lead to on the ground decision making."

A public agency related stakeholder contributed:

> "We each have our own level of expertise for the specific areas we oversee and have valuable insights to contribute relating to integration of rail with other modes, opportunities and challenges associated with those modal connections, and possible opportunities that can be used to improve feasibility/effectiveness of rail's touchpoints with the broader transportation network."

Several other stakeholders drew a relationship between transportation and economic opportunity.

> "It's important for NDOT to add key service and connector roads everywhere that a rail and business hub can be created. If the infrastructure is in place, it becomes a viable interstate commerce location."

> "NDOT can help with the needed planning as it is doing now. Developing rail in Nevada needs to be recognized as an important factor in economic development. That brings GOED into the picture. Also NDOT can assist in securing federal grants for track improvement projects."

Another stakeholder draws distinctions around agency responsibilities:

> "NDOT does not oversee rail operations and cannot own a railroad by state law. Likewise, NDOT does not have a role in land use policy setting or administration."

In distinct contrast, another suggested a wider role for NDOT

"Planning, oversight, acquisition of land if necessary."

Another stakeholder contributed the following specifics:

"Trucking and rail are inextricably linked in transportation supply chains. The T in NDOT stands for transportation. Would recommend beginning with NDOT assessing how well it integrates rail and trucking presently and how it will do so in the future. Specifically, the completion of I-11 connecting I-80 at Fernley to Vegas - Phoenix - Mexico should be given high priority. The I-ll project will enable Nevada to have its own North-South Interstate to move freight. Presently California's freeway systems must accommodate this traffic. These routes are over capacitated, particularly in ever expanding urban areas. The movement of freight in a Nevada corridor would relieve California of that burden and provide Nevada with a competitive route for movement of freight/rail transportation. The flow of traffic on I-11 will not significantly be compromised by urban traffic. The Port of Oakland would likely co-operate in numerous ways to take advantage of intermodal and transshipping efficiencies that would be available at the I-80 - I-11 hub in the Fernley area. Specifically such an extension of the Port's activities into Nevada will enhance its mission to be "Port of First Call" in its competition with Long Beach which is boxed in on all sides with a freeway system paralyzed by urban traffic."

16. Designing smarter supply chains on a statewide basis often involves more thoughtful land-use policies that make better use of transportation infrastructure. Do you have concerns that you would want addressed in how those protocols are developed and implemented? What are they?

The question was designed to help stakeholders examine the relationship (or lack thereof) between transportation infrastructure and land use. It inspired a wide range of responses from which very little consistent theme emerged.
That said, there were many thoughtful contributions.
Some forwarded the general concept that there is a need for conscious design:

> "First/last mile connectivity and availability of loading/staging areas in the right locations is something that will need to be thought-out. There may be different opportunities/challenges for specific areas/jurisdictions that will require unique and/or custom-tailored ideas to work through."

Some touched, once again, on a collaborative approach between levels of government:

> "Coordinate on a multimodal level, we currently have rail, highway and electric working on separate activities. with no coordination they will each develop different routes at different times with no synergy."

> "Naturally, local input is crucial from both the public and the private sectors. Further, ensuring impacts from policy are based on ratios of individuals/companies as opposed to just overall dollar amounts - keeping the full scope of the impact in mind - how it will effect both urban and rural Nevadans. Also, understanding that NOT all policy works on a state-wide level - some may have to be adjusted to best suit the area in which they are implemented."

Another, in the same subject territory, suggested a more top-down approach:

"Needs to be a balance and conscious planning between economic factors and long-term goals of the supply chain and transportation infrastructure. Needs to be a true master plan that receives buy-in from all stakeholders (and others impacted that may not participate) and that is implemented at all levels."

"Consider and implement land-use policies that protect and enhance business access to rail."

One stakeholder suggested that the questioned could be better approached if the process were re-ordered:

"I think this comes towards the end of the process. First, we need to understand the opportunity, develop the plan and then determine the land use policy issues. It would seem to be easier to generate a consensus around land use policy if stakeholder have already developed a consensus on the infrastructure needs and benefits."

And another suggested that the multi-level approach could be assisted by an informative tool.

"Development of a tool kits or other resources that can help local governments make more informed polices and decisions that are aligned with state and local goals may help drive action."

Another stakeholder communicated disagreement with the question's premise:

"State DOT and MPOs can provide data analysis and policy direction.

This question does not ask if I agree with the premise. I would argue that land use determines the efficiency of the supply chain. State DOTs and MPOs provide transportation policy. A better, more robust conversation about the impacts of various land-use decisions have on the transportation system efficiency and vice-versa is what is needed.

Transportation agencies are not involved in land-use decisions. A more coordinated effort between County land-use decisions, economic development and transportation would be helpful."

An outlier brought an as-yet unaddressed layer to the conversation:

"Specific interest in aviation are rail lines adjacent to airports and industries that support those businesses."

17. What are the top needs for passenger rail service around the state?

- Onboard Las Vegas
- Tahoe passenger
- Reno to Tahoe-Reno Industrial Center
- South Reno to Reno
- North Valleys to Reno
- Minden to Reno
- Las Vegas to Reno

Tallied								
		Onboard Las Vegas	Tahoe Passenger	Reno to Tahoe-Reno Industrial Center	South Reno to Reno	North Valleys to Reno	Minden to Reno	Las Vegas to Reno
Priorities	Highest	20	25	5	27	6	10	6
	Medium	11	15	16	16	12	18	11
	Lower	15	5	25	3	28	18	29
	No Response	33	34	33	33	33	33	33
Total Responses:		79	79	79	79	79	79	79

Percentage Including Non-responses								
		Onboard Las Vegas	Tahoe Passenger	Reno to Tahoe-Reno Industrial Center	South Reno to Reno	North Valleys to Reno	Minden to Reno	Las Vegas to Reno
Priorities	Highest	25%	32%	6%	34%	8%	13%	8%
	Medium	14%	19%	20%	20%	15%	23%	14%
	Lower	19%	6%	32%	4%	35%	23%	37%
	No Response	42%	43%	42%	42%	42%	42%	42%
Percentage Not Including Non-responses								
		Onboard Las Vegas	Tahoe Passenger	Reno to Tahoe-Reno Industrial Center	South Reno to Reno	North Valleys to Reno	Minden to Reno	Las Vegas to Reno
Priorities	Highest	43%	56%	11%	59%	13%	22%	13%
	Medium	24%	33%	35%	35%	26%	39%	24%
	Lower	33%	11%	54%	7%	61%	39%	63%

18. Please add any comments you have regarding Nevada's passenger rail needs.

GENERAL COMMENTS

Some stakeholders took the opportunity to champion advancement of passenger rail in the state.

"Passenger rail needs to be elevated in priority in the state rail plan. The opportunities to relieve congestion and improve GHG emissions according to new state mandates justify higher consideration. Commuter and recreation travel patterns are reaching levels that justify consideration of rail connections in certain locations/corridors. The state will be critical in discussion with rail operators about the importance of reserving capacity for passenger rail services while considering growing freight demands."

"It's absolutely vital that Nevada pursue a policy of urban rail transportation. The projected billions of dollars in expense to improve and build new highways in Reno and Las Vegas is far more expensive than improving the tracks in the Truckee Meadows and the Las Vegas Valley to handle urban commuter overlays. The track improvements can be implemented far more quickly, and reduce the highway traffic load, saving lives and attracting and retaining businesses and the jobs they offer to Nevadans as well as reducing the upward pressure on housing prices in our urban areas."

One stakeholder favoring enhancement of Nevada's passenger rail suggests starting with existing infrastructure:

"Notice I've marked them all high priority, but perhaps Minden/Carson/Reno/North Valleys/TRIC are the top priority because along a lot of these routes there is existing ROW, existing track, or both"

Others voiced viability concerns:

"Outside of the larger metro areas, this is going to be hard to fund and justify. This is my biggest concern with rail travel within Nevada."

"I believe the biggest challenge is the end user. Unless there is support from the end user to utilize passenger rail instead of a vehicle, then passenger rail will struggle."

Another wanted to remind other stakeholders of the state's long-term plan:

"The legislature passed SB 254 with goals for zero carbon by 2050 that include transportation, electric passenger rail should be in any planning activities to minimize air transport."

REGIONAL COMMENTS

Comments that placed emphasis on particular regional needs:

"Las Vegas to Reno passenger rail would be a would be a giant step in improving the overall efficiency and lower the cost involved in statewide government."

"Drive from Reno to Las Vegas is too long. Flights too expensive."

"Development of high speed rail between southern Nevada and southern California needs to be a top priority."

"The Salt Lake City - to Las Vegas to LA route formerly hosted a passenger train until 25 years or so ago. It could easily return. Dail Reno to Bay Area service (in addition to the Zephyr) has been suggested for years and would be highly successful. Stops at Lovelock and West Wendover would help boost Zephyr ridership and connect rural NV communities. And startup commuter rail service in Northern Nevada on both existing and abandoned rights-of-way would be a very popular development. Bordertown to Reno. Reno to Carson to Minden/Gardnerville. CA line to Fernley. From Question #3: I see the potential for greatly expanded passenger rail service in Nevada."

"Fallon and Fernley will become more prominent residential markets for TRIC and Reno. Passenger service could become a need between those areas."

"We used to have passenger rail lines between Reno and Carson City. We could certainly reduce road traffic and enhance the environment with rail. Some areas like Reno to the Tahoe-Reno Industrial Center would help mitigate the I-80 transportation nightmare. If Hazen takes off as I expect it to, that same line could run to businesses there. In Southern Nevada anything you can do to mitigate

traffic from business parks to train stations in communities would be a big help. Self-Driving Electric Vehicle Fleets are our future for cars and trucks. Clean Rail would do the same."

"Passenger rail, if done right, can reduce congestion. It must be connected to inter-modal facilities that can get passengers to their destinations, and must answer the value-of-time question for those passengers in order for it to be useful. If Tahoe cannot solve their in-basin transit/bike/ped issues, then getting passenger rail to dump people up in Truckee with no place to go from there is not going to be a utilized service. On the other hand, passenger rail from Reno to the TRIC, where on-site shuttles exist to transport passengers to jobs, is something that would likely be utilized and effective. Likewise, passenger rail from Minden to Reno could accommodate shoppers/commuters that could connect to their destinations via RTC Washoe transit buses, etc., which may also be feasibly utilized."

And another stakeholder anticipates a starkly shifted economy in the post-Covid-19 near future, and suggests an approach:

"Funding for passenger rail comes largely from the Federal government. Given the laundry list of high priority neglected infrastructure projects and, more recently, the massive funding required to recover from Covid-19, it is not realistic and perhaps even advisable for Nevada to devote too much energy to finding funds for any significant passenger rail initiatives. A private sector initiative could be much more effective by targeting, say, the Tahoe Sac - Bay Area link. Work with local transportation, hospitality, food and beverage, entertainment etc. businesses to set up a comprehensive weekend/week package plans specifically targeted to young people in the Bay Area many of whom don't own cars and are very inclined to engage in green/sustainable promoted activities (think travel by train carbon footprint vs. renting a car). A stem to stern package that includes all the mentioned components and is marketed to the target using e-communication they access to chose their free time activities. It would only be effective if comprehensively designed, launched and orchestrated but it could be done mostly with support from the applicable private sector. Prove it will work in terms of patronage and you'll have an improved chance of obtaining public funds to grow to the program."

19. What should the state's responsibility be regarding passenger rail?

- o The state should be in the passenger rail industry
- o Local government should be responsible for passenger rail service
- o Passenger service should be privately owned/ operated
- o Amtrak should take responsibility
- o Passenger rail should be a public private partnership
- o None of the above

Tallied							
	The state should be in the passenger rail industry	Local government should be responsible for passenger rail service	Passenger service should be privately owned/ operated	Amtrack should take responsibility	Passenger rail should be a public private partnership	None of the above	No Response
	5	2	4	2	30	8	28
Total Responses:	79						
Percentage Including Non-Responses							
	The state should be in the passenger rail industry	Local government should be responsible for passenger rail service	Passenger service should be privately owned/ operated	Amtrack should take responsibility	Passenger rail should be a public private partnership	None of the above	No Response
	6%	3%	5%	3%	38%	10%	35%
Percentage Not Including Non-Responses							

	The state should be in the passenger rail industry	Local government should be responsible for passenger rail service	Passenger service should be privately owned/ operated	Amtrack should take responsibility	Passenger rail should be a public private partnership	None of the above	
	10%	4%	8%	4%	59%	16%	

20. Should the state invest in passenger rail?

- Yes
- No
- Undecided

Tallied		
	Yes	20
	No	10
	Undecided	21
	No Response	28
Total Responses:		79
Percentage Including Non-responses		
	Yes	25%
	No	13%
	Undecided	27%
	No Response	35%
Percentage Not Including Non-responses		
	Yes	39%
	No	20%
	Undecided	41%

21. Do you have any questions for NDOT about the NVSRP that you would like addressed in future stakeholder meetings?

STAKEHOLDER RESPONSES

"Comment on question 20 - This is a very delicate subject, some thought should be given to a combination of D and E."

"Yes, when will Nevada abandon granting monopolies to passenger rail companies, and dissolve the Nevada High-Speed Rail Authority?"

"How can NDOT's priorities be shifted to be more inclusive of rail and air transport from being so heavily focused on roads and highways?"

"How are future spur lines integrated into the Nevada's plan?"

"Is the goal of the project the consideration of new Passenger Rail Service in NV exclusively or is it all being considered together?"

"In question #19, just one answer is inappropriate. Amtrak should be responsible for the interstate long-distance routes. While the state in conjunction with cities and counties can be jointly responsible for developing and running regional rail systems."

"Interests surround the Ivanpah proposed airport area in Clark County. Coordination of both rail and airport land use planning requirements are critical for the development of both."

"The nature of these questions indicated they should have been asked about three months earlier in the study. Maybe they were asked during the 150+ interviews that were conducted but I haven't seen those results."

"More examples and data to inform our input."

"Question 18 my answer was Are we talking light rail (commuter transit) or freight rail. my priority would be different. ? So is it light or heavy freight? Can we expand that question to light rail or/and freight? "

"Nye County did a rail economic study about a dozen years ago and provided to DOT. I can submit again if needed."

	"How will State agencies integrate rail in overall initiatives to make Nevada a green sustainable leader? When we talk about going renewable are we just thinking about the ratio of solar/geothermal, etc, energy as opposed to energy produced from conventional sources/resources? Freight transportation in Nevada has a substantive impact on how green we are and in assessing our overall carbon footprint. "The two (energy produced green/conventional - energy consumed truck/rail) will inevitably merge when trucking (nearer term) and rail (longer term) begins to convert from diesel to electric. Then Nevada green energy can be used as a transportation fuel source. Our rail center plans include the States largest passenger and freight vehicle charging/service facilities utilizing geothermal and solar electricity produced within our project. These services will be available not only for trucks involved with rail transloading/shipping but general passenger/truck traffic on the highway and from I-80." "Several of the above questions either did not provide enough background or did not provide space to elaborate. I'm not sure why most did (some that didn't need it), but others didn't. "For example - Q7 is difficult without background information about the current state of the industries in the state. How much do these industries move goods in NV by weight or dollar amount, which are more conducive to rail movement, etc. ? "Questions 19 and 20 should be prefaced with current state and federal law and/or examples of where other states maybe do have a role. What would that even look like? At what level - interstate/intrastate/regional, etc.

Nevada Shipper Interviews

Date of Visit or Call	Name	Address	City	Contact	Sidetrack Status
01/23/20	LP Terminal LLC	19975 S. Reno Park Blvd.	Reno		in service
09/26/19	Industrial Wood Products	19955 S. Reno Park Blvd.	Reno	Kathleen	easy build
11/15/19	General Motors	6565 Echo Avenue	Reno		car storage
11/15/19	Pacific Western Timbers	14551 Industry Cir. (last 10 docks)	Reno	John Wagner, owner	out of service
11/15/19	Warehouse Services	14551 industry Cir. (2nd 20 docks)	Reno	Carlos	out of service
11/15/19	ITS Logistics	14551 industry Cir. (1st 40 docks)	Reno		out of service
11/15/19	Birdrock Brands, Distribution Center	14525 Industry Cir., Suite 100	Reno		easy build
11/15/19	Hubert Company, Western D.C.	14525 Industry Cir., Suite 500	Reno		easy build
01/24/20	Geofortis Processing & Logistics LLC	0 Industry Cir. (but lot on Cocoa Ave.)	Reno	Jim Bowen, founder	out of service
11/15/19	Itronics Metalurgical Inc.	14305 Cocoa Avenue	Reno	Dr. John Whitner	easy build
11/15/19	Waste Mgmt. (former Refuse Inc.)	13890 Mt. Anderson St.	Reno		easy build
11/15/19	vacant bldg.	13805 Mt. Anderson St.	Reno		easy build
11/15/19	A&B Precision Metals	13715 Mt. Anderson St.	Reno		easy build
11/15/19	Hidden Valley Manufacturing	12150 Moya Blvd.	Reno		in service
11/15/19	partly vacant + Pods Moving & Storage	12040 Moya Blvd.	Reno		easy build
11/15/19	Performance Pipe/Spirolite Corp.	14381 Lear Blvd.	Reno		in service
11/15/19	Star Logistics Trucking Co.	14331 Lear Blvd.	Reno		out of service
11/15/19	LSC Communications US	14100 Lear Blvd.	Reno		in service
11/15/19	Veca West Inc.	ML: 14250 Lear Blvd.	Reno		in service
11/15/19	JC Penney Corp. Inc.	1111 Stead Blvd.	Reno		easy build
11/15/19	Sierra Packaging & Converting	11005 Stead Blvd.	Reno		easy build
11/15/19	Ferrellgas LP	7757 N. Virginia Street	Reno		in service
11/15/19	Amerigas Propane LP	7700 N. Virginia Street	Reno		in service
01/24/20	Rosen Materials	7970 Security Circle	Reno		out of service
01/27/20	Kappes Cassiday & Associates	7950 Security Circle	Reno	Jim Estes, ext. 104	car storage
01/14/20	Bender Group (gen'l warehousing)	345 Parr Circle	Reno	John Stimm, Bus. Devel.	out of service
01/14/20	Trend Offset Printing	365 Parr Circle	Reno	James	out of service
01/27/20	Glasfloss Ind. Inc.	300 Parr Circle	Reno	Efrain Mondragon, PM	out of service
01/14/20	ZLine Kitchens	350 Parr Circle	Reno	Mike Zuro (sp?)	out of service
01/14/20	Bender Group (gen'l warehousing)	205 Parr Blvd.	Reno	John Stimm, Bus. Devel.	out of service
01/27/20	for lease/sale (former Packer Term.)	200 Parr Blvd.	Reno	Scott Gaughvan	out of service
01/25/20	Workpak Flexible Packaging LLC	300/350 Parr Blvd.	Reno	Bill Cho, Mgr., ext.1103	out of service
01/14/20	Bender Group (gen'l warehousing)	380 Parr Blvd.	Reno	John Stimm, Bus. Devel.	out of service
01/14/20	Sears Repair & Redistribution Center	400 Parr Blvd.	Reno		out of service
01/13/20	High Desert Truss & Lumber	500 E. Parr Blvd.	Reno	Leif Erickson, Opns Mgr.	in service
01/24/20	UP "ramp track," double-ended team trac	500 E Parr Blvd.	Reno	Gary Mason, Chandler AZ	in service
	Standard Motors Prod.	305 Western Road	Reno		no track
01/14/20	Schnitzer Steel Ind. Inc.	490 Valley Road	Reno		team track?
01/14/20	Martin Iron Works Inc.	530 E 4th Street	Reno	Trish & Mario Bulantini	out of service
01/27/20	Twisted Metal Works	130 Woodland Avenue	Reno	Charlie&Todd Giguiere	out of service
	Waste Management of NV	1390 E. Commercial Row	Reno	Ryan West, Sr Dist Mgr	easy build
11/12/19	Hunt & Sons (formerly Casazza Oil)	1575 E. Commercial Row	Reno	Ed Wagner, Manager	easy build
01/27/20	Reno Salvage Co, New Metals Div	333 Toano Street Reno 89512	Reno	Melissa	in service
01/28/20	Reno Gazette Journal	955 Kuenzli	Reno		no track
01/28/20	Porsche Cars North America Inc.	ML: One Porsche Dr	Atlanta	Andy North	listing error
11/14/29	NV Energy	6100 Neil Road	Reno	Johnny Hargrove, Jeff Sutich	no track
01/28/20	Gruners Furniture Inc.	9095 S. Virginia St.	Reno		no track
01/28/20	US Postal Service	2000 Vassar St.	Reno		no track
01/28/20	Ennis Furniture Co.	1350 Neil Way	Reno		no track
01/28/20	Custom Glass	1095 E 2nd Street	Reno		no track
01/30/20	FN Logistics LLC	ML: 12710 Thuderbolt Dr.	Reno	Craig Brinkman	listing error
01/30/20	Pronghorn Transload LLC	ML: 12710 Thuderbolt Dr.	Reno	Craig Brinkman	listing error
01/30/20	Kinder Morgan Liquid Terminals	301 Nugget Ave.	Sparks	Gary Kulichevsky	in service
10/13/19	Jensen Precast	625 Bergin Way	Sparks	Klaus Zieschang	easy build
10/12/19	Fernco Inc. West	855 Linda Way	Sparks	renamed Cooper Companies	easy build
10/12/19	The Pillow Factory	900 Southern Way	Sparks		easy build
10/12/19	Calvada Food Sales	950 Southern Way	Sparks	Rich Patton, Whse Mgr	need dock access
10/12/19	vacant	1150 Southern Way	Sparks		not used
10/12/19	South/Win Ltd.	1280 Southern Way	Sparks		in service
01/30/20	Just Refiners USA Inc.	540/620 Greg Street	Sparks	Beverly Boekhoud	in service
10/13/19	Paterson Paper	545/625 Greg Street	Sparks	Scott, Maint. Mgr.	out of service
10/13/19	Basalite	345/355 Greg Street	Sparks	Rich Guinn, Retail Sales	easy build
10/13/19	Blue Frog Screen Printing	345 Coney Island Drive	Sparks		out of service
10/13/19	Innovative Cabinets & Design	445 Coney Island Drive	Sparks		out of service
10/13/19	Ranshu Parts Co.	525 Coney Island Drive	Sparks	Jodi Marwell, Shp. Mgr.	out of service
10/13/19	vacant warehouse	725 Greg Street	Sparks		out of service
10/13/19	MicroMetl	905 Southern Way	Sparks	Freddie Garcia	out of service
10/13/19	Tom Duffy Wholesale Products	656 Dunn Circle	Sparks		easy build

Date of Visit or Call	Name	Address	City	Contact	Sidetrack Status
10/13/19	Leach Logistics	810/830 E. Glendale Ave.	Sparks		car storage
10/07/19	Reno/Carson Lumber	680 Spice Islands Dr.	Sparks	Rick	in service
10/13/19	Watts Regulator	750 Spice Island Dr.	Sparks	Dan Hernandez, Shipping	not used
10/13/19	Bimbo D.C./Sara Lee Food Service	950 United Circle	Sparks		out of service
10/13/19	vacant warehouse (1/2 with Bimbo)	956/958 United Circle	Sparks		out of service
10/13/19	ArcBest	1755 Purina Way	Sparks		out of service
01/31/20	Sims Group USA Corp.	1655 Franklin Way	Sparks	Gabby	in service
10/13/19	LSC Communications d/b/a BNSF QDC	1141 E. Glendale Ave.	Sparks	Bill Staab, Manager	in service
11/12/19	McKillican American Inc.	1802 Brierley Way	Sparks	switch removed	easy build
11/12/19	vacant warehouse (1/2 still CES Machine)	45 Vista Blvd., Ste. 101	Sparks		easy build
11/12/19	ProLogis	255 Vista Blvd.	Sparks		easy build
11/12/19	American Tire Distributors Inc.	250 Lillard Dr. #100	Sparks		easy build
11/12/19	Southern Wine & Spirits	250 Lillard Dr. #101A	Sparks		easy build
11/12/19	Allstates Warehousing & Distribution	350 Lillard Drive, Suite 171	Sparks		easy build
11/12/19	Geodis Logistics LLC	450 Lillard Drive	Sparks		not used
11/12/19	ITS Logistics	555 Vista Blvd.	Sparks	Chris Abbott	not used
11/12/19	Associated Bag Company	550 Lillard Blvd.	Sparks		not used
11/12/19	Laddawn Inc.	659/550/540 Lillard Drive	Sparks		in service
11/12/19	J. Hofert Company	1755 E. Prater Way	Sparks	Dan Webb	easy build
01/30/20	Chicken Hawk Transport LLC	ML: 235 London Drive	McCarran	Craig	no track
01/28/20	vacant lot, 2300' of level RR frontage	1025 Waltham Way	McCarran	Marcia Giordano	easy build
01/31/20	Ardagh Metal Packaging	900 Waltham Way	McCarran	Lawrence Sparks	not used
12/14/19	Nevada Energy	1799 Waltham Way	McCarran	Jeff Sutich	not used
02/03/20	Duraflex International	160 Wunotoo Road	Sparks	Catina Hotchton	car storage
01/28/20	vacant parcel with turnout in place	? Waltham Way	McCarran	Bob Code, Seattle WA	easy build
01/31/20	Golden Gate Set Petrol. Partners of Neva	500 Ireland Drive	Sparks	Eddie, rail manager	in service
01/31/20	PPG Industries (Reno Plant)	500 Pittsburgh Ave.	McCarran	Terry McGinnis, Plt Mgr	in service
10/15/19	Truckee Tahoe Lumber Co.	1800 USA Parkway	Sparks	Brad Benamati, GM	in service
10/15/19	Battery Systems	3410 Peru Drive	McCarran	Roberto Melendrez	easy build
repeated	Fulcrum Bioenergy (bio-refinery)	? Peru Drive under const.	McCarran	Flyn van Ewijk	easy build
04/16/20	Rice Lake Weighing Systems	265 Logan Lane	Fernley	Kevin McCarthy	in service
10/16/19	Johns Manville Corp.	325 Industrial Drive	Fernley	Drew Roschli, RR	in service
02/03/20	vacant lot for sale	2185 Newlands Dr.	Fernley	deal with Meek's Lumber	not unsed
10/16/19	Mills Farm & Industrial	Venturacci Lane, UP Team Track	Fallon		in service
10/17/19	SS Hert Trucking Inc.	380 N. Taylor Street	Fallon	Steven Hert, Manager	in service
02/03/20	NV Wood Preserving (see below)	1680 Spruce Street	Silver Springs	Stella Jones	in service
01/14/20	UP team track, double-ended, 900 ft.	N. Highway 95Alt.	Yerington	truck driver	in service
02/03/20	Itronics Metalurgical, Inc.	N. Highway 95 Alt.	Mason Valley	Tracy	not used
various	Sierra Pacific Power (NV Energy)	1000 Sierra Way	Yerington	Johnny Hargrove	out of service
01/15/20	Hawthorne Army Depot	United States Army	Hawthorne	Johnny Peterson	in service
04/17/20	Oreana Energy LLC	leased UP track on NV Blvd	Lovelock	George Trabits, owner	in service
03/12/20	Winnemucca Farms Inc.	1 Potato Pl. Unit 1	Winnemucca	Sam Routser	in service
03/12/20	Sexton & Sons d/b/a Mezotrace	415 Wellington Street	Winnemucca	Dave Sexton, owner	not used
03/06/20	Interstate Oil Co.	ML: 50 Lillard Dr.	Sparks	Jeff Barnes	no track
10/25/19	Carlin Rail Terminal LLC	2001 Chestnut Street	Carlin	James	in service
02/20/20	Southwest Energy	Chestnut Street	Henderson	Thatcher Co. ended lease	in service
03/06/20	Komatsu Mining Corp.	4450 P&H Drive	Elko	Sterling Skinner	no track
03/04/20	Lemm Corporation--Operations	4141 Old Highway 40	Carlin	Marley Fac. Mgr.	in service
03/04/20	Blach Distributing Co.	131 W. Main Street	Elko	George Richards, whse	no track
03/13/20	Graymont Western US Inc.	15 miles NW of Wendover Pilot Exit 39	Wendover		in service
03/04/20	Al Park Petroleum Inc.	275 12th Street	Elko		in service
04/21/20	Southwest Energy LLC	Mobley Ranch Rd.	Golconda	Jenine Dalrymple	in service
03/05/20	Precast Management Corp.	HQ: 3664 Susana Street	Las Vegas	David Wallis, Pres.	no track
03/04/20	Certainteed Gypsum Manufacturing Inc.	Highway 159	Blue Diamond	Damian Nottingham	no track
03/04/20	Southern Glazer's Wine & Spirits	8400 S. Jones Blvd.	Las Vegas	Ian Staller, EVP & GM	easy build
03/10/20	Americold Logistics	830 E. Horizon Dr.	Henderson	Jack Wilson, Plant Mgr.	easy build
04/27/20	Rugby Architectural Bldg. Products	3585 W. Diablo Rd. Ste. 6	Las Vegas	Carol	no track
04/27/20	Steel Engineers Inc.	716 W. Mesquite Ave	Las Vegas	Keith in Shipping to call back	not used
04/27/20	Nevada Ready Mix Corp.	601 W. Bonanza Road	Las Vegas	Larry Miller	in service
04/27/20	On Time Oil LLC	715 W. Bonanza Road	Las Vegas	receptionist asked	not used
04/27/20	Keenan Pipe & Supply	831 W. Bonanza Road	Las Vegas	?	in service
04/27/20	Remac Inc.	2123 W. Bonanza Road	Las Vegas	?	no track
05/05/20	Parker Plastics	4700 Engineers Way	N. Las Vegas	Brad Hayes, VP Finance	not used
05/05/20	Lighthouse Holdings dba L/H Logistics	4501 Mitchell Street	N. Las Vegas	Ms. ?	in service
04/29/20	Tri-Dim Filter Corp.	4980 Statz Street	N. Las Vegas	Luciano Rielman	not used
04/29/20	CalPortland Company	4938 Donovan Way	N. Las Vegas	Jamie Padia	in service
04/20/20	Strategic Materials Inc.	4910 Donovan Way, Ste. A	N. Las Vegas	referred to Jamie Padia	in service
04/20/20	Las Vegas Paving Corp.	4910 Donovan Way	N. Las Vegas		in service

Date of Visit or Call	Name	Address	City	Contact	Sidetrack Status
04/20/20	Thermo Fluids (div. of Clean Harbors)	4910 Donovan Way	N. Las Vegas	Kathy ref. to Samantha	in service
03/10/20	ProPetroleum Terminal	4800 El Campo Grande Ave.	Las Vegas	Mark Lytle	in service
various	Rebel Oil Company	5095 E. El Campo Grande Ave.	Las Vegas	Jason Case, Caitlin Scherr	in service
05/01/20	Plastic Express		Moapa	Tom McKellar, VP Rail	in service
05/01/20	Ecology Recycling Services LLC	ML: 785 E. M Street	Colton	Laney Jr.	no track

Land Development Progress Assessment Form

Land Development Progress Assessment

Development Name _____ Date _____

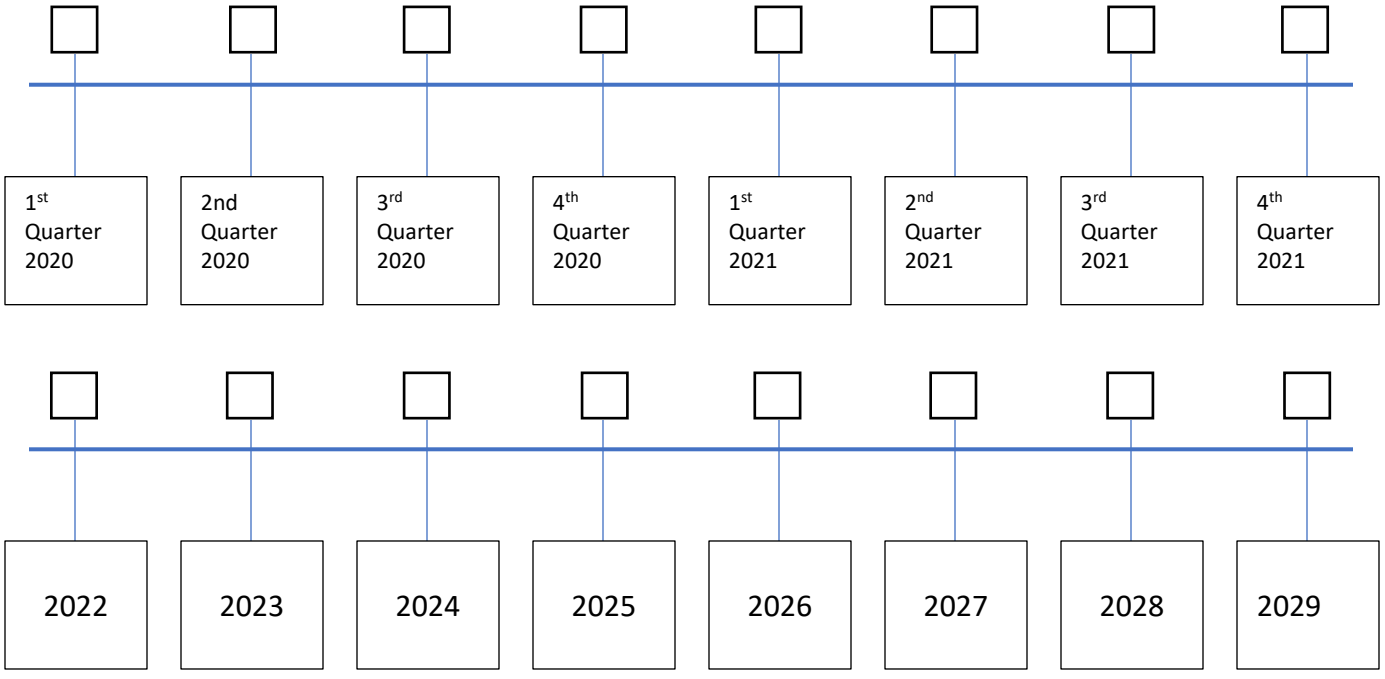
Individual Name _____

Status

☐ Existing ☐ Pre-development ☐ Development

Remaining permitting:

Projected opening



Project Description

Acres under control:

Acres under option:

Acres teed up (can remain confidential):

Description of project focus, including targeted markets and targeted services:

Square footage of industrial space projected:

Percent of industrial space to be rail-served:

Percent of acreage to be rail-served:

Water rights status (including both supply and sewer):

Electric, gas, geothermal, and internet access:

Rail Status

ROW existing: ☐ Yes ☐ No

Track distance to mainline rail:

Industrial lead track status:

In place? ☐ Yes ☐ No

Accessible ☐ Yes ☐ No

Impediments or challenges:

Is it rail engineered? ☐ Yes ☐ No

Comments:

UP site plan approval status:

☐ No ☐ 10% ☐ 30% ☐ 60% ☐ 100%

Geographic advantages and challenges e.g. - If not flat, what is maximum grade?:

Capital Status

Predevelopment funding:

☐ In-house ☐ Teed Up ☐ Need Support

Development funding:

☐ In-house ☐ Teed Up ☐ Need Support

Rail Funding:

☐ In-house ☐ Teed Up ☐ Need Support

Comments:

Management Team Status

Management Strength-competency

☐ Short-handed ☐ Adequate ☐ Strong

Management drive-personal energy, time, and commitment

☐ Short-handed ☐ Adequate ☐ Strong

Rail Experience:

☐ None ☐ Minimal ☐ Significant ☐ Operator selected

Other Comments:

Fernley Multimodal Freight Facility Feasibility Study

Fernley Multimodal Freight Facility Feasibility Study

September 18th, 2020

STRATEGIC RAIL FINANCE

1700 Sansom Street, Suite 500
Philadelphia, PA 19103
(215) 564-3122

NNDA Northern Nevada Development Authority

Table of Contents

A. Introduction

The Nevada Department of Transportation, recognizing that the City of Fernley region was in line to experience the next surge of Nevada commercial land development, requested Northern Nevada Development Authority services to determine how the public sector can encourage and support freight-based economic development.

The Fernley region promises to be well-positioned for a multimodal freight facility with existing and future freight rail capabilities as the core. The objective of this Feasibility Study is to research the achievability and practicality of such a multimodal freight facility in the study region, qualify Fernley as the optimal location for a facility and assess the potential economic impact on the surrounding region.

While the focus of the project is Fernley, Hazen, Fallon, Silver Springs, and the Tahoe-Reno Industrial Center, it is important to understand the logistics dynamics, needs, and opportunities of nearby Mineral County and points east along the I80 corridor to determine the full set of shipper needs that new rail infrastructure can serve. This wider regional understanding has been developed through a combination of this engagement and the ongoing work on the new Nevada State Rail Plan.

The deliverable for this Fernley Multimodal Facility Freight Feasibility Study engagement is a report that communicates a set of recommendations and related background for a multimodal freight facility and related rail infrastructure and services that can be built and provided in the primary study area. This discrete Fernley Study will also be incorporated into the Nevada State Rail Plan. Rail infrastructure and service recommendations outside of the primary study area will be advanced and covered in the state plan.

SRF early-on ascertained that there are twelve private-sector land development projects underway in the region that all feature freight-generating industrial activity. Discussions with NNDA resulted in alignment on these key engagement elements:

- Support these private-sector project sponsors with logistics knowledge and relationships with transportation providers is a productive use of limited public-sector resources
- Identify ways for the Fernley region to become a rail-centric hub of intermodal and bulk cargo shipping to and from the California marketplace and its ports
- Develop a multifaceted industrial logistics strategy that is attractive to shippers and transportation providers across multiple states
- Prepare for interactions with Union Pacific Railroad and BNSF Railway to secure optimal services, routing, and pricing

B. Executive Summary

This feasibility study illustrates there is a commercial business case for an Integrated Multimodal Cargo Transfer Facility (IMCTF) in the study region and identifies Fernley as an optimal location for siting the development. An IMCTF is a design for an "Inland Port" or "Intermodal Facility" that stimulates freight-based commercial activity beyond the transfer of containers from one mode to another and is described in detail in this report.

Implementing an IMCTF in northwest Nevada is an opportunity to transform freight transportation in the region by creating a sustainable system which balances the use of truck and rail. The IMCTF will also be a catalyst for industrial development, offering cheaper and more flexible transportation options for new companies attracted to the industrial land available in the region.

B.1 Freight flow conversion and generation

The business case analysis demonstrates the commercial viability of the IMCTF and its role in converting existing truck movements to intermodal truck/rail and generating new intermodal activity.

The primary opportunity for truck to rail freight conversion is associated with existing through-state international and domestic truck service between the California port regions and states east of Nevada. This bi-directional flow presently accounts for 1.39MM annual truck journeys carrying 26.9MM tons of freight. Significant portions of this through-freight would be attracted by the reduced costs and improved service to an IMCTF in northwest Nevada. Farm and food product commodities are a leading freight category targeted for this conversion from road to rail.

Another category of existing freight flows the IMCTF could convert from road to rail are extractive commodities transported from northwest Nevada to California. On this freight corridor the commodity categories of clay, concrete, glass, stone, and non-metallic minerals presently account for 1,000,000 truck journeys of which 50% are empty return trips. While a rail freight corridor already exists for the transportation of these commodities it handles only a fraction of total volume. Our initial analysis indicates that an IMCTF facility in northwest Nevada would support the conversion of a significant volume of the 11MM tons of this freight currently being trucked to California onto rail.

The IMCTF will go beyond supporting the conversion of existing and future truck freight flows to rail. We estimate, based on analysis and interviews with developers and shippers, a generative effect from the new facility. New companies locating in the Fernley area will be attracted by the opportunity to reduce transportation costs and optimize their supply chain performance by utilizing the IMCTF facility.

B.2 Fernley: The optimal location in the study region

An effective and sustainable intermodal freight facility needs to be strategically located on a major transportation corridor where truck cargo/shipments intersect with primary rail lines and has large-scale land available for cargo handling expansions. The study region is therefore ideally positioned for an Integrated Multimodal Cargo Transfer Facility (IMCTF) and Fernley is the obvious location due to the combination of available land and adjacencies to I-80, U.S. 95, and the Union Pacific Railroad. Our analysis identifies that Fernley is the sole area between the California border and Hazen with sufficient available space, and flat topography, in a commercial development zone, located aside the primary rail and highway network.

B.3 Strategic Partnership with Port of Oakland

The study highlights that developing an IMCTF facility introduces the opportunity for a strategic transportation partnership with the Port of Oakland. Analysis of truck traffic passing through the study region identifies a compelling business case for deflecting existing freight flows bound for Los Angeles ports to the Port of Oakland via an IMCTF at Fernley. Exploratory dialogue with the Port of Oakland captured their enthusiasm for supporting rail-based development in Northern Nevada to deflect a proportion of these 1,250,000 annual truck journeys from the Los Angeles ports. The Port of Oakland specifically identifies short haul rail serving Nevada distribution centers as a strategic initiative, offering the potential for a partnership with the port to develop existing and new freight flows. An alternative to the congested Los Angeles ports would make the IMCTF facility hugely attractive to shippers on one of the nation's highest volume trade corridors resulting in growing business for the facility and the Port of Oakland.

B.4 Competitive advantage of the IMCTF

The study recommends NNDA support the development of an IMCTF facility to serve the needs of today's diverse supply chains. The IMCTF has a competitive advantage over traditional intermodal facilities at ports or elsewhere, which are generally limited to container freight and have little or no logistics transloading capacity. Existing facilities at California ports or inland sites east of Nevada, do not have this capability nor the capacity to develop it. Case study analysis in the Business Case section of this study suggests transportation costs savings of between 15% and 20% when shippers have access to an IMCTF compared to a traditional multimodal facility.

B.5 Catalyst for industrial development and land revaluation

In contrast to many new transportation infrastructure projects, the proposed IMTCF at Fernley is not dependent upon a freight-intensive anchor tenant to justify development. The large volumes of organic through-traffic with a real commercial business case for both the deflection and diversion of truck-based traffic to the facility are sufficient to make this project feasible. This is an important benefit of the IMCTF at Fernley generating significant upside for developers of industrial properties. The in-motion development of the facility and its attributes will catalyze new tenant attraction, as the intended value proposition of co-location to the IMCTF is clearly defined.

Industrial land values will reflect this enhanced attractiveness, encouraging developers to convert more land to industrial use and support expansion of economic development areas in the Fernley hinterland.

B.6 Ensuring sustainable economic development

Northwestern Nevada is experiencing increasing freight activity because of the surge of regional industrial development and from its position on one of the nation's major continental trade arteries. Over 75% of all freight in the study region is currently moved by truck accounting for more than 50% of all Nevada's truck journeys. Such an overreliance on trucks can negatively impact the economic value of a region as congestion, pollution and road maintenance costs increase to unsustainable levels. The development of an IMCTF facility at Fernley directly addresses this issue by enabling a far more sustainable transportation system. This study identifies that large scale conversion of existing freight flows will result from the availability of an IMCTF facility balancing the use of truck and rail appropriately and supporting the continued growth and prosperity of the economy in northwest Nevada.

B.7 Critical Success factors

The study identifies three critical success factors for the IMCTF project to deliver the sustainable freight system envisaged by the NNDA:

1) A diversified IMCTF model that offers cargo transload options in addition to modal transfer is necessary to maximize the freight facility's utility for generating freight volume and ancillary freight activity.

2) A degree of public sector sponsorship is important for a project of such strategic importance to the region. This will assure developers and shippers of the long-term commitment to a facility crucial to their freight transportation and business operations. This sponsorship can take the form of financial, technical, managerial, or political support.

3) The third critical success factor is effective stakeholder engagement. Developing the IMCTF and ensuring its sustainable operation is dependent on the involvement and support of many stakeholders including rail operators, land developers, shippers, freight forwarders and 3PLs, and California port operators. As these stakeholders will have distinct and sometimes divergent priorities, the process of alignment is vital to the project's success.

B.8 Trusted Partners

The migration to a sustainable freight system in northwest Nevada can be accelerated with a Fernley-area IMCTF at its core. However, simply building the facility will not transform existing freight flows or engender the new use of rail for freight movements into, out of, and through the region. Multiple factors require attention and management during the implementation phase.

We recommend contracting a specialist organization with experience in the rail industry, logistics, stakeholder engagement, project management, financing, and land development in order to realize a sustainable freight system in northwest Nevada.

C. The Current Freight Picture – Fernley and Northwest Nevada

The region of Fernley, Hazen, Fallon, Silver Springs, and eastern Sparks is experiencing a surge in commercial development with over 160,000 acres of existing and planned industrial park projects. In addition, there are many more acres of confidential or smaller industrial developments also underway or planned in the region.

Table 4-1: Region 5 Industrial Parks Under Development

Industrial Parks in Fernley-Hazen-Fallon-Silver Springs-Sparks			
Name	**Acreage**	**Location**	**Distance from Rail**
Pyramid Commercial Center*	3,333	NW of Wadsworth	2 mi., former R-O-W
Victory Logistics	3,894	NE of Fernley	Abuts 2 branch lines
Tahoe Reno Industrial II	6,345	SW of Fernley	3 mi. to closest parcel
Northern Nevada Industrial Center	20,251	Stagecoach	7 mi. to Mina Branch
Silver Springs Opportunity Fund	2,746	Silver Springs	½ mi. to 4 parcels
Geothermal Rail/Dark Horse Rail	3,177	NW of Hazen	2 parcels abut main line
Western Nevada Rail Park	226	NW of Hazen	In operation on main line
Churchill Hazen Industrial Park	2,308	S of Hazen	Abuts 2 branch lines
Lahontan Rail Industrial Park	620	NE of Silver Springs	Abuts Mina Branch
Tahoe-Reno Industrial Center	19,749	Storey County	Limited rail is present
Innovation Park	67,000	Storey County	Rail is adjacent
40-Mile Desert Project	25,000	Churchill County	Abuts UP main east of Hazen
Unnamed project, City of Fallon*	3,625	NW of Fallon	1 mi to Fallon Branch
Unnamed project, City of Fallon*	3,070	NE of Fallon	1 mi to Fallon Branch
Total	**161,344**	**acres**	

**land deals not finalized*

Integrating these Fernley area developments with rail infrastructure and service is important to the state as well as the country, given their size and location on the corridor to and from California. For reference, the entire land mass of Salt Lake City, UT is 70,000 acres and San Francisco, CA covers 71,000 acres.

While some land and economic development leaders do not consider rail service to be a salient selling point, most of the current project sponsors are working on rail-served industrial parks. Even those developers that have been low-key about rail in the past are expressing their interest in providing rail service to enhance the attractiveness of their properties.

Branch line in the Tahoe-Reno Industrial Center

Innovation Park is the name for the 67,000-acre development planned by Blockchains, Inc. acquired from the developers of the Tahoe-Reno Industrial Center. The brand may be in the process of also being applied to the 20,000-acres remaining within the Tahoe-Reno Industrial Center. Its total land mass of 107,000 acres makes it one of the top three largest industrial parks in the world.[1] The Tahoe-Reno Industrial Center is a vibrant industrial park, yet largely dependent upon trucks for freight. Of its 35 tenants with shipping needs of at least truckload quantities only 6 (17%) use rail. Our analysis suggests only 2-4% of freight flowing into and out of this development utilizes rail. Tesla, for instance ships an average of 52 truckloads of auto parts per night (round trip) from its Gigafactory over the Donner Pass to its assembly plant in Fremont, CA. The Fremont facility already has adjacent rail, and a routing for a new 2.5-mile spur to connect the Gigafactory to rail has been identified. This one project would enable the elimination of 36,400 truck trips a year on I-80 through Sparks, Reno, and northern California.

[1] World Atlas website, "The World's Largest Industrial Areas" article, source link, published June 10, 2019.

Key Strategies

- Support existing industrial parks and shippers in connecting to rail by attending to their specific logistics requirements and current rail infrastructure.
  In our engagement with land developers some believed rail could not be constructed to their properties. Months of dialogue in the Region uncovered a series of conflicting beliefs about where in the Tahoe-Reno Industrial Center rail could and could not be constructed and used, due to possible steep grades, tight curves, or poor engineering and construction. However, track inspection has shown the existing track to be adequate for servicing the park's tenants located adjacent to the rail corridor and topographical analysis conducted by the NVSRP team and NDOT in 2020 has identified a viable route to connect the remainder of the park tenants to rail, including Tesla, as well as the nearby Innovation Park acreage.

- Support new land developers in the Fernley/Hazen/Fallon/Silver Springs corridor in their efforts to develop rail service.
  The high number of vast land developments underway in Region 5 presents one of the state's most urgent opportunities to improve economic well-being and environmental sustainability through the logistics efficiencies of rail. Continuing the engagement with new land developers in this part of the region is needed to encourage their utilization and promotion of rail freight service in their industrial developments. It is crucial to continue to provide on-going support to these developers as they navigate the often-challenging process of dealing with railroads, tenants, federal government, state entities and other stakeholders when trying to enable rail service to their sites.
  One 4,000-acre development in the region was operating under the misunderstanding that a viable rail connection could not be constructed to their property. NDOT and the NVSRP team's preliminary topographical analysis has established two rail right-of-way alignments that could be used to build in rail service. This is a major opportunity for the region to secure rail freight service and address the current over-dependence on trucking freight because of the large scale of these new industrial sites. The largest land developers in Region 5 contacted by SRF have indicated they see rail as a core element of their land development. The developments that were accounted for via Land Development Project Assessment forms (Appendix Item) completed by developers include approximately 40,000 acres of land with 9,000 acres of industrial space being available in 2021 and 2022. All these developers are located aside or close to the UPRR Main line and 75% have industrial lead track status in place or accessible. The majority also have their industrial sites rail engineered with Union Pacific approval in place.

- Complete a detailed business case analysis of Fernley Multimodal Freight Facility.
  In parallel to the NVSRP report, SRF has also completed a feasibility study for the Northern Nevada Development Agency (NNDA) (Appendix Item) The study concluded that locating a new multimodal freight facility at Fernley is commercially feasible and will result in a significant conversion of truck freight to rail. The feasibility study identifies the potential for:

1) conversion of existing through-region truck freight,

2) conversion of existing truck freight out of the region, and

3) generation of new out of region freight flows.

The study proposes an Integrated Multimodal Cargo Transfer Facility (IMCTF) model for the Region to maximize the economic benefits of freight rail utilization. Unlike traditional multimodal terminals which are focused on container freight, the IMCTF model accommodates multiple freight types and a large land footprint. These aspects are important because the Fernley IMCTF will be able to capture the regional demand for mining and manufactured freight as well as containers. The additional land capacity of the Region is also a key factor as it enables the Fernley facility to offer extended freight services such as transloading and warehouse operations.

- Focus on rail development opportunities along the Fallon Branch, especially near the town of Fallon
- Reinstitute commercial service on the Mina Branch to Hawthorne, thereby stimulating rail activity that can utilize new logistics services in Fernley area
- Continue and expand stakeholder engagement and collaboration

This region is currently dominated by truck freight, accounting for 90% of all current freight flows. Although this report has identified major opportunities for increasing rail freight traffic, supported by land developers openly encouraging rail development, successfully achieving this potential will be dependent upon numerous stakeholders. Stakeholder engagement and collaboration is therefore of crucial importance.

A Guide to Region 5 Industrial Park Insets

The following nine maps, beginning with an overview map of all major industrial developments (Tim Tucker's planned 40-mile Desert Project is not shown) zoom in on the planned industrial parks listed previously. Region 5 is a hotbed of such activity due to the proximity of California and the lack of such large areas of developable land to the west in Region 6. Intense pressure on I-80 from traffic congestion, pavement degradation, and the incidence of truck accidents can be relieved through the proactive facilitation of rail service into these developments.

Figure 4-1: Region 5 – Industrial Parks

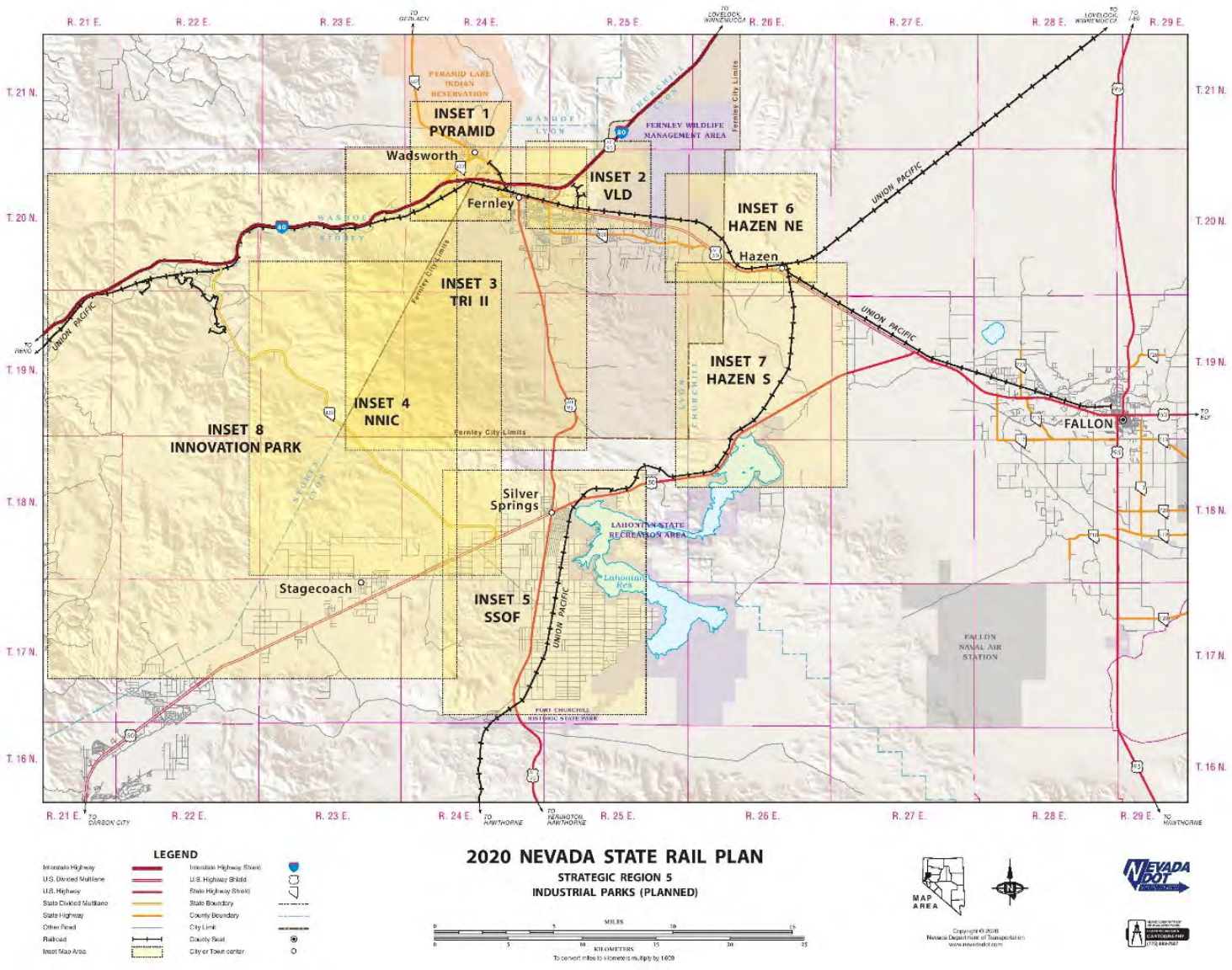


Figure 4-2: Region 5 – Pyramid Commercial

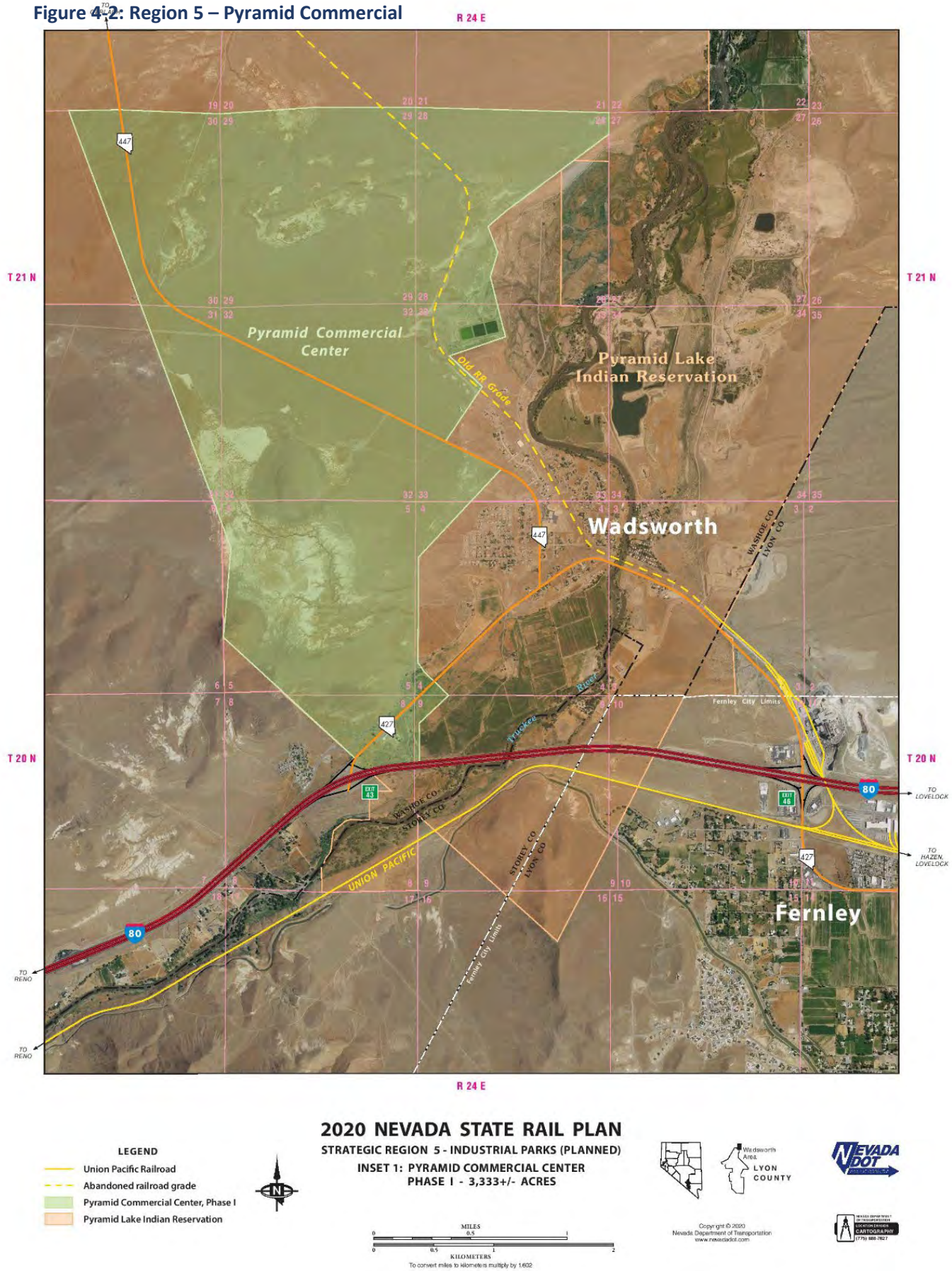


Figure 4-3: Region 5 – Victory Logistics District

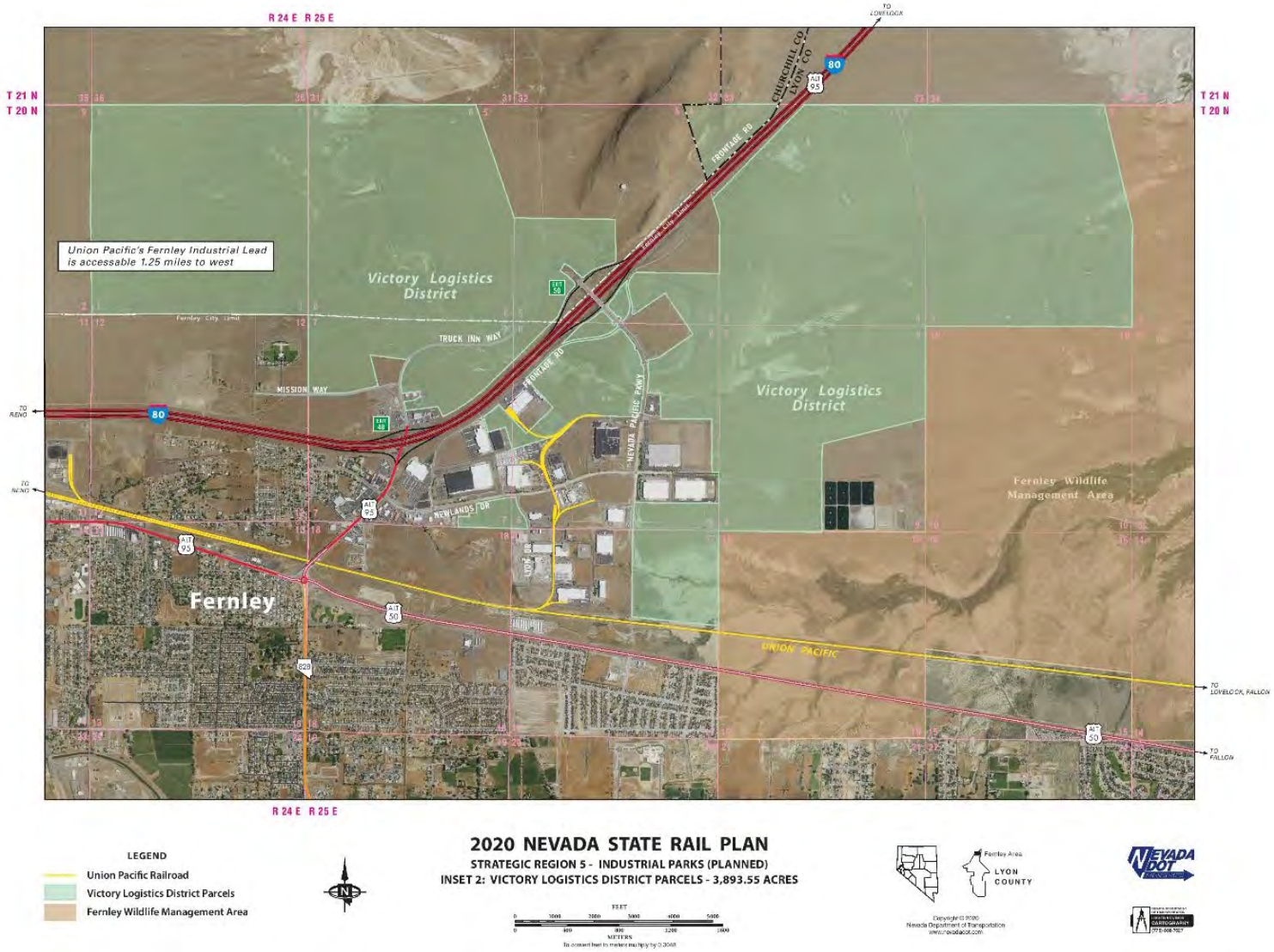
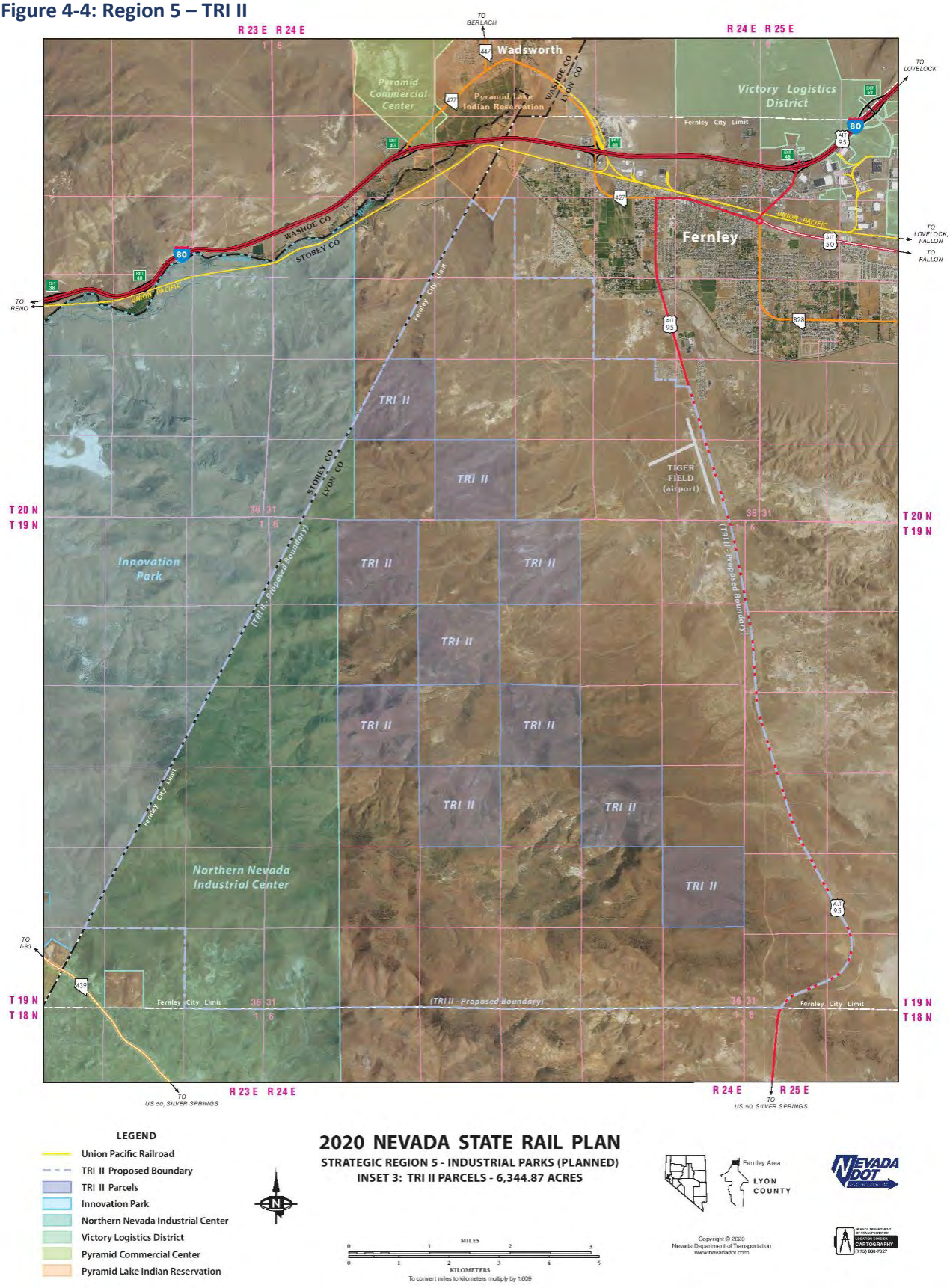


Figure 4-4: Region 5 – TRI II



LEGEND

- Union Pacific Railroad
- TRI II Proposed Boundary
- TRI II Parcels
- Innovation Park
- Northern Nevada Industrial Center
- Victory Logistics District
- Pyramid Commercial Center
- Pyramid Lake Indian Reservation

2020 NEVADA STATE RAIL PLAN

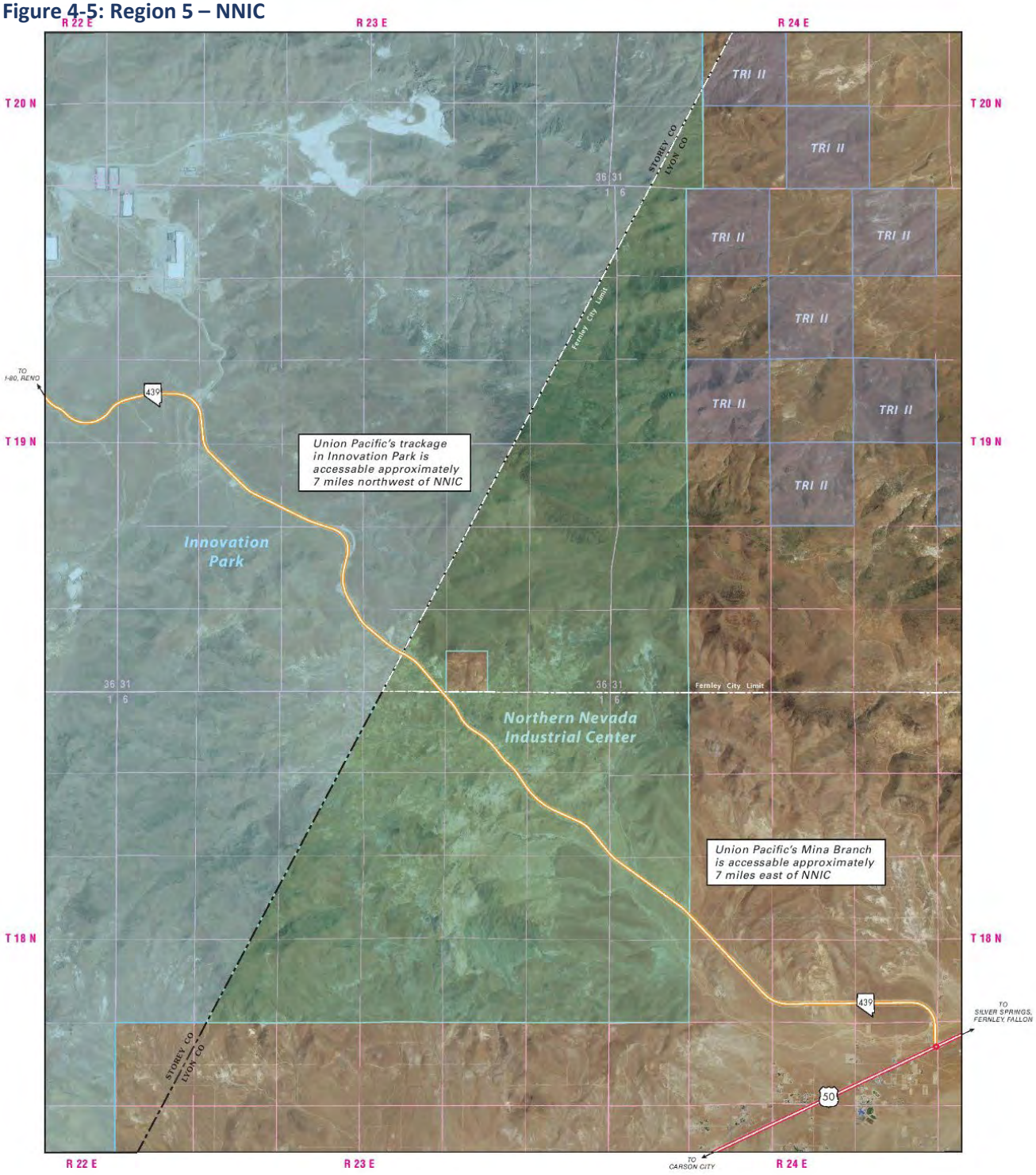
STRATEGIC REGION 5 - INDUSTRIAL PARKS (PLANNED)

INSET 3: TRI II PARCELS - 6,344.87 ACRES

Fernley Area
LYON COUNTY

MILES
KILOMETERS
To convert miles to kilometers multiply by 1.609

Figure 4-5: Region 5 – NNIC



2020 NEVADA STATE RAIL PLAN

STRATEGIC REGION 5 - INDUSTRIAL PARKS (PLANNED)

INSET 4: NORTHERN NEVADA INDUSTRIAL CENTER PARCELS - 20,251 ACRES

LEGEND

- Northern Nevada Industrial Center (NNIC)
- Innovation Park
- TRI II Parcels

Northern Nevada Industrial Center Area

LYON COUNTY

MILES 0 1 2 3

KILOMETERS 0 1 2 3 4 5

To convert miles to kilometers multiply by 1.609

Figure 4-6: Region 5 – SSOF

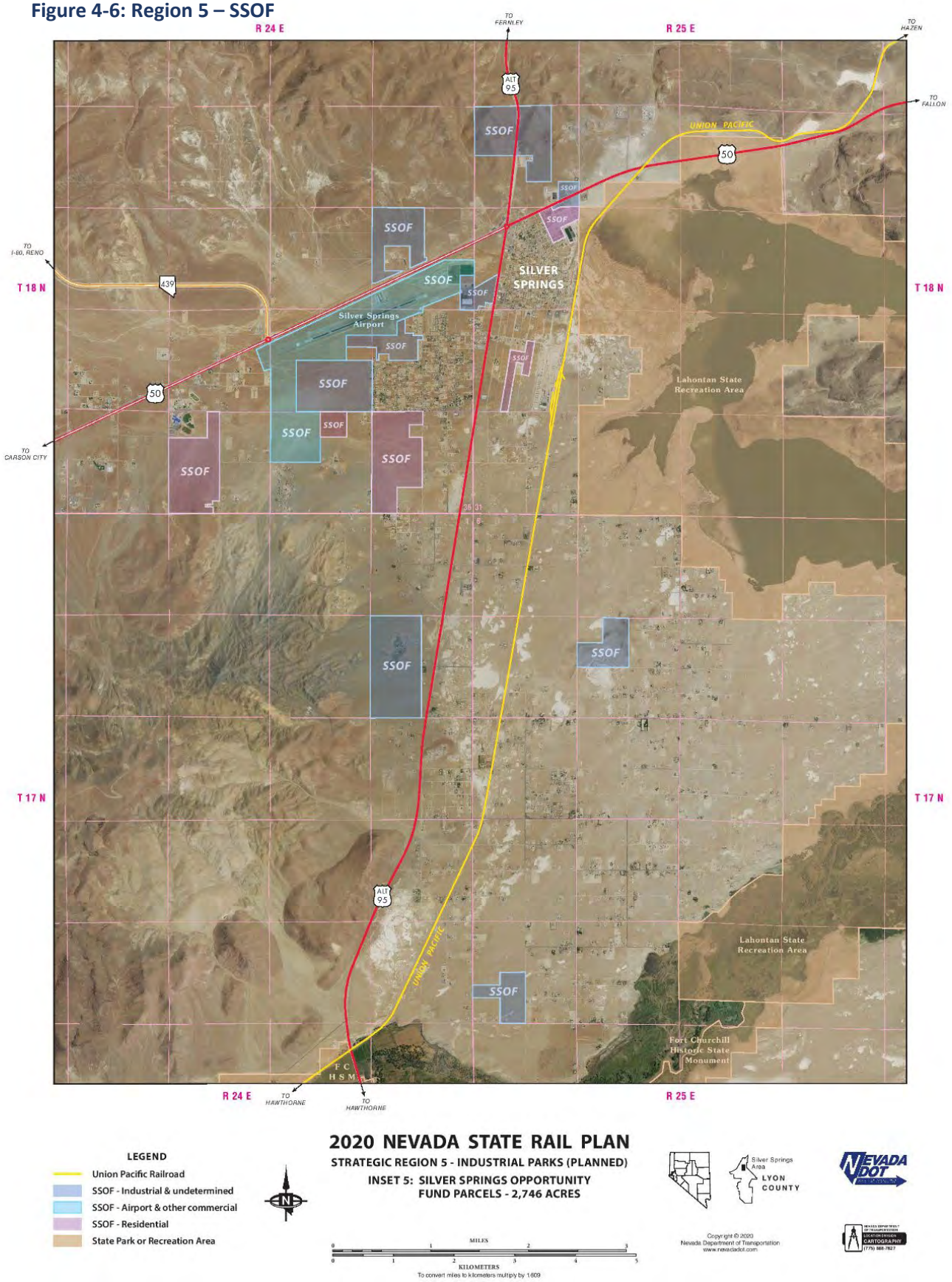


Figure 4-7: Region 5 – Hazen NW

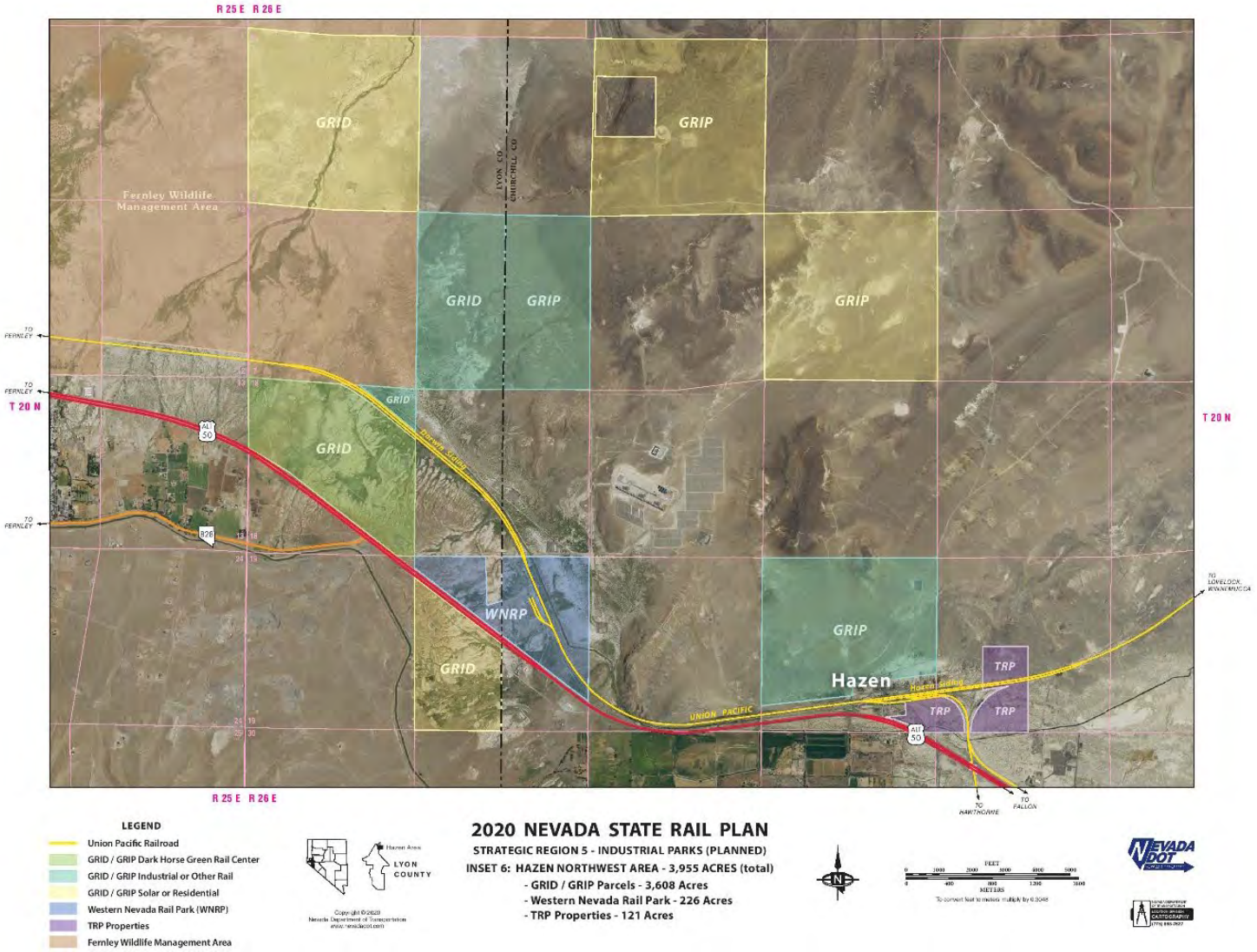
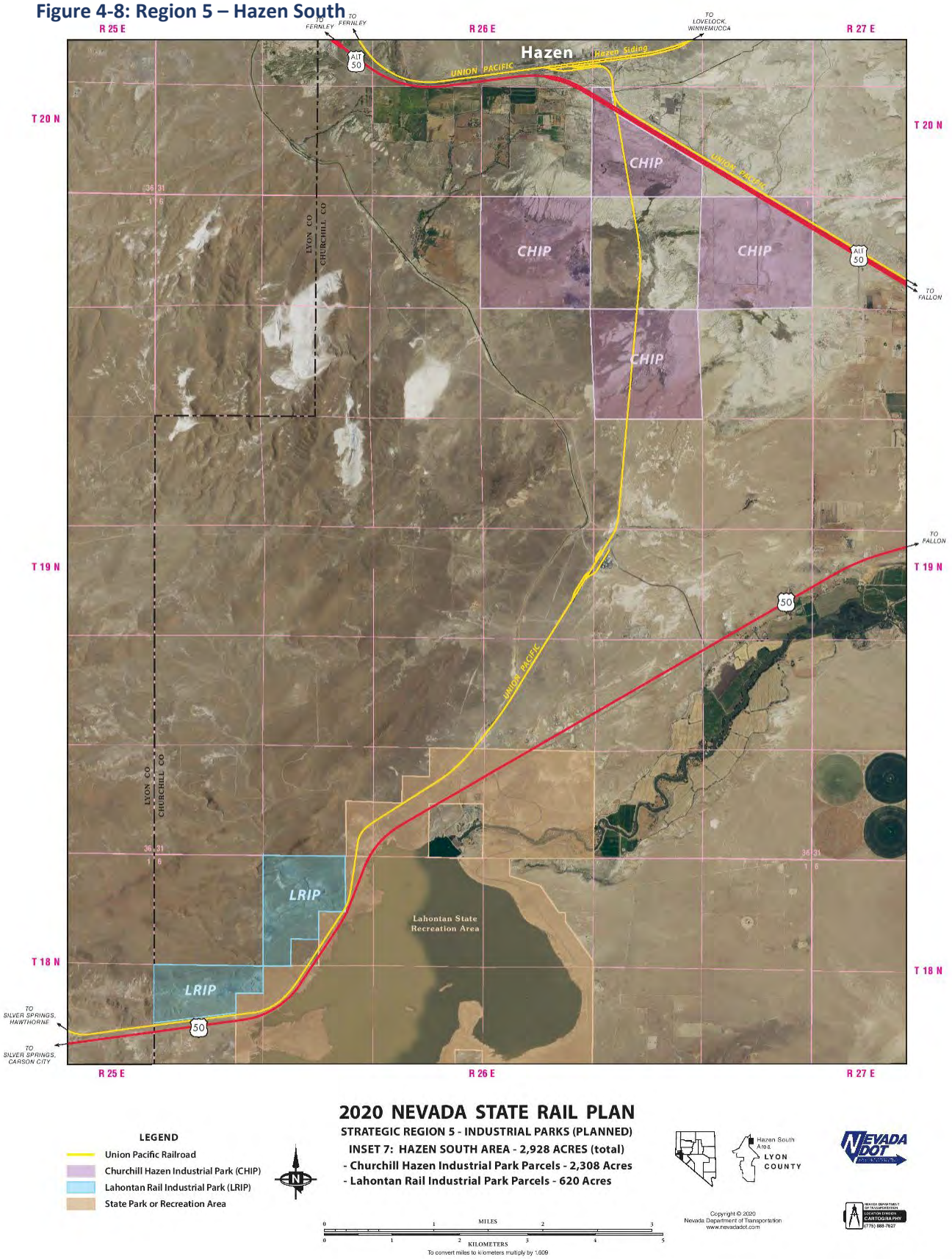


Figure 4-8: Region 5 – Hazen South



2020 NEVADA STATE RAIL PLAN

STRATEGIC REGION 5 - INDUSTRIAL PARKS (PLANNED)

INSET 7: HAZEN SOUTH AREA - 2,928 ACRES (total)

- Churchill Hazen Industrial Park Parcels - 2,308 Acres
- Lahontan Rail Industrial Park Parcels - 620 Acres

LEGEND

- Union Pacific Railroad
- Churchill Hazen Industrial Park (CHIP)
- Lahontan Rail Industrial Park (LRIP)
- State Park or Recreation Area

Hazen South Area
LYON COUNTY

MILES 0 1 2 3
KILOMETERS 0 1 2 3 4 5
To convert miles to kilometers multiply by 1.609

Figure 4-9: Region 5 – Innovation Park

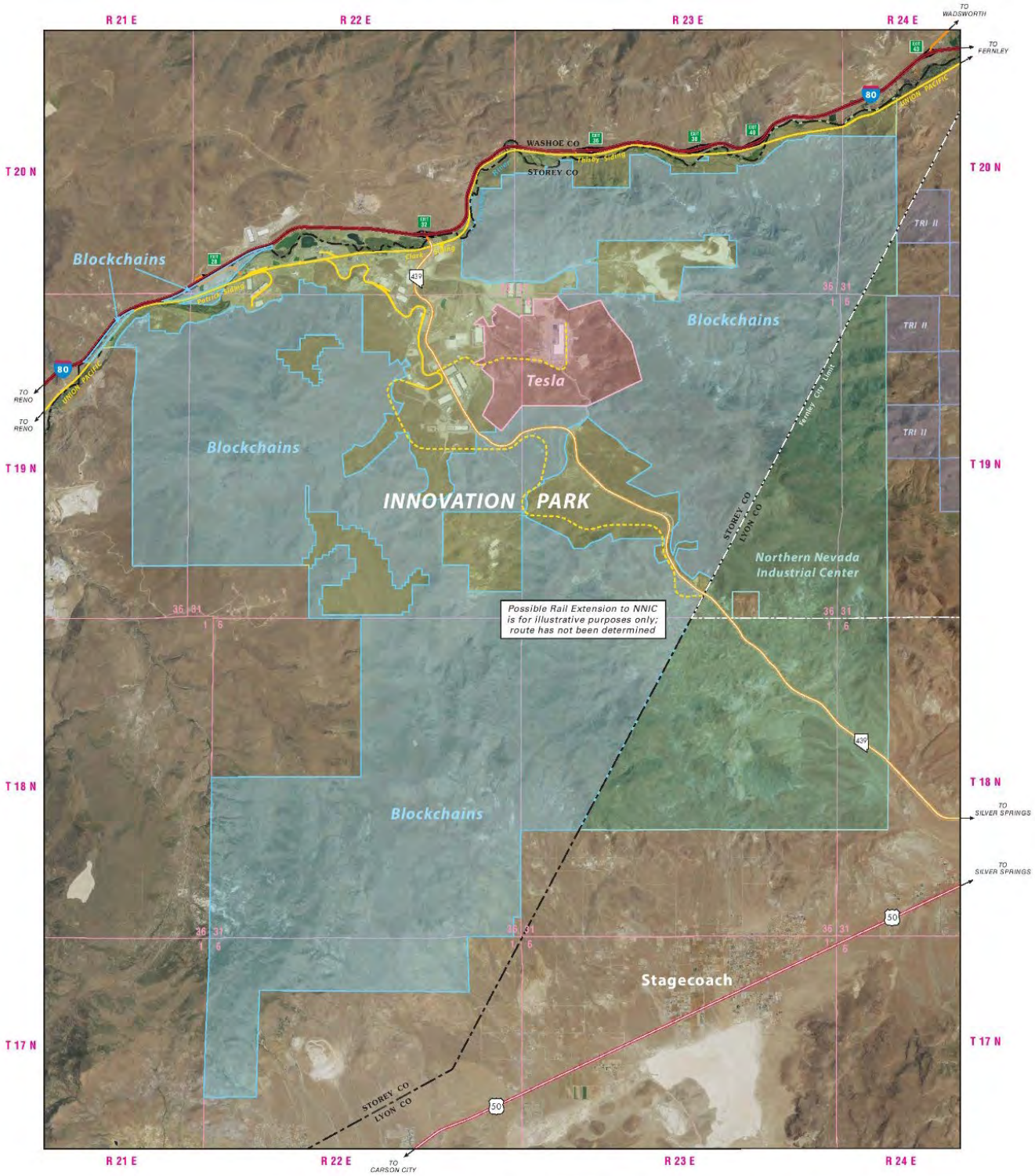
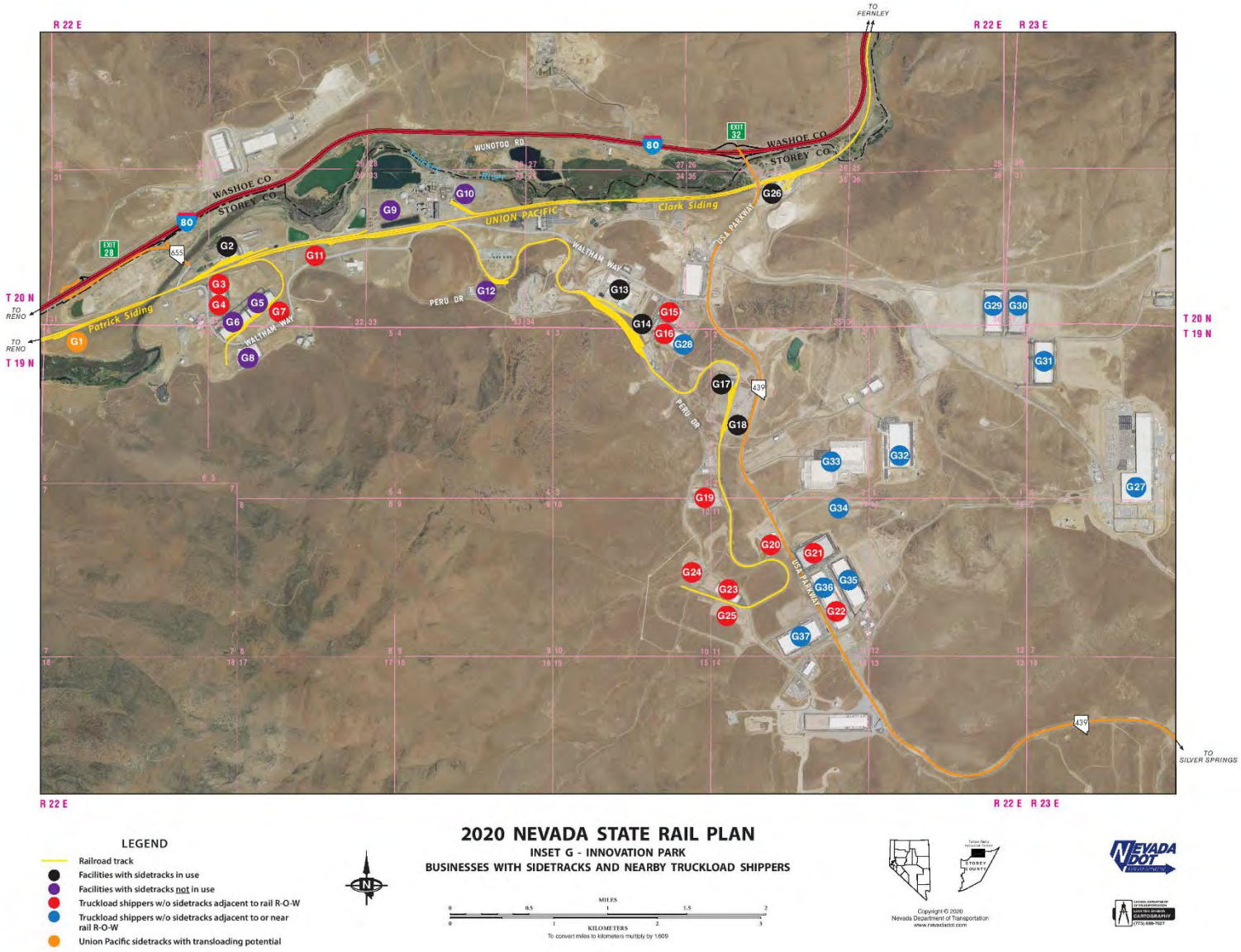


Figure 4-10: Innovation Park-Tahoe Reno Industrial Center (Inset)



The above map and the following map show details of the existing rail infrastructure where existing and potential rail customers are clustered in Region 5. Notice that Tesla's Gigafactory (blue disk G27 in lower right), which ships an average of 52 truckloads per night via I-80 over the Donner Pass to Tesla's assembly plant in Fremont, CA, is only 2.5 miles away from an active branch line. The rail right-of-way for this connection (not shown) has already been set aside by the TRI General Improvement District and Tesla.

Figure 4-11: Fernley Northeast Area

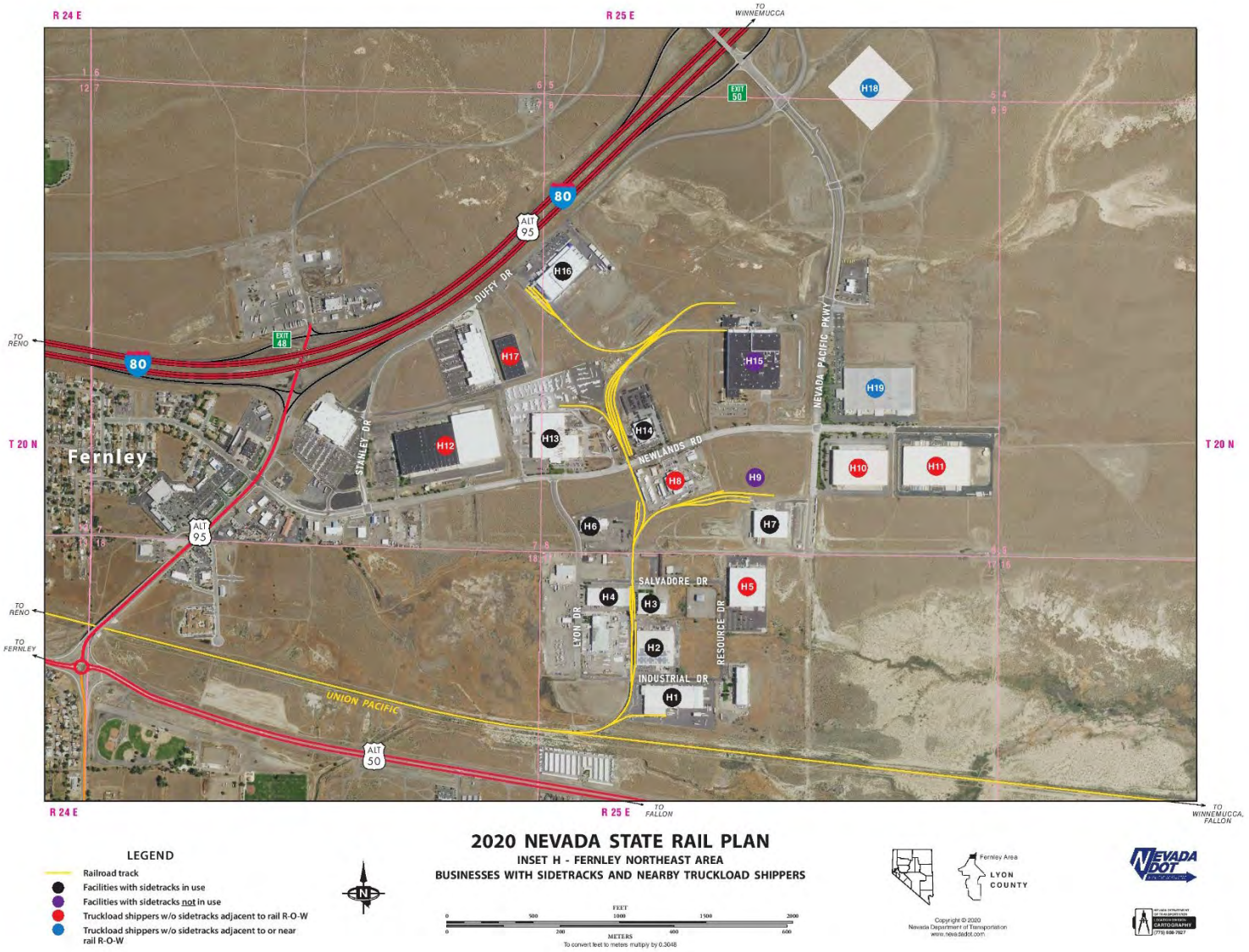


Table 4-2: Region 5 Project List

Project Name	County	Short Description	Contracted Description	Commodities	Track Mi*	Cost	Company	Region	Horizon
40-Mile Desert Land Development	Churchill	Connect to UP main line	Rail Connection	TBD	0.1	$4,000,000	TOT, LLC	5	4
Lahontan Rail Industrial Park	Churchill	Connect to Mina Branch	Rail Connection	TBD	0.2	$400,000	TOT, LLC	5	4
Geothermal Resources Industrial Park	Churchill	Connect to UP main line	Rail Connection	TBD	0.1	$4,000,000	GRIP LLC	5	4
Limestone Mine	Churchill	Transloading site off main	Transload	specialized limestone	0.2	$4,000,000	Advanced Carbonate Technologies, LLC	5	4

Project Name	County	Short Description	Contracted Description	Commodities	Track Mi*	Cost	Company	Region	Horizon
Victory Logistics	Churchill	Connect to Fernley Industrial Lead Connect to LA Pacific Lead	Rail Connection	TBD	0.4 1.25	$4,000,000	Mark IV Capital	5	4
TRP Properties	Churchill	Connect to Fallon Branch	Rail Connection	TBD	0.1	$300,000	Omaha Track Hazen Project	5	4
Churchill Hazen Industrial Park	Churchill	Connect to Fallon Branch	Rail Connection	TBD	0.1	$300,000	TOT, LLC	5	4
Northern Nevada Industrial Center	Lyon	Connect to TRIC lead	Rail Connection	TBD	7	$14,000,000	Reno Engineering	5	4
Sierra Springs Opportunity Fund	Lyon	Connect 15-591-09 (120 ac.) Connect 15-581-03 (91 ac.)	Rail Connection	TBD	0.6 0.6	$2,000,000	Sierra Springs Opportunity Fund	5	4
Geothermal Rail Industrial Development	Lyon	Connect to UP main line	Rail Connection	TBD	0.1	$4,000,000	GRID LLC	5	4
Gigafactory Project	Storey	Connect to TRIC lead	Rail Connection	battery packs, drivetrains	2.5	$5,000,000	Tesla	5	4
Sierra Biofuels Plant	Storey	Connect to TRIC lead	Rail Connection	O/B syncrude feedstock	0	$0	Fulcrum BioEnergy	5	4
Innovation Park	Storey	Industrial Park	Rail Connection	TBD	0.1	$4,000,000	Blockchains, Inc.	5	4
Pyramid Commercial Center	Washoe	Connect to Fernley Industrial Lead	Rail Connection	TBD	1.7	$5,000,000	Reno Engineering	5	4

Table 4-3: Region 5 – Active Mines

FID	ID #	Name	Operator	Commodity	County	Y_U83N	X_U83E
58	59	**Churchill Mine**	Nevada Cement Co.	Limestone	Churchill	4427500	349540
67	68	**Fernley Operation Mine**	EP Minerals, LLC	Diatomite	Churchill	4410158	332267
77	78	**Huck Salt**	Huck Salt Co.	Salt	Churchill	4346860	374550
95	96	**Nightingale Pit**	Imerys Filtration Minerals, Inc.	Diatomite	Churchill	4422800	321060
101	102	**Popcorn Mine**	EP Minerals, LLC	Perlite	Churchill	4344290	345870
131	132	**Brady Hot Springs**	Ormat Nevada, Inc.	Electricity	Churchill	4407088	327912
132	133	**Brady Hot Springs**	Olam Spices and Vegetables, Inc.	Vegetable dehydration	Churchill	4406553	327273
134	135	**Desert Peak II**	Ormat Nevada, Inc.	Electricity	Churchill	4402148	332634
135	136	**Dixie Valley**	Terra-Gen Power, LLC	Electricity	Churchill	4424433	426925
144	145	**Patua**	Cyrq Energy	Electricity	Churchill	4383471	321797
145	146	**Salt Wells**	Enel North America, Inc.	Electricity	Churchill	4352375	364296
147	148	**Soda Lake Nos. 1, 2**	Cyrq Energy	Electricity	Churchill	4380171	341112
150	151	**Stillwater 2**	Enel Stillwater, LLC	Electricity	Churchill	4378439	366194
151	152	**Tungsten Mountain**	Ormat Nevada, Inc.	Electricity	Churchill	4391619	440784
46	47	**Basalite Dayton Pit**	Basalite Concrete Products, LLC	Sand, gravel	Storey	4357606	282597
60	61	**Clark Mine**	EP Minerals, LLC	Diatomite	Storey	4381500	295120
106	107	**River Canyon III**	Joy Engineering	Aggregate	Storey	4379781	286375

FID	ID #	Name	Operator	Commodity	County	Y_U83N	X_U83E
110	111	**Sierra Stone Quarry**	CEMEX Construction Materials Pacific, LLC	Aggregate	Storey	4372283	274829
120	121	**Trico Pit**	Gopher Construction Co.	Aggregate	Storey	4382000	283800

This industrial development in northwest Nevada is generating increased freight activity. The region currently accounts for over 50% of all freight movements in the entire state of Nevada and this continued commercial development will lead to further increases in freight volumes.

Freight flow data from TRANSEARCH®, a transportation database developed by IHS Global Insights, reveals that 75% of all freight by tonnage in northwest Nevada moves by truck. This equates to 5.5MM loaded truck movements annually. The actual number of truck movements on the region's roads and highways is even higher because many loaded truck movements create empty return trips.

Limited freight rail service is available in northwest Nevada but only 4.6MM tons of freight is transported by rail into or out of the region. This compares to 29.2MM tons of freight traveling by truck. There are several reasons, listed below, for the relatively small volume of rail tonnage. All of these issues are eminently addressable through better coordination, education, and strategic infrastructure development.

- Prospective and current property buyers and lessees who are making site location and logistics decisions are skeptical about rail service
- Developers and shippers often have limited knowledge of rail service design, including engineering, loading, unloading and transloading, and may not understand the physical suitability of their property for freight rail development
- Existing rail intermodal facilities serve only container-based freight with limited frequencies and routings

As thousands of acres of new industrial development create more freight activity there is a compelling need to implement a balanced freight transportation system in the region. Otherwise, increasing truck traffic in northwest Nevada will negatively impact quality of life and reduce the region's attractiveness for businesses, developers, and residents. The future without this intervention can be viewed firsthand with a visit to the Pennsylvania towns of Easton, Allentown, Lancaster, and Carlisle, now overburdened by trucks on local roads and interstates to and from non-rail served industry. Eastern Pennsylvania, like Nevada has become a hotbed of warehouse and distribution activity in support of its more-densely populated adjacent states.

C.1 Northwest Nevada Freight Transportation Statistics Report

C.1.1 Overview of Data Sources and Reporting

The 2020 Northwest Nevada Freight Transportation Statistics report utilized a variety of data sources to determine the estimated road and rail traffic that impact the region's surface-based freight transportation network. In this report, the following counties and regions were analyzed in relation to the rest of Nevada (RONV). Herein the "Region" analyzed is comprised of the following jurisdictions:

- Reno-Sparks
- Churchill County
- Lyon County

- Storey County
- Unincorporated Washoe County

Rail-based cargo flow data from the Surface Transportation Board (STB), combined with the truck-based flows provided by TRANSEARCH® data capture the unit volume, commodity descriptions, units, and tonnage. This enables detailed analysis of surface freight movements in the Region and the potential opportunities for modal conversion and other strategies for more efficient freight movement.

The data sources employed were:

1. The Surface Transportation Board's (STB) 2018 stratified rail carload waybill sampling
2. IHS-Markit TRANSEARCH® 2018 Truck Freight Flows

C.1.2 The STB Waybill Sampling of Rail Data

The STB Waybill Sampling is a stratified look at carload waybills (usually 1-3%) for all U.S. rail traffic submitted by those rail carriers terminating 4,500 or more revenue carloads annually. The data provided was for 2018, the most current year available. Waybill data has broad applications and is used by transportation practitioners as a primary source of information for the development of state transportation plans. In the case of the 2020 Northwest Nevada (NWNV) freight report, the STB dataset was transmitted to TRANSEARCH® where it was processed and formatted in a Microsoft Access database and transmitted to Strategic Rail Finance for analysis and reporting.

C.1.3 TRANSEARCH® Truck Data

Developed by IHS Global Insight, TRANSEARCH® is an extensive database of North American freight flows, compiled from more than one hundred industry, commodity, and proprietary data-exchange sources. The truck data provided was for 2018, the most current year available. TRANSEARCH® combines primary shipment data obtained from some of the nation's largest truck freight carriers with information from public, commercial, and proprietary sources to generate a base-year estimate of freight flows at the county level. Furthermore, TRANSEARCH® establishes market-specific production tonnages by industry or commodity, drawn mostly from IHS Global Insight's Business Markets Insights (BMI) database.

C.1.4 Commodity Code Descriptions

Both the STB Waybill Sampling and the TRANSEARCH® truck data classify and report using the Standard Transportation Commodity Code (STCC) scheme. STCC is a publication containing specific product information used on waybills and other shipping documents. A STCC code is a seven-digit numeric code consolidating into and representing 38 commodity groupings (STCC2) on which this Plan reports.

With respect to TRANSEARCH® truck data reporting, there is a unique commodity code that is particularly insightful and that requires additional explanation.

- **STCC2 42: Semi-trailers Returned Empty.** While these truck movements do not represent a physical commodity, they are significant in terms of unit traffic volume and illustrate the degree to which many truck moves are one-way loaded moves, returning in many instances to home terminals without return freight. STCC2-42 is reported throughout the document in the assessment of truck-flows.

C.1.5 Reporting Structure

The reporting of freight data is in tabular ranking format with additional supporting charts. Reporting covers three primary areas:

1. Top commodities for truck and rail expressed in units and tons covering all freight traffic flows
2. Top out-of-state trading partners to the region, expressed in units and tons covering all freight traffic flows
3. Comparative charts of unit and tonnage of the NWNV Region versus the rest of Nevada

Reporting on freight traffic flows is organized in the following order:

- **Outflows:** Freight originating in the region that terminates in out-of-state destinations
- **Inflows:** Freight originating in out-of-state locations and terminating in Nevada overall and the NWNV region
- **Intrastate:** Freight that both originates and terminates within Nevada and/or NWNV region
- **Through Traffic:** Freight passing through the State and Region with both originations and destinations outside of the State and the NWNV Region

C.2 Northwest Nevada Freight Flows Overview:2018 Truck and Rail Traffic

The 2020 Northwest Nevada freight statistics report incorporates the latest available 2018 freight data that reports traffic and commodity flows across the Region's road and rail transportation networks. SRF processed over 12MM records for the period and applied filtering to arrive at nearly 6.2MM records of truck and rail movements associated with NWNV.

The NWNV region and the overall Nevada data reflect an overwhelming reliance on trucking of commodities versus rail. For the NWNV region and the rest of Nevada, over 78% of all commodity flows are conducted by truck versus 22% by rail. In general, this datapoint may lead to the conclusion that there exists a long-term opportunity for the investment in rail-cargo infrastructure that would lead to truck-to-rail modal conversion.

C.2.1 Overview: Trucking Statistics

Table 2 depicts truck traffic expressed in both units and tonnage. This table, in combination with **Figures 1 and 2** provide a clear over-all depiction of truck-based traffic flows and the comparative context between the NWNV Region and the rest of Nevada. While the overall distribution of truck traffic between NWNV and the rest of the state is nearly equal (52% NWNV vs. 48% Rest of Nevada), individual flow types reveal unique characteristics. As an example, and as identified below, nearly 80% of the State's truck-based outflow tonnage originates from the NWNV Region. In the following sections of this report, a detailed presentation of traffic flow types will be addressed.

Table 2: 2018 NWNV Freight Flow Matrix: Distribution of Freight Flows: Truck Units and Tons[2]

Description	NWNV Truck Flows	Rest of Nevada Truck Flows	Total Nevada Truck Tonnage	NWNV Truck Flows	Rest of Nevada Truck Flows	Total Nevada Truck Flows
Traffic Flow	**Tonnage**	**Tonnage**	**Tonnage**	**Units**	**Units**	**Units**
Outflow	19,814,465	5,334,857	25,149,322	1,130,872	700,308	1,831,180
Inflow	9,482,497	14,956,982	24,439,479	1,243,946	771,173	2,015,119
Intrastate	18,092,477	21,567,750	39,660,227	1,784,028	2,073,792	3,857,820
Through	26,991,174	29,043,365	56,034,539	1,387,384	1,486,859	2,874,243
Total	**74,380,613**	**70,902,954**	**145,283,567**	**5,546,230**	**5,032,132**	**10,578,362**

Figure 1: Truck Unit Volume Percentage NWNV vs. Rest of Nevada[3]

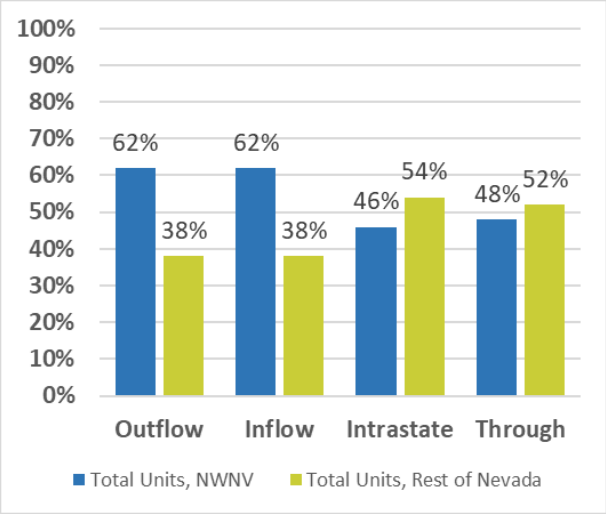
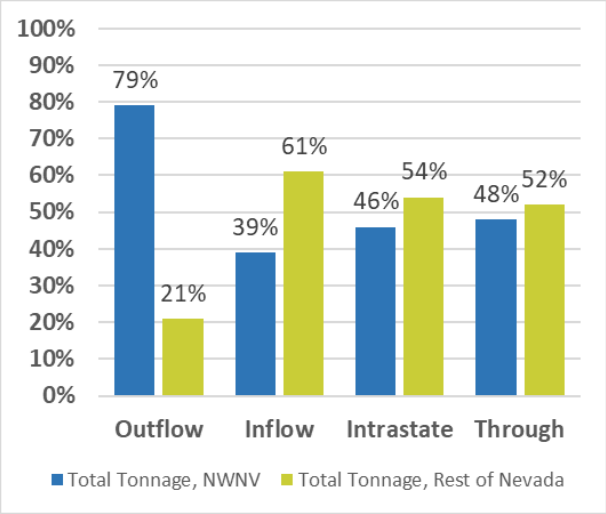


Figure 2: Truck Tonnage Volume Percentage NWNV vs. Rest of Nevada [4]



C.2.2 Overview: Rail Statistics

Table 3 depicts rail-based traffic expressed in both tonnage and units. This table, in combination with **Figures 3 and 4** provide a clear over-all depiction of rail-based traffic flows and a comparative context between the NWNV Region and the rest of Nevada. As with truck flows, there exists a near equal balance of overall rail-based traffic between NWNV and the rest of Nevada (51% NWNV vs. 49% Rest of Nevada). As with trucking, individual rail-based freight flow types reveal unique characteristics. As an example, and as identified below, nearly 63% of the State's rail-based inflow tonnage is destined for the NWNV Region. In the following sections of this report, a detailed presentation of traffic flow types will be addressed.

[2] Source: TRANSEARCH® Truck Data 2018
[3] Source: TRANSEARCH® Truck Data 2018
[4] Source: TRANSEARCH® Truck Data 2018

Table 3: 2018 NWNV Freight Flow Matrix: Distribution of Freight Flows: Rail Tons and Units[5]

Description	NWNV Rail Flows	Rest of Nevada Rail flows	Total Nevada Rail flows	NWNV Rail flows	Rest of Nevada Rail flows	Total Nevada Rail Units
Traffic Flow	*Tonnage*	*Tonnage*	*Tonnage*	*Units*	*Units*	*Units*
Outflow	1,264,581	**989,604**	**2,254,185**	**22,312**	**11,252**	**33,564**
Inflow	3,342,102	**1,936,898**	**5,279,000**	**47,392**	**31,064**	**78,456**
Intrastate	55,548	**7,080**	**62,628**	**564**	**100**	**664**
Through	17,757,491	**18,329,509**	**36,087,000**	**466,143**	**662,395**	**1,128,538**
Total	**22,419,722**	**21,263,091**	**43,682,813**	**536,411**	**704,811**	**1,241,222**

Figure 3: Rail Tonnage NWNV vs. Rest of Nevada[6]

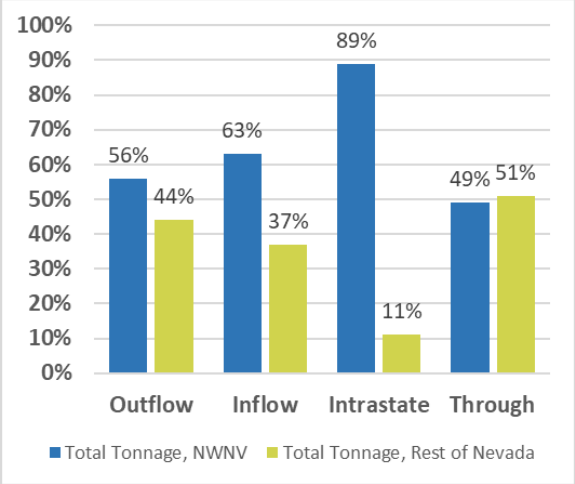
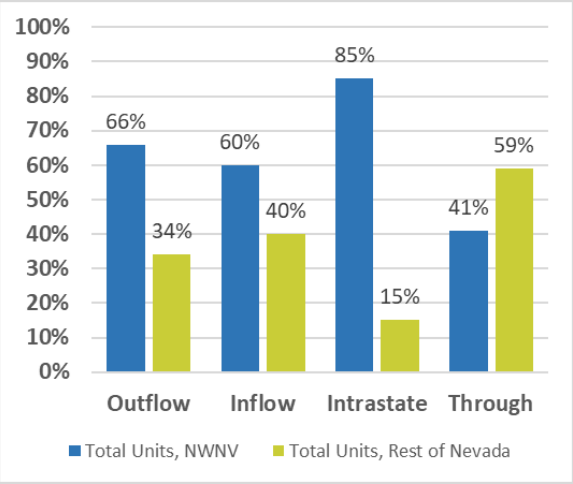


Figure 4: Rail Units NWNV vs. Rest of Nevada[7]



C.3 NWNV Road and Rail Freight Outflows:(NWNV Originations)

C.3.1 Truck Outflow Statistics

Table 4 ranks the top five commodities shipped by truck from NWNV to other states and is presented in both units and tonnage. As depicted in the table, the top five commodities represent an overwhelming percentage of overall shipments from the Region. The top five ranked commodities represent 90% of all truck-based commodity outflows. Thematic throughout this report is the magnitude of shipments of Non-Metallic Minerals (STTC2-14) and Clay, Concrete, Glass, and Stone (STTC2-32) from the Region. In terms of tonnage, these two commodities combined represent 70% of all truck-based commodity outflows.

Also, of importance, all tables that rank truck-based commodity flows include Return of Empty Trailers (STTC2-42). While these transportation movements do not represent a specific commodity and carry no

[5] Source: STB Waybill Sample 2018
[6] Source: TRANSEARCH® Truck Data 2018
[7] Source: TRANSEARCH® Truck Data 2018

tonnage, they do represent a critical component of truck volume activity, and its inclusion is a material element in the freight study report.

Table 4: 2018 NWNV Top Five Commodity Ranking: Truck Outflows[8]

NWNV Truck Outflow Traffic: Top Five Commodities					
STCC2	**Commodity Name**	**Units**	**% Units**	**Tons**	**% Tons**
32	Clay, Concrete, Glass, or Stone	346,789	31%	6,344,296	32%
14	Nonmetallic Minerals	313,796	28%	7,628,487	38%
42	Return of Empty Trailers	196,288	17%	0	0%
1	Farm Products	76,703	7%	1,376,786	7%
29	Petroleum or Coal Products	67,042	6%	1,614,907	8%
40	Waste or Scrap Materials	38,054	3%	953,114	5%
	All Other Commodities	92,201	8%	1,896,875	10%
	Total NWNV Commodities	**1,130,872**	**100%**	**19,814,465**	**100%**

Table 5: 2018 NWNV Top State Trading Partners: Truck Outflows[9]

NWNV Truck Outflows: State Partners				
State	**Units**	**% Units**	**Tons**	**% Tons**
CA	849,334	75%	15,254,291	77%
TX	31,422	3%	586,206	3%
UT	29,294	3%	433,677	2%
IN	15,110	1%	277,654	1%
WA	13,830	1%	271,173	1%
ALL Others	191,882	17%	2,991,465	15%
Total	**1,130,872**	**100%**	**19,814,465**	**100%**

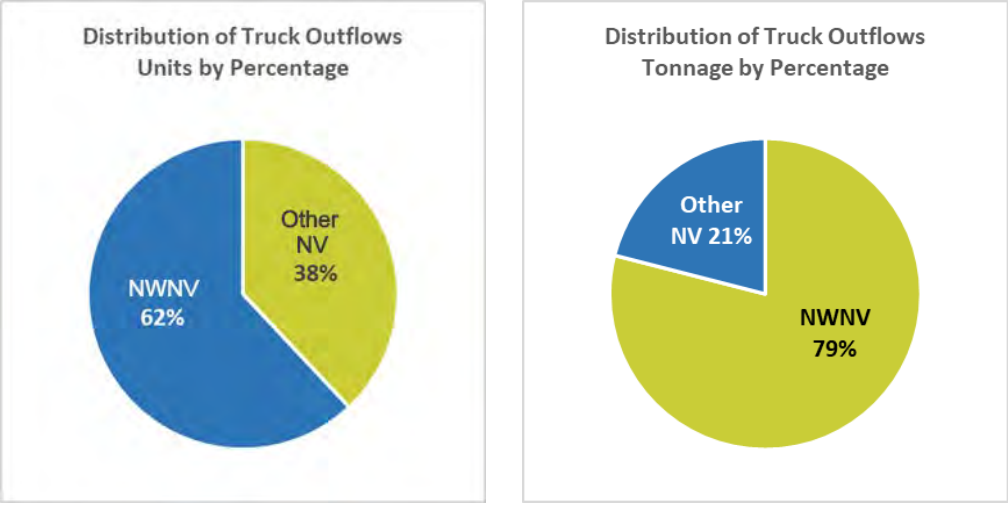
Table 5 identifies the NWNV's top five state partners for trucking outflows. The State of California leads with over 75% of all trucking volume. The next ranked trading partners of Texas, Utah, Indiana, and Washington account for 8% of the volume. The rest of the country with no state over 1%, comprises the remaining 15%.

Figure 5 demonstrates the concentration of truck-based outflow traffic from the NWNV region vs. the rest of Nevada. With over 62% of truck unit volume and nearly 80% of truck tonnage volume, it is clear that the Region is largely a production-based economy when compared to the rest of Nevada, especially compared to the consumption-based markets of the Las Vegas Region.

[8] Source: TRANSEARCH® Truck Data 2018

[9] Source: TRANSEARCH® Truck Data 2018

Figure 5: Truck-Based Outflows Versus the Rest of Nevada



C.3.2 Rail Outflow Statistics

Table 6 represents the top five rail-based commodity outflows. When compared to trucking, rail represents only 16% of the total regional outflow of commodities. While rail-based outflows represent a more diverse distribution of commodity haulage, the primary commodities of Non-metallic Minerals and Clay, Concrete, Glass, and Stone dominate rail-based cargo outflows, representing over 66% of all rail-based commodity outflow tonnage. Also, of note is STCC2-46 – Misc. Mixed Shipments which is directly tied to the movement of individual intermodal containers rather than rail cars. While intermodal containers represent only 8% of the total rail tonnage, they represent 29% of the unit movements.

Table 6: 2018 NWNV Top Five Commodity Ranking: Rail Outflows[10]

NWNV Rail Outflow Traffic: Top Five Commodities					
STCC2	**Commodity Name**	**Tons**	**% Tons**	**Units**	**% Units**
14	Nonmetallic Minerals	418,800	33%	5,356	24%
32	Clay, Concrete, Glass, or Stone	413,145	33%	3,900	17%
46	Miscellaneous Mixed Shipments	104,400	8%	6,440	29%
28	Chemicals or Allied Products	79,720	6%	1,160	5%
40	Waste or Scrap Materials	74,340	6%	944	4%
	All Other Commodities	174,176	14%	4,512	20%
	Total NWNV Commodities	**1,264,581**	**100%**	**22,312**	**100%**

Table 7 identifies the top five state rail trading partners. While California ranks number one in terms of tonnage, it does not represent the same degree of concentration as truck-based traffic to California. This

[10] Source: TRANSEARCH® Truck Data 2018

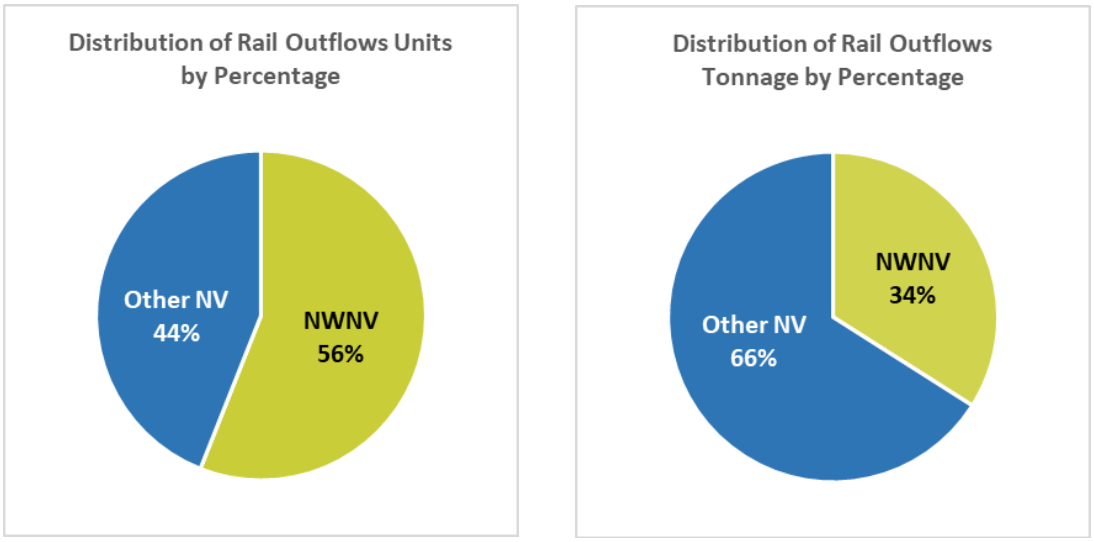
is due to the proximity between the two states and the economic rationale for rail-based transport versus trucking.

Table 7: 2018 NWNV Top State Trading Partners: Rail Outflows[11]

NWNV Rail Outflows: State Partners				
State	Tons	% Tons	Units	% Units
CA	524,485	41%	53,556	24%
IL	148,204	12%	7,820	35%
WY	93,360	7%	960	4%
PA	61,280	5%	1,320	6%
WA	52,004	4%	620	3%
ALL Others	385,248	30%	6,236	28%
Total	1,264,581	100%	22,312	100%

Figure 6 presents the distribution of rail-based outflow for the NWNV Region versus the rest of the state. While there is a concentration of rail freight tonnage from the region versus the rest of the State (56% vs. 44%), it does not demonstrate the significant bias toward truck-based movements, where nearly 80% of the outflow tonnage was moved by truck.

Figure 6: Rail-Based Outflows Versus the Rest of Nevada[12]



[11] Source: STB Waybill Sample 2018
[12] Source: STB Waybill Sample 2018

C.4 NWNV Road and Rail Freight Inflows (NWNV Destinations)

C.4.1 Truck Inflow Statistics

Relative to freight outflows, freight inflow traffic for both road and rail to the NWNV region is substantially lower in terms of tonnage. Whereas outflow tonnage from the region exceeds 21MM tons, inflow traffic is less than 13MM tons. This imbalance supports the fact that the Region is substantially a production-based economy rather than a consumption-based economy, especially when compared to the rest of Nevada, and in particular the Clark County-Las Vegas region. This indicates a positive result of the economic diversification work that has been done in Northern Nevada which may inform future opportunities for diversification in Southern Nevada.

Table 8 ranks the top truck inflow commodities. In terms of truck unit volume, inflow traffic of commodities is substantially more diverse when compared to outflows, which are dominated by extractive aggregates and byproducts. Attention should be paid to STCC2-42, Return of Empty Trailers. The return of these empty trailers represents 63% of all inflow truck traffic volume to the Region, nearly 800,000 units in 2018. This truck volume is primarily driven by the substantial volume of the outflow out-of-state traffic of non-metallic minerals and clay, concrete, glass, and stone, where there do not exist back-haul opportunities.

Table 8: 2018 NWNV Top Commodity Ranking: Truck Inflows[13]

NWNV Truck Inflow Traffic: Top Commodities					
STCC2	**Commodity Name**	**Units**	**% Units**	**Tons**	**% Tons**
42	Return of Empty Trailers	789,022	63%	0	0%
14	Nonmetallic Minerals	115,428	9%	2,806,094	30%
32	Clay, Concrete, Glass, or Stone	72,629	6%	1,169,282	12%
50	Warehouse/Distribution	56,556	5%	1,194,539	13%
20	Food or Kindred Products	47,286	4%	1,085,662	11%
1	Farm Products	41,668	3%	783,815	8%
	All Other Commodities	118,357	10%	2,443,106	26%
	Total NWNV Commodities	**1,243,946**	**100%**	**9,482,497**	**100%**

Table 9 represents the top state truck-based inflow trading partners to the NWNV region. California represents 84% of the total units and 65% of the truck freight tonnage. It is notable that the concentration of truck traffic from California is due to the significant volume related to the return of empty trailers. However, even absent that fact, California is a critical supply chain partner to the NWNV Region.

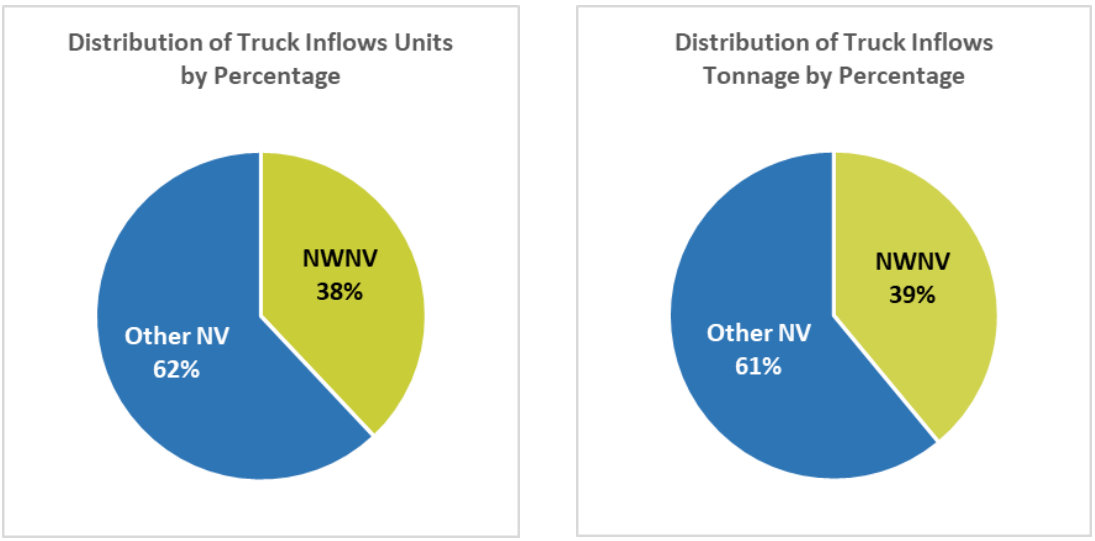
[13] Source: TRANSEARCH® Truck Data 2018

Table 9: 2018 NWNV Top State Trading Partners: Truck Inflows[14]

NWNV Truck Inflows: State Partners				
State	Units	% Units	Tons	% Tons
CA	1,040,716	84%	6,178,867	65%
ID	42,089	3%	640,043	7%
UT	39,371	3%	431,514	5%
OR	22,503	2%	396,312	4%
WA	16,390	1%	300,399	3%
All Others	82,877	7%	1,535,363	16%
Total	**1,243,946**	**100%**	**9,482,497**	**100%**

Figure 7 presents truck-based inflows for the NWNV Region versus inflows into the rest of Nevada. Thematic throughout the report, NWNV inflows of truck traffic units (62%) is largely due to the significant return of empty trailers. However, inflows of truck cargo tonnage demonstrate a majority of productive cargo tonnage inflows (61%) destined to consumption-based markets (Las Vegas Region).

Figure 7: Truck-Based Inflows Versus the Rest of Nevada[15]



C.4.2 Rail Inflow Statistics

Table 10 ranks the top 5 rail commodity inflows to the NWNV Region. While coal leads the way in terms of tonnage at 30%, it is on a steep decline relative to prior periods and this trend is expected to continue. Conversely, STCC2-28 Chemicals and Allied Products represents 27% of the total tonnage and based upon prior periods has risen dramatically and this trend is expected to continue. All other commodities represent 20% of the tonnage volume and a diverse array of commodities. Nevada electric power generation is projected to be completely coal-free by 2025.

[14] Source: TRANSEARCH® Truck Data 2018
[15] Source: TRANSEARCH® Truck Data 2018

Table 10: 2018 NWNV Top Commodity Ranking: Rail Inflows[16]

NWNV Rail Inflow Traffic: Top Five Commodities					
STCC2	Commodity Name	Units	% Units	Tons	% Tons
11	Coal	1,017,970	30%	8,804	19%
28	Chemicals or Allied Products	909,400	27%	10,260	22%
32	Clay, Concrete, Glass, or Stone	312,784	9%	2,900	6%
29	Petroleum or Coal Products	279,756	8%	3,384	7%
20	Food or Kindred Products	145,316	4%	1,912	4%
	All Other Commodities	676,876	20%	20,132	42%
	Total NWNV Commodities	**3,342,102**	**100%**	**47,392**	**100%**

Table 11 presents the top 5 State trading partners to the NWNV region. WY and UT represent nearly 40% of the inbound rail traffic and all other States represent 40% of the total tonnage. The Table demonstrates a significant diversity of inbound State trading partners, particularly of long-haul freight movements, which is traditionally the domain of rail.

Table 11: 2018 NWNV Top State Trading Partners: Rail Inflows[17]

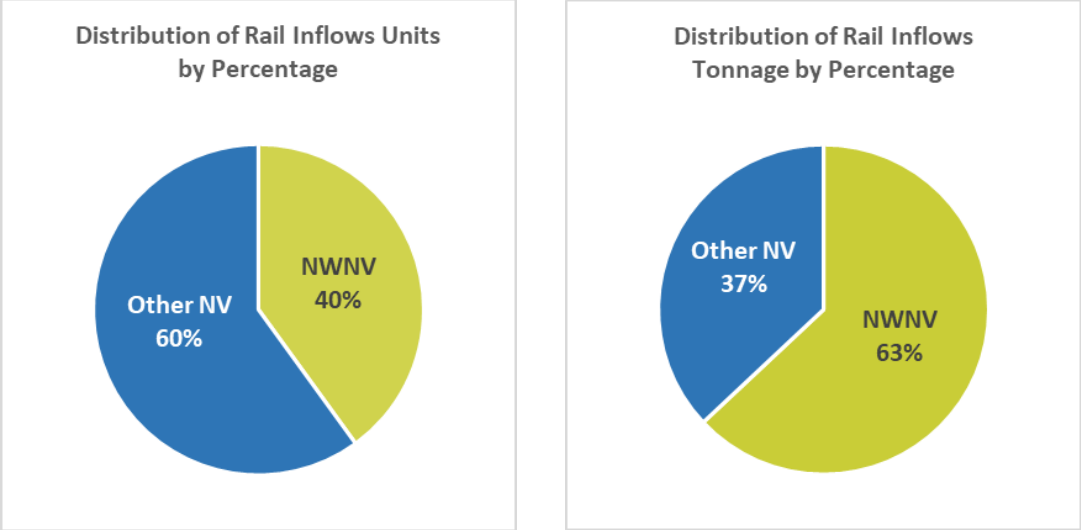
NWNV Rail Inflows: State Partners				
State	Tons	% Tons	Units	% Units
WY	877,770	26%	7,564	16%
UT	431,482	13%	4,122	9%
CA	304,952	9%	3,760	8%
IL	215,720	6%	10,440	22%
LA	174,320	5%	1,720	4%
All Others	1,337,858	40%	19,786	42%
Total	**3,342,102**	**100%**	**47,392**	**100%**

Figure 8 shows the distribution of rail inflow cargo in both tonnage and units for the NWNV region vs. the rest of Nevada. Note the inverse relationship between the tonnage and unit volume destined to the Region. This is because the NWNV region receives heavy weight car-load volumes while the rest of Nevada, particularly the Las Vegas region, receives a higher volume of low weight intermodal containers.

[16] Source: TRANSEARCH® Truck Data 2018

[17] Source: TRANSEARCH® Truck Data 2018

Figure 8: Rail-Based Inflows Versus the Rest of Nevada[18]



C.5 NWNV Road and Rail Intrastate Freight Flows

Intrastate traffic to and from the NWNV Region to the rest of Nevada is almost entirely truck based, representing 99.7% of total intrastate cargo tonnage. Intrastate rail traffic is virtually non-existent, and the State of Nevada's lack of intrastate rail infrastructure is a deficiency that should be addressed.

Table 12 ranks the top commodities moving into and out of the NWNV region to the rest of Nevada. Over 55% of the traffic is related to the return of empty trailers. Thus, virtually all intrastate truck moves are one-way loads and are returned to the station without any cargo, so only 45% of the truck units flowing into and out of NWNV carry productive cargo. Also as expected, intrastate flow of nonmetallic minerals and clay, concrete, glass, and stone represent 84% of the total tonnage and 38% of the unit volume.

Table 12: 2018 NWNV Top Commodity Ranking: Truck Intrastate Flows[19]

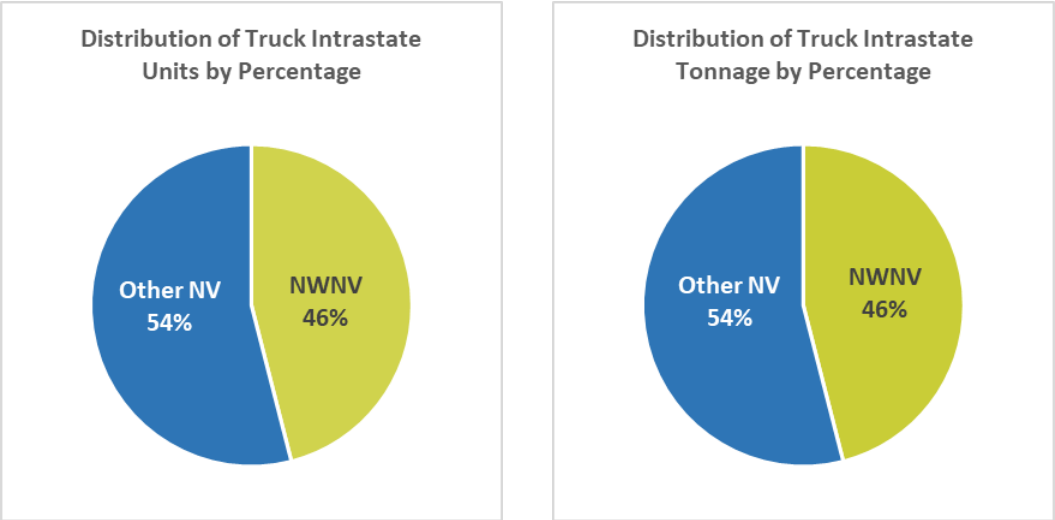
NWNV Truck Intrastate Traffic: Top Commodities					
STCC2	Commodity Name	Units	% Units	Tons	% Tons
42	Return of Empty Trailers	974,153	55%	0	0%
14	Nonmetallic Minerals	480,811	27%	11,688,684	65%
32	Clay, Concrete, Glass, or Stone	196,454	11%	3,484,789	19%
29	Petroleum or Coal Products	57,849	3%	1,404,053	8%
50	Warehouse/Distribution	36,905	2%	683,593	4%
1	Farm Products	16,551	1%	336,382	2%
	All Other Commodities	21,305	1%	494,976	3%
	Total NWNV Commodities	**1,784,028**	**100%**	**18,092,477**	**100%**

[18] Source: STB Waybill Sample 2018

[19] Source: TRANSEARCH® Truck Data 2018

Figure 9 presents the distribution of truck-based intrastate truck traffic between NWNV and the rest of Nevada. In terms of tonnage and units, NWNV represents 46% of Nevada's intrastate traffic.

Figure 9: Intrastate Truck Traffic vs. Rest of Nevada[20]



C.5.1 Truck Through-Traffic Statistics

As stated previously in this analysis, through-traffic is defined as cargo movements that neither originate nor terminate in the NWNV region, but simply pass through the Nevada road and rail system. **Table 13** represents the top truck-based commodities passing through NWNV Region. Farm and food products lead the way with over 52% of the unit volume and 56% of the tonnage. Remaining commodities represent a wide range, where All Other Commodities represent 28% of the volume and no single commodity represents more than 3% of the truck-based through traffic.

Table 13: 2018 NWNV Top Commodity Ranking: Truck Through-Traffic[21]

NWNV Truck Through Traffic: Top Five Commodities					
STCC2	Commodity Name	Units	% Units	Tons	% Tons
1	Farm Products	408,662	29%	7,848,964	29%
20	Food or Kindred Products	319,173	23%	7,326,221	27%
32	Clay, Concrete, Glass, or Stone	105,083	8%	1,766,396	7%
24	Lumber or Wood Products	60,221	4%	1,561,098	6%
40	Waste or Scrap Materials	52,864	4%	1,272,950	5%
42	Return of Empty Trailers	50,031	4%	0	0%
	All Other Commodities	391,350	28%	7,215,545	27%
	Total NWNV Commodities	**1,387,384**	**100%**	**26,991,174**	**100%**

[20] Source: TRANSEARCH® Truck Data 2018

[21] Source: TRANSEARCH® Truck Data 2018

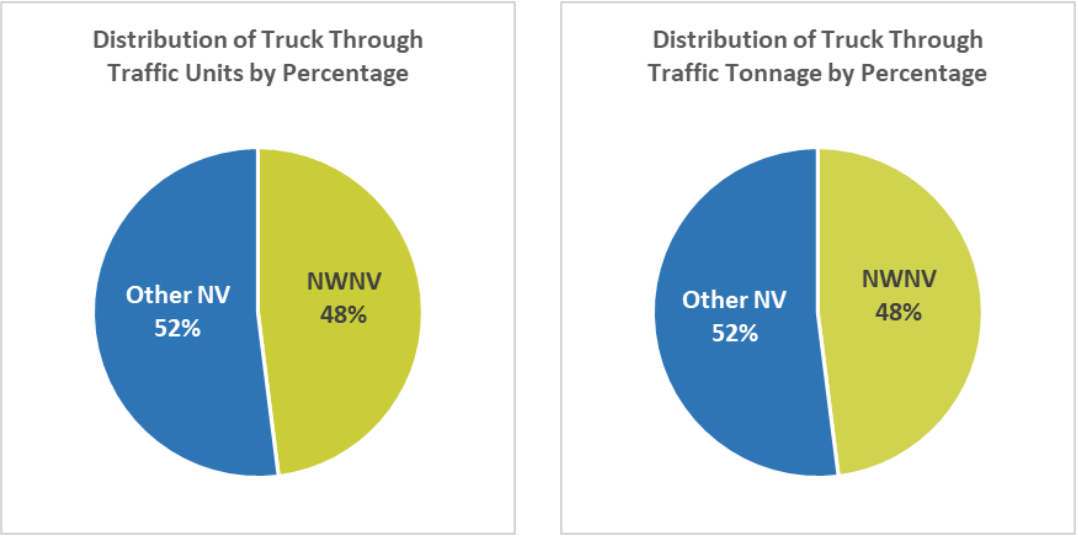
Table 14 presents the top 10 ranked State origin and destination pairs for truck-based commodities that pass through the NWNV Region. Of the 225+ identified State O-D pairs, the top 10 represent 54% of the total volume and the remaining 215 O-D pairs represent 46% of the total truck-based through traffic volume.

Table 14: 2018 NWNV Top State Origination/Destination Pairs for Truck Through Traffic[22]

NWNV Truck Through Traffic: State Partners					
Origination	Destination	Units	% Units	Tons	% Tons
ID	CA	211,891	15%	4,515,986	17%
UT	CA	98,414	7%	1,969,184	7%
CA	ID	98,394	7%	1,292,742	5%
CA	UT	68,611	5%	1,238,149	5%
MT	CA	55,281	4%	1,177,550	4%
WI	CA	53,059	4%	1,015,417	4%
MN	CA	52,036	4%	1,048,161	4%
CO	CA	40,790	3%	791,029	3%
IL	CA	37,123	3%	688,436	3%
OH	CA	36,098	3%	651,938	2%
All Others		635,688	46%	12,602,582	47%
Total		**1,387,384**	**100%**	**26,991,174**	**100%**

Figure 10 presents the distribution of truck- based unit and tonnage volume for the NWNV region versus the rest of Nevada. As can be seen, the NWNV region represents 48% of Nevada State truck-based through traffic in both truck units and tonnage.

Figure 10: Truck-Based Through-Traffic Versus the Rest of Nevada[23]



[22] Source: TRANSEARCH® Truck Data 2018
[23] Source: TRANSEARCH® Truck Data 2018

C.5.2 Rail Through-Traffic Statistics

Table 15 represents the top-ranked rail-based through-traffic commodities. As with trucking, farm and food products represent a significant proportion of the total rail-based commodity tonnage at over 52%.

It is important to note that the STB does not differentiate between the reporting of rail car units and domestic or international containers units. However, rail car units are likely to weigh three to four times more than containers, which are weight limited by truck regulations. As can be seen in the table below STCC2-46 Misc. Mixed Shipments is composed of a significant percentage of domestic and international containers. As illustrated, this commodity represents 31% of the total unit volume and only 14% of the tonnage. Conversely, farm products are transported primarily by much larger capacity rail cars and represent 26% of the total tonnage and only 10% of the total units. Domestic and international containers are also partially represented in the All Other Commodities category and represent 28% of the total units and 17% of the total tonnage.

Table 15: NWNV Top Commodity Ranking: Rail Through-Traffic[24]

NWNV Rail Through Traffic: Top Five Commodities					
STCC2	**Commodity Name**	**Tons**	**% Tons**	**Units**	**% Units**
1	Farm Products	4,661,869	26%	48,311	10%
20	Food or Kindred Products	4,630,017	26%	106,799	23%
46	Misc. Mixed Shipments	2,489,393	14%	144,648	31%
11	Coal	1,466,571	8%	12,022	3%
28	Chemicals or Allied Products	1,429,446	8%	23,483	5%
	All Other Commodities	3,080,195	17%	130,880	28%
	Total NWNV Commodities	**17,757,491**	**100%**	**466,143**	**100%**

Table 16 ranks the top origination and destination pairs for rail-based through traffic for the NWNV Region. Out of the 43 identified O-D State Pairs, the top 10 ranked State pairs represent 85% of the total tonnage. Of note are the 2nd and 3rd ranked trade partners of California and Illinois, which are heavily influenced by the movement of container traffic.

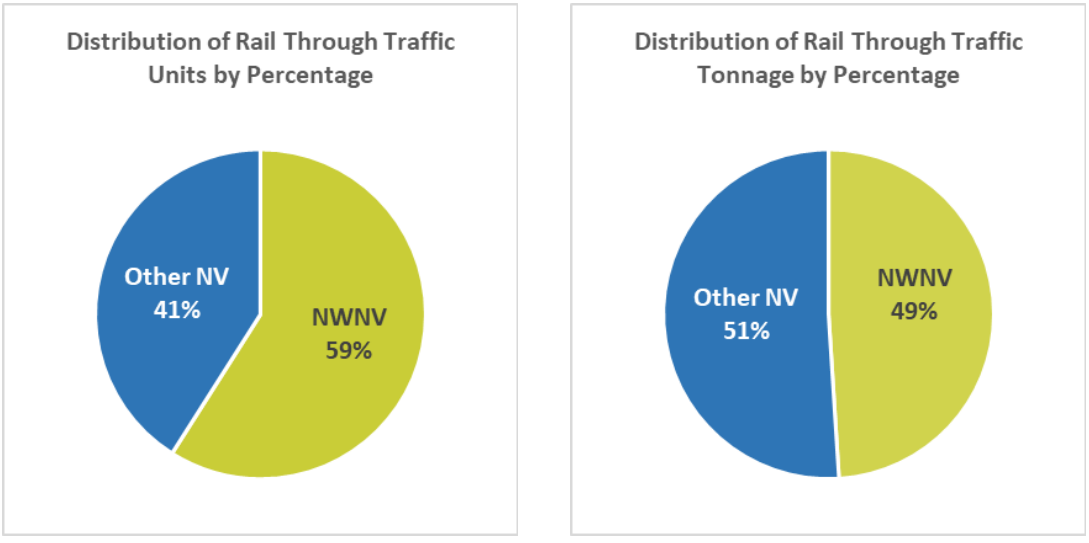
[24] Source: TRANSEARCH® Truck Data 2018

Table 16: 2018 NWNV Top State Origination/Destination Pairs for Rail Through Traffic[25]

NWNV Truck Through Traffic: State Partners					
Origination	Destination	Tons	% Tons	Units	% Units
NE	CA	3,078,686	17%	30,649	7%
IL	CA	2,308,348	13%	119,578	26%
CA	IL	2,081,481	12%	79,189	17%
UT	CA	2,079,103	12%	34,779	7%
IA	CA	199,813	11%	27,524	6%
MN	CA	1,442,505	8%	14,401	3%
CA	UT	845,974	5%	2,799	6%
ID	CA	412,705	2%	4,031	1%
CO	CA	388,857	2%	14,410	3%
MO	CA	374,472	2%	16,661	4%
All Other		2,745,551	15%	96,921	21%
Total		**17,757,491**	**100%**	**466,143**	**100%**

Figure 11 represents the distribution of rail cargo through-flows between the NWNV Region and the rest of Nevada. In terms of total rail tonnage, there is a near equal distribution. With respect to rail units, NWNV represents 41%. This is directly attributed to through-traffic of intermodal containers which are heavily biased towards the major ports of Los Angeles and Long Beach.

Figure 11: Rail-Based Through-Traffic Versus the Rest of Nevada[26]



[25] Source: TRANSEARCH® Truck Data 2018
[26] Source: TRANSEARCH® Truck Data 2018

D. The Goal of a Sustainable Freight System

Achieving the NNDA's vision of a prosperous, resilient economy for northwest Nevada requires a freight system that supports the economic ecosystem of the region. This system must balance the use of truck and rail appropriately. This provides economic, environmental, and social benefits to the state's businesses and residents in multiple ways:

- Improved quality of life in the community from a transportation system that uses rail as much and as safely as possible, replacing thousands of daily truck journeys
- Increased economic development opportunities from new logistics services and freight-oriented industrial development
- Local economic development with lower public burden for road construction and maintenance
- Land valued higher given its vital location on a trade corridor between the 5th largest economy in the world (California) and the rest of North America
- More profitable and growing businesses resulting from lower transportation costs, extended market reach, and integrated logistics services

This study considers the economic feasibility of a Multimodal Freight Facility, the practical options for locating this in the Fernley region, and the scale of freight-based economic development. This report is not an environmental impact study nor deep analysis of the quality of life implications from an enhanced freight system. However, the analysis reported herein uncovers the volume of existing and future truck trips that could be replaced by rail in the region. In 2015, the Congressional Budget Office reported[27] that trucks emitted 300% more PM, NO_x and CO_2 per ton-mile of freight than rail and the accident risk for trucks was between 700% and 1000% higher than rail. The implication of a sustainable freight system for the study region therefore includes many non-economic benefits such as safer roads, cleaner air, reduced congestion, and increased attractiveness of the region to incoming residents vital for its continued economic development.

E. Study Approach

This study, completed in conjunction with the Nevada State Rail Plan (NVSRP) detailed the following informational and geographic datasets for the region:

- Potential rail service growth projects
- Major land developments
- Active mines

[27] Source: Austin, D. (2015, March). Pricing Freight Transport to Account for External Costs [Editorial]. Working Paper Series. Retrieved 2015, from https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/workingpaper/50049-Freight_Transport_Working_Paper-2.pdf.

- Truckload shippers that are not located adjacent to a rail line
- Nevada Inventory of Industry—Businesses with sidetracks and nearby truckload shippers including:
    - Private sidetracks owned by active and inactive rail shippers and receivers
    - UP-owned in-service sidetracks that are not used for linehaul or switching operations
    - Future sidetracks that could be built by truckload users adjacent to UP right-of-way

The databases used as sources were:

1. The SCRS (Serving Carrier Reciprocal Switching) database maintained by Railinc, which is a wholly owned subsidiary of the large U.S. railroad trade association, The Association of American Railroads. SCRS purports to itemize all private sidings in the U.S. by Customer Name, Station Name, Street Address, Serving Carrier, Phone, and other information. This resource proved to be only about 70 percent accurate for Nevada but was a good starting point.
2. Google Maps, to verify the existence of sidings in SCRS, to identify sidings not listed in SCRS, and to identify facilities that appear to be handling truckload lots next to railroad R-O-W.
3. Nevada county online tax maps, to identify the parcel ID number for specific lots where the operator of the facility is not shown on Google Maps.
4. Nevada county online property records, to find the owner, address, and acreage of specific parcels using the parcel ID number.
5. Internet search engines, to find the customer name associated with an address.
6. Web pages, to gather specific information about their products and telephone numbers.
7. Union Pacific maps, specifically ZTS maps that show track numbers designated by UP for individual customers and other UP-owned tracks.

The information gleaned from these databases was supplemented and confirmed when necessary by on-site visits and telephone calls. The SRF team has developed, as part of the NVSRP, an innovative set of data tools custom-designed to assist rail development in the region and state. These data tools, including maps, identify active and non-active rail sidings, truckload shippers, truckload shippers located adjacent to a rail line, and commercial projects that can benefit from expanded rail service.

All location data includes addresses and contact information and this catalogued data is accessible to stakeholders and interested third parties through an interactive database, spreadsheets, and digital mapping system.

In addition to the above sources utilized in the NVSRP, highly detailed truck and rail freight data for Reno, Churchill, Lyon, Storey, and Washoe Counties was specifically obtained for this study from TRANSEARCH®, a transportation database developed by IHS Global Insights.

E.1 Engagement with Land Developers

Our approach did not rely solely on statistical records and datasets. During the assignment SRF reached out to multiple land developers that are actively investing in Fernley area projects to understand their objectives and interest in sustainable freight systems and specifically an intermodal facility. Our analysis pinpoints specific land holdings and adjacent road and rail infrastructure of each development with maps of each project and their relation to each other. Stakeholders were all open and forthcoming with details

of their projects and expressed appreciation for the attention to rail development that NNDA and NDOT are bringing to the area.

Nine developers in Region 5, the Fernley, Hazen, Fallon, and Silver Springs area of Northern Nevada were contacted in August 2020 by SRF and requested to complete a short questionnaire regarding their development plans for land use, target markets and utilization of rail.

The developers contacted control roughly 40,000 acres of land and are planning to develop over 250,000,000 square feet of industrial space. All the respondents projected opening in 2021 or 2022.

All these developers are located aside or close to the UPRR Main line and 75% of respondents had industrial lead track status in place or accessible. Five of the eight respondents already had their industrial sites rail engineered with Union Pacific approval in place. These five development sites equate to over 9,000 acres of industrial space.

Three quarters of respondents shared their projected industrial use and markets, and these were overwhelmingly related to intermodal and transload services supporting high-tech manufacturing and logistics tenants. One developer also planned to include affordable housing in addition to industrial development.

All developers reported a flat or gently sloping land topography, well suited for rail.

The majority of developers felt they had adequate or strong management strength but were mixed on rail experience where 25% already stated 'operator selected', 25% reported 'significant' and the remaining 50% responded they had minimal rail experience.

Regarding capital status all but one of the respondents reported having capital for development already available or in process. However, when questioned on specific rail funding a majority, 63% of respondents, stated they required capital support.

Three respondents had obtained switching quotes from Union Pacific and a further respondent had conceptual drawings approved by Union Pacific and BNSF.

E.2 Engagement with Transportation Stakeholders

In addition to land developers a broad eco-system of relevant stakeholders to the study were contacted. Existing shippers in the region, railroad operators UP and BNSF, and Caltrans and the Port of Oakland were all engaged directly to capture their views on, and potential support for, new rail infrastructure and specifically an intermodal facility in the study region. The Port of Oakland has subsequently made rail service to northern Nevada one of their top business development goals.

The study took a holistic and inclusive approach whereby detailed data, accurate maps and existing freight networks were utilized in conjunction with information from stakeholder liaison. This approach enabled 'real-world' testing of data accuracy, a continuous qualification of assumptions and, crucially, a platform to test the viability and stakeholder support for proposed solutions and subsequent recommendations in this report.

Port of Oakland's Executive Director Chris Lytle outlined in a 2017 Press Release[28] that he, "wants more rail business…rail transport is the preferred means of shipping cargo in and out of the Port. It takes trucks off the road," he said, "reducing freeway congestion and diesel emissions." His statement continued that in 2016 "the Port completed a $100 million rail storage yard with 41,000 feet of track."

In a December 2019 Business and Rail Overview Report, attached as Appendix 1, the port specifies short haul rail serving Nevada distribution centers as a strategic initiative.

F. Key Findings

- A sustainable freight system is necessary for the study region to manage dependency on truck transportation. The highway infrastructure cannot support the ongoing surge in the region's commercial development if this growth continues to be truck focused. More use of rail for freight flows is necessary for the continued economic development of the study region.

- A new multimodal freight facility situated in the study region would have a clear commercial business case converting international and domestic rail service between the Port of Oakland region and the eastbound geography that is currently serviced by truck. Furthermore, a new multimodal freight facility could attract a sizeable portion of existing international intermodal container unit volume and domestic railcar trade lane traffic between northwest Nevada and the high-volume consumption markets of San Francisco/Oakland and Los Angeles. Additionally, the facility would generate new rail-based freight flows.

- An Integrated Multimodal Cargo Transfer Facility (IMCTF) is required in preference to a traditional Intermodal Container Transfer Facility (ICTF). Optimizing the value and utilization of the Fernley facility requires freight type flexibility (for example bulk minerals as well as containers) and development of adjacent land for logistics services not available in traditional container facilities.

- The study region is ideally located for an Integrated Multimodal Cargo Transfer Facility (IMCTF) with its major east-west arteries serving California's markets and ports and its local growth as a growing economic development area. Fernley is the obvious location in the study region to build an intermodal facility, due to the combination of available land and adjacencies to I-80, U.S. 95, and the Union Pacific Railroad.

- The availability of land is a key success factor in developing an IMCTF. Northwest Nevada has a very high commercial space absorption rate having experienced seven continuous years of 3.5MM sq.

[28] Source: Zampa, M. (2017, May 27). Port of Oakland seeks to move more cargo via rails. Retrieved September 18, 2020, from https://www.portofoakland.com/press-releases/port-oakland-seeks-move-cargo-via-rails/

ft. of net absorption to 2019.[29] Our analysis identifies that Fernley is the sole area between the California border and Hazen with sufficient available space, and flat topography, in a commercial development zone, located aside the rail and highway network. (Two topographical maps are attached as Appendices 2 and 3 showing the paucity of available land in the region.)

G. Business Case

G.1 Overview

The objective of this report is to determine the commercial viability of establishing an Integrated Multimodal Cargo Transfer Facility (IMCTF) in the northwest Nevada region of Fernley. The basis and findings of this report rely heavily upon objective commodity truck flow data provided by TRANSEARCH®, a transportation database developed by IHS Global Insights. In some instances, the study relied upon reasonable estimates that are clearly noted in this report. Furthermore, the study employed an analytic process for this report.

From a commercial perspective, two primary questions need to be addressed in the affirmative:

- Does the freight data analysis support the required volume thresholds for the development and operation of the proposed facility?
- Will the design and service infrastructure of the IMCTF provide shippers with both service enhancement and cost savings that are sufficient enough to compel shippers to convert truck-based cargo to and from the Oakland and San Francisco region and the potential diversion of truck-based cargo currently destined and originating to the southern California Port region?

To attract the largest potential audience of shippers, the facility design will need to incorporate the latest thinking related to in-land transportation and logistics. Rather than a traditional intermodal container transfer facility (ICTF), it is highly recommended that this facility be designed as an integrated multimodal cargo transfer facility (IMCTF). Compared to traditional ICTFs, this facility design allows for:

- The receipt and discharge of cargo from all modes of transport and situations, including:
    a. the interception of domestic truck and rail-based traffic that is currently transloaded to international containers at or near ocean port facilities
    b. inbound transload and cross-docking of intermodal containers to domestic trucking
    c. truck-to-rail car transloading of domestically bound cargo
    d. conventional ICTF single-mode trucking (drayage) of preloaded and empty container transfers to and from intermodal rail ramps
- The siting of integrated cargo commodity handling infrastructure and services. This includes but is not limited to:
    - dry and cold chain storage
    - ground and open-pit discharge and storage

[29] "Reno Industrial MarketView Q2 2020," CBRE, source link, (2020)

- cross-docking
- private chassis service
- phytosanitary
- USDA and customs inspection services
- other specialized commodity handling requirements.

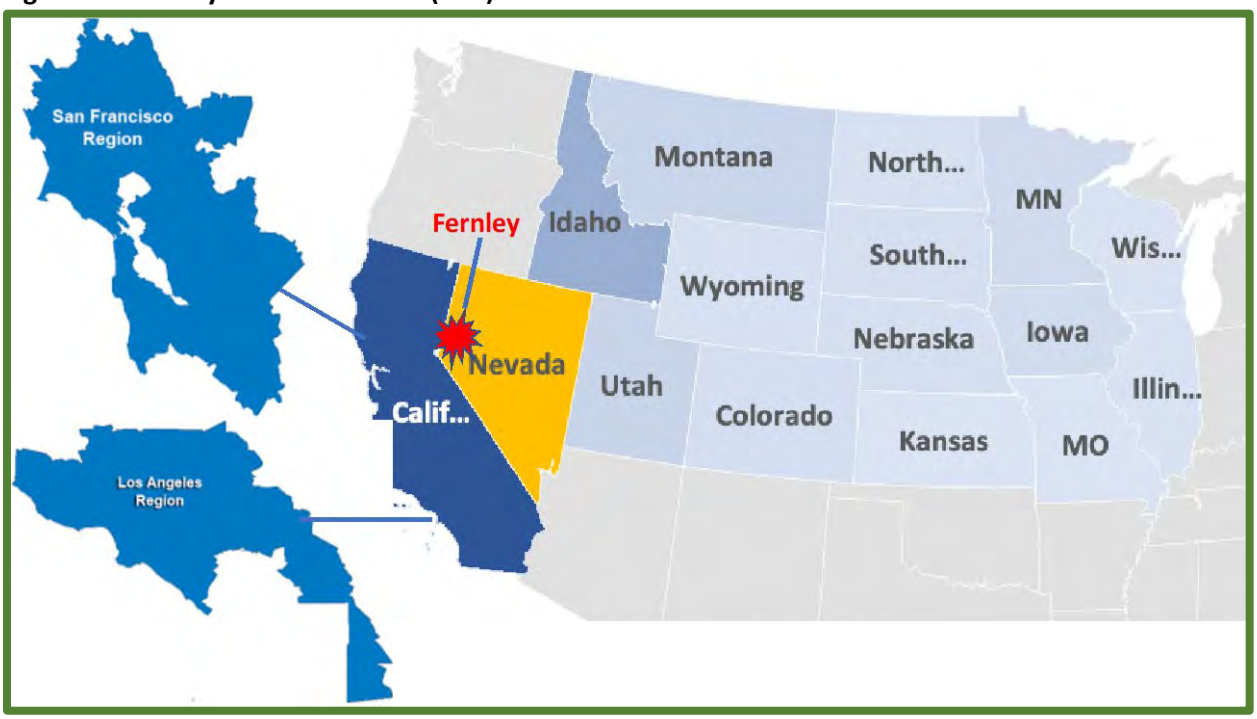
Our findings in this report suggest a clear commercial business case for an IMCTF facility in Fernley; providing intermodal and domestic rail service between the Port of Oakland region and the extensive eastbound geography that is primarily served by truck. Furthermore, based upon the above conditions and data analysis set forth in this study, SRF estimates that the Fernley IMCTF would attract a range of 160,000 to 215,000 of the existing international intermodal container unit volume and potentially significant domestic railcar trade lane traffic between the Fernley IMCTF and the high-volume consumption markets of San Francisco/Oakland and San Pedro Bay.

G.2 Defining the Geographic Market

An objective data-driven process was applied to determine the geographic markets that would support the unit volume threshold requirement for new rail infrastructure in the Fernley, NV region. This analysis identified all domestic and international truck-based through-traffic between the Oakland/San Francisco region and trade partner states east of Nevada that specifically pass through the Reno, NV corridor. For this report, this corridor region is called the Fernley Catchment Area (FCA) and consists of 14 states east and north east of Nevada.

Upon the identification of the FCA, the study also observed and reported domestic and international truck traffic from the FCA to and from the Los Angeles region and its Ports of Long Beach, Los Angeles, and San Diego. To the extent to which this cargo is destined to or from international markets, there is a compelling commercial business case for the deflection of this cargo from the Los Angeles area ports to the Port of Oakland via the IMCTF at Fernley.

Figure 12: Fernley Catchment Area (FCA)



G.3 Why Fernley

There are a host of strategic considerations and stakeholder requirements that must be met to ensure that the Fernley project becomes a successful operation. These considerations and requirements are intertwined. However, the over-arching key to success is simply volume. As depicted in **Table 17** and reported further in this study, there exists substantial truck-based traffic volume between Northern Nevada, the Fernley Catchment Area and the port regions of Oakland and Los Angeles. The following sections of this report identify strategic advantages of the proposed IMCTF at Fernley.

G.3.1 Strategic Location and Connectivity

The proposed facility in Fernley possesses strategic attributes that allow for substantial opportunities for road-to-rail conversion. Fernley is located along the east-west transit corridor of both I-80 and the Union Pacific Railroad, where an intermediate IMCTF would be ideally situated between the Fernley Catchment Area and the San Francisco/Port of Oakland region. In addition, Fernley is ideally situated to serve northern Nevada producers of domestically bound aggregates to the high-density markets of San Francisco and perhaps Los Angeles.

G.3.2 Existing Truck-Based Traffic

The Fernley region is a major thoroughfare for both domestic- and international-bound truck traffic to the high-density market regions of the San Francisco/Port of Oakland region and potential deflection of international traffic moving to the southern California ports. This report provides top-down truck-based volume reporting statistics in the section titled Northwest Nevada Freight Transportation Statistics Report. The study reveals substantial conditional volume available to the Fernley IMCTF.

Table 17: Comprehensive Truck Volume Table: FCA States and Corresponding Port Regions

Fernley Catchment Area (FCA)	Oakland/SF Domestic Truck	Oakland/SF Int'l Units	Oakland/SF Total Units	LA Region Domestic Units	LA Region Int'l Units	LA Region Total Units	Grand Total Units
Colorado	62,030	3,655	65,685	172,003	22,318	194,321	260,006
Idaho	185,713	4,341	190,054	136,771	8,509	145,280	335,334
Illinois	37,540	767	38,307	47,179	15,345	62,524	100,831
Iowa	30,857	1,684	32,541	32,035	10,974	43,009	75,550
Kansas	11,361	1,026	12,387	36,292	6,635	42,927	55,314
Minnnesota	49,357	1,886	51,243	74,945	13,283	88,228	139,471
Missouri	17,407	878	18,285	32,200	4,841	37,041	55,326
Montana	42,296	2,251	44,547	71,934	2,446	74,380	118,927
Nebraska	18,324	3,164	21,488	24,707	12,766	37,473	58,961
North Dakota	13,897	309	14,206	30,228	2,710	32,938	47,144
South Dakota	18,863	1,350	20,213	27,322	4,959	32,281	52,494
Utah	121,641	10,862	132,503	269,617	49,306	318,923	451,426
Wisconsin	49,580	1,543	51,123	74,162	9,808	83,970	135,093
Wyoming	32,107	1,940	34,047	53,001	5,490	58,491	92,538
Total	690,973	35,656	726,629	1,082,396	169,390	1,251,786	1,978,415

Source: TRANSEARCH® 2018 Truck Data

G.3.3 Land Availability

One key to the facility design of an IMCTF is land availability. In the absence of sufficient developable land adjacent to the Union Pacific Railroad, the opportunity at Fernley would be relegated to traditional ITCF design, which would lack adequate site capabilities to attract sufficient freight volume to justify further consideration. As it were, the Fernley region possesses significant large-scale land availability, both contiguous and non-contiguous, to support both an IMCTF single-site facility and adjacent non-contiguous parcels to support commercial and industrial development that would naturally arise from the advanced and highly efficient service provided by an IMCTF.

G.3.4 Fernley in Summary

So, why Fernley? It possesses ideal rail and road connectivity, evidence of sufficient potential freight volume, and substantial land availability.

G.4 About IMCTFs

To best understand contemporary thinking related to inland terminals and how they support effectiveness, efficiency, and value in the supply chain, particularly to the land transportation portion of the supply chain, one must understand the differences between the current intermodal container transfer facility (ICTF) models operating today as compared to the proposed IMCTF. We must understand their designed roles, their current limitations, and the pain points that have developed because of ever-growing changes within the cargo supply chain itself.

G.4.1 Traditional ICTF (Intermodal Container Transfer Facility)

The primary role of the traditional ICTF is to transfer loaded or empty containers to/from the train cars, to/from the ITCF facility, and then to/from trucks. This traditional model is typically run by an intermodal

operator, such as a Class I railroad (i.e. Union Pacific), which oversees the operations portion of transferring containers to and from railcars and trucks.

G.4.1.1 Pain Points of the Traditional ICTF model

Shipper/Trucker Perspective

- Facilities are typically open for 8-to-10-hour shifts Monday to Friday and closed on weekends and all major/traditional holidays.
- Process delays are common and include factors such as heavy truck volume accessing the terminal, onsite chassis availability, and limited electrical sources to power refrigerated containers.
- Multiple point processing, when truckers must make several stops to secure chassis and containers can add substantial time to the drayage process.
- Inland terminal locations in densely populated areas require truckers to manage congestion and safety issues that can add time to container moves.
- Land-locked urban areas lack available land for inland terminals and related operations.

G.5 Latest thinking in Integrated Multimodal Cargo Transload Facility (IMCTF) Design

The IMCTF model design allows for the inflow and outflow of cargo from all modes of transport, with integrated on-dock cargo handling and services resulting in significant shipper savings. **The IMCTF is built around identifying a strategic location where sufficient volumes of truck cargo/shipments intersect with primary rail lines that can provide the most efficient land transportation method to/from specific major destination points.** This concept design is limited only by the availability of large-scale land development, which in the case of Fernley is not a factor.

G.5.1 Important operational service differences of the IMCTF model

The IMCTF model focuses on driving efficiency through combining cargo transloading operations in a strategic location. The IMCTF provides for the following:

- Commodity specialization including in-gate processing infrastructure and dry- and cold-storage capabilities
- Bulk commodity transfer stations where aggregates and other bulk commodities can be received by truck and transloaded to rail
- Complete on-dock consolidation of logistics steps that provide un-paralleled ease of use relative to current practices
- Customs bonded operations to provide for multiple in-bond services
- Partnering Government Agencies (PGA) located onsite allowing access for efficient and timely processing of CBP, USDA, FDA, F&W, etc. as may be needed for shipments in review

G.5.2 IMCTF can remove pain points that result in inefficiencies and added costs

- IMCTF facilities, with supportive volumes, can operate 24/7 aligning with most Class I rail (i.e. Union Pacific) operations

- Drayage movements of containers from terminals to distant rail "ramps" are not necessary when cargo is transloaded directly to rail. Truckers thus avoid the empty miles of making additional stops to pick up and return chassis equipment, and the empty return trip to the terminal.
- Elimination of wait-time charges for shippers who face delays when their shipments are brought to third-party service providers for transloading from trailers to containers
- Detention charges from equipment providers can quickly add up to thousands of dollars. Because an IMCTF would be providing high-volume moves using precision scheduled railroad processes and systems, detention charges could be eliminated
- Timely onsite PGA processing of shipments allow for cargo reviews to be completed in a timely fashion and without travel to multiple third-party facilities in congested urban areas. With the IMCTF, cargo is brought directly to the on-site PGAs

G.5.3 Case Study: ICTF at Salt Lake City

The Union Pacific ITCF facility in Salt Lake City provides direct intermodal rail service to the Ports of Oakland and Los Angeles-Long Beach. Why do 250,000 international-bound trucks bypass this facility every year?

- No cargo transloading capabilities: The ICTF does not transload cargo in and out of different containers, it only moves the containers themselves from one mode to another. Therefore, the largest portion of international-bound loads, which are coming from states beyond Nevada, load their cargo into standard 53-foot trailers for truck delivery to near-dock transloading facilities in the Oakland/San Francisco or Los Angeles/Long Beach port regions for processing and last-mile transportation to the port.
- Limited equipment capabilities: This ICTF facility is limited to TOFC (Trailer on Flat Car) and COFC (Container on Flat Car) equipment transfer services.
- Container/chassis equipment access: Limited to truck carriers that are required to meet all equipment provider (ocean carrier, chassis provider, railroad, etc.) rules and requirements included in intermodal interchange agreements.
- Detention charges: These can add up very fast and are built into the equipment provider interchange agreements between the truck carriers and the facility. Costs accrue well in excess of $100/container per day for shippers unable to pick-up or return equipment within the allowable "free time" (which varies by equipment provider).
- Limited local service area: All international cargo loads outside of the local SLC area must make a trip to the SLC ICTF to first pick up a container on a chassis, then transport it back to the shipper for loading, and then return to the SLC ICTF to drop off the loaded container. This process adds excessive time and costs to moving the cargo, more so with increased distance from the ICTF.

G.6 Shipper Savings

The following section identifies the shipper savings gained through the elimination of the truck-based processes obviated for FCA international shippers using the IMCTF at Fernley. Also, in this section are two business cases identifying shipper cost savings in comparison to the most highly cost-competitive routing and utilization of the Union Pacific ITCF in Salt Lake City. These models stress-test the economics relating to the diversion of truck-based cargo to Fernley with rail-shuttling to the Port of Oakland.

G.6.1 Consolidated Logistics Steps

The traditional ICTF model is built around the transfer of equipment, not cargo. The ability to transition typical truckload cargo requires it to be loaded into rail-approved container equipment at the shipper or transload facility. This offsite requirement adds significant additional costs and time to get the cargo transported to the destination point.

The IMCTF model is based around cargo transloading and therefore removes the obstacles associated with container equipment positioning for seamless transition from truckload cargo to rail transportation.

Figure 13: ITCF 9-Step Logistics Process

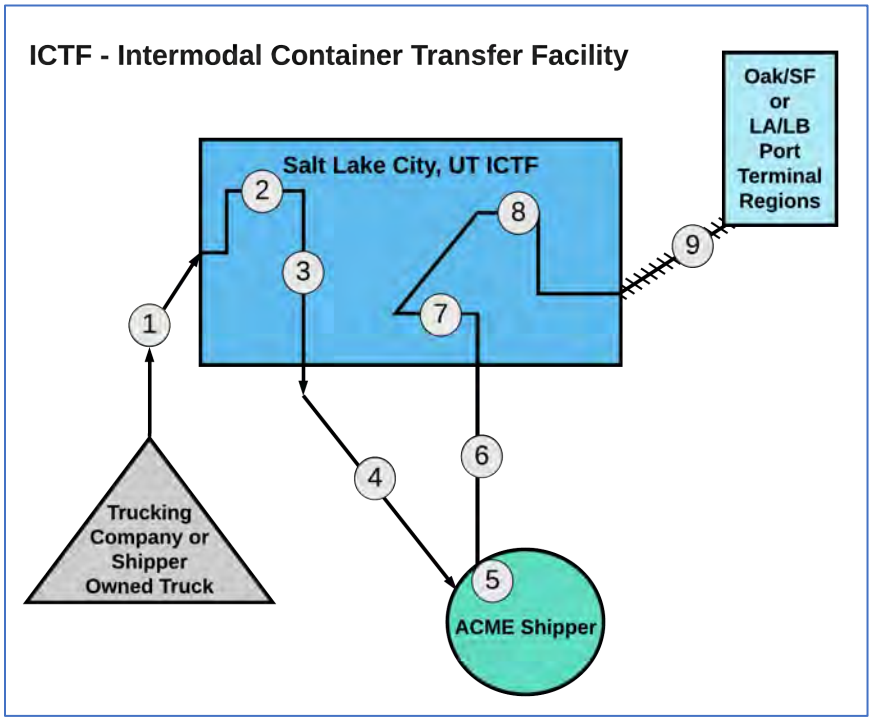


Exhibit 1 demonstrates the nine steps involved to accommodate an export container loaded via an ICTF operation. The ICTF process is driven by the need for cargo loading at the shipper location into special equipment necessary for rail transportation.

Step 1 – Shipper owns truck or hires a truck carrier to provide container drayage services to pick up a container and bring it to the shipper's loading dock to be loaded (export). Trucker gets the container booking information from the shipper and goes to the ICTF for the chassis and container equipment.

Step 2 – Truck carrier/driver arrives at the ICTF, checks in at the gate and proceeds to the chassis area where truck carrier/driver finds a chassis and connects safely.

Step 3 – Truck carrier/driver proceeds to the yard location for container. Truck carrier/driver waits for yard operator to load an empty export container on the chassis. Trucker then proceeds to the check-out area and does an outside visual inspection for any potential unsafe conditions before leaving.

Step 4 – Trucker leaves the ICTF and drives to shipper dock for loading.

Step 5 – Truck carrier/driver arrives at shipper's designated facility dock for loading (export). Most international shipments are shipped floor loaded. Time to load a floor loaded 40-foot container by a two-person team can vary greatly depending on the commodity and packaging characteristics but typically it takes four hours.

Step 6 – Truck carrier/driver leaves the shipper dock and returns to ICTF with the loaded (export) container.

Step 7 - Upon return to the ICTF, the truck carrier/driver checks in at the gate, moves to instructed yard position and awaits removal of the container from the chassis.

Step 8 – Upon removal of the container from the chassis, the truck carrier/driver takes the chassis to the chassis drop location in the yard and disconnects it.

Step 9 – The ICTF transfers the loaded container onto the train for transportation to the ocean port terminal destination for transfer to a pre-determined ocean carrier vessel.

Figure 14: IMCTF 5-Step Logistics Process

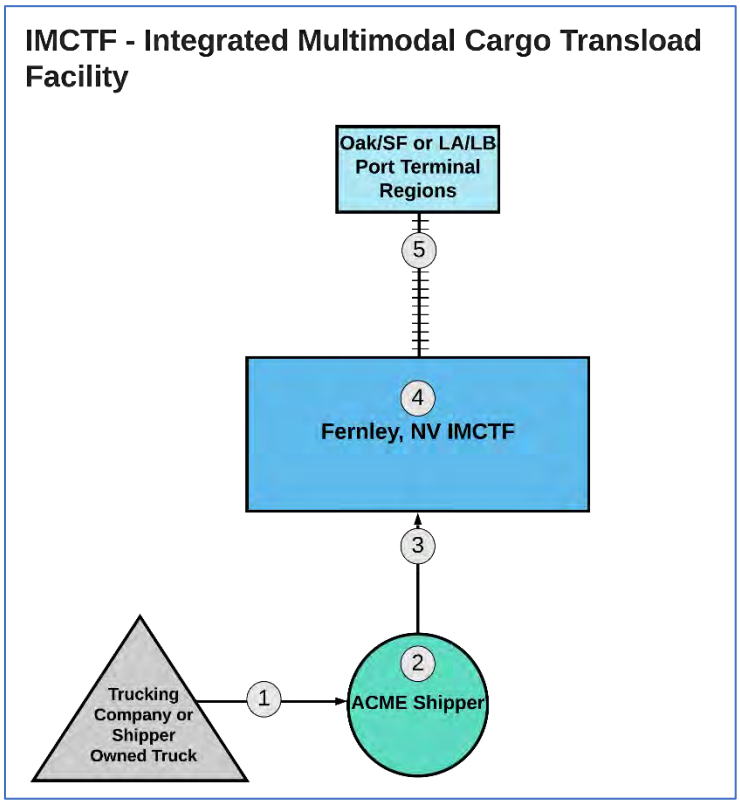


Exhibit 2 is the process diagram for an IMCTF operation. As demonstrated, the IMCTF significantly consolidates logistics activities from 9 steps to 5.

Step 1 – Shipper owns truck or shipper hires a truck carrier to provide standard 53-foot dry van to transport the shipper's cargo to the IMCTF. Shipper-owned truck process starts at Step 2.

Step 2 – Truck carrier/driver arrives at the shipper facility, checks in and backs into a designated dock and gets loaded. Once loaded the trucker is provided all necessary documents and ensures there is a seal attached to the trailer door to ensure no tampering prior to arrival at the IMCTF.

Step 3 – Truck carrier/driver transports the cargo truckload to the IMCTF in Fernley, NV.

Step 4 – Truck carrier/driver arrives at the IMCTF in Fernley, NV and is directed to a dock for transloading. The transload team unloads the cargo and the driver proceeds to the check-out gate and on to their next job.

Step 5 – Once the transload operator has completed the transload of the cargo into the international container, the IMCTF operator stages the loaded container for the intermodal operator where it will be loaded onto the train for transportation to the ocean port terminal.

In summary, and as demonstrated in the above exhibits, the consolidation of steps offered by the IMCTF translates to ease of use and significant internal cost savings.

G.6.2 Transportation Cost Improvement

Two scenarios are presented in **Tables 18** and **19** below to illuminate the savings difference between the traditional ICTF model and the IMCTF model. The study employed current sample western region truck rates of $2.65/mile 500 miles/day with 10 hours' drive time per day for cost calculations. It is important to note that we have applied an estimated $600.00 rail shuttle cost to and from the Fernley IMTCF and the Port of Oakland. Furthermore, in the model below, we show a $450.00 transloading revenue charge per truck, an appealing revenue line item for a Fernley IMCF investor/operator.

Table 18: Fernley IMCTF Vs. SLC ITCF: Shippers in 250 Mile Radius Drive

Shipper Savings Summary: ICTF vs IMCTF	Salt Lake City, UT ICTF	Fernley, NV IMCTF	
40' Intl. Export Food/Farm Cargo at 250 miles away	Year 1	Year 2	
Container Drayage 500 miles R/T (250 miles O/W)	$1,325.00	$0.00	
Shipping of cargo to IMCTF via 53' Dry Van 250 miles	$0.00	$662.50	
Chassis Charge @$40/day with 2 Day minimum	$80.00	$0.00	
Transload to 40' container floor load	$100.00	$450.00	
Rail to Oakland/SF Port Terminal Region	$600.00	$600.00	
Other	$0.00	$0.00	
Estimated Total Costs	$2,105.00	$1,712.50	Savings Percentage:
Shipper Savings per Unit		-$392.50	19%

Table 18 demonstrates the accrued shipper savings from the consolidation of logistics services at the IMCTF, versus the multiple movements required at UP's ICTF in Salt Lake City.

In this scenario:

- An international shipper of farm and food cargo located within the FCA and located 250 miles from the Salt Lake City ITCF is compared with a shipper located 250 miles from the Fernley IMCTF.
- Transporting the cargo via the ITCF at Salt Lake City to the Port of Oakland is estimated to cost $2,105.
- The re-routing of the truck-based cargo to the IMCTF at Fernley and with a final destination to the Port of Oakland is expected to cost $1,712.50.
- This yields a nearly $400 savings and eliminates a number of the logistics gymnastics relating to the use of the ITCF.

Table 19: Fernley IMCTF Vs. Through Trucking to Near Port Transload

Shipper Savings Summary: Truck Through vs IMCTF	Through Truck	Fernley, NV IMCTF	
40' Intl. Export Food/Farm Cargo at SLC region to destination to Oak/SF Port Terminal Region.	730 miles	486 miles	
Shipping of cargo to IMCTF via 53' Dry Van 486 miles	$0.00	$1,287.90	
Shipping of cargo to IMCTF via 53' Dry Van 250 miles	$1,934.50	$0.00	
Transload to 40' container floor load	$450.00	$450.00	
Container Drayage near dock	$300.00	$0.00	
Chassis Charge @$40/day with 2 Day minimum	$80.00	$0.00	
Rail to Oakland/SF Port Terminal Region	$0.00	$600.00	
Other	$0.00	$0.00	
Estimated Total Costs	$2,764.50	$2,337.90	Savings Percentage:
Shipper Savings per Unit		-$426.60	19%

Table 19 demonstrates the accrued shipper savings, with a cost comparison for shippers located within the FCA of trucking cargo to near west coast port transload facilities, versus their using the IMCTF at Fernley.

In this scenario:

- An international shipper of farm and food cargo is located within the FCA, 730 miles from the Port of Oakland region, and 486 miles from the Fernley IMCTF.
- Truck transporting the cargo to the Port of Oakland for container transloading is estimated to cost $2,764.50.
- The alternate routing of the truck-based cargo to the IMCTF at Fernley with a final destination to the Port of Oakland is expected to cost $2,337.90.
- This yields over $425 in savings to the shipper, and as previously discussed, the entire IMTCF design concept removes other soft costs related to complex transport supply-chain alternatives.

G.7 Survey of Relevant Rail Infrastructure and Port Partnerships

As addressed in the above sections, the ITCF in Salt Lake City is one of the most viable options within the FCA for international and domestic shippers to reach the California Port Regions. As explained, this facility has significant limitations to handling diverse truck-based commodity shipments, as its design and function is purely as an ICTF operation. Below is a brief description of the relevant rail interfaces, their

attributes, and their respective service schedules. Also, below is a broad differentiation between the Ports of Los Angeles and Long Beach relative to the Port of Oakland.

G.7.1 Current Inland Rail Interfaces

- Sparks, NV: Union Pacific: Rail carload service only to and from Chicago.
- Las Vegas, NV: Union Pacific: Domestic 53' container service only to and from UP ITCF Los Angeles.
- Salt Lake City, UT: Union Pacific.
    - International container service to Long Beach, CA. Four days per week, three-day transit time
    - International and domestic container service to Oakland, CA. Four days per week, two-day transit time.
    - Proximity from Fernley: 481 Miles (6:45)

G.7.2 Port Partnership Considerations

- Ports of Los Angeles and Long Beach
    - From an economic shipper savings perspective and to the extent that this traffic is international, a near-universal business case can be made to deflect this current trade lane to the Port of Oakland via the Fernley IMTCF. Current truck-based routing of the FCA westbound and eastbound originations that pass-through Nevada are concentrated on the Southwestern Nevada I-15 gateway to Southern California port regions, and currently avoid the routing to/from the Fernley/Reno I-80 gateway.
    - Perhaps even more important, neither the Port of Los Angeles or Long Beach possess the capacity to absorb any additional on-dock intermodal rail volume, thus eliminating them as a rail-based port partner for either Las Vegas, Sparks, or Fernley
- Port of Oakland and Union Pacific (UP) Bay Area
    - Geographically aligned with Nevada truck-based through-traffic
    - UP main line already provides domestic and international container service between Oakland and Salt Lake City
    - Enthusiastic Port Authority and no limitations for on-dock intermodal and carload service
    - Fernley is likely to deflect cargo from the Ports of Los Angeles and Long Beach, creating incremental new volume to Oakland
    - Fernley would modally convert truck-based traffic to rail, reducing port congestion and meeting Caltrans and NDOT objectives of highway to rail (H2R) conversion along the I- 80 corridor
    - Oakland is a major farm and food products port, which coincides with NV through-traffic of those commodities which represent nearly 50% of all NV truck-based through-traffic
    - In conjunction with Eagle Rock Aggregates (Vancouver), the Port of Oakland has opened an on-dock import and distribution operation for sand and gravel to supply Bay Area construction. Non-Metallic Mineral and Clay, Concrete, and Stone represent over 50

percent of the NWNV commodity production, with over 190,000 truckloads moving to the Bay Area region.

G.8 Trucking Statistics

The following tables and charts depict truck-based traffic flows between the FCA and California port regions of Oakland/San Francisco and the Southern California port regions of Long Beach, Los Angeles, and San Diego, collectively referred to here as the Port Regions. The data (from 2018) was furnished by TRANSEARCH®. To estimate potential cargo flows to the IMCTF at Fernley, the presented data has undergone filtering to isolate baseline truck-traffic between the FCA and the Port regions.

Table 20 depicts the total consolidated truck-based freight activity to and from the FCA and the Port Regions. Total current freight activity to and from the Oakland region exceeds 725,000 units annually and 1,250,000 units to the LA region. It is important to note that virtually all of the Oakland/San Francisco regional freight traffic passes through the Fernley region along I-80. Secondly, as demonstrated in the Shipper Savings section, **there is a compelling business case for the deflection of existing internationally bound domestic and international truck-based traffic to/from the Los Angeles area ports to the Port of Oakland via the IMCTF at Fernley.** This scenario is included in the potential volume study for the IMCTF at Fernley.

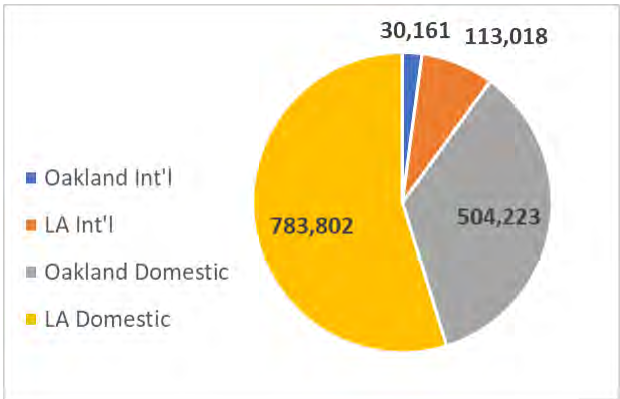
Table 20: Consolidated Truck-Based Freight Activity: FCA between Oakland and Los Angeles Regions

Fernley Catchment Area (FCA)	Oakland/SF Domestic Truck	Oakland/SF Int'l Units	Oakland/SF Total Units	LA Region Domestic Units	LA Region Int'l Units	LA Region Total Units	Grand Total Units
Colorado	62,030	3,655	65,685	172,003	22,318	194,321	260,006
Idaho	185,713	4,341	190,054	136,771	8,509	145,280	335,334
Illinois	37,540	767	38,307	47,179	15,345	62,524	100,831
Iowa	30,857	1,684	32,541	32,035	10,974	43,009	75,550
Kansas	11,361	1,026	12,387	36,292	6,635	42,927	55,314
Minnnesota	49,357	1,886	51,243	74,945	13,283	88,228	139,471
Missouri	17,407	878	18,285	32,200	4,841	37,041	55,326
Montana	42,296	2,251	44,547	71,934	2,446	74,380	118,927
Nebraska	18,324	3,164	21,488	24,707	12,766	37,473	58,961
North Dakota	13,897	309	14,206	30,228	2,710	32,938	47,144
South Dakota	18,863	1,350	20,213	27,322	4,959	32,281	52,494
Utah	121,641	10,862	132,503	269,617	49,306	318,923	451,426
Wisconsin	49,580	1,543	51,123	74,162	9,808	83,970	135,093
Wyoming	32,107	1,940	34,047	53,001	5,490	58,491	92,538
Total	**690,973**	**35,656**	**726,629**	**1,082,396**	**169,390**	**1,251,786**	**1,978,415**

Source: TRANSEARCH® 2018 Truck Data

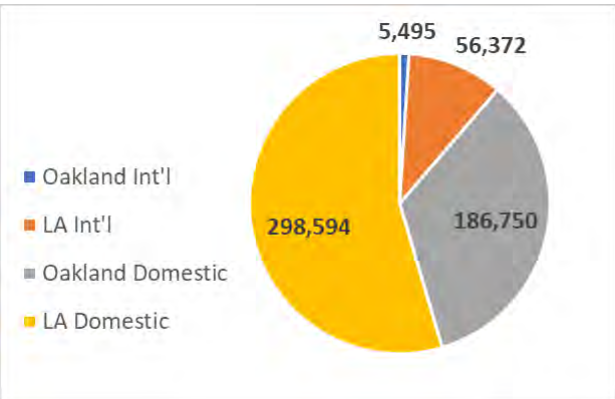
Figures 15 and **16** depict the directional flows of Nevada truck-based through traffic between the FCA and Port Regions. As demonstrated from the charts, over 72% is westbound from the FCA to the Port Regions, versus only 28% eastbound. This is largely explained by both the significant consumption and International shipping that occurs in the Port Regions of Oakland and Los Angeles.

Figure 15: Westbound Traffic to Port Regions



Source: TRANSEARCH® 2018 Truck Data

Figure 16: Eastbound Traffic to FCA



Source: TRANSEARCH® 2018 Truck Data

G.8.1 Consideration of Farm and Food Products Commodities

Commodities of farm and food products play a dominate role in transportation between the FCA and the Port Regions. Overall, 47% of all truck-based cargo shipped to and from the FCA and the Port Regions are farm and food products, nearly 900,000 truck units. This commodity concentration is even more pronounced when isolating shipments between the FCA and the Oakland region, where farm and food products represent over 54% of the westbound truck moves (291,000 moves) and 60% of the eastbound truck moves (116,000 moves).

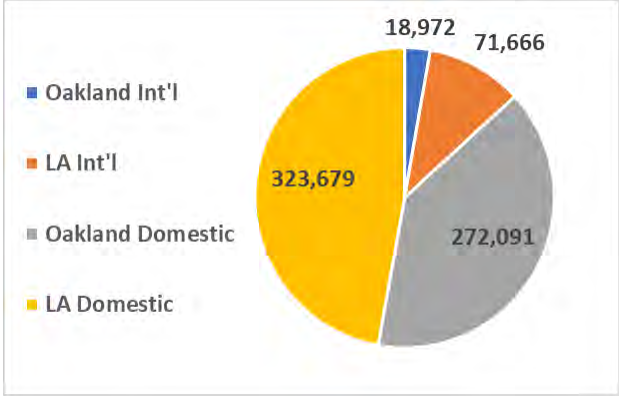
This commodity concentration represents a significant opportunity to attract freight volume to the IMCTF:

1) Allows for specialization of infrastructure to handle this large volume commodity sector, as this commodity group is likely to represent approximately 50% of the cargo volume.

2) Provides for the opportunity for highly targeted marketing strategies to an industry sector that is known for its collective organizational strength: large-scale food processing tenants.

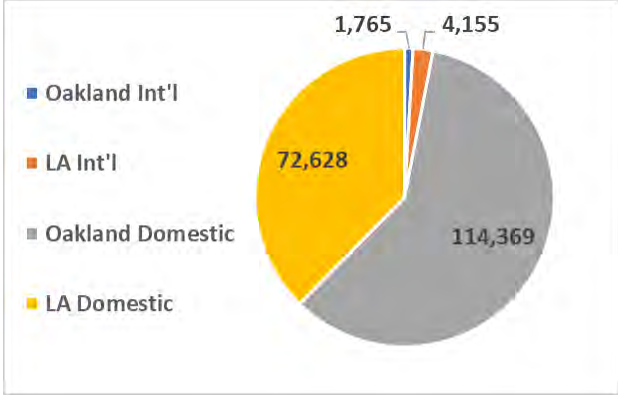
3) Served by a highly focused group of third-party logistics firms. **Figures 17** and **18** present the truck unit volume of Farm and Food Products by truck units, direction, and trade type.

Figure 17: Westbound Farm and Food Products Traffic



Source: TRANSEARCH® Truck Data

Figure 18: Eastbound Farm and Food Products Traffic



Source: TRANSEARCH® Truck Data

As Farm and Food Products are a significant contributor to overall truck flows, **Tables 21** and **22** focus on this commodity, including the domestic traffic activity and directional flow for Oakland Regional truck traffic, ranked by State truck volume.

Table 21: Domestic Westbound Commodity Traffic from the FCA to the Oakland Region

Cartchment Origination	Port Region Destination	Farm & Food Truck Units	Other Commodities Truck Units	Total Truck Units
Idaho	SF/OAK	103,550	23,212	126,762
Utah	SF/OAK	31,835	39,667	71,502
Minnesota	SF/OAK	19,803	20,809	40,612
Colorado	SF/OAK	13,338	27,104	40,442
Montana	SF/OAK	29,306	10,350	39,656
Wisconsin	SF/OAK	4,949	34,193	39,142
Wyoming	SF/OAK	8,941	18,763	27,704
Illinois	SF/OAK	5,105	21,155	26,260
Iowa	SF/OAK	17,387	8,707	26,094
Nebraska	SF/OAK	11,220	4,881	16,101
South Dakota	SF/OAK	10,457	5,377	15,834
Missouri	SF/OAK	3,756	9,922	13,678
North Dakota	SF/OAK	9,083	3,118	12,201
Kansas	SF/OAK	3,361	4,874	8,235
Total		**272,091**	**232,132**	**504,223**

Source: TRANSEARCH® Truck Data

Table 22: Domestic Eastbound Commodity Traffic from Oakland Region to the FCA

Port Region Origination	Catchment Destination	Farm & Food Truck Units	Other Commodities Truck Units	Total Truck Units
SF/OAK	Idaho	30,906	28,045	58,951
SF/OAK	Utah	32,172	17,967	50,139
SF/OAK	Colorado	11,208	10,380	21,588
SF/OAK	Illinois	8,205	3,075	11,280
SF/OAK	Wisconsin	8,787	1,651	10,438
SF/OAK	Minnesota	6,677	2,068	8,745
SF/OAK	Iowa	3,688	1,075	4,763
SF/OAK	Wyoming	938	3,465	4,403
SF/OAK	Missouri	2,592	1,137	3,729
SF/OAK	Kansas	2,299	827	3,126
SF/OAK	South Dakota	2,353	676	3,029
SF/OAK	Montana	1,842	798	2,640
SF/OAK	Nebraska	1,599	624	2,223
SF/OAK	North Dakota	1,103	593	1,696
Total		114,369	72,381	186,750

Source: TRANSEARCH® Truck Data

As with **Tables 21** and **22**, the following tables focus on Farm and Food Product data: **Tables 23** and **24** present the domestic traffic activity and directional flow for Los Angeles Regional, ranked by State truck volume.

Table 23: Domestic Westbound Commodity Traffic from the FCA to the LA Region

Cartchment Origination	Port Region Destination	Farm & Food Truck Units	Other Commodities Truck Units	Total Truck Units
Utah	LA Region	46,886	108,375	155,261
Idaho	LA Region	84,781	24,601	109,382
Colorado	LA Region	32,872	72,786	105,658
Minnesota	LA Region	22,662	40,458	63,120
Wisconsin	LA Region	6,746	56,316	63,062
Montana	LA Region	37,367	24,968	62,335
Wyoming	LA Region	10,757	33,526	44,283
Illinois	LA Region	7,172	22,651	29,823
Iowa	LA Region	13,619	13,653	27,272
Kansas	LA Region	9,575	17,005	26,580
Missouri	LA Region	6,875	19,175	26,050
North Dakota	LA Region	16,030	9,599	25,629
South Dakota	LA Region	14,378	9,543	23,921
Nebraska	LA Region	13,959	7,467	21,426
Total		323,679	460,123	783,802

Source: TRANSEARCH® Truck Data

Table 24: Domestic Eastbound Commodity Traffic from the LA region to the FCA Truck Data

Port Region Origination	Catchment Destination	Farm & Food Truck Units	Other Commodities Truck Units	Total Truck Units
LA Region	Utah	21,445	92,911	114,356
LA Region	Colorado	13,412	52,933	66,345
LA Region	Idaho	10,969	16,420	27,389
LA Region	Illinois	4,039	13,317	17,356
LA Region	Minnnesota	6,677	5,148	11,825
LA Region	Wisconsin	4,300	6,800	11,100
LA Region	Kansas	2,595	7,117	9,712
LA Region	Montana	1,829	7,770	9,599
LA Region	Wyoming	1,203	7,515	8,718
LA Region	Missouri	1,611	4,539	6,150
LA Region	Iowa	1,693	3,070	4,763
LA Region	North Dakota	636	3,963	4,599
LA Region	South Dakota	1,132	2,269	3,401
LA Region	Nebraska	1,087	2,194	3,281
Total		72,628	225,966	298,594

Source: TRANSEARCH®

G.9 IMCTF at Fernley—Estimated Traffic Volume

G.9.1 Preliminary Facility Requirements

In preparation of this report, an extensive truck-based freight study was performed to determine the range of cargo volumes that could be captured at the IMCTF at Fernley. This study first identified the target market catchment area—the FCA, and its truck-based commodity volume relationship with the California Port Regions. The reporting of freight statistics establishes the baseline of the available universe of relevant truck volume. Appropriate facility design and operating requirements are as follows:

- The facility design, operations and services need to extend beyond traditional ICTF's to the full services offered by an IMCTF.
- The IMCTF must clearly demonstrate to shippers compelling cost and service improvements over current transportation practices.
- Largely dependent upon volume, the frequency of intermodal rail service must meet a minimum threshold of three days per week, preferably 4 to 5 days per week. Any rail shuttle service must meet the Union Pacific Railroads' Precision Scheduled Railroading (PSR) operating requirements.
- Direct integrated ocean bill of lading service at the Fernley IMCTF must be provided by the broad range of ocean carriers that are currently calling on the Port of Oakland.
- The IMCTF should be a private operation and independent of the facility's core partners of Union Pacific and the Port of Oakland.
- Relating to the above, a detailed financial business case and model will need to demonstrate an appropriate rate of return on the infrastructure investment.

To estimate freight volume potential at the IMCTF at Fernley, a cascading volume sensitivity model has been developed. While the overall data is entirely objective, the model relies upon several major subjective considerations, for which there are no verifiable data-driven sources. They are:

G.9.2 Near-Port International Conversion of Domestic Cargo

The TRANSEARCH® Truck Data only reports cargo unit moves as international when the destination or origination is specifically identified as an international deep-water port. Otherwise, the move is identified as domestic. In the case of the Fernley IMCTF report, all domestic and international truck-based traffic reporting was refined to port region origins and destinations. By default, the Port Regions imply that both possess major international port gateways. The question then becomes, how much of this truck-based cargo is being consumed within those two regions and how much is being converted to and from international containers in near-port regions and then locally drayed to/from the international port. The estimated percentage of international cargo is a three-factor consideration:

1. The regions immediately surrounding the ports of Oakland, Los Angeles, Long Beach, and San Diego have extensive near-port logistics and transportation service providers whose core functions are to receive and discharge domestic trucks, provide dry and cold storage, consolidate and deconsolidate international containers, and provide drayage to and from the local port(s).
2. Within the FCA, international shipper and receiver locations are scattered, and often distant from intermodal container truck-to-rail transfer facilities; thus, trucking to and from international port regions is the only commercially viable option.

3. The composition of commodities shipped to and from the FCA are biased towards potential for international export and import. As an example, aggregate commodities such as sand and stone are almost entirely consumed domestically within their delivered market. Conversely, unprocessed food and farm products are more likely to be exported rather than locally processed and consumed within the major port regions. In the case of the FCA and Port Regions relationship, farm and food products represent nearly 50% of all commodities.

Based on the above, and considering the relative near-port population, and regional production-consumption characteristics in both the FCA and corresponding Port Regions, a subjective ratio was applied to domestic truck-based cargo flows that are transloaded from domestic truckloads into between internationally bound containers, herein known as International Conversion Ratio (ICR).

Table 25: Westbound Domestic to International Conversion Ratio ICR: FCA and Port Regions

Origination	Destination	Min. Conversion	Max. Conversion
Oakland Region	Oakland Region	30%	40%
FCA	LA Region	20%	30%

Table 26: Eastbound Domestic to International Conversion Ratio ICR: FCA and Port Regions

Origination	Destination	Min. Conversion	Max. Conversion
Oakland Region	FCA	45%	55%
La Region	FCA	35%	45%

G.9.3 Fernley IMCTF Interception of International Cargo

Of the nearly two million total truck-based through traffic trips between the FCA and the Port Regions, the above tables narrow the range of eligible cargo from 630,00 to 791,000 truck moves, or 32-40% of the total truck-based traffic. **Tables 27** and **28,** below depict the range of domestic truck-based cargo that is likely reclassified as international cargo. The final portion of the analysis relates to the interception of international cargo to the Fernley IMCTF for final rail shuttle service to the Port of Oakland. Again, this is a subjective exercise but is based upon the ability to market the facility's attributes of shipper savings, the broad service offering of the IMTCF, and its convenience versus current truck-based transport to and from the FCA and the Port Regions. See **Tables 27** and **28**:

Table 27: Westbound Fernley Interception Ratios (FIR): FCA and Port Regions from FCA to Oakland Region

Origination	Destination	Min. Conversion	Max. Conversion
FCA	Oakland Regon	30%	40%
FCA	LA Region	20%	25%

Origination	Destination	Min. Conversion	Max. Conversion
Oakland Region	FCA	35%	45%
La Region	FCA	25%	35%

Table 28: Eastbound Fernley Interception Ratios (FIR): FCA and Port Regions from FCA to Oakland Region

G.9.4 Summary of Findings for International Cargo Volumes at the Fernley IMCTF

Based upon the above range of ratios relating to truck-based domestic cargo reclassification to international, along with the Fernley interception ratio of inbound/outbound international cargo flows to and from the Port of Oakland, the schedules below present both estimated minimum and maximum anticipated truck-based unit volumes that the Fernley IMCTF could receive and discharge between the Port of Oakland and the FCA on an annual basis: See **Tables 29** and **30**.

Table 29 applies the minimum ratios to the entire truck-based data set and arrives at a minimum anticipated volume of international containerized traffic between the Fernley IMCTF and the Port of Oakland of approximately 160,000 units per year. This number essentially distills the overall through-traffic volumes between the FCA and the Port Regions of two million units to 16% market capture by the Fernley IMCTF.

Table 30 applies the maximum ratios to the entire truck-based data set and has arrives at a maximum anticipated volume international containerized traffic between the Fernley IMCTF and the Port of Oakland of approximately 215,000 units per year. This number essentially distills the overall through-traffic volumes between the FCA to the Port regions of two million units to 21.5% market capture by the Fernley IMCTF.

Table 29: Consolidated Total of Minimum International Volumes at the Fernley IMCTF: FCA and Port Regions

IMCTF at Fernley: Projected Volume Analysis, Westbound

Fernley Catchment Area (FCA)	Oakland/SF Domestic Truck	Oakland/ SF Int'l Units	Oakland/SF Total Units	LA Region Domestic Units	LA Region Int'l Units	LA Region Total Units	Grand Total Units
FCA to Port Regions	504,223	30,161	534,384	783,802	113,018	896,820	1,431,204
Domestic to Int'l Conversion Ratio	30%			20%			
Int'l Traffic Unit Values	151,267	30,161	181,428	156,760	113,018	269,778	451,206
Fernley IMCTF Interception Ratio	30%	30%		20%	20%		
Anticipated Volumes at Fernley IMCTF	45,380	9,048	54,428	31,352	22,604	53,956	108,384

IMCTF at Fernley: Projected Volume Analysis, Eastbound

Fernley Catchment Area (FCA)	Oakland/SF Domestic Truck	Oakland/ SF Int'l Units	Oakland/SF Total Units	LA Region Domestic Units	LA Region Int'l Units	LA Region Total Units	Grand Total Units
Port Regions to FCA	186,750	5,495	192,245	298,594	56,372	354,966	547,211
Domestic to Int'l Conversion Ratio	30%			20%			
Int'l Traffic Unit Values	56,025	5,495	61,520	59,719	56,372	116,091	177,611
Fernley IMCTF Conversion Ratio	35%	35%		25%	25%		
Anticipated Volumes at Fernley IMCTF	19,609	1,923	21,532	14,930	14,093	29,023	50,555

Grand Total (Min) Unit Volume at Fernley IMTCF, Westbound and Eastbound	**64,989**	**10,971**	**75,960**	**46,282**	**36,697**	**82,979**	**158,939**

Table 30: Consolidated Total of Maximum International Volumes at the Fernley IMCTF: FCA and Port Regions

IMCTF at Fernley: Projected Volume Analysis, Westbound

Fernley Catchment Area (FCA)	Oakland/SF Domestic Truck	Oakland/ SF Int'l Units	Oakland/SF Total Units	LA Region Domestic Units	LA Region Int'l Units	LA Region Total Units	Grand Total Units
FCA to Port Regions	504,223	30,161	534,384	783,802	113,018	896,820	1,431,204
Domestic to Int'l Conversion Ratio	40%			30%			
Int'l Traffic Unit Values	201,689	30,161	231,850	235,141	113,018	348,159	580,009
Fernley IMCTF Interception Ratio	30%	30%		20%	20%		
Anticipated Volumes at Fernley IMCTF	60,507	9,048	69,555	47,028	22,604	69,632	139,187

IMCTF at Fernley: Projected Volume Analysis, Eastbound

Fernley Catchment Area (FCA)	Oakland/SF Domestic Truck	Oakland/ SF Int'l Units	Oakland/SF Total Units	LA Region Domestic Units	LA Region Int'l Units	LA Region Total Units	Grand Total Units
Port Regions to FCA	186,750	5,495	192,245	298,594	56,372	354,966	547,211
Domestic to Int'l Conversion Ratio	40%			25%			
Int'l Traffic Unit Values	74,700	5,495	80,195	74,649	56,372	131,021	211,216
Fernley IMCTF Conversion Ratio	45%	45%		35%	25%		
Anticipated Volumes at Fernley IMCTF	33,615	2,473	36,088	26,127	14,093	40,220	76,308

Grand Total (Min) Unit Volume at Fernley IMTCF, Westbound and Eastbound	**94,122**	**11,521**	**105,643**	**73,155**	**36,697**	**109,852**	**215,495**

G.10 Additional Volume Considerations at the Fernley IMCTF

G.10.1 Industrial Development

Nearly all truck-to-rail facilities, such as inland ports, begin with securing a prospective freight-intensive anchor tenant to justify development of a transportation infrastructure project, for example the BMW facility at the South Carolina Inland Port at Greer. **Unlike many other transportation infrastructure projects, the proposed IMTCF at Fernley possesses extraordinary organic through-traffic where there is a real and actual commercial business case for both the deflection and diversion of truck-based traffic to the facility.** It is essentially the de-facto "anchor tenant" in terms of its potential volume through-put.

What this means for developers of industrial properties is that new freight-intensive tenant attraction will not be akin to a "field of dreams" approach, and the development of the IMCTF can proceed without first solving the tenant question. The in-motion development of the facility and its attributes will likely have a significant impact on new tenant attraction, as the intended value proposition of co-location to the IMCTF is clearly defined and not based upon singular outcomes that typically define the exhausting and long-term effort common with developing new transportation facilities.

G.10.2 Domestic Railcar Service of Aggregates

As addressed in the Aggregates Study below, the immediate region within the Fernley market locally produces significant quantities of construction aggregates consumed in the high-density trade lane markets of Sacramento, Oakland, and Los Angeles. With respect to the Oakland region alone, over 180,000 truckloads of material are shipped annually. The IMCTF at Fernley will possess the ability to transload this locally produced, truck-based material and, to the extent that there exists a corresponding rail-served deconsolidation facility, handle a potential market of over 45,000 railcars to the Oakland market.

Recently, the Port of Oakland has entered into an agreement with a Canadian importer of construction aggregates, (Eagle Rock Aggregates of Vancouver), and the port has provisioned land within their facility to serve as a truck-based transload and discharge operation to serve the Bay Area market from the Port of Oakland. This development is a natural fit for the Fernley IMCTF, where the design of the facility is likely to generate additional organic opportunities.

Included as Appendix 4 is a paper entitled *Modern Logistics and the Evolution of Multimodal Terminals*. This paper explains in detail the IMCTF and how it differs from traditional container terminals. The paper also describes how modern logistics and supply chain planning is migrating from restricted container port models to integrated models such as the IMCTF being proposed at Fernley.

G.11 Aggregates Study

G.11.1 Activities and Objectives

SRF conducted an extensive commodity freight flow study of both truck and rail activity for both the entire state and the northwest Nevada region (NWNV). For the NWNV region, over 6 million freight records were analyzed from the year 2018.

The objective of the Aggregates Study is to determine the economic feasibility for the modal conversion from trucking to lower cost rail, thus providing options and lower cost of transportation for Nevada shippers.

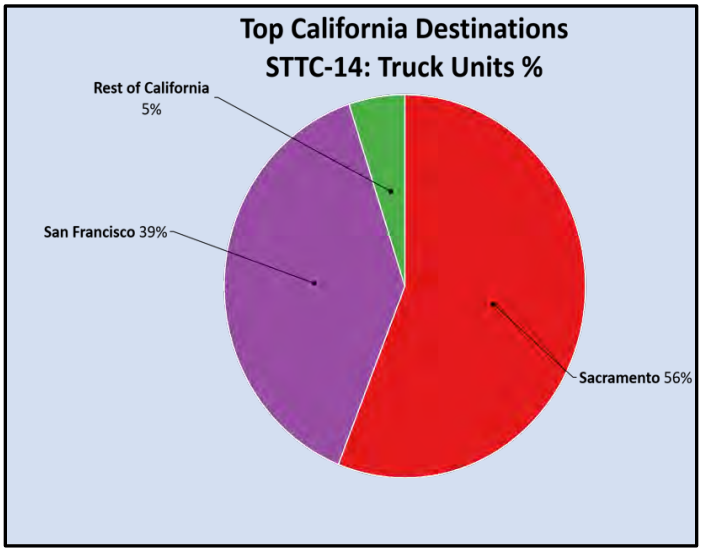
Table 31: Northwest Nevada Truck Units and Tons Outflow by Commodity

NWNV Truck Outflow Traffic: Top Five Commodities					
STCC2	**Commodity Name**	**Tons**	**% Tons**	**Units**	**% Units**
14	Clay, Concrete, Glass or Stone	6,344,296	32%	346,789	31%
32	Nonmetallic Minerals	7,628,487	38%	313,796	28%
42	Return of Empty Trailers	0	0%	196,288	17%
1	Farm Products	1,376,786	7%	76,703	7%
29	Petroleum or Coal Products	1,614,907	8%	67,042	6%
40	Waste or Scrap Materials	953,114	5%	38,054	3%
	All Other Commodities	1,896,875	10%	92,201	8%
	Total NWNV Commodities	**19,814,465**	**100%**	**1,130,872**	**100%**

Source: TRANSEARCH® Freight Flow Data 2018

From the above table, over 60% of all Nevada truck-based shipments to out-of-state destinations are comprised of two primary commodities: Non-Metallic Minerals, i.e. Sand (STTC2-14) and Clay, Concrete, Glass or Stone (STTC2-32). California is by far the single largest destination (97% for STCC 14 & 57% for STCC 32)

Figure 19: Top California Destinations - Clay, Concrete, Glass or Stone



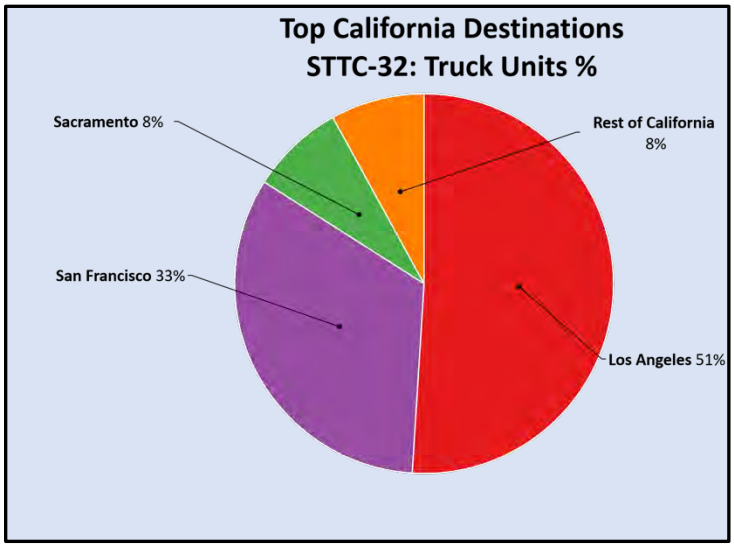
- California Accounts for 97% of the Destinations for Nevada's Production of Clay, Concrete, Glass or Stone Non-Metallic Mineral – Over 305,000 Truck Loads - All of Which Return to the Region Empty – Thus, over 600,000 Truck Movements
- 56% or 170,000 Truck Loads are Destined to the Sacramento Region
- 39% or 120,000 Truck Loads are Destined to the San Francisco Region
- 5% is Destined to All Other Regions of California

Source: TRANSEARCH® Freight Flow Data 2018

G.11.2 Questions and Inquiry Regarding Clay, Concrete, Glass or Stone

- Why is there such a concentration of shipments to the Sacramento Region – 56% of all California truck-based destinations?
  - Is there a major truck-to-rail transfer facility in Sacramento?
  - Is there a concentration of industrial raw material conversion activity in the Sacramento Region?
- Similar questions apply to the concentration of shipments to the San Francisco Region – 39% of all California truck-based destinations.
  - Is there a concentration of industrial raw material conversion activity in the San Francisco Region?
- Would northwest Nevada benefit from the development of localized truck-to-rail transfer facilities for this commodity group that would serve the destinations of Sacramento and San Francisco?
- Are there opportunities to convert these raw commodities into finished goods at the local level? What are the constraints: water, etc.?

Figure 20: Top California Destinations - Non-Metallic Minerals



- California Accounts for 57% of the nation's destinations for Nevada's Non-Metallic Minerals – Nearly 200,000 Truck Loads - All of Which Return to the Region Empty – Thus, over 400,000 Truck Movements
- 51% or over 100,000 Truck Loads are Destined to the Los Angeles Region
- 33% or 65,00 Truck Loads are Destined to the San Francisco Region
- 16% is Destined to All Other

Source: TRANSEARCH® Freight Flow Data 2018

G.11.3 Questions about Non-Metallic Minerals

- Why is there such a concentration of shipments to the Los Angeles Region – 51% of all California truck-based destinations?
- Is there a concentration of industrial raw material conversion industry in the Los Angeles Region?
- The same question applies to the concentration of shipments to the San Francisco Region – 33% of all California truck-based destinations?
- Would North-West Nevada benefit from the development of localized truck to rail transfer facilities for this commodity group?
- Are there opportunities to convert these raw commodities into finished goods at the local level? What are the constraints?

G.11.4 The Region Already Transports These Two Commodities by Rail

Rail movements are already occurring, representing defined trade lanes to the major truck markets of Los Angeles, San Francisco, and Sacramento.

Table 32: Northwest Nevada Rail Units and Tons by Commodity

NWNV Rail Outflow Traffic: Top Five Commodities					
STCC2	**Commodity Name**	**Tons**	**% Tons**	**Units**	**% Units**
14	Nonmetallic Minerals	418,800	33%	5,356	24%
32	Clay, Concrete, Glass or Stone	413,145	33%	3,900	17%
46	Misc. Mixed Shipments	104,400	8%	6,440	29%
28	Chemicals or Allied Products	79,720	6%	1,160	5%
40	Waste or Scrap Materials	74,340	6%	944	4%
	All Other Commodities	174,176	14%	4,512	20%
	Total NWNV Commodities	**1,264,581**	**100%**	**22,312**	**100%**

Source: TRANSEARCH® Freight Flow Data 2018

While total rail volume, at 6% of total tonnage, is only a fraction of truck-based volume, the commodity groups STTC2-14 and STTC2-32 represent 66% of total commodities shipped by rail to out-of-state destinations. Thus, a business case for conversion of road to rail has already been demonstrated.

G.11.5 In Summary

The freight corridor between northwest Nevada and California is subject to 1,000,000 annual truck journeys carrying the commodity categories of clay, concrete, glass, stone, and non-metallic minerals. Around 500,000 of these truck journeys are empty return trips back to Nevada from California. While a rail freight corridor already exists between northwest Nevada and California for the transportation of these commodities it handles only 6% of the total volume.

Our initial assessment indicates that an IMCTF facility located in northwest Nevada would support the conversion to rail of a significant volume of the 11MM tons of this freight currently being trucked to California.

We recommend a further study be commissioned to; 1) address the questions outlined in this Aggregates Study regarding the truck-based shipping behavior of northwest Nevada regional producers, 2) build an accurate modeling of the potential for truck to rail conversion, and 3) fully assess opportunities from converting these raw commodities into semi and finished goods within the study region thus stimulating job growth and economic vitality.

H. Implementation and Recommendations

As outlined in the Business Case section of this report, there is a viable opportunity and sufficient support from key stakeholders for the development of a multimodal transfer facility, specifically an IMCTF, at Fernley. Implementing the IMCTF involves various activities ranging from stakeholder engagement to financing.

H.1 Stakeholder Engagement

This study has referenced the eco-system of stakeholders whose engagement and active support will be crucial to the success of an IMCTF and the continued realization of its benefits. Each stakeholder has their own economic, commercial, environmental, and strategic objectives relative to a Fernley IMCTF. The project's success requires an appreciation of stakeholder priorities and objectives. Buy-in from certain stakeholders, such as the Union Pacific Railroad and the Port of Oakland is fundamental to the successful development and operation of an IMCTF. Other stakeholders such as land developers, NDOT, Caltrans, shippers, freight forwarders, and transport operators also form an important constituency whose contribution is key to the success of the Fernley IMCTF project.

We recommend stakeholders be engaged throughout the next phase of deeper analysis and conception to ensure that all commercial factors are included in the 'go forward' decision. Their involvement is necessary for securing the full set of commitments that will support the use of this facility.

H.2 Financing

Developing an IMCTF facility capable of handling these volumes of converted flows plus the newly generated volumes from planned industrial developments in northwest Nevada likely involves a major capital investment.

The *Integrated Multimodal Cargo Transfer Facility, Business Case for Fernley, Nevada* provides a detailed forecast of anticipated freight volumes. International traffic, combining eastbound and westbound freight flows, equates to between 165,000 and 215,000 annual shipments. In addition, the *Aggregates Study* reported in Section G.11 identifies the probability of converting a proportion of the 500,000 truckloads of aggregates and non-metallic minerals produced in northwest Nevada and shipped to the Sacramento, Oakland, and Los Angeles areas.

Even without a contribution of public funding the business case for Fernley IMCTF is such that its development may be funded by private investors who could be existing stakeholders or new financing partners. The NVSRP proposes an entity to create a framework for public-private collaboration sponsored by the Nevada Department of Transport (NDOT).

The role of that entity would be to coordinate contributions from NDOT, SRF, state economic development agencies, and an extensive network of stakeholder relationships for harnessing action across Nevada. A key function of that entity would be to facilitate private sector financing for rail projects in Nevada and the NVSRP recommends the establishment of a Nevada Freight Rail Development Fund for this purpose. This proposed Fund would raise and deploy debt capital for small and mid-sized rail projects, and service loans from origination to maturity. Additionally, it would use transaction fees to fund technical services provided by the entity.

More details on the proposed Fund and other rail financing initiatives are included in the NVSRP report.

H.3 Implementation Planning

The migration to a sustainable freight system in the study region has the Fernley IMCTF at its core. However, as outlined in this study, simply building the facility will not transform freight flows and foster the increased use of rail for freight movements into, out of and through the region. There are multiple success factors which require attention and management during the implementation phase.

Implementation therefore requires a multifaceted plan incorporating both ‘soft’ and ‘hard’ elements. Soft elements include communication plans, stakeholder engagement, marketing activity, and management of reputational risks and project opposition. Hard elements are traditional project steps such as land acquisition, construction design, contractor selection, project management, budgeting, financing, and statutory reporting.

The sponsoring entity for the Fernley IMCTF project must ensure implementation planning takes into consideration the entire range of activities. Proven experience and specific management skills should be utilized with the ultimate goal of a sustainable freight system through the development of the IMCTF.

H.4 Further Studies

In preparing this report we have identified additional study areas we recommend that should be commissioned to maximize the business case for a Fernley multimodal freight facility.

H.4.1 Aggregates market study

The Aggregates Study included in this report identifies the significant potential for converting large volumes of aggregate traffic from trucks to rail. An aggregates market study would dive deeper into the truck-based shipping behavior of northwest Nevada regional producers and build accurate modeling of the truck to rail conversion potential. This report could also expand to include an assessment of the opportunities for the study region from converting these raw commodities into semi and finished goods thus stimulating job growth and economic vitality.

A Note on Beneficiation

The economic development strategy known as "Beneficiation" holds the potential to drive Nevada towards higher value activities, and therefore its economic and environmental objectives. Beneficiation concentrates developmental resources on a region's established industry sector as the backbone for new enterprise. Expanding value chains within a region serve to attract new related businesses, and in turn offer the original businesses opportunities for service expansion. Naturally, these synergies produce an expanding set of employment opportunities.

An example of the beneficiation approach can be readily imagined as applied to Nevada's resources sector. Rather than simply exporting raw materials out of the state, new industries that process those materials could be encouraged. In time, this could beget businesses that receive the used, post-market material, recycle it, and sell it back into the supply chain. Such a vision of economic expansion is clearly dependent upon the ease and cost of intra-state commodity movement, facilitated by rail in many cases. Capacity, scalability, and sustainability must be considered crucial values toward the development of higher value industries through beneficiation.

As the freight data analysis in Chapter 2 reports, the share of intra-state freight rail activity (originate and terminate the same railcar load of freight within the state) is currently about .25% of overall rail traffic in Nevada. That statistic, as diminutive as it is, also expresses Nevada's vast potential for higher-value economic growth.

H.4.2 Fernley IMCTF growth generation

Development of a new integrated multimodal facility at Fernley has the potential to attract new industrial development to the region and generate additive freight volumes. A further study assessing the generative effects of the Fernley IMCTF and modeling new freight flows will further bolster the business case. This study should also consider how the IMCTF can improve land values.

I. Appendices

1. Port of Oakland Business and Rail Overview (12.10.2019)

2. Slope Map Fernley Wadsworth

3. Slope Map Reno Sparks

4. Modern Logistics and the Evolution of Multimodal Terminals

NEVADA DOT
SAFE AND CONNECTED

NNDA
Northern Nevada
Development Authority

Port of Oakland
Business and Rail Overview
12/10/2019

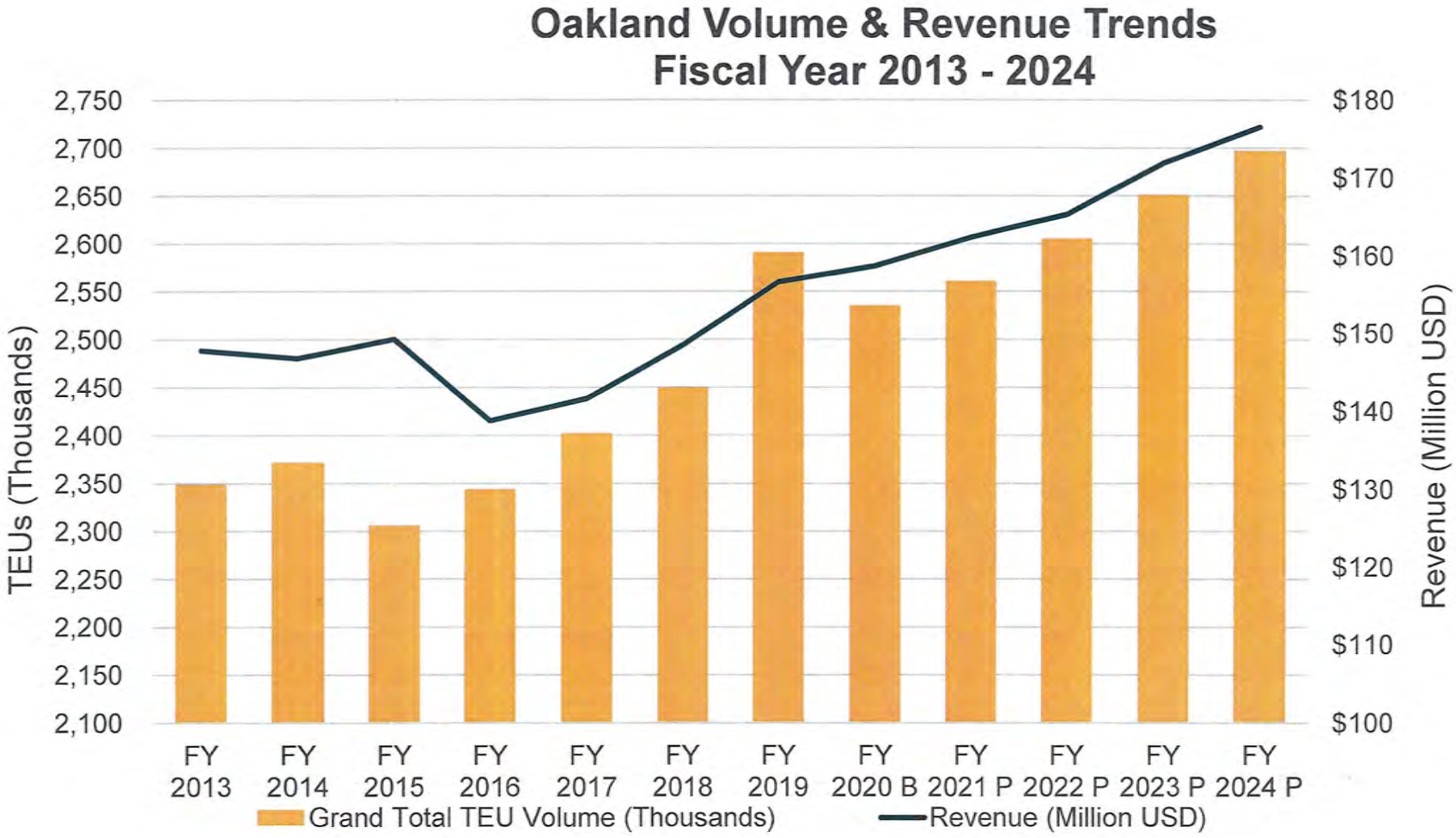
PORT OF OAKLAND
SEAPORT

Port of Oakland by the Numbers

- **4 active** marine terminals
- **3 terminal operators** SSA, Everport, & TraPac
- **33 Cranes** of which 23 are Port-owned
- **2.54 million TEUs** handled in 2018
- **20 ocean carriers** with service to/from Oakland
- **1,571 vessel calls** in 2018

PORT OF OAKLAND
SEAPORT

Port Volume & Revenue Trends



PORT OF OAKLAND SEAPORT

Notes: *For TEU and Revenue figures, B = Budget, F = Forecast, and all other numbers are Actual*
Revenue excludes utility sales
Fiscal Year is July 1 – June 30

Ongoing Key Events & Improvements

- Terminal **consolidation**
- Introduced industry-first online **measure of truck wait times**
- **Cool Port** operational since November 2018
- **TraPac Terminal** expansion completed
- CenterPoint Properties breaks ground, to launch **Seaport Logistics complex** in 2020
- **Tallest cranes in U.S.** ordered for 2020 delivery in addition to 4 cranes raised to accommodate larger ships

Port Investment$ for the Future

- **$100M** in rail manifest and support tracks
- **$78.5M** in Oakland International Container Terminal
  (**$42.5M** toward purchase of 3 cranes and raising 4)
- **$67M** in TraPac Terminal project
- **$28M** in Ben E. Nutter Terminal upgrades
- **$610M** in grade separation, intelligent transportation system, and traffic circulation improvements
- **$90M** in Cool Port
- **$52M** in Seaport Logistics Complex
- **$90M** in grain transload facilities

Preferred Export Gateway for Protein

US Port	Bills of Lading	Container Qty	TEUs	Total Calculated Value (US$)
OAKLAND,CA	**37,565**	**35,891**	**71,387**	**3,601,876,908**
SAVANNAH,GA	16,651	30,258	60,467	835,885,876
LOS ANGELES,CA	18,313	18,658	37,062	1,894,723,962
CHARLESTON, SC	13,061	18,374	36,727	828,167,656
LONG BEACH,CA	16,365	16,807	33,462	1,639,772,147
NORFOLK,VA	7,755	10,302	20,512	471,729,702
HOUSTON,TX	5,539	10,116	20,076	547,511,513
WILMINGTON, NC	6,058	6,661	13,322	271,784,880
NEW ORELANS, LA	2,614	6,497	12,983	160,446,601
TACOMA,WA	3,860	4,773	9,529	361,495,784
SEATTLE,WA	3,205	3,364	6,666	264,243,940
Total All U.S. Ports:	146,241	181,507	361,550	11,840,189,988

PORT OF OAKLAND
SEAPORT

Strategic Initiatives

- **First** port of call
- **Short haul** rail serving major DCs in Nevada
- **Diversity** of services
- **Environmentally** conscious upgrades
  - Electric trucks
  - Hybrid RTGs
  - 2020 & Beyond Plan
  - Truck Management Plan

R. 21 E. R. 22 E. R. 23 E. R. 24 E. R. 25 E.

T. 21 N. T. 20 N. T. 19 N.

TO GERLACH

(old RR grade)

447

Pyramid Lake Indian Reservation

Truckee River

Low Slope undeveloped land exists in the vicinity of Wadsworth and Fernley

Wadsworth

427

Fernley City Limit

80

TO LOVELOCK, WINNEMUCCA

Highlighted area shows land within approximately one mile of existing rail lines

Fernley

ALT 50

TO FALLON, WINNEMUCCA

TO FALLON

UNION PACIFIC

Thisby Siding

828

ALT 95

WASHOE

STOREY

80

Truckee River

Clark Siding

Patrick Siding

439

Tiger Field (airport)

Fernley City Limit

TO RENO

TO RENO

Future rail line extensions are possible to these areas of Innovation Park

Innovation Park

STOREY

LYON

439

ALT 95

TO SILVER SPRINGS

TO SILVER SPRINGS

LEGEND

- Railroads
- Flat and Low Slope Areas
- Moderate Slope Areas
- Steep Slope Areas

N

2020 NEVADA STATE RAIL PLAN

SLOPE ANALYSIS OF LAND ADJACENT TO RAIL LINES IN THE FERNLEY - WADSWORTH AREA

MILES 0 1 2 3 4 5 6

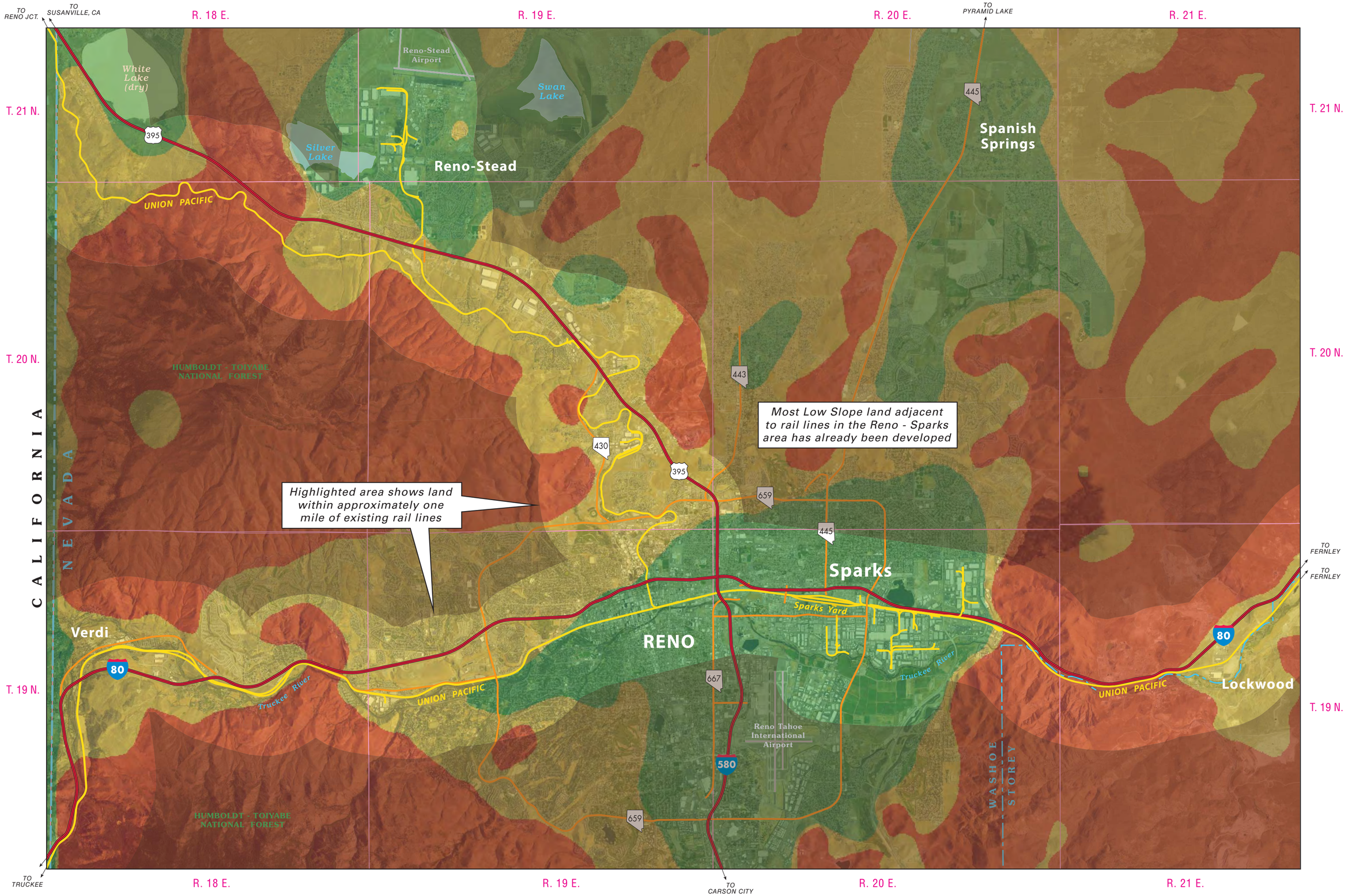
KILOMETERS 0 2 4 6 8 10

To convert miles to kilometers multiply by 1.609

MAP AREA

NEVADA DOT SAFE AND CONNECTED

NEVADA DEPARTMENT OF TRANSPORTATION
LOCATION DIVISION
CARTOGRAPHY
(775) 888-7627



LEGEND

- Railroads
- Flat and Low Slope Areas
- Moderate Slope Areas
- Steep Slope Areas

2020 NEVADA STATE RAIL PLAN

SLOPE ANALYSIS OF LAND ADJACENT TO RAIL LINES IN THE RENO-SPARKS AREA

MILES: 0 1 2 3 4 5 6

KILOMETERS: 0 2 4 6 8 10

To convert miles to kilometers multiply by 1.609

MAP AREA

NEVADA DOT SAFE AND CONNECTED

NEVADA DEPARTMENT OF TRANSPORTATION
LOCATION DIVISION
CARTOGRAPHY
(775) 888-7627

Modern Logistics and the Evolution of Multimodal Terminals

This report explains in further detail the concept of the IMCTF terminal and how modern logistics and supply chains are migrating from traditional container-based multimodal facilities to integrated models such as the IMCTF being proposed at Fernley.

Introduction

The globalization of the world's economy over the past two decades has spotlighted the importance of supply chains. Companies and entire industry sectors have been able to take advantage of international outsourcing of production, supply, and distribution to reduce costs, increase output, extend product lines, improve quality, and lift profitability. Supply chains have always existed but in the modern global economy they have become more international and a highly sophisticated and complex aspect of the business value chain.

There have been significant advances in supply chain design and adoption of technology which has transformed goods tracking, route planning and order fulfilment. However, not all aspects of the modern supply chain have been optimized and there are sizeable opportunities to improve their resilience and performance. In the United States there are bottlenecks and other inefficiencies in the underlying transportation system which impact the performance of supply chains. A key area for improvement is land transportation at terminals where legacy operating models and the sub-optimal utilization of rail creates unnecessary costs and delays which degrades supply chain performance.

This report will describe how NNDA can utilize a new intermodal operations framework that optimizes land transportation at terminals and offers a major source of sustainable economic development for the region. The framework design, **Integrated Multimodal Cargo Transfer Facility (IMCTF),** addresses the fundamental inefficiencies in terminals and land transportation operations by identifying the optimal mode to reduce costs and enhance supply chain performance. The IMCTF reworks existing land transportation operations, which are traditionally designed around road trucking, and ensures that both rail and road options are taken into consideration by supply chain planners.

To understand the role of inland port terminals and how the IMCTF model is a catalyst for economic development it is important to understand the key areas impacting the efficient flow of cargo in the traditional transportation supply chain. There are four modes of transportation, Air, Ocean, Rail and Truck prevalent in today's supply chain.

Air Freight

The highest cost mode of transportation is air freight and is typically only utilized for high value items (such as pharmaceuticals, medical equipment, or electronics) or goods that are time critical (perishables such as flowers, livestock, or critical manufacturing components). Air freight is premium priced compared to other modes, especially when compared to ocean and rail modes. Inbound air freight arrives at a local airport cargo terminal where shipments are allocated into trucks delivering direct to customers covering specific areas in the region, generally over short distances.

Outbound shippers using air cargo typically arrange for a local truck to pick up individual consignments for delivery to an airport in a single stop. This same truck then handles the inbound deliveries collected from the airport.

The air cargo transportation model consists of one direction increments; from shipper by local route truck to the closest airport, then flown to the closest destination airport where another local route truck will collect and deliver multiple shipments direct to customers within the region. Due to the large number of international, regional, and local airports in the United States, the infrastructure exists to support consistent, efficient, and expedited transportation services. Air cargo transportation can typically move shipments faster and more efficiently than any other mode. However, air cargo is, relative to other modes, very expensive and not cost effective for most of the freight in the global supply chain. In addition, aircraft, including dedicated freighters, are limited in their ability to carry bulky, oversized, or heavy shipments. Although air cargo accounts for 35% of world trade by value it accounts for less than 1% of all trade by volume.

Ocean Freight

Accounting for 90% of world trade by volume, ocean freight's 50,000 vessels are the backbone of global supply chains. It is by far the most cost-efficient method for moving freight per ton. Ocean freight is also highly flexible, with the ability to transport any cargo type from containers to specialized or oversized items, such as bulk freight, liquids and roll-on/ roll-off (vehicle/equipment).

Although ocean freight is vital for the shipping of bulk commodities such as oil, coal, aggregates, and grain it is containerization that makes ocean shipping fundamental to the world economy and its global supply chains. There are an estimated 20 million shipping containers in active use, with the largest ocean vessels able to carry over 20,000 units. Containers use a global standard with only two designs: TEU (20 feet long) and FEU (40 feet long). This standardization has been crucial in the development of highly efficient global supply chains with rail, road and ocean transportation modes utilizing a standard design in ports, trailers, cars, terminals, and vessels.

The ocean freight transportation model involves one direction increments from port terminals to port terminals on specific routes. Two constraints associated with ocean freight relate to limitations at ports. Firstly, a port's capacity to handle the vessel's size and secondly a port's ability to handle the volume of cargo in terms of storage space or transloading facilities.

Rail Freight

Due to its large and scalable capacity and an extensive route network throughout the continental United States rail freight provides an important land transportation method accounting for 10% of surface freight[1]. Rail freight is significantly more cost effective than road trucking over distances greater than 300 miles but also competes with truck operators on shorter routes. Individual freight trains typically consist of over 100 rail cars providing a considerable fuel and labor cost advantage over trucks. In addition, rail can handle many types of freight; dry, liquid, bulk, containers, and vehicles. Rail freight also has fewer weight restrictions than road trucking. However, the reason why rail freight carries the minority of goods (by volume or by value) is that it is limited to operate only where tracks have been built, whereas roads are ubiquitous across the landscape. This means that unless the start and end points of a freight journey are both served by rail (such as coal mine to port) rail is dependent upon a modal transfer to road

[1] U.S. Ton-Miles of Freight, source link

transport to complete the final local carriage. In the United States intermodal transfers tend to be inefficient and add to journey times which can make road trucking equally or more attractive to shippers. In addition, although the United States has over 140,000 route miles in the rail network there are hundreds of freight rail operators and many freight flows require at least one operator transfer which extends delivery times.

Rail transportation is completed in one direction increments from railhead, port and intermodal terminals to other railhead, port, and intermodal terminals on specific routes. The primary constraint for rail is its inability to provide first and final mile service for the majority of freight flows. Rail transportation is therefore highly dependent on intermodal transfer of freight to play an effective role in modern supply chains. Unfortunately, the inefficiency of intermodal transfers in the U.S. transportation system, particularly between road and rail, proves to be a limiting factor in the utilization of rail by shippers and supply chain planners.

Truck Freight

Over 65% of U.S. surface freight is transported by road trucking[2] and trucks are required for an increasing number of the first and last mile freight moves. Unless a shipper or customer has a dedicated rail connection, is located at an inland terminal, airport, or marine port all freight flows must commence and end with road trucking. For most freight flows the shipment completes its journey on the same vehicle or is transloaded to another truck. Only a minority of shipments will be transferred to/from rail.

Truck transportation is typically reliable, highly flexible when compared with rail freight and benefits from publicly funded road infrastructure which keeps operating costs very low. Trucks are compatible with many types of cargo including containers, bulk goods, finished products, refrigerated perishables and commodities. The mode also offers 'less than truckload' (LTL) freight enabling small consignments to be collated into a single truck journey, providing a high level of flexibility for even the smallest of shipments.

The relative disadvantage of truck freight is the size and capacity limitations of individual vehicles and highway weight limits. Each truck and trailer combination can only transport the equivalent of one rail car, compared to over one hundred rail cars on a single freight train. Another disadvantage of truck transportation is the restriction on driver hours which delays longer distance freight journeys, especially compared to rail freight where a fixed network operation enables efficient crew changes and a seamless journey flow. Despite its flexibility compared to rail and lower operating costs, trucking generates thin operating margins. There are thousands of truck operators in the U.S., the majority being small, owner-operated businesses. The result of this fragmented operator base is a highly competitive industry and inefficient operations resulting from many return freight flows running empty for all or part of their journey. Although large, national trucking companies, such as Schneider National and JB Hunt, are able to optimize their routing and operations to avoid empty running, small operators, which account for most of the industry, struggle to secure return loads.

[2] U.S. Ton-Miles of Freight, source link

The demand for efficiencies in the supply chain

As outlined in the previous summary of the four core transportation modes there are significant inefficiencies in the twin surface modes of rail and truck. There are two fundamental deficiencies in the way land transportation is allocated and interchanged.

Land transport allocation

Despite the advantages rail offers in capacity, scalability and cost per ton rail freight accounts for only 9% of the volume of freight carried in trucks[3] . In Nevada only 4% of all the state's freight movement are made by rail to and from instate businesses with a significant number of truck borne freight flows operating on existing rail freight corridors.

There is clearly a misallocation of transportation modes on a national and state level. Despite the advantageous operating economics of rail freight, and the issues of congestion, pollution, and road safety associated with road freight, there remains an over-reliance on trucking. Considering the high degree of 'empty running' of trucked freight these social and environmental impacts are incurred with zero economic value for close to half of all trucking activity.

There are multiple contributors to the current misallocation; inadequate marketing of rail freight by operators, a fear of or bias against rail from shippers, ignorance of the accessibility of rail among companies, development agencies and freight forwarders, and inadequate service levels offered by rail operators. Each of these underlying reasons are addressable.

Interchanges

Intermodal interchange and transferring is typically inefficient and adds unacceptable delays (and sometimes risk) for shippers. As a result, single mode transit is preferred by supply chain planners. With trucks already serving the majority of first and last mile freight flows trucking becomes the default transportation mode.

Interchanges are inefficient for numerous reasons; outdated operating procedures, inadequate or incomplete technology, poor coordination between the transferring parties (truck and rail), poor coordination between interchange parties (rail and rail), requirement for and limited ability of specialized chassis equipment and a prevalence of empty running.

The IMCTF model being proposed for NNDA addresses these issues and would create a far more efficient supply chain in Northern Nevada. Generating a major shift to rail freight will open opportunities for economic development in the region, as existing and new companies can leverage the cost and competitive advantages of an optimized transportation and supply chain system.

The cost of inefficient land transportation in supply chains

The previous section described the inefficiencies in land transportation and the reasons why sub-optimal practices around modal allocation and intermodal operations continue in the United States. What are the implications of this inefficiency, and who would benefit from optimizing the land transportation component in supply chains?

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[3] Summary Freight Tables, source link

There are significant economic and environmental implications. Economic implications are first outlined below:

Congestion Costs

The present modal allocation which favors trucks for land transportation is adding millions of truck miles to the nation's roads. In Nevada, 96% of freight is currently hauled by truck exposing the fact that goods movement is not being efficiently integrated with railroads. The direct impact for Nevadans is congested highways, especially on corridors with growing economic activity or with limited highway capacity. Nationally, Americans as a whole lost an average of 97 hours a year due to traffic congestion, which cost them nearly $87 billion in 2018, or an average of $1,348 per driver[4]. Congestion is a serious and growing concern and with projected growth in U.S. freight transport of 40% in the next 25 years[5] an over-reliance on truck based freight is not sustainable without major development of the state's highway infrastructure.

Congestion creates numerous costs across the economy impacting individuals, companies, and the state. Citizens see their car journey times increase and are forced to trade productive time for wasted time sitting in their cars. Employers cannot attract talent as new hires are dissuaded by lengthy and congested commutes. Manufacturers are forced to re-schedule production as their suppliers cannot deliver as quickly or reliably. Distributors must reduce service levels as delivery schedules are longer and less predictable. Business owners avoid locating to areas with congestion reducing the land values and attractiveness in economic development zones.

Transportation Costs

All business sectors in Nevada incur some degree of transportation cost. For the extractive and manufacturing industries transportation can account for as much as 15% of all costs. Inefficient supply chains such as over-reliance on trucking when lower cost rail alternatives are available are typically responsible for higher than necessary transportation costs. A study of companies with inefficient networks identifies they can lower their transportation costs by 10-25%[6]. These efficiencies improve their competitive advantage due to lower prices, higher profits and added shareholder value. Business owners, particularly in extractive, processing, manufacturing, and distribution industries, will closely study transportation costs when selecting new site developments, making areas with optimized and efficient transportation options, such as intermodal road and rail facilities, more attractive. For economic development agencies the ability to offer reduced transport costs from intermodal options will increase the value of commercial land. Conversely, high transportation costs and limited modal flexibility reduces the attractiveness and value of sites to commercial developers.

One of the major contributors to higher transport costs is the prevalence of one-way loaded moves with over half resulting in empty returns. All empty moves still incur full operating and social costs. One-way or empty running costs are particularly acute at ports because time and access constraints severely restrict the flexibility of road truckers to identify and secure return loads. Beyond port operations supply chains across the U.S. are impacted by the additional costs associated with one-way loads. In Nevada there are

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[4] U.S. Ton-Miles of Freight, source link

[5] U.S. Ton-Miles of Freight, source link

[6] Ruffin, R., Shehorn, M., & Banerjee, D. (2020, April 01). Are Your Distribution and Transportation Costs Out of Control? source link

numerous examples of dump trucks transporting aggregate rock material to California which invariably return empty because there are no suitable loads for the return journey in these special-purpose vehicles. Freight flow data from TRANSEARCH®, a transportation database developed by IHS Global Insights, reveals that 200,000 loaded truck shipments of Clay, Concrete, Glass or Stone move annually from Northern Nevada to California, all of which return empty, making 400,000 truck movements in total.

Transportation Capacity Costs

An over-reliance on truck transportation causes capacity constraints in different aspects of the supply chain which reduces overall efficiency, increases costs, and generates delays. Two capacity challenges which add costs to everyone touching the supply chain are port space and chassis availability.

Ocean container ports mandate a modal interchange for every piece of freight arriving and departing; ocean vessels must transfer their cargo to either rail or road-based transportation. The largest U.S. ocean ports are located in some of the highest populated cities in the country such as Los Angeles, New York, Seattle, Oakland, Houston, and Miami. Although these ports have a large footprint, they are hemmed in by the adjoining urban areas which have swallowed up the adjoining port property as land prices rise. At the same time, ocean shipping has experienced a significant traffic growth and increased vessel size over the past two decades. As the amount of freight being handled has grown and the dimensions of cranes and vessels increase, ports are simply squeezed for space. This capacity constraint is a serious concern for supply chain planners. Port delays, affecting inbound and outbound flows on ocean vessels, trains, or trucks, increases shipping costs and has a serious impact on supply chain performance. In addition to the capacity crunch inside the port, road transport is constrained by the growing urban development and congestion around ports. Trucks are increasingly subjected to limited hours of access, added regulations, and congestion delays inside and outside the port.

Due to these capacity issues at ports and the impact on efficient movement of freight, efficiency in the landside supply chain is crucially important. Rail freight has a clear advantage over trucking at ocean ports. Rail is not impacted by road congestion or access restrictions and moves significantly more freight in a single operation. However, despite these advantages' trucks carry the vast majority of land transportation freight volumes at ports, estimated at 75-80%[7] by volume.

A secondary capacity cost is caused by the limited availability and reliability of chassis equipment. Chassis are the equipment required to transport a cargo container by road, the trucking equivalent of a railroad flat car. Despite the fundamental importance of chassis in the movement of container freight by truck the process of chassis allocation is ad hoc and highly fragmented making it highly inefficient. This inefficiency is exacerbated because of a shortage of available chassis at ports in the U.S. As a result, chassis equipment becomes a significant bottleneck impacting container movements in ports causing supply chain delays for inbound and outbound freight flows. An additional cost resulting from the shortage and inefficient allocation of chassis is demurrage fees, which can amount to thousands of dollars, incurred when containers are not transported from the port as scheduled.

State Infrastructure costs

Unlike railroad infrastructure, which is privately owned by rail and terminal operators, the nation's roads, bridges, and tunnels which form the trucking infrastructure are funded by the federal and state government. The frequency and costs of maintenance for highways is significantly impacted by the volume of trucks as these heavier vehicles cause far more wear and damage than cars. A Transport

[7] Weight of Shipments by Transportation Mode, source link

Research Board study in 1990 established that one heavy truck is equivalent to about 95 light trucks or passenger cars in terms of its impact on pavement maintenance cost.[8] Where trucks are not the most optimal transportation mode used in the supply chain the economic costs are not only borne by the mining company, manufacturer, or distribution company. The state and federal government are also bearing a substantial economic cost for the repair and maintenance of highways. In addition to economic costs there are environmental implications from an inefficient transportation model which has a bias towards truck.

Pollution

This report has referenced the many economic cost disadvantages of truck transportation compared to rail for freight movements. Rail freight provides a scale efficiency where a single train and crew moves the equivalent freight of a hundred truck loads. This operational efficiency of rail transportation also translates into an important environmental benefit whereby the present inefficient overallocation of freight towards trucking has a significant pollution cost.

Pollution is a serious consideration for the transportation industry and supply chains. In 2018 the U.S. Environmental Protection Agency (EPA) reported[9] that transportation is the nation's single largest source of U.S. greenhouse gas emissions, accounting for approximately 27% of total emissions. Medium and heavy-duty trucks account for 60% of all freight transport emissions compared to only 5% for rail freight. Considering that trucks account for 67% and rail 11% of freight in the US this means truck road transport emits 100% more emissions than rail per ton of freight carried.

Safety

A key difference between rail and truck transportation is the level of control and safety built into their network and operations. Rail operations utilize an integrated network where moving vehicles are controlled and operated within a set of safety regulations managed by the National Transportation Safety Board (NTSB). This highly regulated operation contrasts with truck operations which utilize the public highway systems.

Rail freight is one of the safest modes of transportation in the US. Rail also has limited interface with the public, with rail grade crossings over roads being the only touchpoint. In 2018 the U.S. Bureau of Transportation Statistics (BTS)[10] reported only 685 accidents at grade crossings for the year. In contrast to rail's closed operating system, trucks share the same highway infrastructure as passenger vehicles, pedestrians, and other road users. In the same BTS survey, large trucks (defined as >10,000lb weight) were involved in 531,000 crashes in 2018.

Trucks account for six times more freight volumes than rail but are involved in seven hundred and seventy times more crashes involving the public. Beyond the health and safety implications of having more trucks on the highways than necessary there is an economic cost associated with crashes which impacts the costs of transportation, supply chains, and society.

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[8] Gibby, R., Kitamura, R., and Zhao, H., *Evaluation of Truck Impacts on Pavement Maintenance Costs,* source link, (1990)

[9] Fast Facts on Transportation Greenhouse Gas Emissions. source link (2020, July 29).

[10] Transportation Accidents by Mode. source link

IMCTF – Addressing the inefficiencies in land transportation in Nevada

The previous sections of this report highlighted how an inefficient allocation of road transport freight between road and rail in supply chain in Nevada and the U.S. adds significant economic costs to supply chains. It also adds avoidable environmental and social costs. Fortunately, there are solutions to this inefficient process which have been tried and proven throughout the world. Nevada has a unique opportunity to implement solutions that address these inefficiencies to achieve significant economic and environmental benefits for the state's companies and residents.

An Integrated Multimodal Cargo Transfer Facility (IMCTF) is recommended to address the twin issues of modal misallocation and the ineffectiveness of modal interchange in Nevada's current supply chains.

The IMCTF is a flexible solution which accommodates all freight types; packaged/boxed/carton goods, equipment, bulk dry product, agriculture products, containers, and temperature-controlled goods. It can support Nevada's existing freight flows and generate new supply chains. It can work with existing multi-modal facilities with little or new investment required or it could take the form of a new multi-modal facility developed as an economic generator attracting new companies and industries to a development zone.

What is the IMCTF model?

An IMCTF is a facility for multi-modal interchange, which essentially means transferring freight between transportation modes. There are four transfer, or transloading, scenarios: road to rail, rail to road, rail to rail and road to road. Offering all four options in a single facility provides shippers and supply chain planners a flexible and integrated solution. The leading cause of the over-reliance on trucks in Nevada and across the U.S. is the absence of efficient interchange facilities to utilize rail transportation. Where intermodal interchanges do exist, they typically are not operated in an integrated manner and cannot support the time sensitive supply chains important to many businesses. Even when transport and supply chain planners want to alleviate the over reliance on trucks, they find few realistic alternatives enabling efficient modal interchange. IMCTF's provide planners with an alternative enabling them to transform supply chain performance by removing unnecessary financial and environmental costs.

Examples of how IMCTF transforms supply chains

EXAMPLE 1) Ocean Containerized Retail Freight

In this example a large retailer of fans orders multiple FEU (40 feet long) ocean containers per year of various boxed fans manufactured in Asia. Today these containers are imported to the U.S. and arrive at a Pacific port terminal where they are offloaded from the vessel and stacked in the terminal yard waiting for trucks to pick them up. Truck drivers receive instructions from a dispatcher, make an appointment with the terminal to collect the container, make an appointment to deliver the container to the receiver, go to an offsite location to pick up a chassis, then drive to the port and join a line awaiting access. The driver will then check-in and go to the yard location to pick up the container.

The truck will depart the port and drive to the receiver, which in this example is a large distribution center (DC). DC's could be located many hours' drive from the port area and trucks are often faced with urban traffic congestion around the port.

On arrival, the container is unloaded at the DC and the truck driver will schedule an appointment to drop his empty container back at the port. As ports have limited space, they restrict the volume of empty containers on site and the appointment could be a day or more in the future.

The boxed fans at the DC are checked, recorded, and managed (palletized and stretch wrapped) and will eventually be collected by truck for onward delivery. This onward journey could be direct to local customers or a longer distance haul to another DC and then distributed to local customers around that DC location.

In an IMCTF model, the ocean container is put directly onto a rail flat car as it is unloaded from the vessel. When the train has been loaded at the port (potentially up to 300 FEU containers can be loaded onto a single train) it runs to the IMCTF site. The shipper will have advised the IMCTF as to the consignment's arrival and provided instructions on dealing with the incoming container. On arrival at the IMCTF the container is offloaded and positioned in a neutral area by the intermodal rail operator at the IMCTF site. Once in the neutral area, the transload operator who oversees the managing of the trucking and transloading operations takes responsibility for the container. The container in this example is marked in the system for transloading, placed on a yard chassis and positioned to a dock door at the onsite transloading facility for unloading, palletizing and transloading for outbound shipping into a standard 53' dry van trailer for one way delivery to destination.

This example demonstrates several benefits in using the IMCTF:

- Using rail at the port avoids lengthy road transport journeys and avoids adding to congestion in the port and its urban environs. No road transport at all is required at the port. This is a significant cost saving and environmental benefit.
- There is no empty running back to the port as the empty container stays in the IMCTF yard and is available for an export shipment which will be transloaded from an incoming truck to rail at the IMCTF. This is a significant cost saving and environmental benefit.
- Utilizing rail at the port is more cost effective than trucking, a single train replacing 300 trucks entering and returning to the port.
- Large trucks with chassis carrying containers are not required. The IMCTF has eliminated trucks entering the road system at the port area, on the highway system between port and DC and the local roads around the DC.
- Utilizing the IMCTF avoids the capacity issues at ports where containers must be unloaded and reloaded onto trucks when they access the port. In addition, ports are spared the requirement of holding empty containers helping with space management and improving the efficiency of the port's operations.
- Eliminates the need for chassis equipment because the empty containers are processed within the IMCTF site. This removes the costs and challenges of locating and retuning chassis equipment.
- As no large trucks are used there is no requirement for a chassis. This eliminates the costs associated with identifying, collecting, and returning chassis.
- Relocating transloading from the ports provides an opportunity for those regional and local truck operators to take part in the first and final mile truck transportation. This helps boost the local and regional economy surrounding the IMCTF site.

EXAMPLE 2) Dry Bulk Freight

In this example a construction aggregates producer in Northern Nevada is shipping locally mined aggregate material to Sacramento, CA. The demand is high, and several dump truck loads are shipped per day.

Today dump trucks would load-up the day before and leave early the following morning for the drive to Sacramento. Once onsite in Sacramento they unload their trucks and return home with empty dump trucks. It is unlikely dump trunk compatible loads can be sourced around Sacramento for delivery to Northern Nevada so the return trip will be an empty run.

In an IMCTF model a facility located in the Northern Nevada area would receive these trucks and transload the aggregates into hopper rail cars or flat-bottomed gondola rail cars. The freight would then be transported by rail to the customer. In this example we assume the customer has a rail siding that the cars can be held whilst aggregates are unloaded.

If the customer is not situated on a rail line, an IMCTF or simple transloading point closer to his facility in Sacramento could be utilized with trucks collecting and delivering the aggregates.

This example demonstrates several benefits in using the IMCTF:

- Using a single rail train over most of the freight journey is significantly cheaper than running multiple trucks from northern Nevada to California.
- This model takes multiple truck journeys off the highways, providing environmental and safety benefits as well as reducing highway maintenance costs.
- The IMCTF model offers a far more efficient utilization of transportation equipment. Whereas empty trucks are forced to make the return journey back to the driver's home base, empty rail cars can be left at the customer site and utilized for the export of other goods or, more commonly, collected and brought to a local yard for re-allocation.
- The IMCTF model provides greatly improved throughput for the Nevada construction distributor since the company trucks can make multiple trips to/from a local IMCTF site as opposed to one trip per day on a long transit to Sacramento. The added opportunity for additional volume of business is a typical value-add of an IMCTF site.

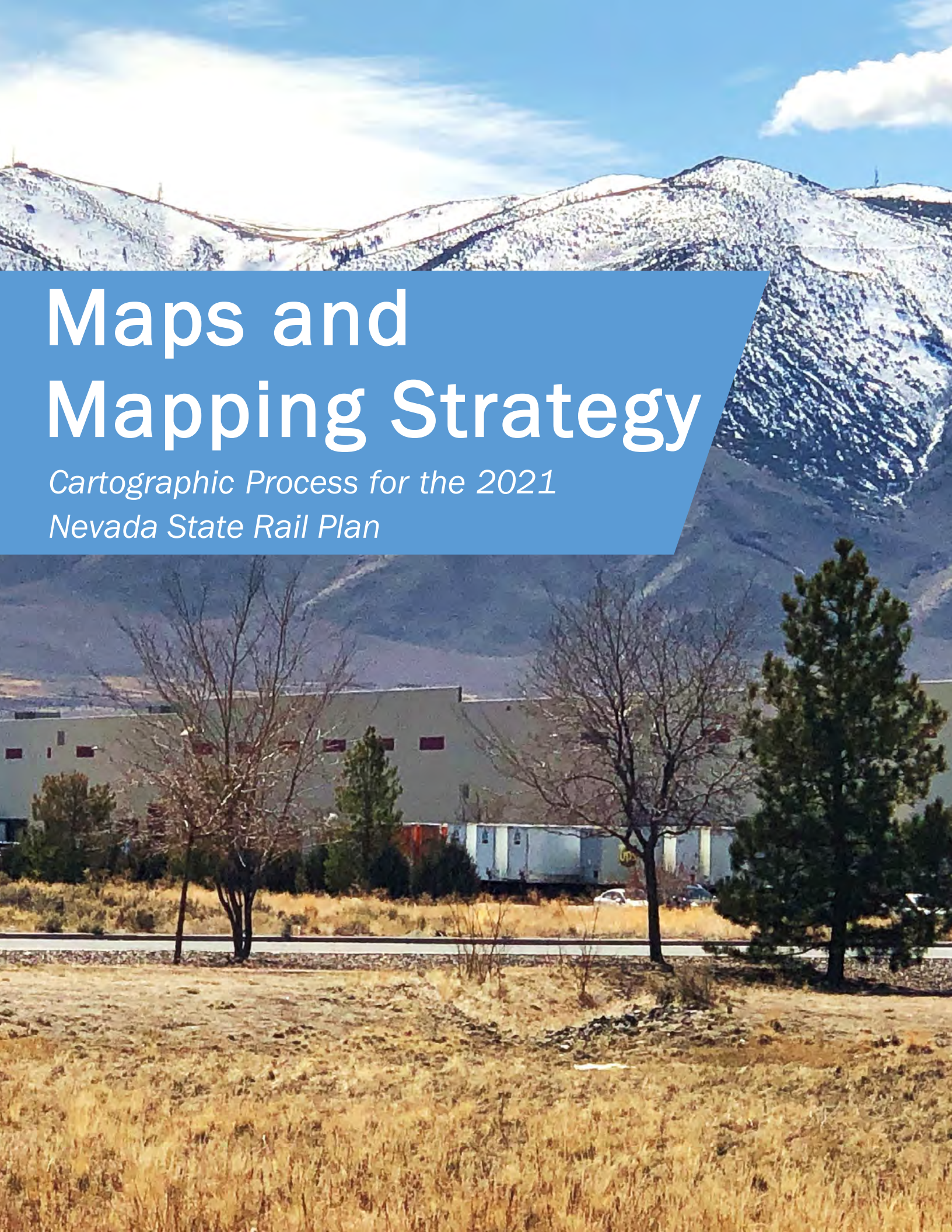
Locating IMCTFs

Although IMCTF's can handle all types of freight they do not need to be equipped for all cargo types. An analysis of current and projected freight flows in a region will define the optimal IMCTF design. IMCTF sites could be single or multiple use, for example container only or dry bulk only. Some IMCTF sites will incorporate substantial warehousing sites for container transloading to small trucks, others may incorporate open storage space for equipment, vehicles, or other large freight items.

IMCTF's stimulate additional economic activity and growth in the region. New companies will seek to locate close to a facility which can reduce their transport costs and provide a high performing supply chain operation which can open new markets and further boost growth. An IMCTF will encourage an eco-system of new distribution hubs attracted by the accessibility and efficiency gains.

An IMCTF is a strategic opportunity for economic development agencies seeking to grow commercial zones or catalyze underperforming regions. Where inland port terminals already exist, these can be easily converted into IMCTF sites and advantages of the integrated model can be quickly implemented.

The availability of existing rail lines and available land for constructing rail extensions from existing lines suggests the Fernley region is an optimal location for locating an IMCTF.



Maps and Mapping Strategy

Cartographic Process for the 2021 Nevada State Rail Plan

Maps and Mapping Strategy

Maps from the 2021 Nevada State Rail Plan

Chapter 1 – The Role of Rail in Statewide Transportation

Chapter 2 – Existing Nevada Rail System

Chapter 3 – Nevada Passenger Rail Strategic Plan

Chapter 4 – Nevada Freight Rail Strategic Plan:

Chapter 6 – Coordination and Review

Cartographic Process for the 2021 Nevada State Rail Plan

The NVSRP approaches maps with the same level of inventiveness as it does freight data—using maps as the central tool for understanding a system that is as geographically- and topographically-based as railroads. Maps like data, are tools for knowledge, understanding, clarity, and productivity. Fortuitously, the Nevada Department of Transportation has a skilled cartography team who have stepped into collaboration with the NVSRP staff in applying their mapping skills. The NVSRP applies what may prove to be a breakthrough in the use of web technology to power-up statewide rail development.

NVSRP stakeholders will have the opportunity to explore new possibilities for the use of this technology. To wrap up the new Nevada State Rail Plan, we hear from Jeff Welter, NDOT's Cartography Supervisor in two statements, first on the fundamentals of print-map production, and then a forward-looking discussion on the advanced webmap system that the NVSRP has created:

Statement of Jeff Welter, NDOT Cartographer, August 21, 2020

> Producing the maps for the 2021 Nevada State Rail Plan is a straightforward, yet multifaceted process. The methodology varies depending on the type or theme of the map and its intended purpose, but in general follows the same steps in each instance.
>
> The initial organizing decisions made before creating a map determine how efficient and productive the eventual map and the map-making process. The goal is a product that clarifies and illuminates with minimal wasted effort on incorrect, outdated, or irrelevant information.
>
> Data is then gathered from many sources, including:
>
> - Aerial imagery from USDA National Agricultural Imagery Program
> - Railroads and highways from Nevada Department of Transportation datasets
> - Federal Land locations and classifications from the US Geological Survey
> - Public Land Survey System (PLSS) from the Bureau of Land Management
> - River and lake information from the USGS National Hydrology Dataset
>
> To these and other datasets are added proprietary information relative to the individual map which are obtained from other public sources, provided by stakeholders, or collected by consultants.
>
> The raw data is then organized and processed using ESRI ArcGIS, software specifically designed for geospatial data i.e., any data that has a locational aspect as opposed to being simply numerical in nature. This can be time consuming due to the sheer size of some files, especially imagery. The computational process can take many hours for each map.
>
> The map is then drawn using Adobe Illustrator, a scalable vector graphics (SVG) program. With SVG, lines are continuous curves instead of a series of pixels, as occurs in raster-based photo processing and some graphics software. Vectors do not change with a change of scale, which allows maps created using SVG to be printed at larger or smaller sizes with no loss of quality. Enlargements with SVG do not result in the 'pixelization' that is often seen when increasing the size of raster-based maps or images.

The key to this entire process is the use of Avenza MAPublisher software. MAPublisher 'translates' the geospatial information derived in ArcGIS to the SVG format used in Illustrator. Once the projection of the map is established, any new 'layers' of information added to the map will conform to the same projection – everything will be in alignment and any changes made to the base of the map will be made to all the features on the map simultaneously. This capability not only speeds the cartographic process, but also allows more creativity and responsiveness to changes as a project progresses.

Once the first draft of a map is created, there is a process of proofreading, review, correction, and amendment by various involved persons. This usually requires multiple subsequent drafts, and the process is repeated until a final version is obtained that satisfies the goals and requirements of the project. Finally, the map can then be published and distributed to stakeholders and the public. The extensive work invested in generating 77 maps in the NVSRP has been conducted with a high level of attention to accuracy, clarity, and usefulness.

Webmap Design and Creation, Jeff Welter, September 18, 2020

Designing a webmap to feature a specific set of data takes the cartographic process to a higher level of complexity. A well-designed webmap requires more work to create than the sum of its component parts but has the benefit of increased utility and flexibility of displaying information compared with traditional print maps.

A webmap consists of a number of maps at different scales portraying the same area. As the scale increases, the number of map sections to cover a particular area also increases i.e., an area portrayed at a scale of 1:100,000 will require four map sections to cover the same area at 1:50,000. Depending on the area and scales used, a webmap can consist of hundreds of individual maps or 'tiles.'

These tiles then are co-registered in six directions: north/south, east/west, and 'zoom in'/'zoom out.' This allows the user to both pan across and zoom into the map area seamlessly. This allows the user to quickly move to areas of interest within the map and then focus on the data of interest.

Once the extent of the area and the number of zoom levels have been decided and the functional structure has been created, geospatial data can then be entered into the map. Geospatial data is any data that has a physical location as one of its components. How the data was collected is a factor here – data collected with GPS coordinates can usually be incorporated into the map automatically; data with addresses often has to be entered manually. This can be a very time-consuming process. Also, the quality of the data and how it has been structured (i.e., how it is arranged in a spreadsheet) will affect the data entry process. Many man-hours can be spent correcting and standardizing data, or even searching for locations that have not been properly described.

After the data has been incorporated, the usual cartographic decisions on symbology, color, line weights and styles, labeling, etc. are then made. The difference here is that the design elements must work at different scales, which quite often is a challenge and, if the zoom levels of the map vary greatly, is actually impossible. So, a new set of decisions are required regarding at which zoom levels do features and data points become visible/disappear.

Along with this, quite often the style of the base map upon which the data is displayed may be suitable at one zoom level, but makes the lines, symbols, and labels difficult to read or interpret at another, so the base map must change as the user zooms in or out. This is another decision to be made and adds more complexity to the functional structure of the webmap.

A feature of web maps is the ability for the user to access all the information associated with each data point. This information is called 'attributes' and the 'attribute table' of the webmap corresponds generally to a typical spreadsheet. Using the example of businesses, clicking on the symbol will then open a pop-up box showing the name, address, phone, amount of traffic, accessibility, or any other type of information relating to that business. The only limitation of the data available to display is the quantity and quality of the data provided to the cartographer.

Another feature of webmaps is the capability for the user to make only certain types of information visible in order to focus on particular aspects of the data as a whole. As information is entered into the webmap, it is arranged in 'layers' by the cartographer. These layers are usually defined by some particular aspect of the data; for example, using businesses again, they could be grouped into layers based on the number of employees. The user then could 'turn off' (deselect) any layers not of interest leaving only the desired group of data points (in this case, business locations) that meet their criteria. This simplifies reading and interpreting the map and also allows a map to be 'customized' for presentation, highlighting the information that the user deems most important.

Web maps are a powerful tool, the possible uses of which are only beginning to be discovered and utilized. The extra effort needed for their creation is more than compensated by the benefits derived from them.

Figure 1-1: Nevada Rail Network

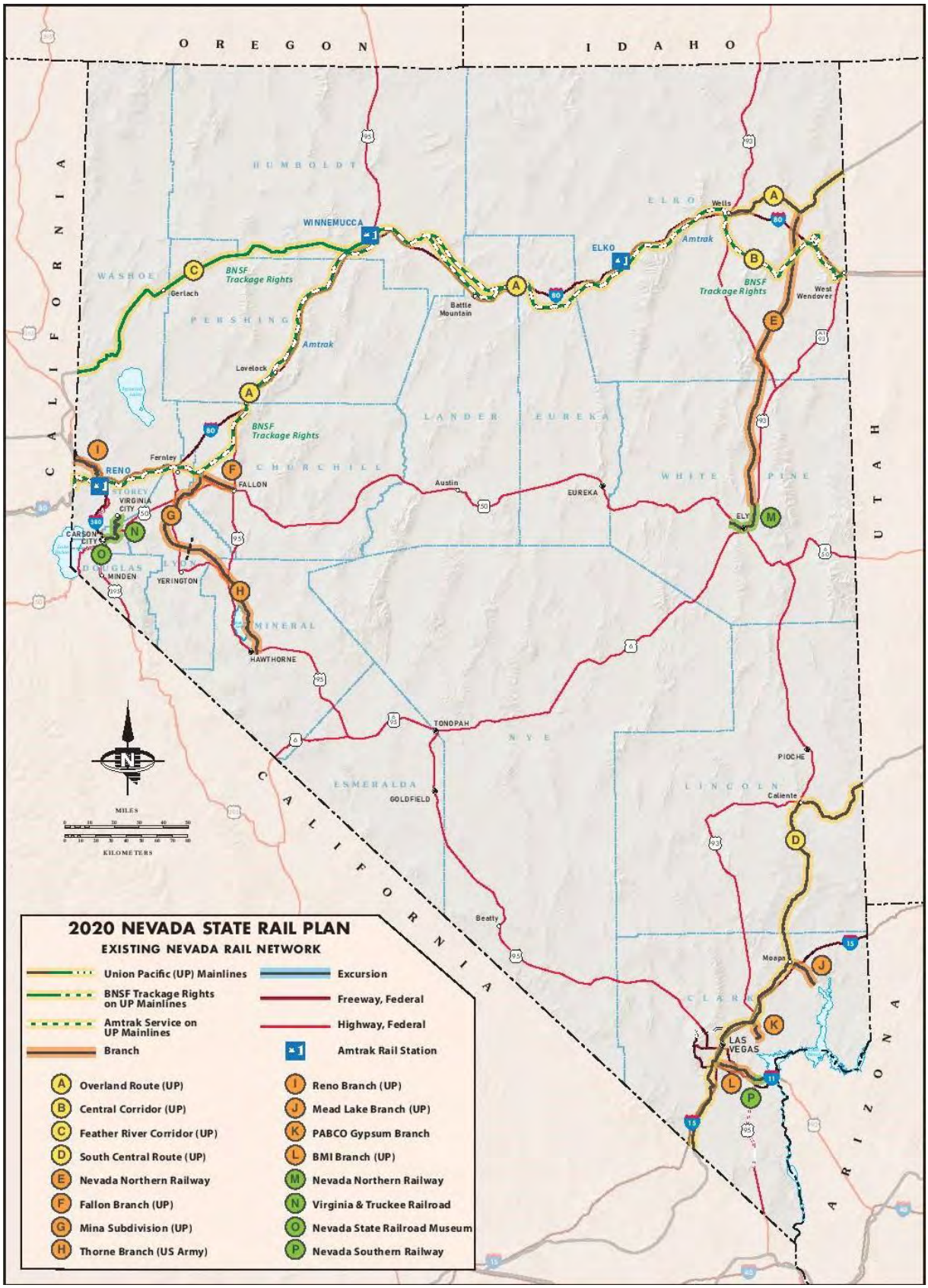
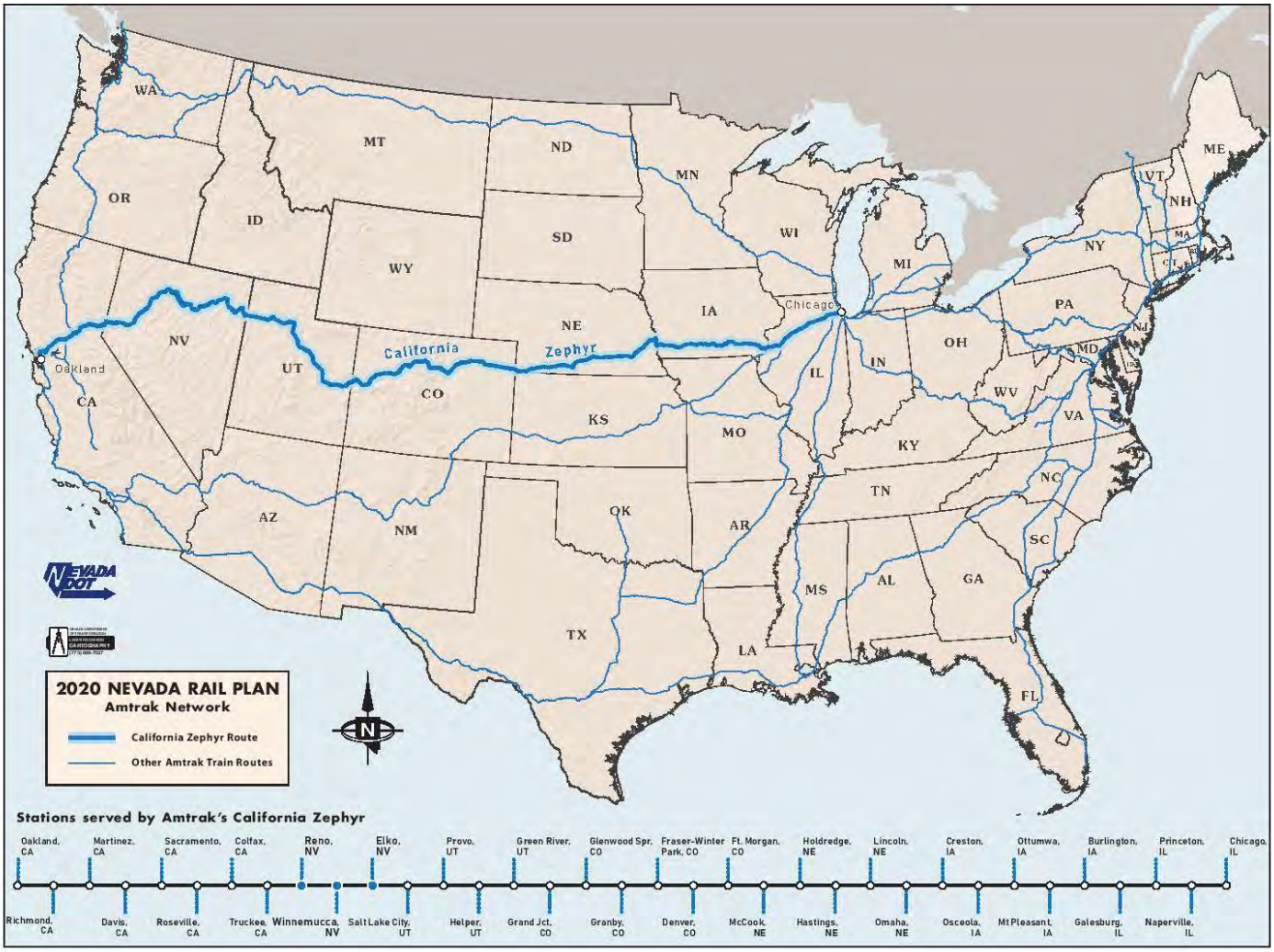


Figure 2-2: California Zephyr and Amtrak System[1]



[1] Amtrak website, source link, accessed June 9, 2020.

Figure 2-3: California Zephyr Station Stops in Nevada

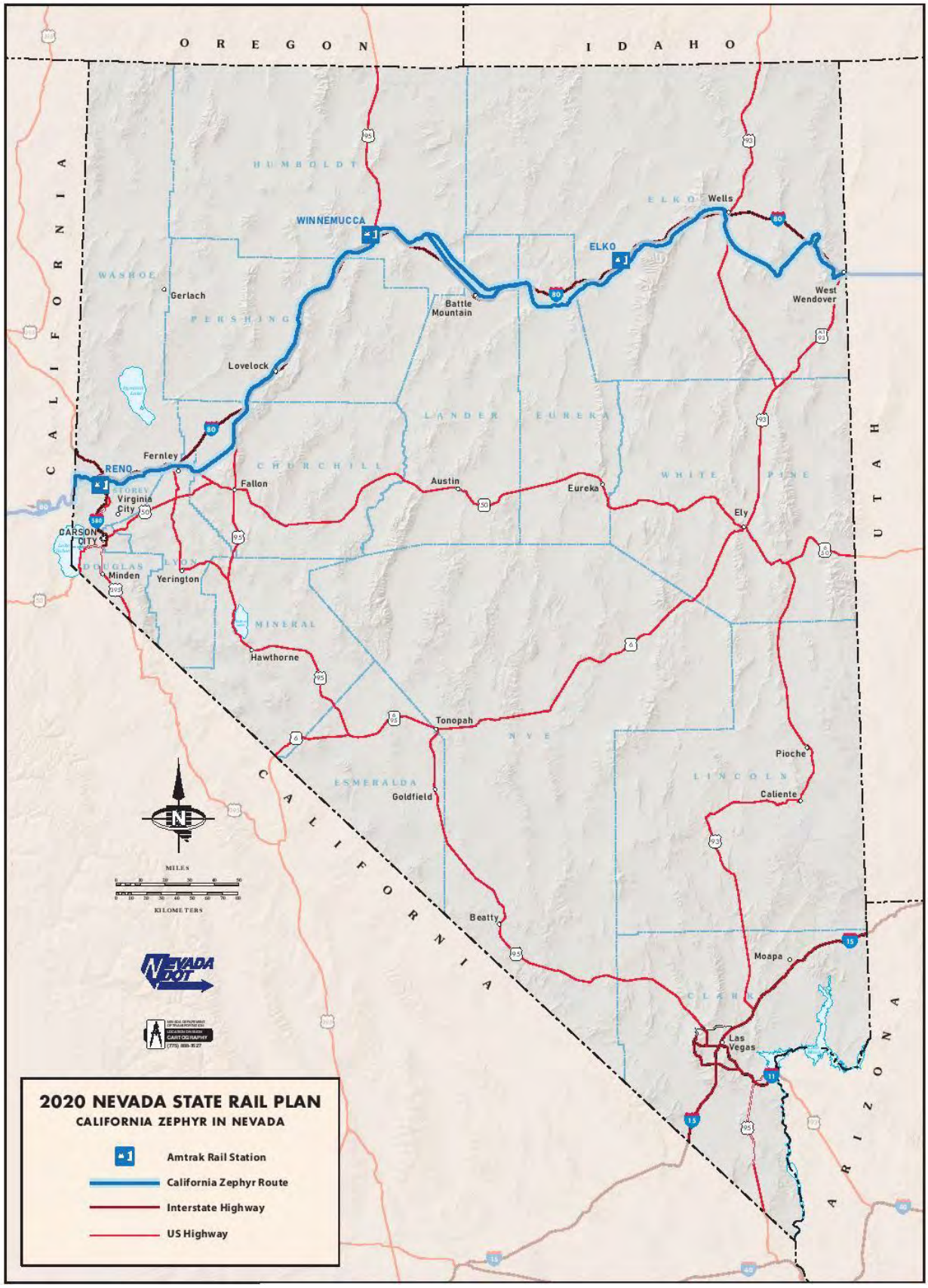


Figure 2-4: Connecting Amtrak Thruway Bus Service with Nevada

Figure 2-5: Excursion Lines

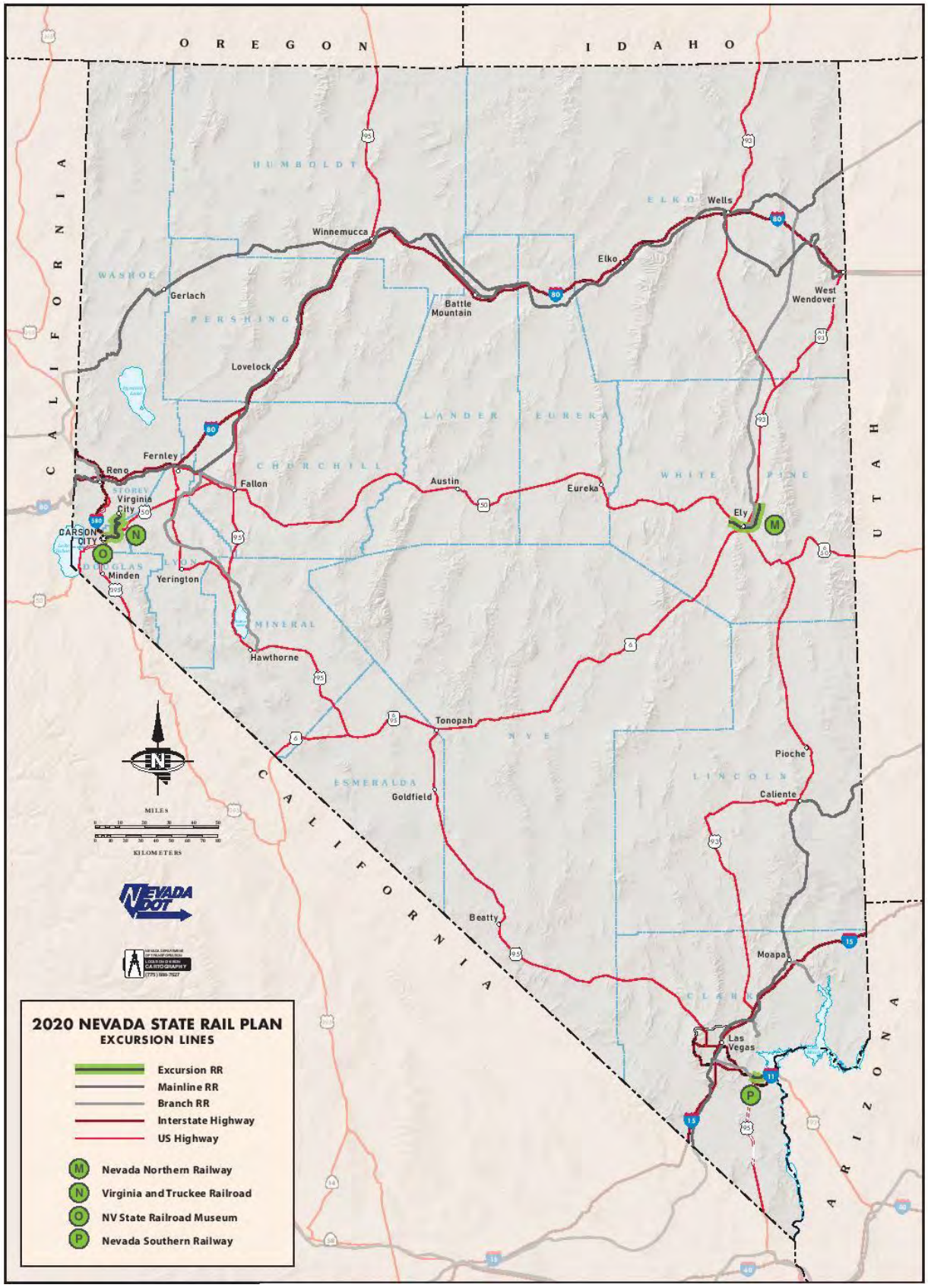


Figure 2-6: Las Vegas Multimodal Passenger Connections

Figure 2-7: Reno Multimodal Passenger Connections

Figure 2-8: Elko Amtrak Passenger Station

Figure 2-9: Winnemucca Amtrak Passenger Station

Figure 2-10: Sparks Multimodal Passenger Connections

Figure 2-11: Laughlin Multimodal Passenger Connections

Figures 2-12 and 2-14.1: Stateline Multimodal Passenger Connections

Figure 2-13: Nevada Main Lines

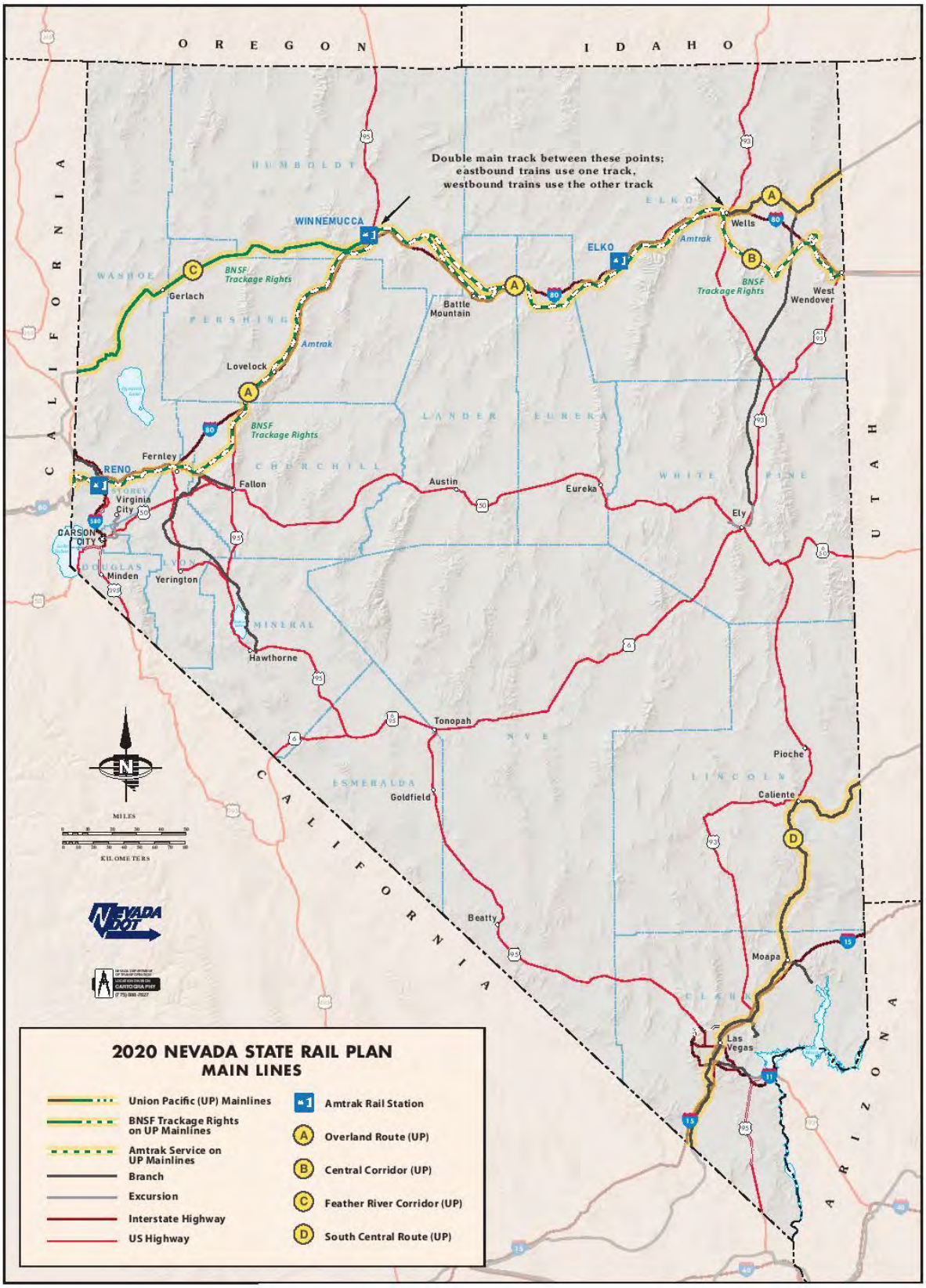


Figure 2-14: Major Line Network in Adjoining States

Figure 2-15: Nevada Branch Lines

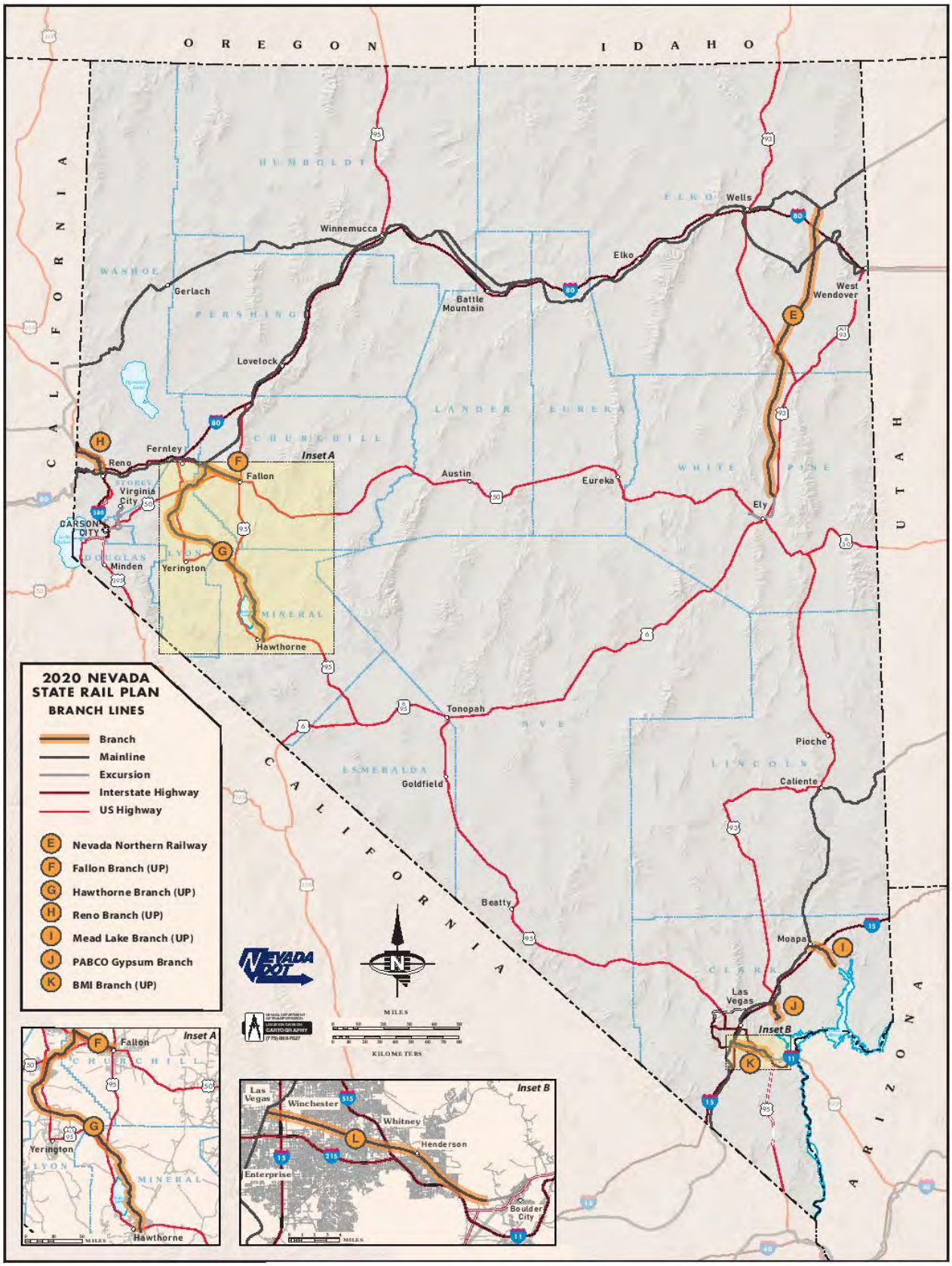


Figure 2-16: Freight Right-of-Way and Major Facilities in Nevada

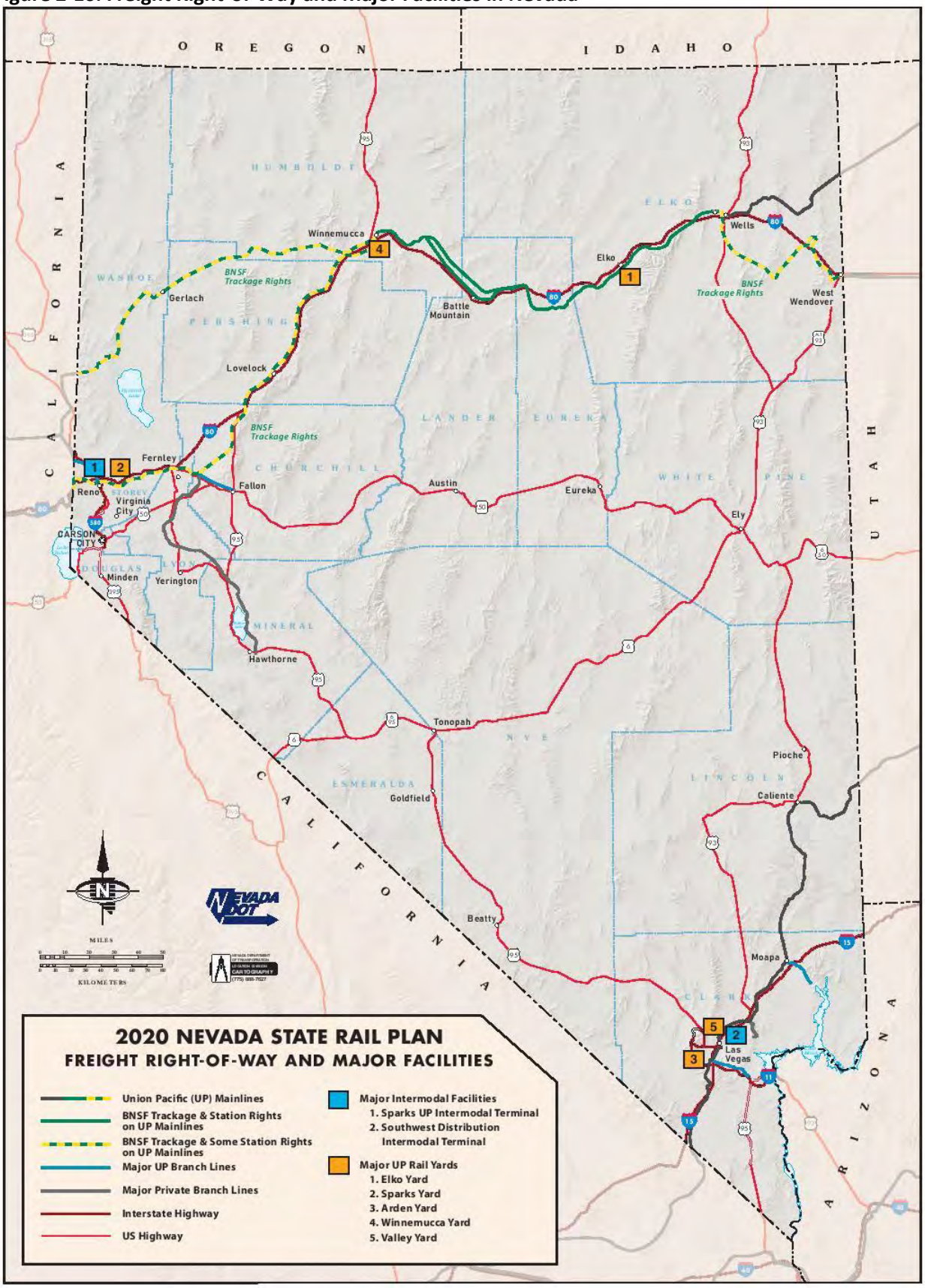


Figure 2-17: Abandoned Rail Line

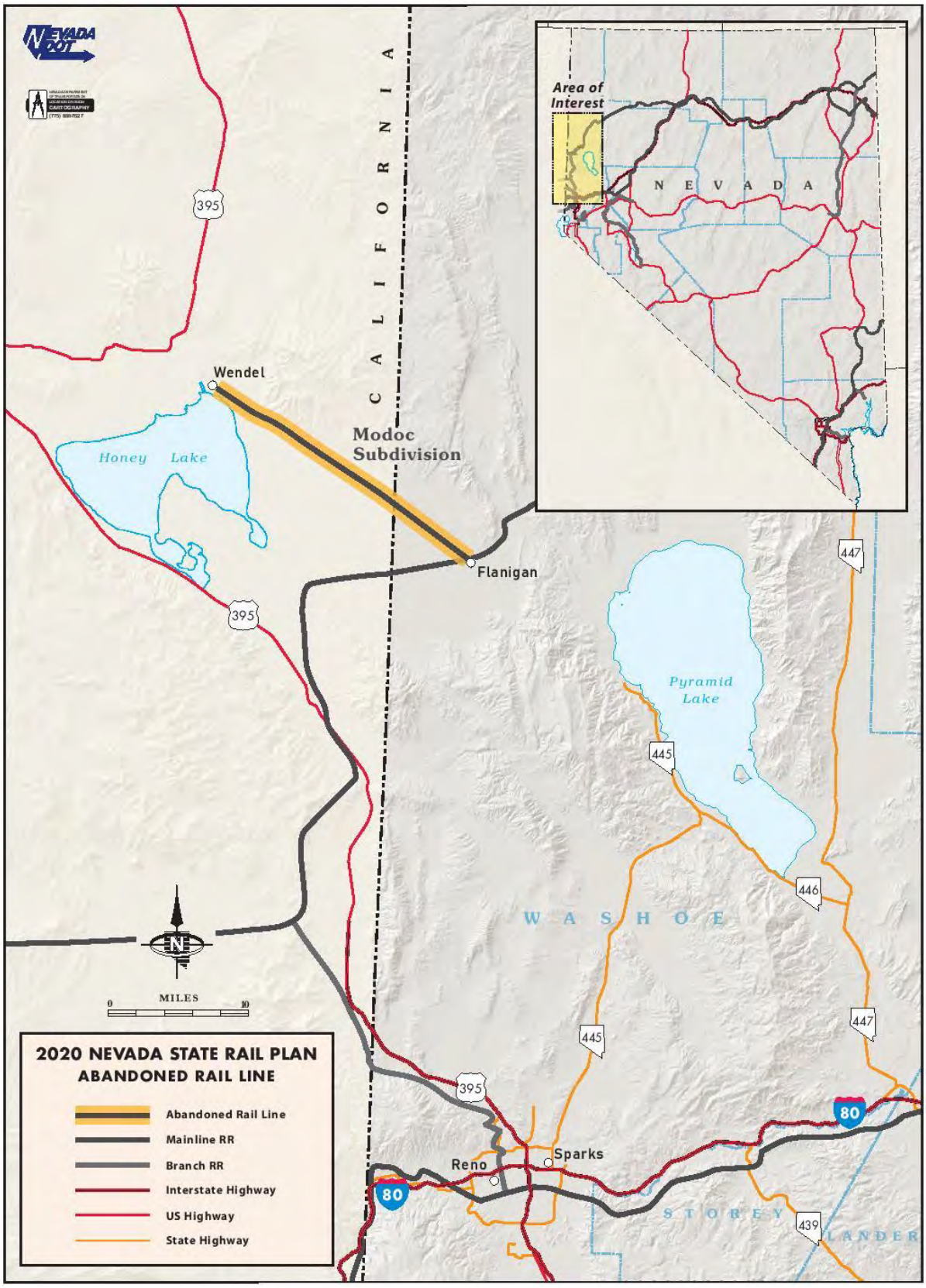


Figure 2-18: Destination of Rail Traffic Originating in Nevada (2018)

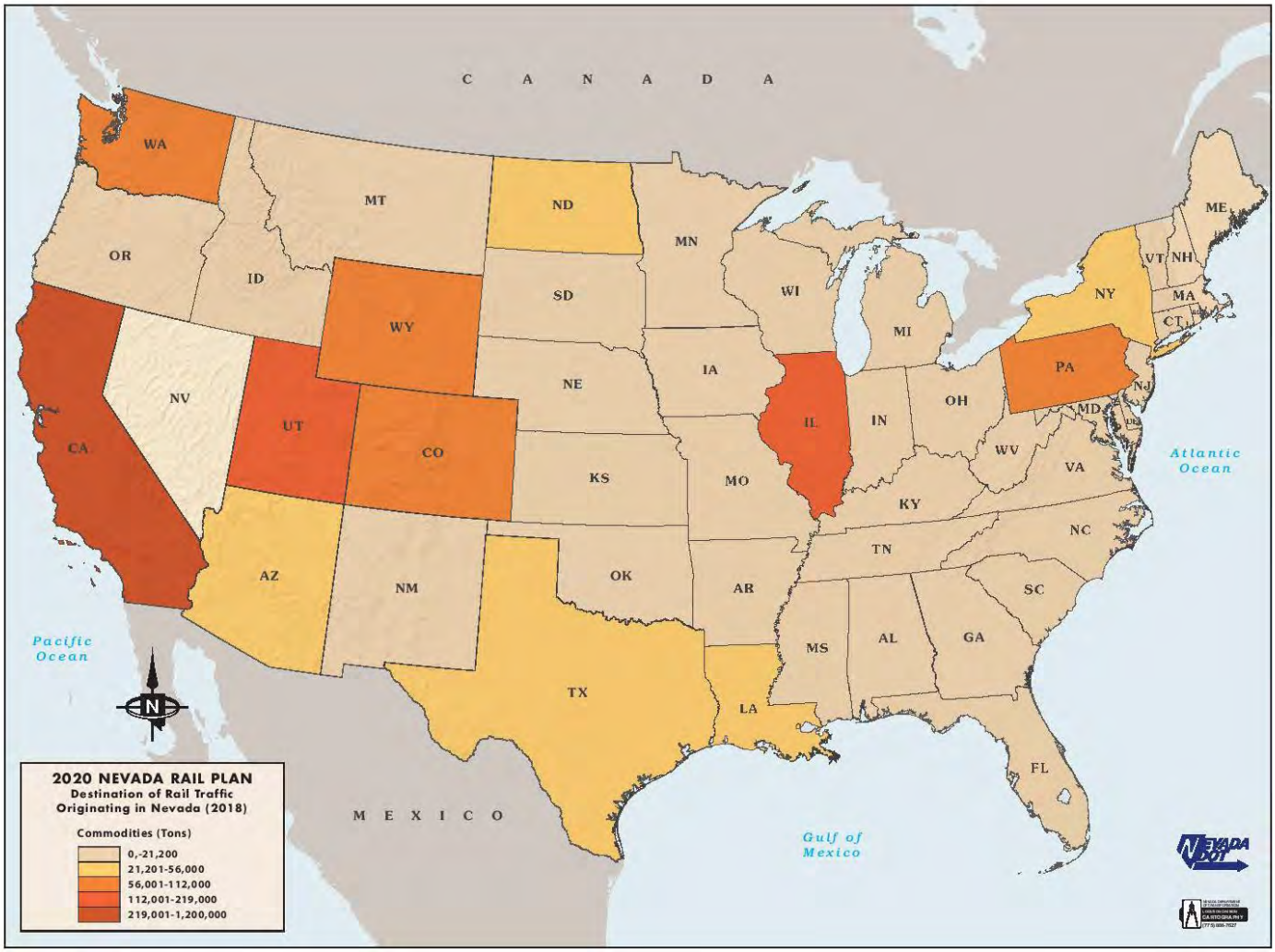


Figure 2-19: Origination of Rail Traffic Terminating in Nevada (2018)

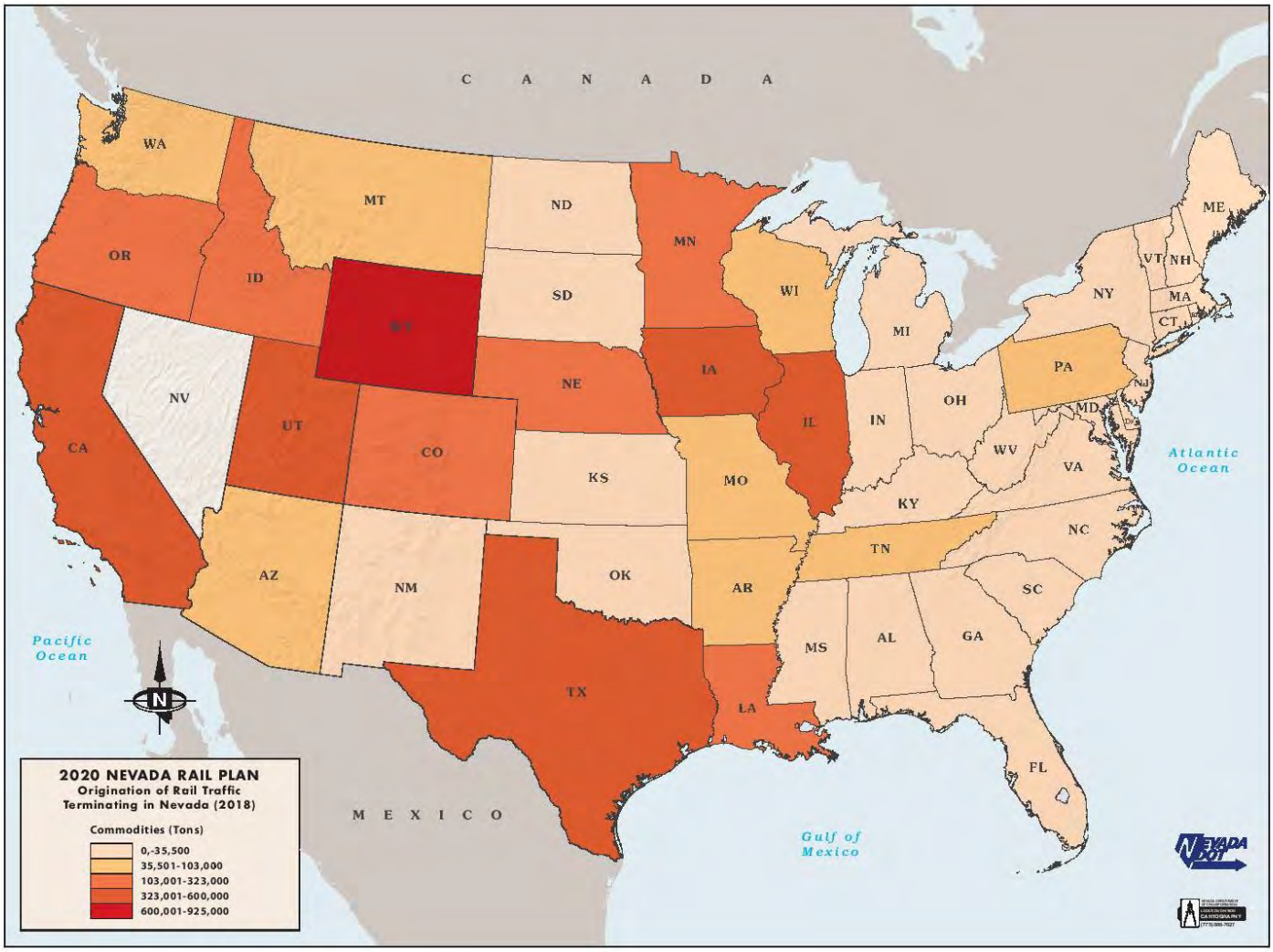


Figure 3-1 Proposed Amtrak California Zephyr Station Stops

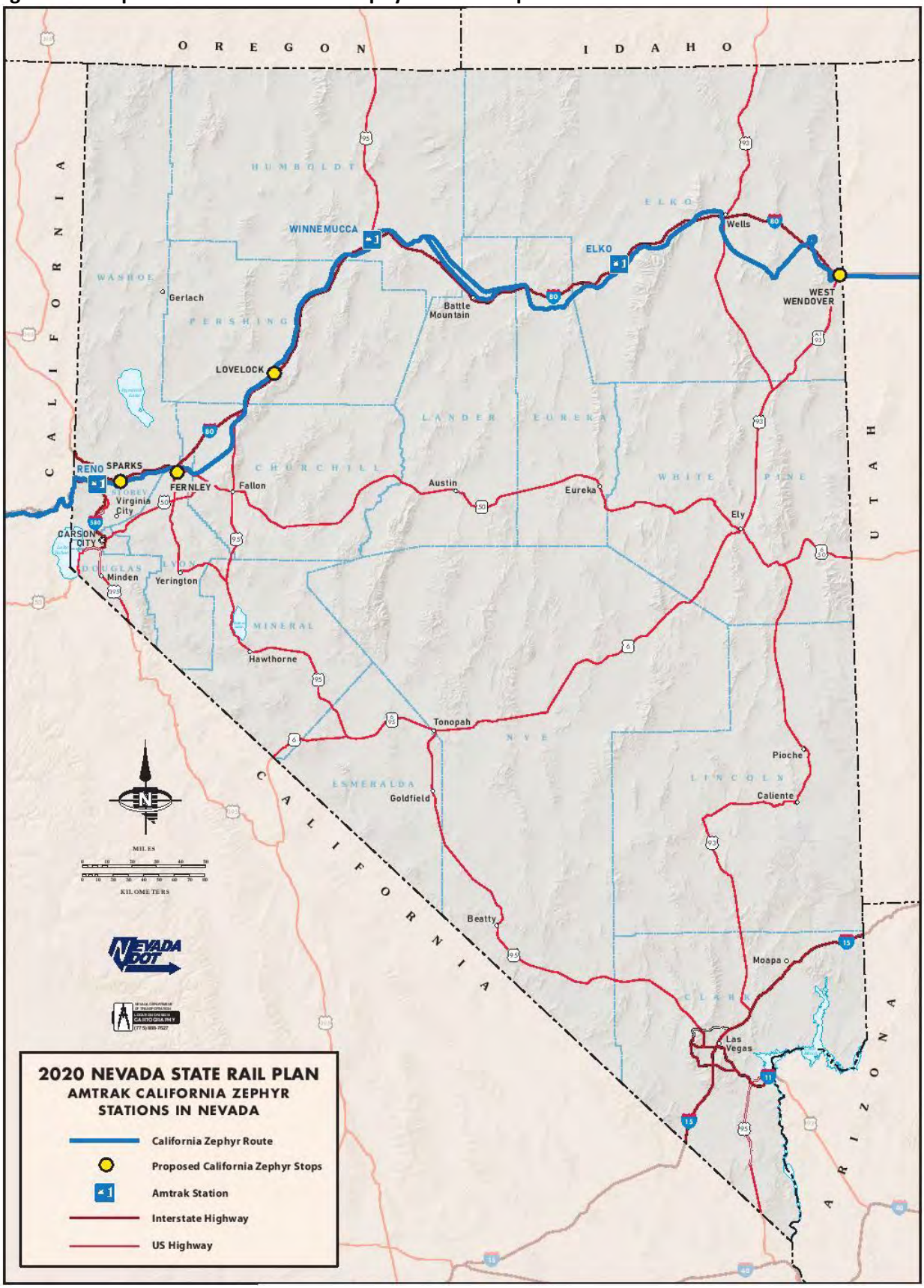


Figure 3-2 Proposed Amtrak Capital Corridor Extension to Reno/Sparks

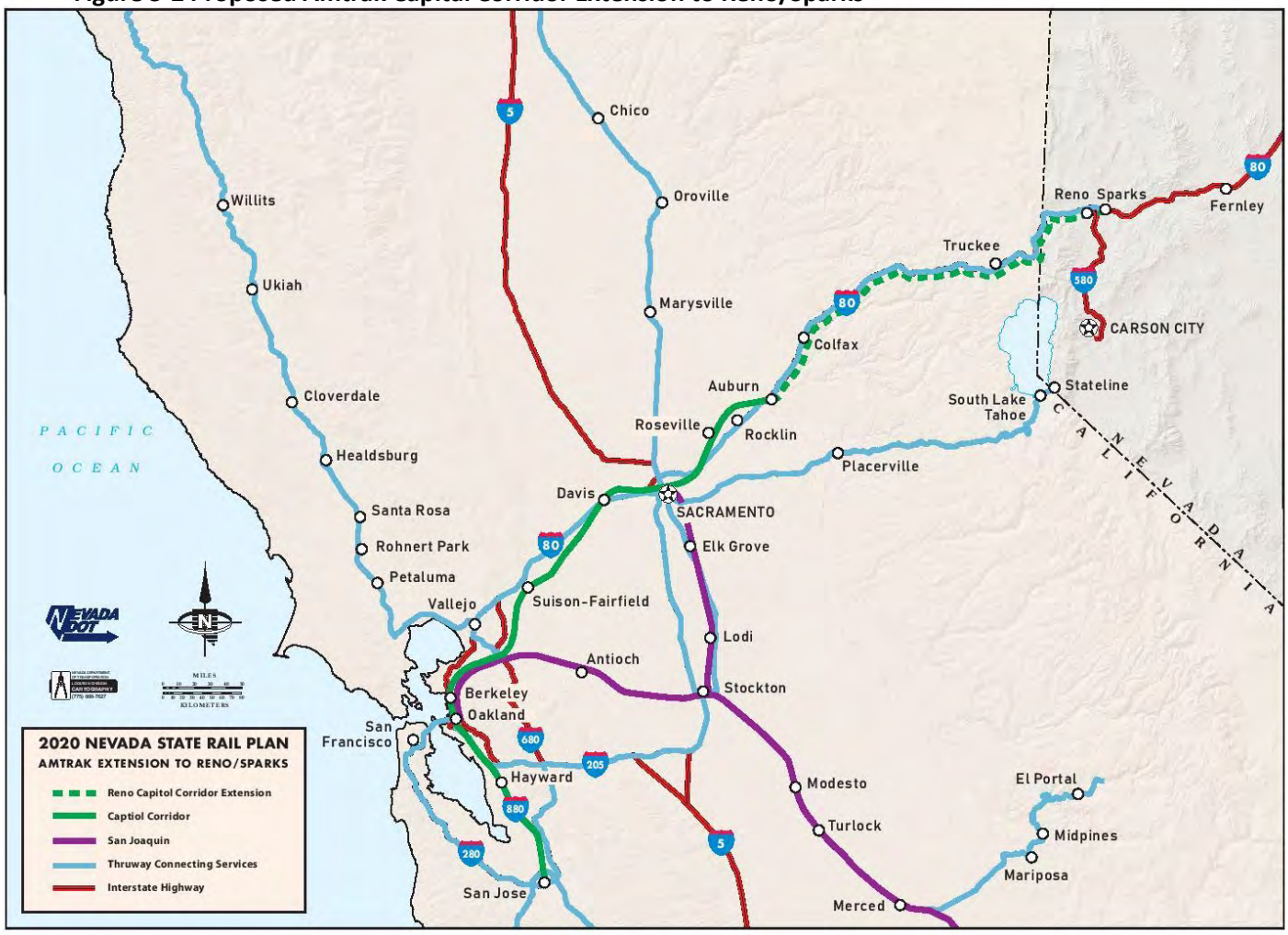


Figure 3-320 Brightline West Route Map

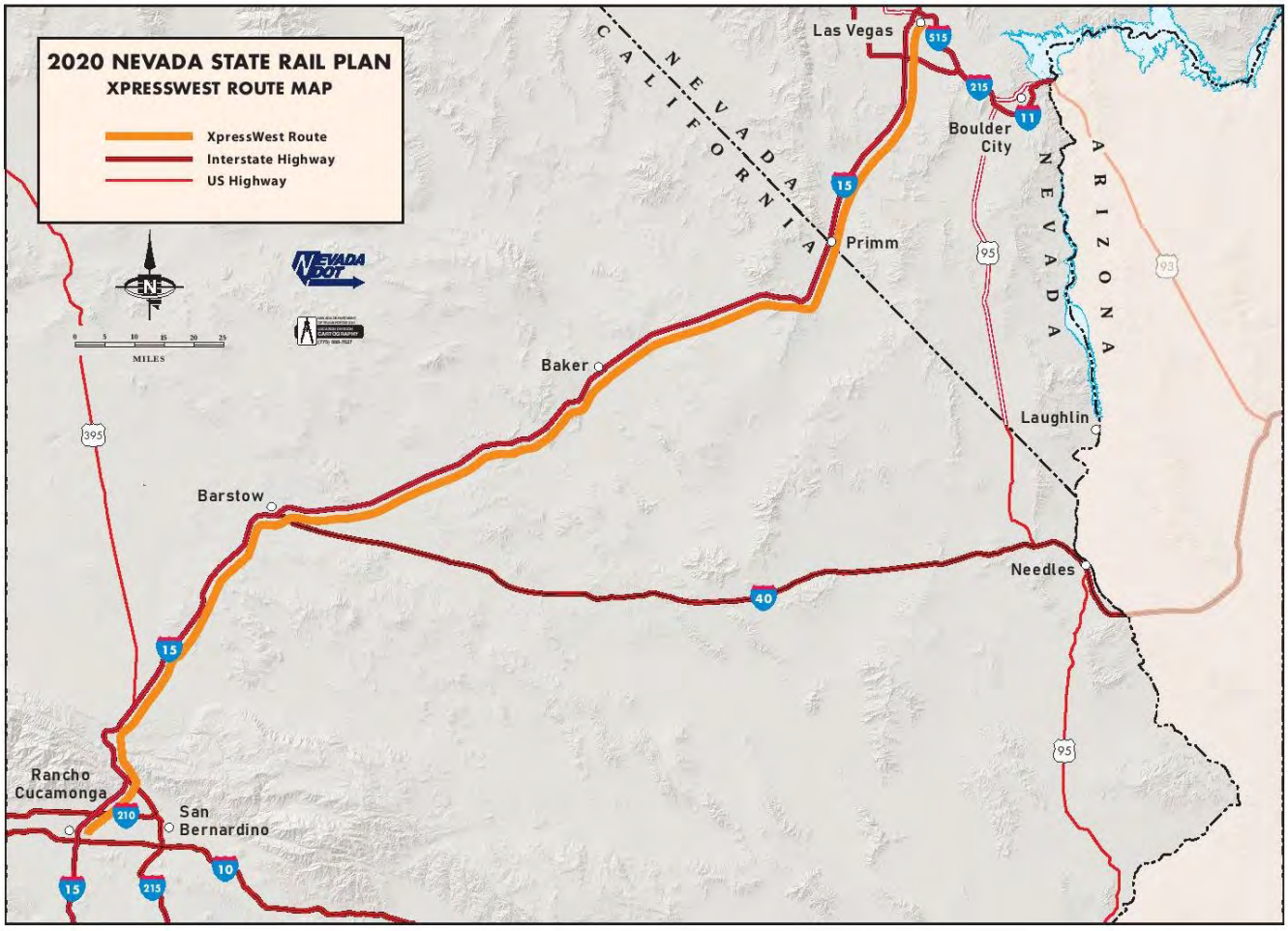


Figure 3-5: Las Vegas – Reno C Route

Figure 3-6: C Route Highlight Overlay on Population Heat Map

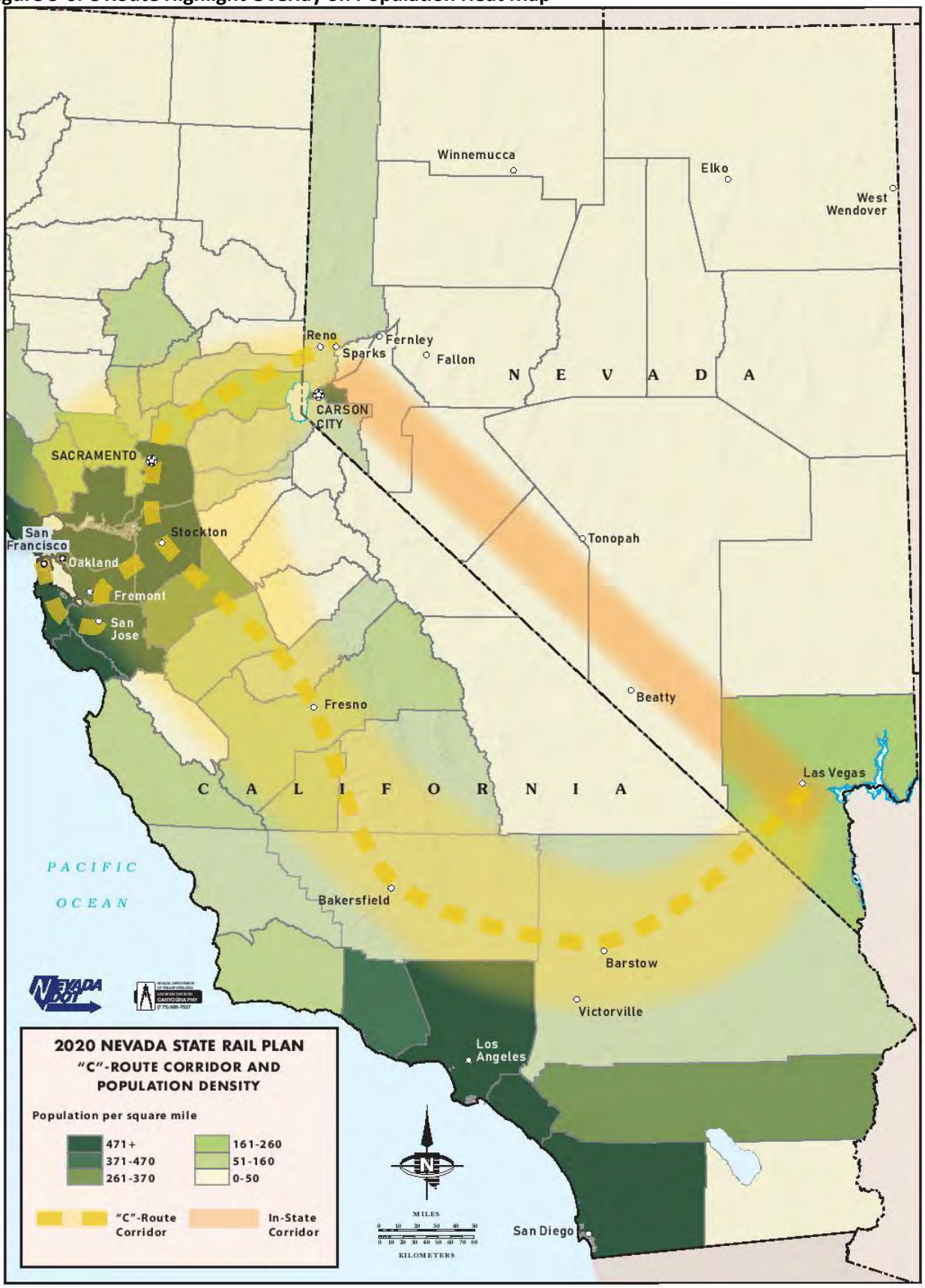


Figure 3-7: Desert Wind Corridor

Figure 3-8: Nevada Northern Railway McGill Extension

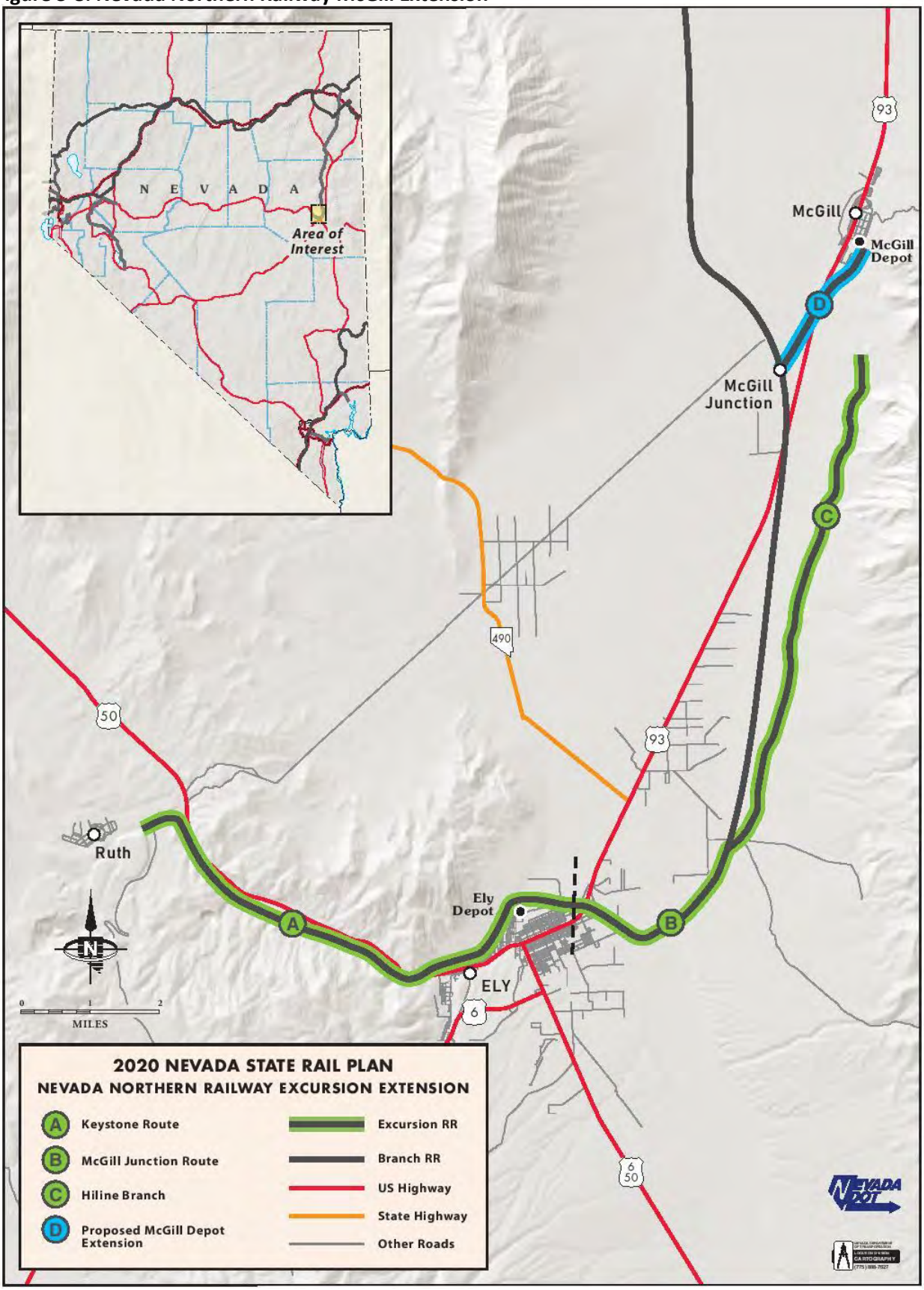


Figure 3-10: "The Hoover Dam Limited"

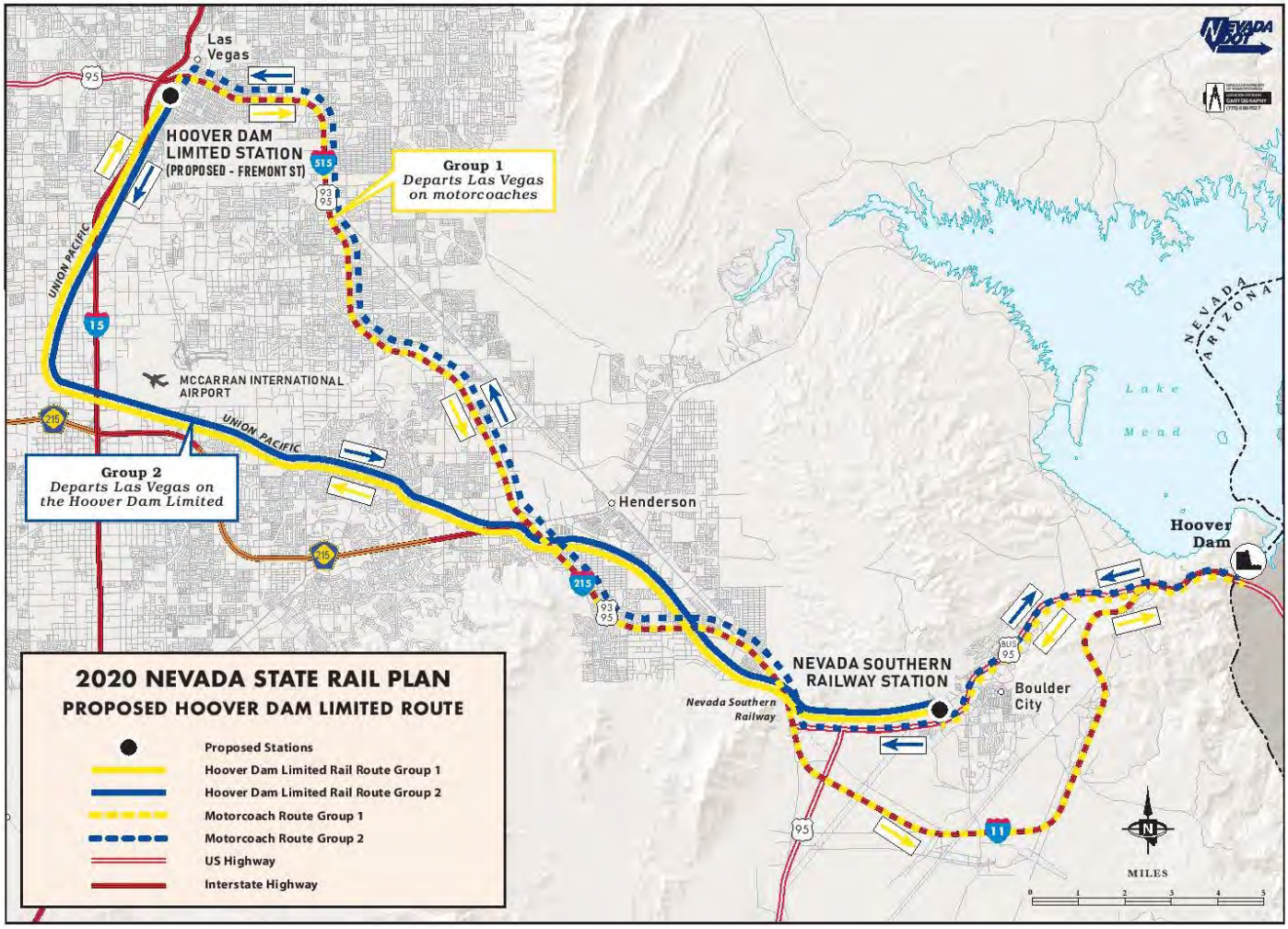


Figure 3-11: Innovation Park Commuter Rail Service

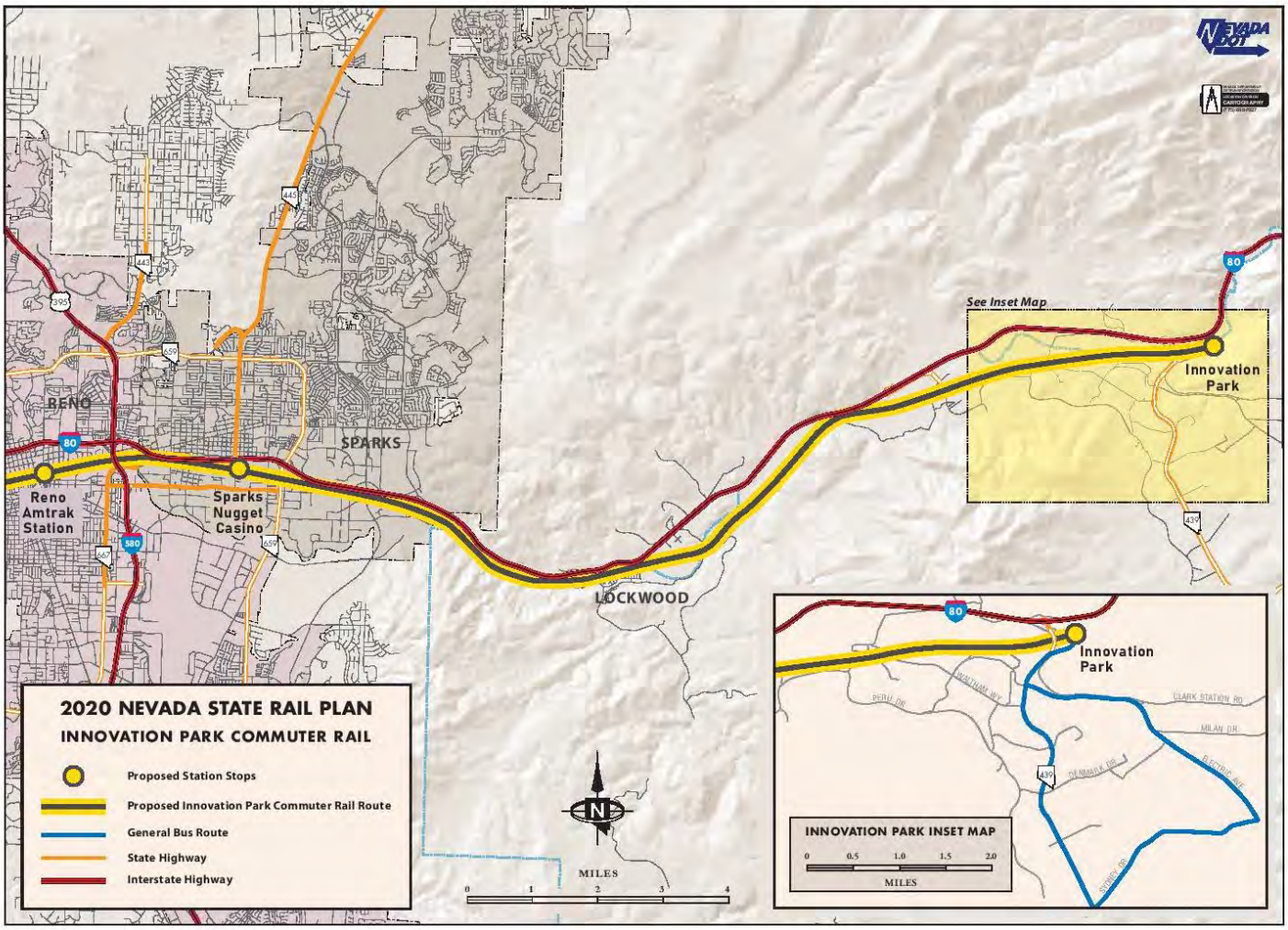


Figure 3-12: RailPAC Reno Corridor Proposals

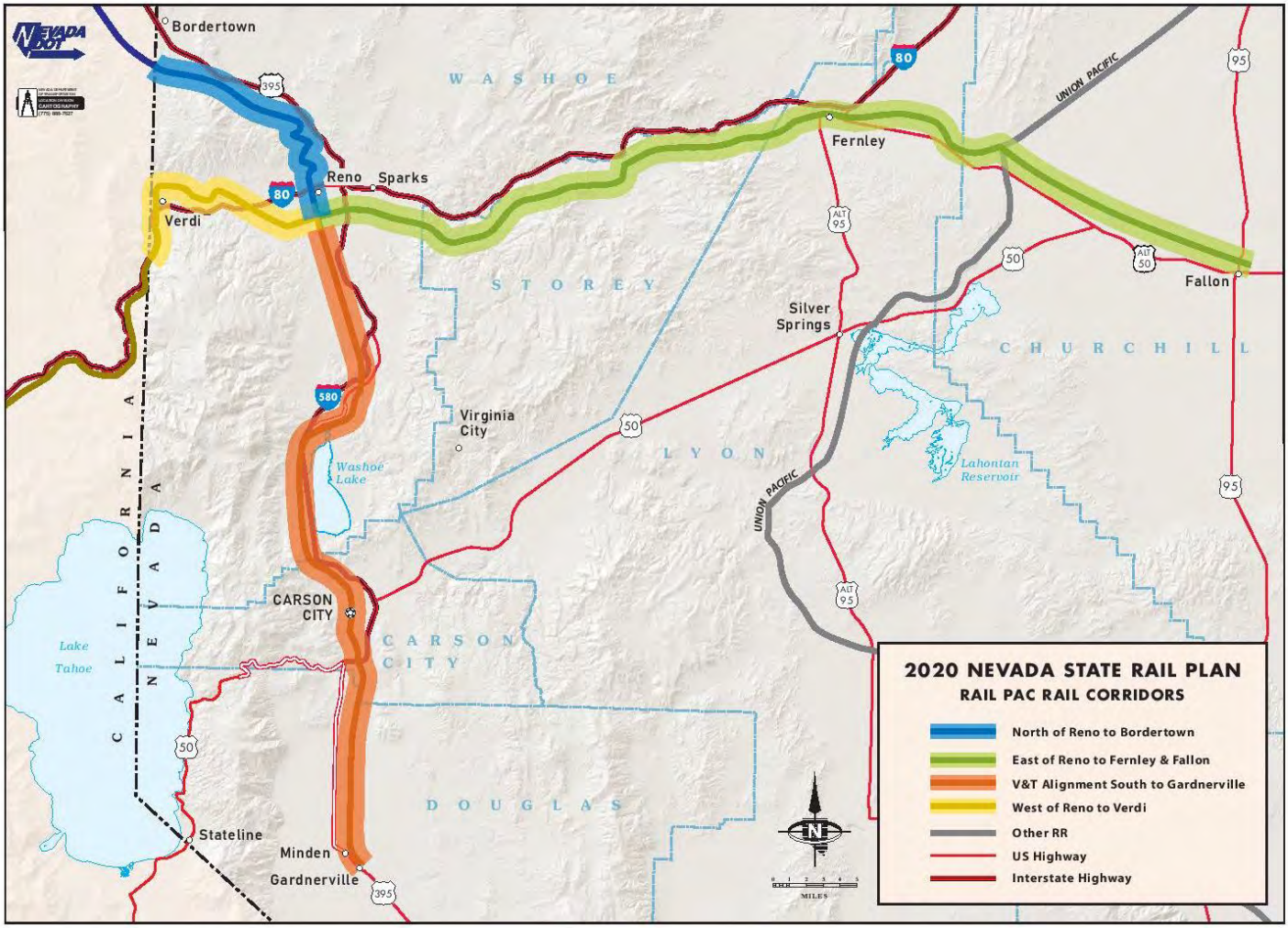


Figure 3-13: Las Vegas – Primm Regional Rail

Figure 3-14: Las Vegas Monorail Extension to Brightline West

Figure 3-15: Existing Nevada Rail Network

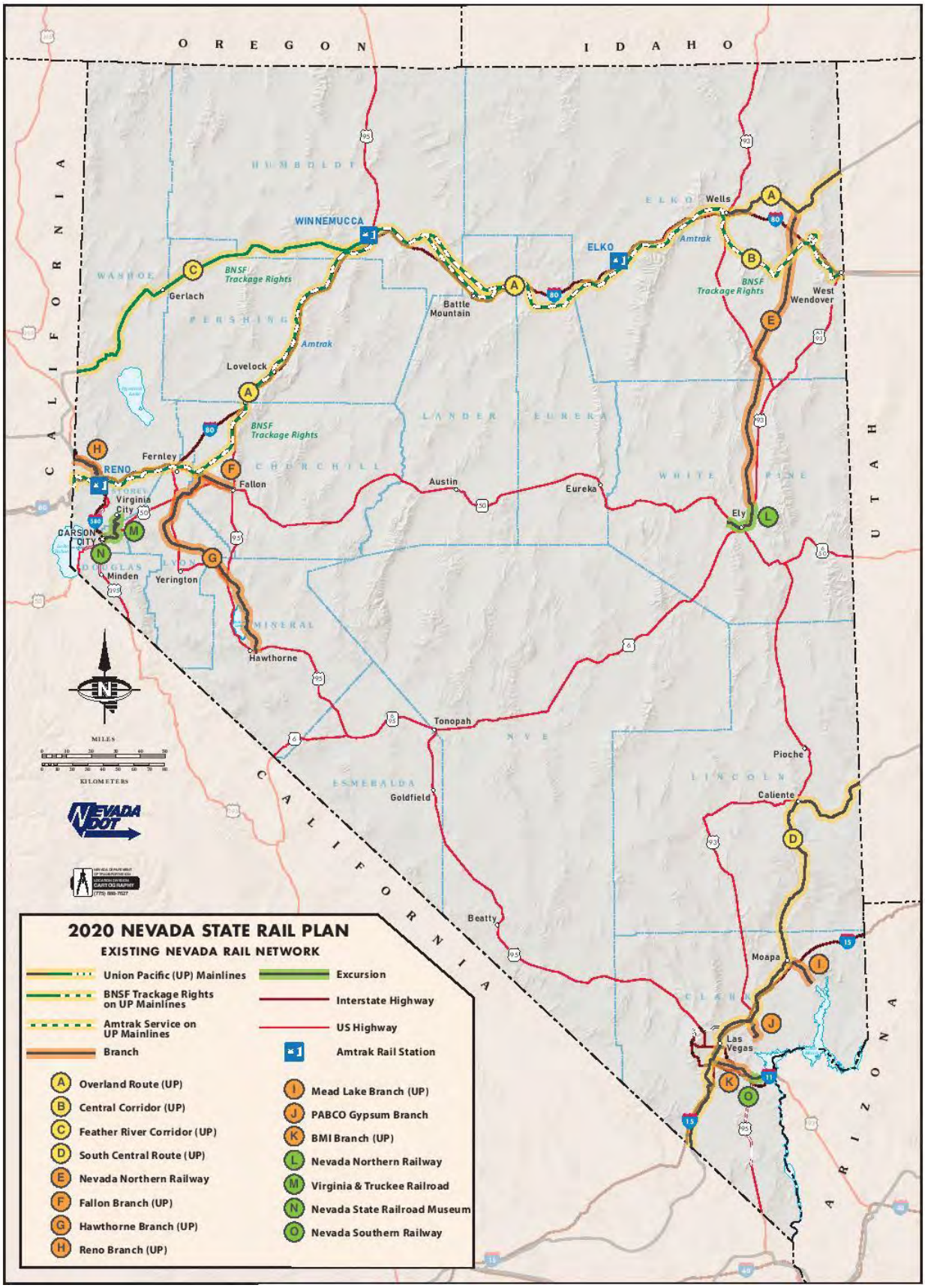


Figure 4-1: Nevada Active Mines Overview

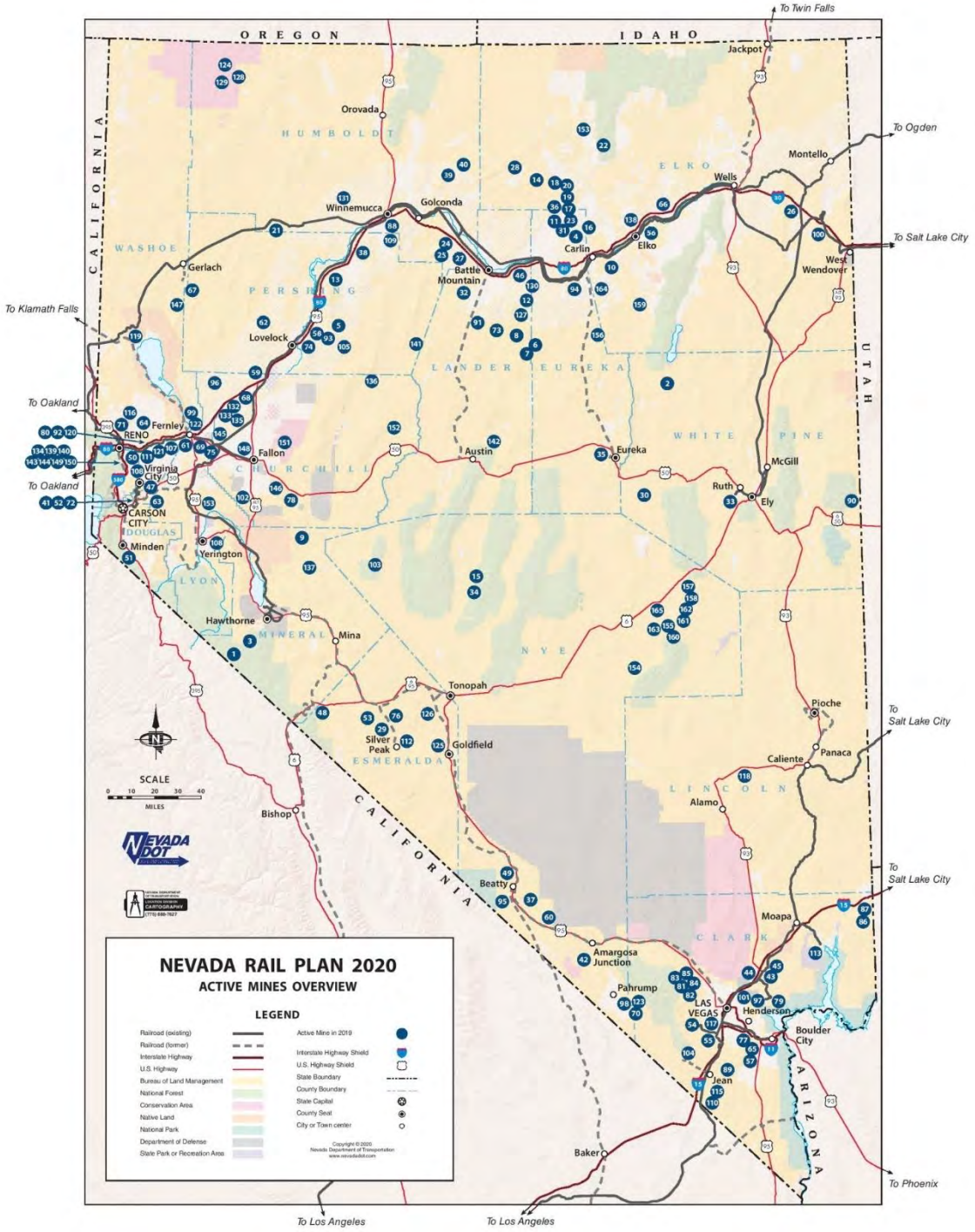


Figure 4-2: Nevada Strategic Regions

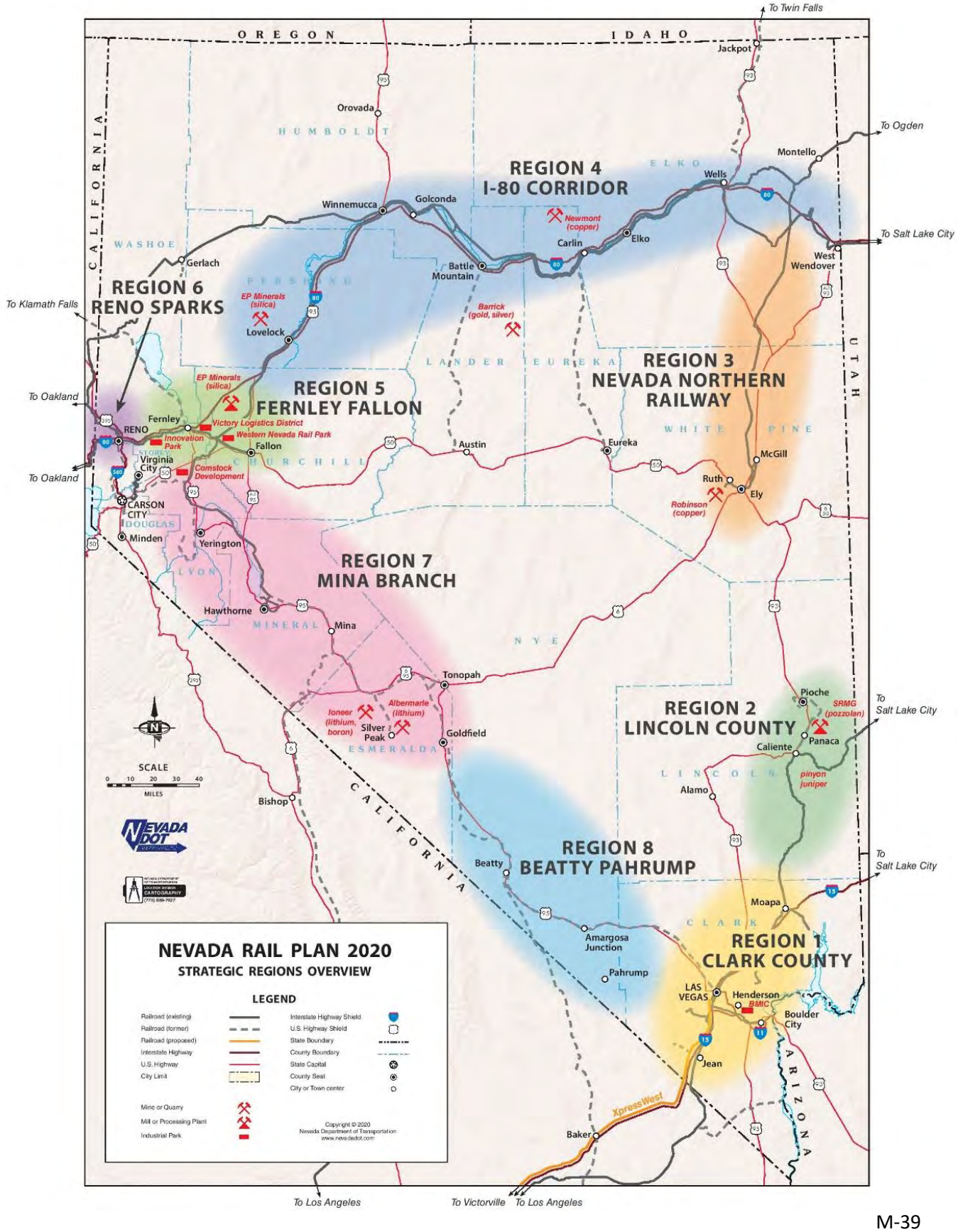


Figure 4-3: Region 1 - Clark County Area

Figure 4-4: Region 1 – Black Mountain Industrial Complex Area

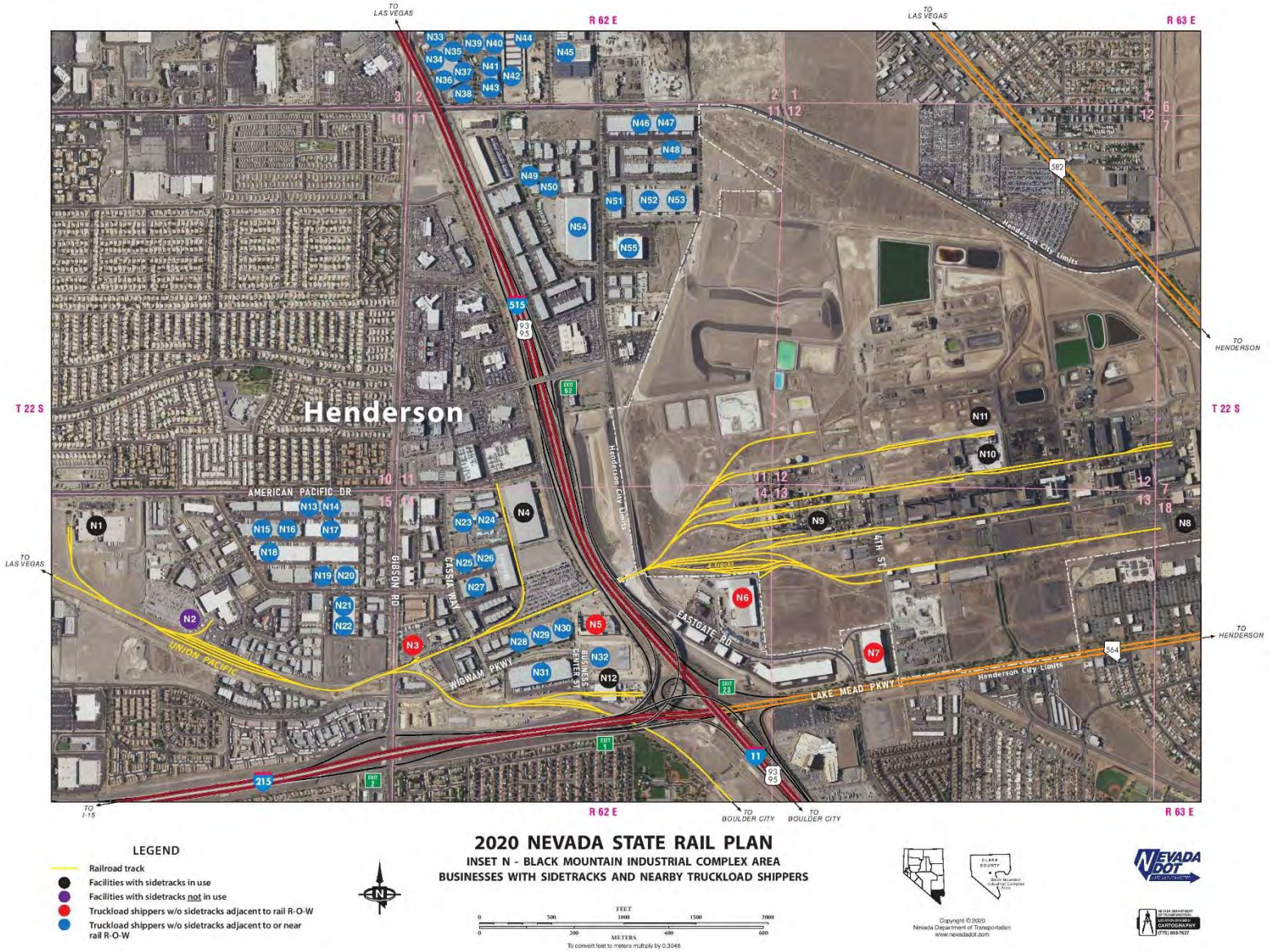


Figure 4-5: Region 1 – North Las Vegas Area

Figure 4-6: Region 1 – Nellis Area

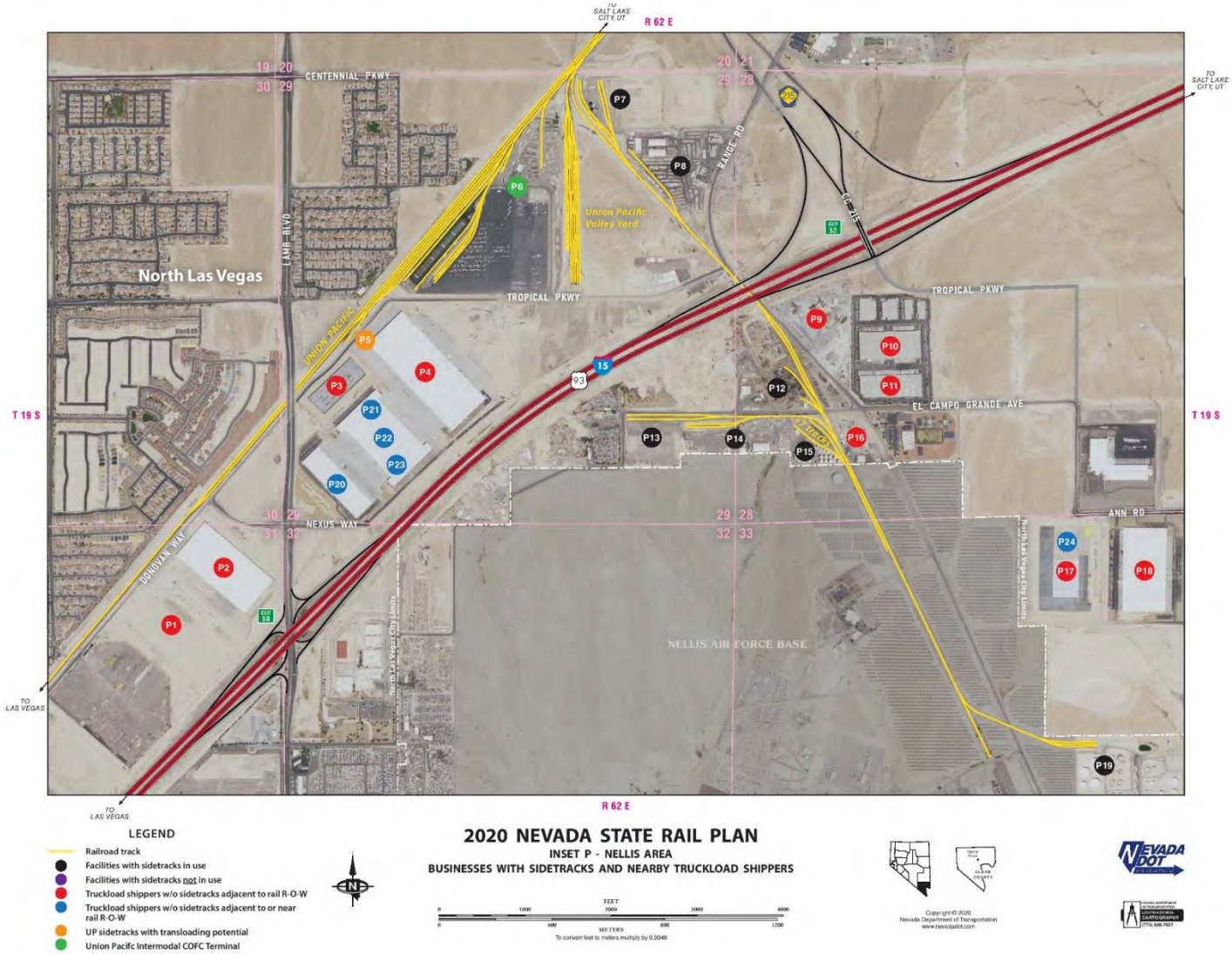
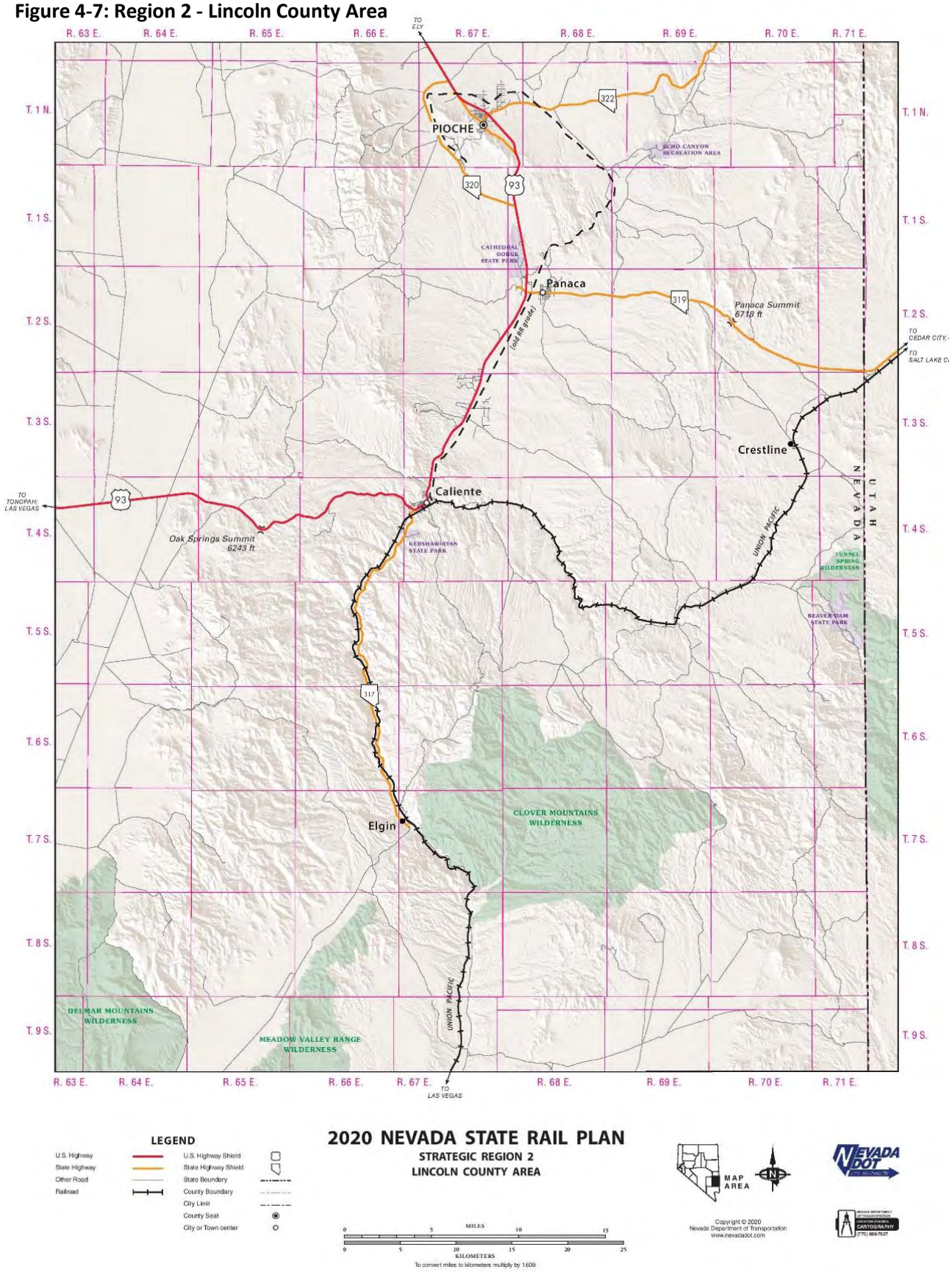


Figure 4-7: Region 2 - Lincoln County Area



LEGEND

U.S. Highway
State Highway
Other Road
Railroad
U.S. Highway Shield
State Highway Shield
State Boundary
County Boundary
City Limit
County Seat
City or Town center

2020 NEVADA STATE RAIL PLAN

STRATEGIC REGION 2
LINCOLN COUNTY AREA

MILES 0 5 10 15
KILOMETERS 0 5 10 15 20 25
To convert miles to kilometers multiply by 1.609

MAP AREA

NEVADA DOT

CARTOGRAPHY (775) 888-7627

Figure 4-8: Region 3 - Nevada Northern Railway

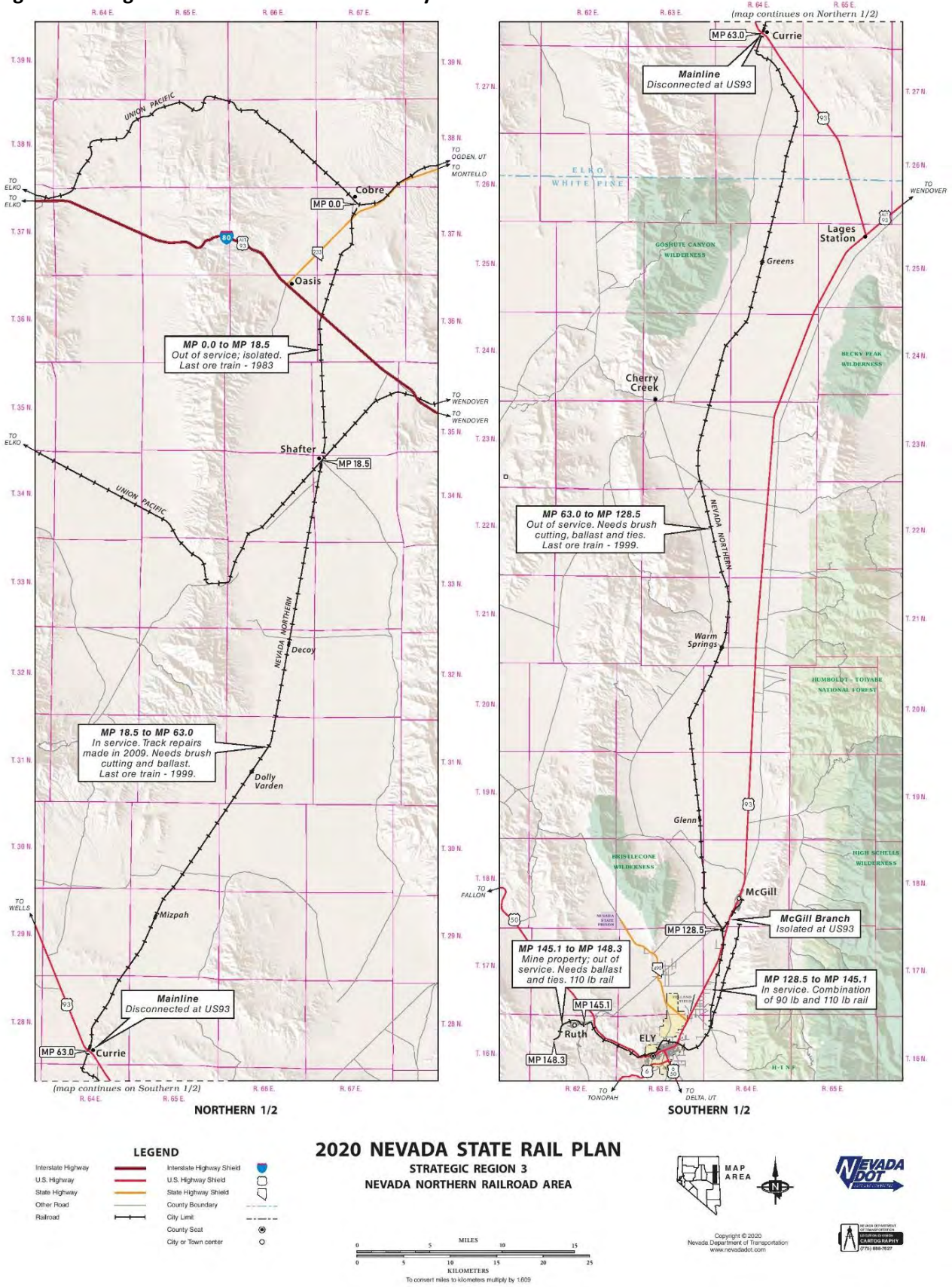


Figure 4-9: Region 4 - I-80 Corridor Area

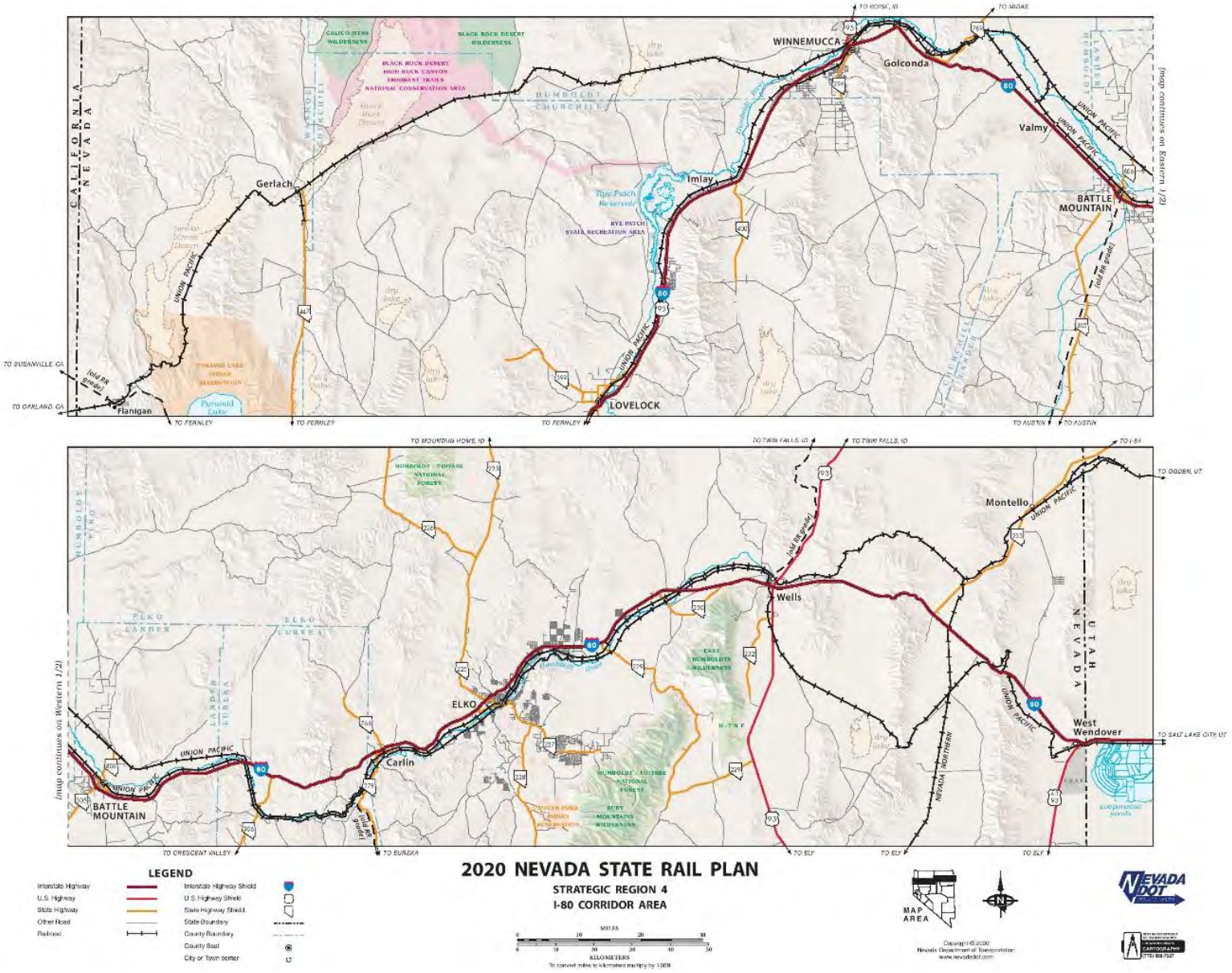


Figure 4-10: Region 5 – Fernley Fallon Area

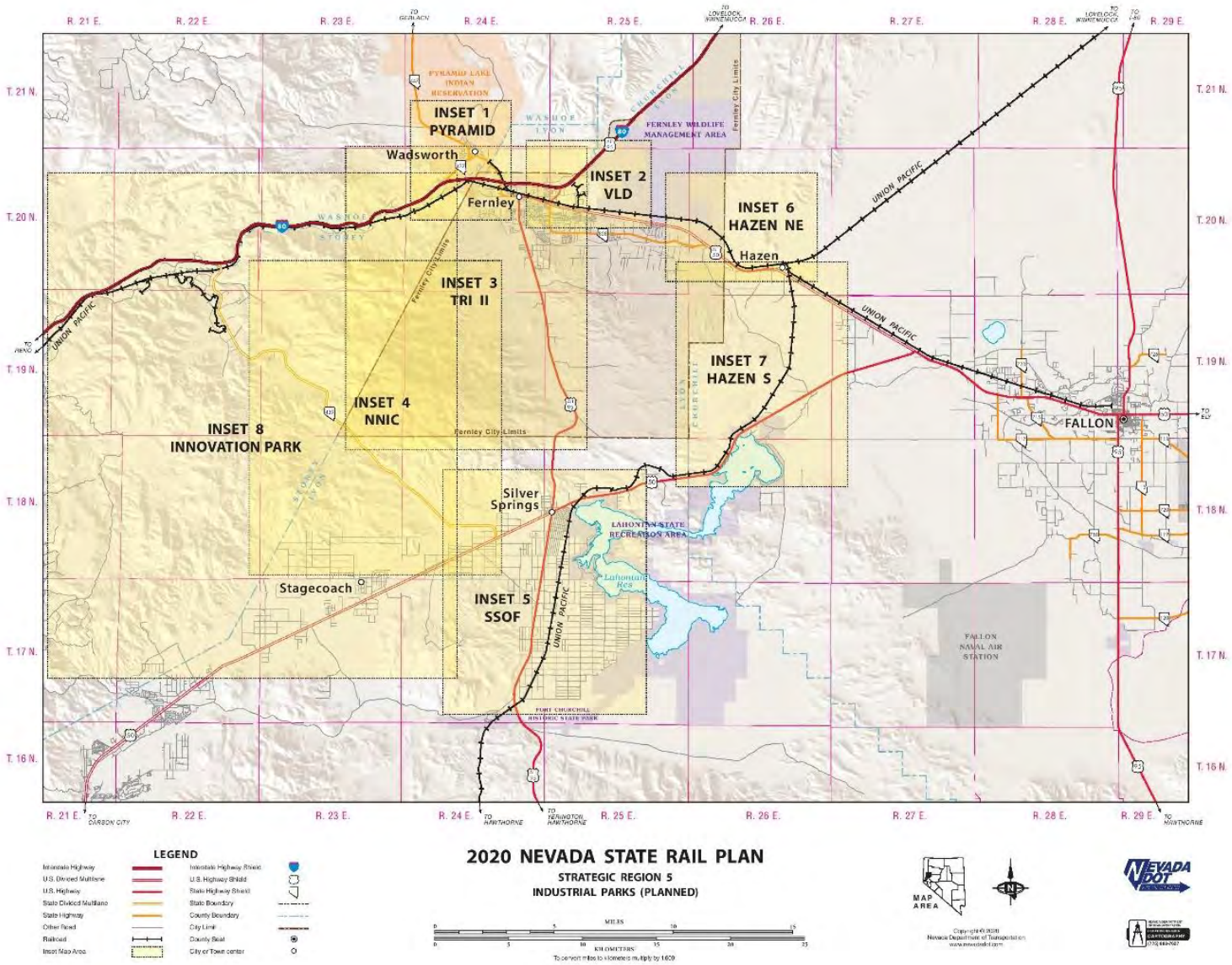


Figure 4-11: Region 5 – Pyramid Commercial Center

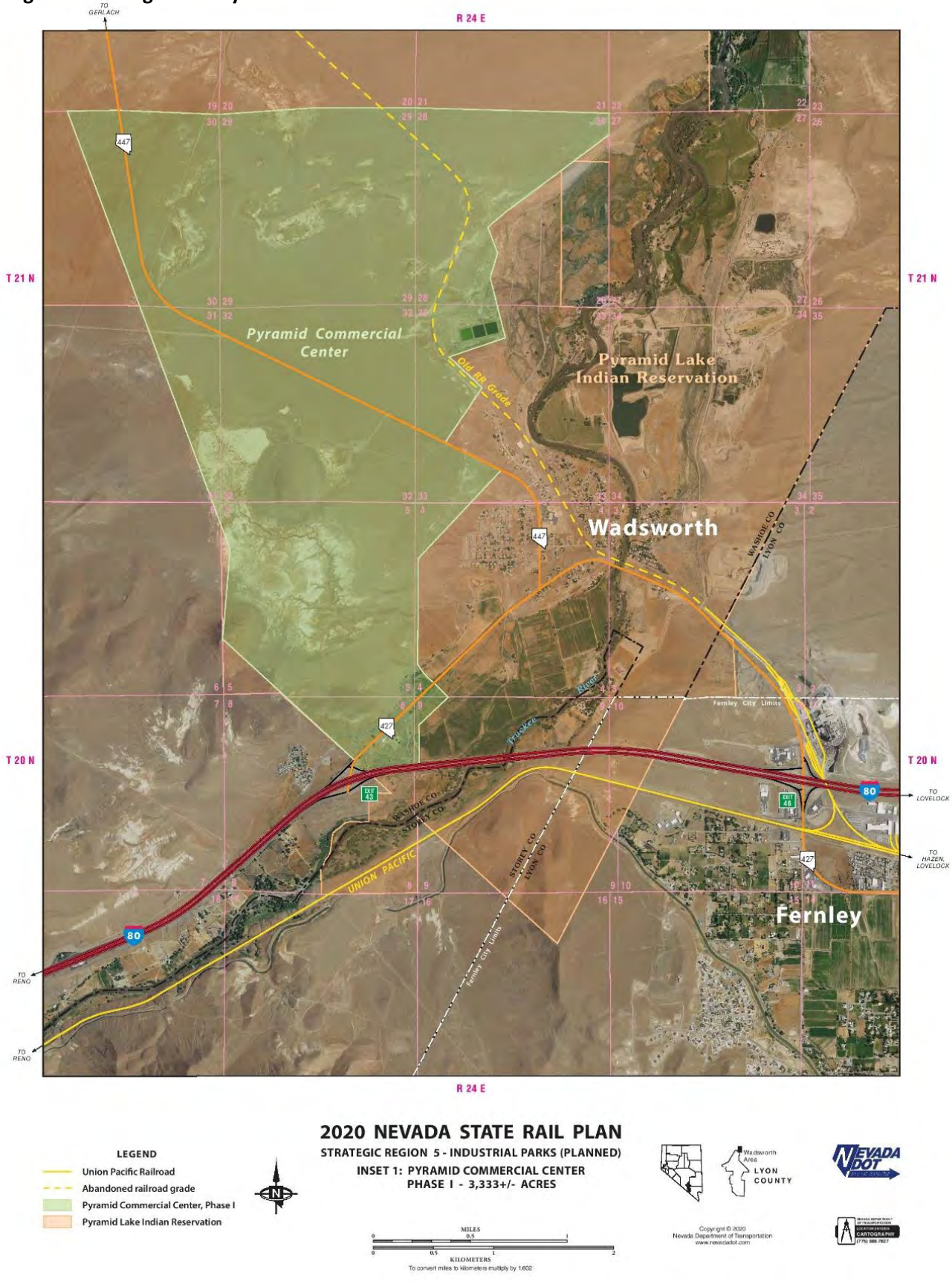


Figure 4-12: Region 5 – Victory Logistics District

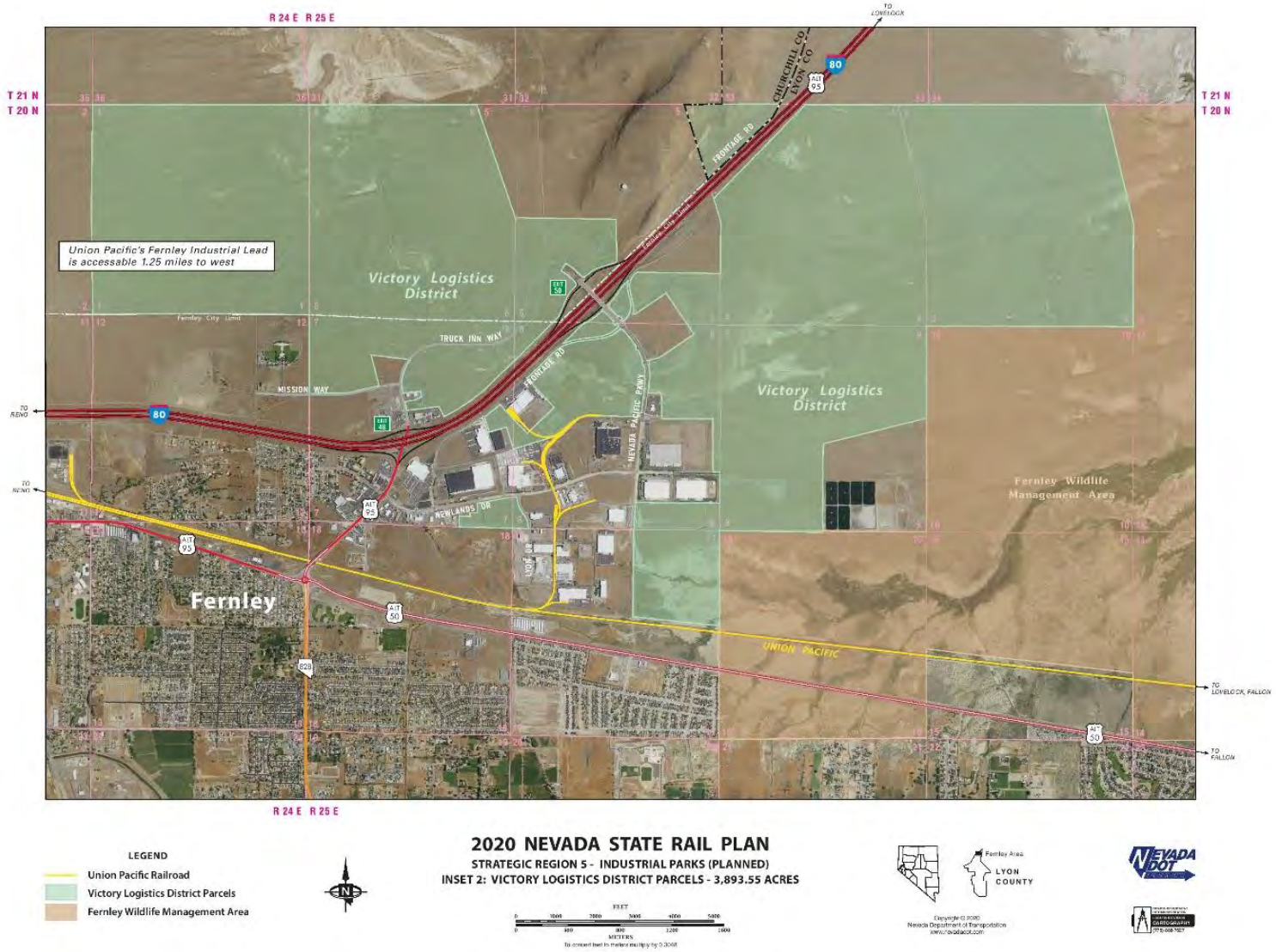


Figure 4-13: Region 5 – TRI II

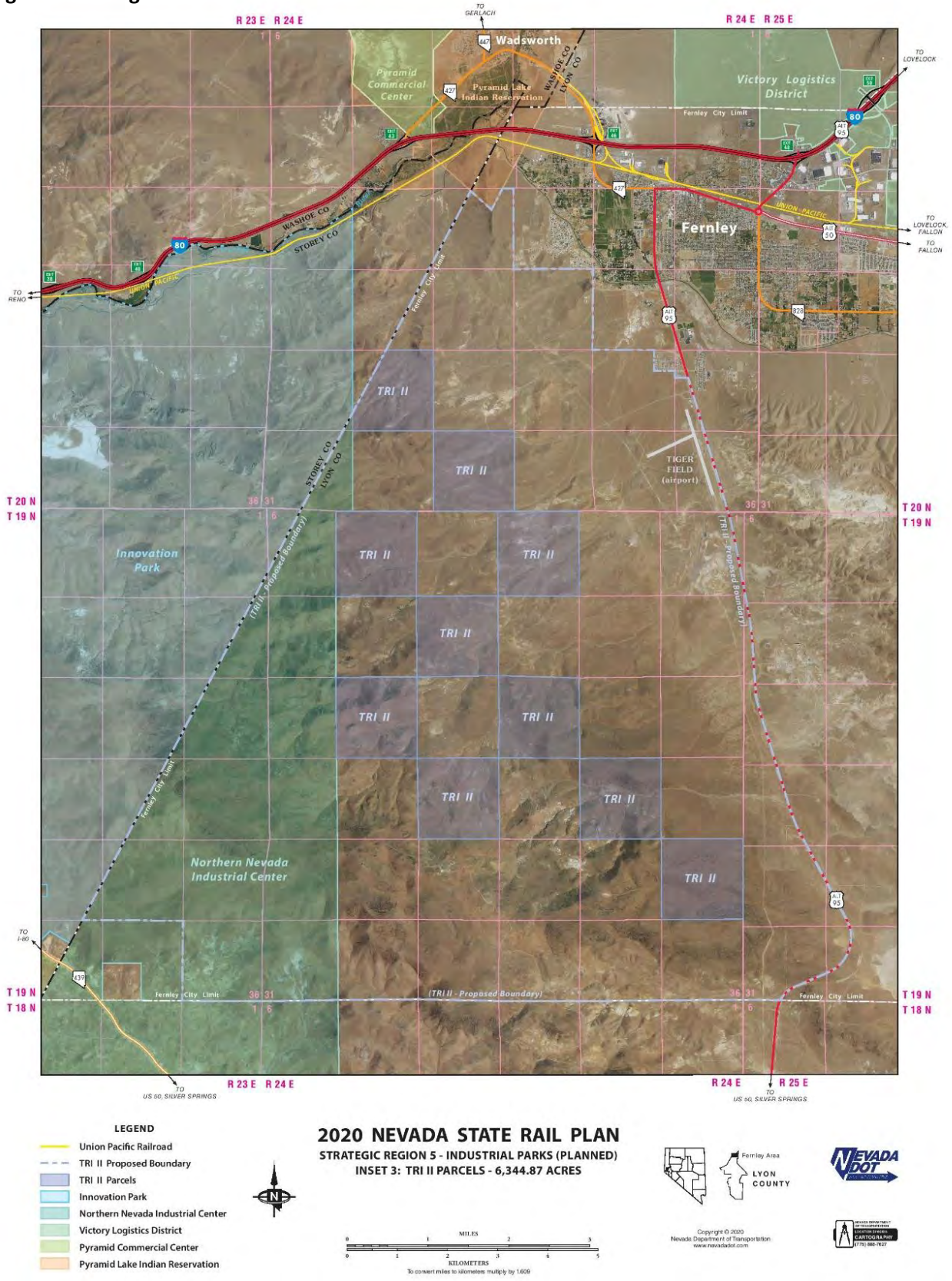


Figure 4-*14*: Northern Nevada Industrial Center (NNIC)

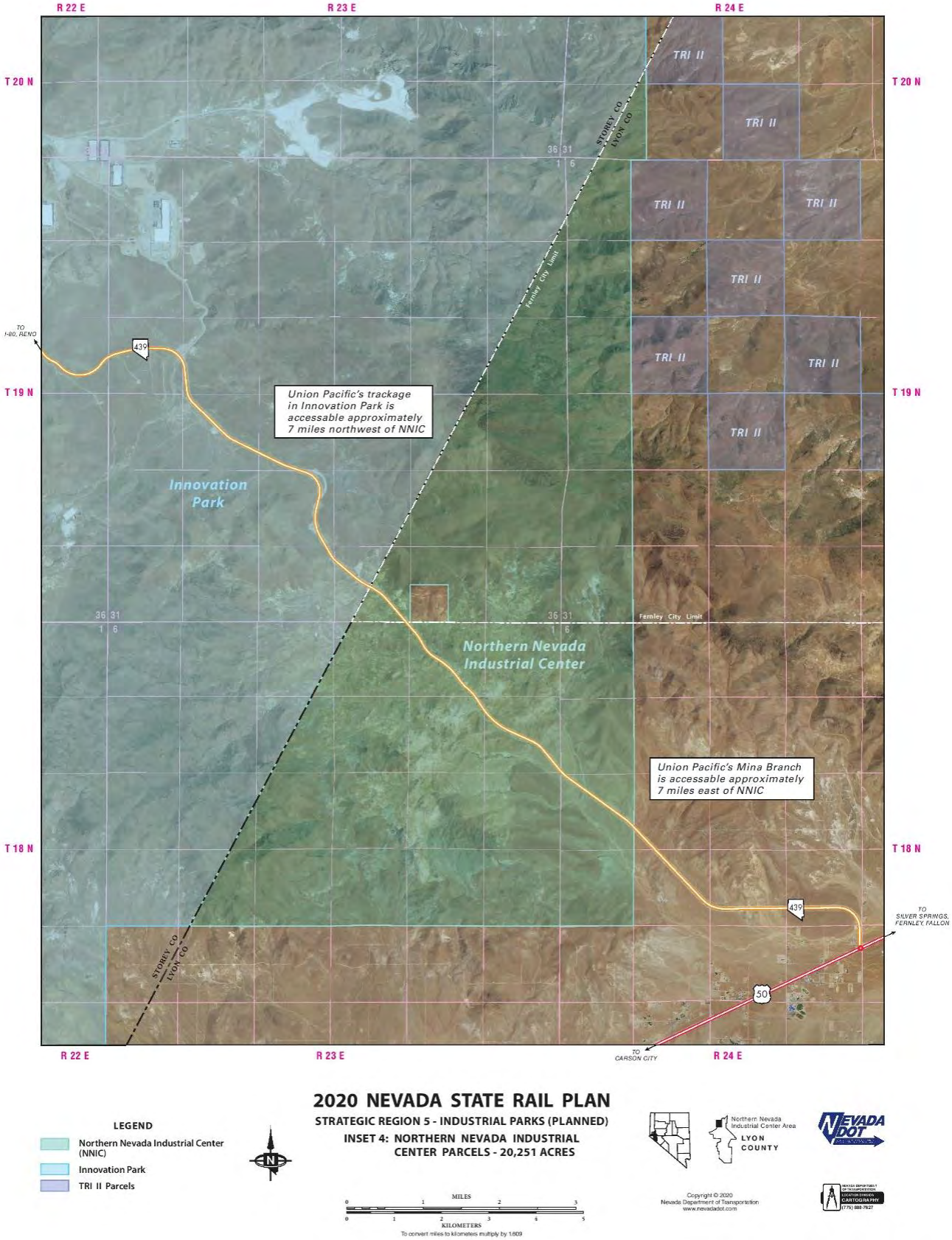


Figure 4-*15*: Silver Springs Opportunity Fund (SSOF)

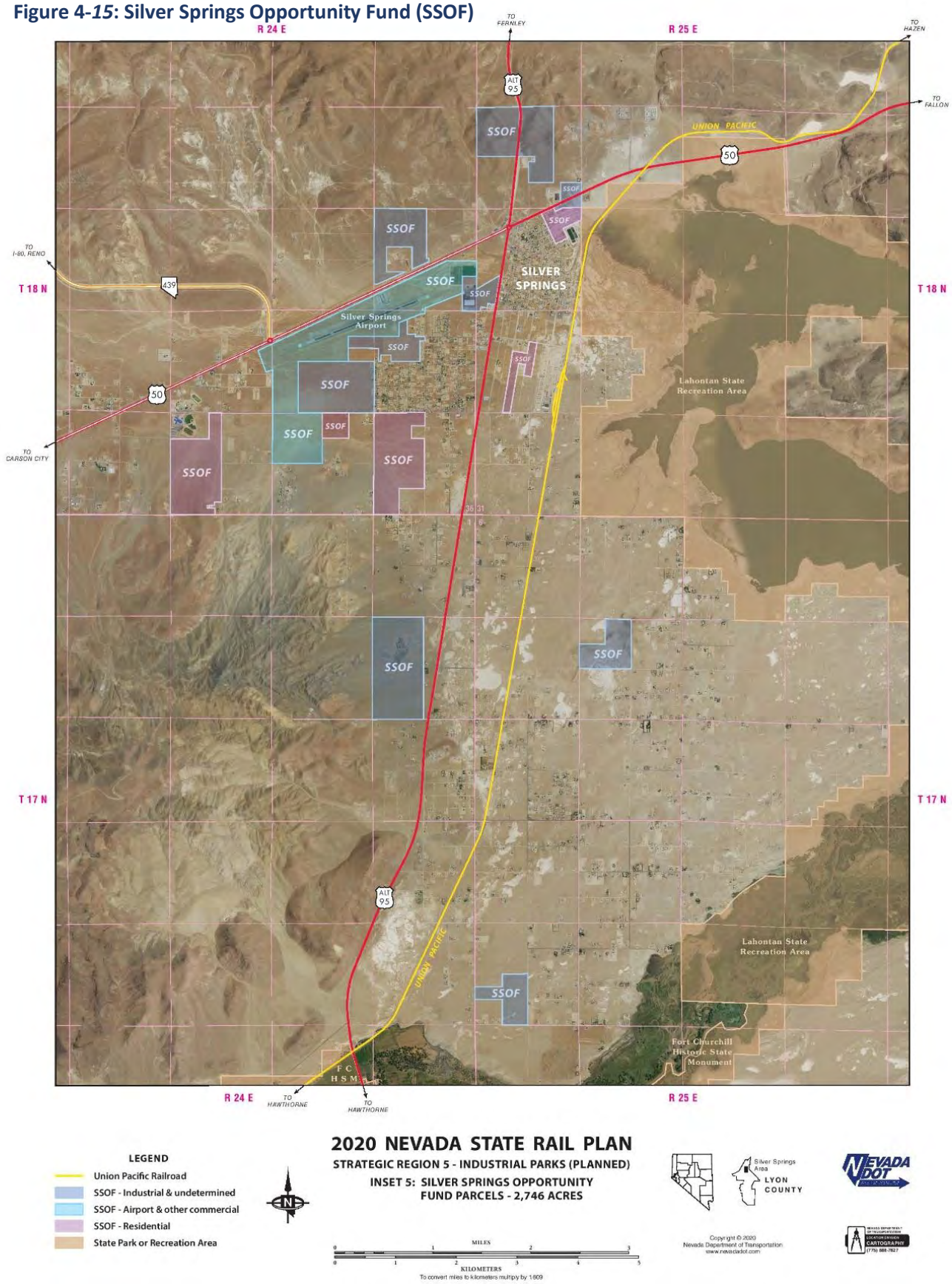


Figure 4-16: Hazen NW Area

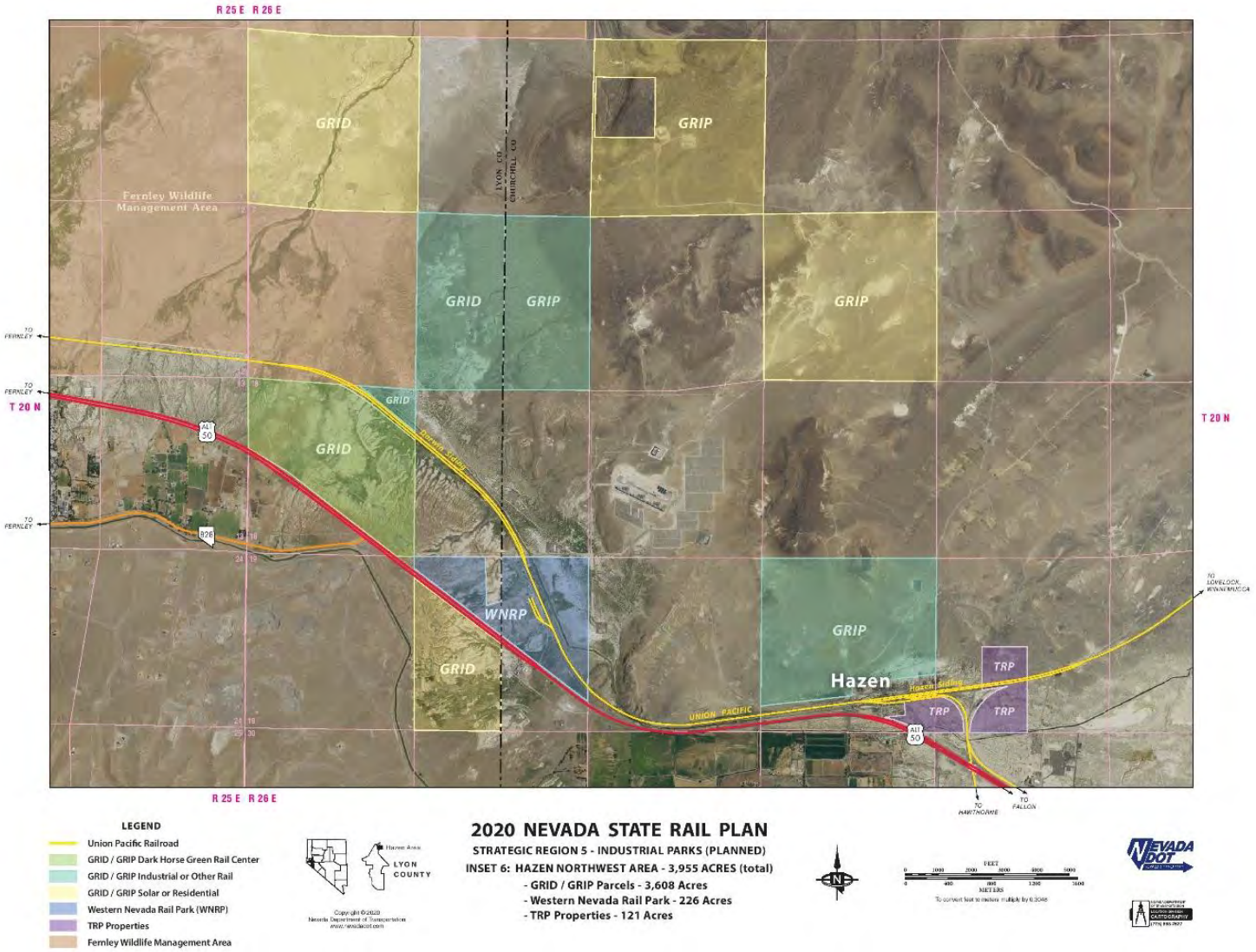


Figure 4-*17*: Hazen South Area

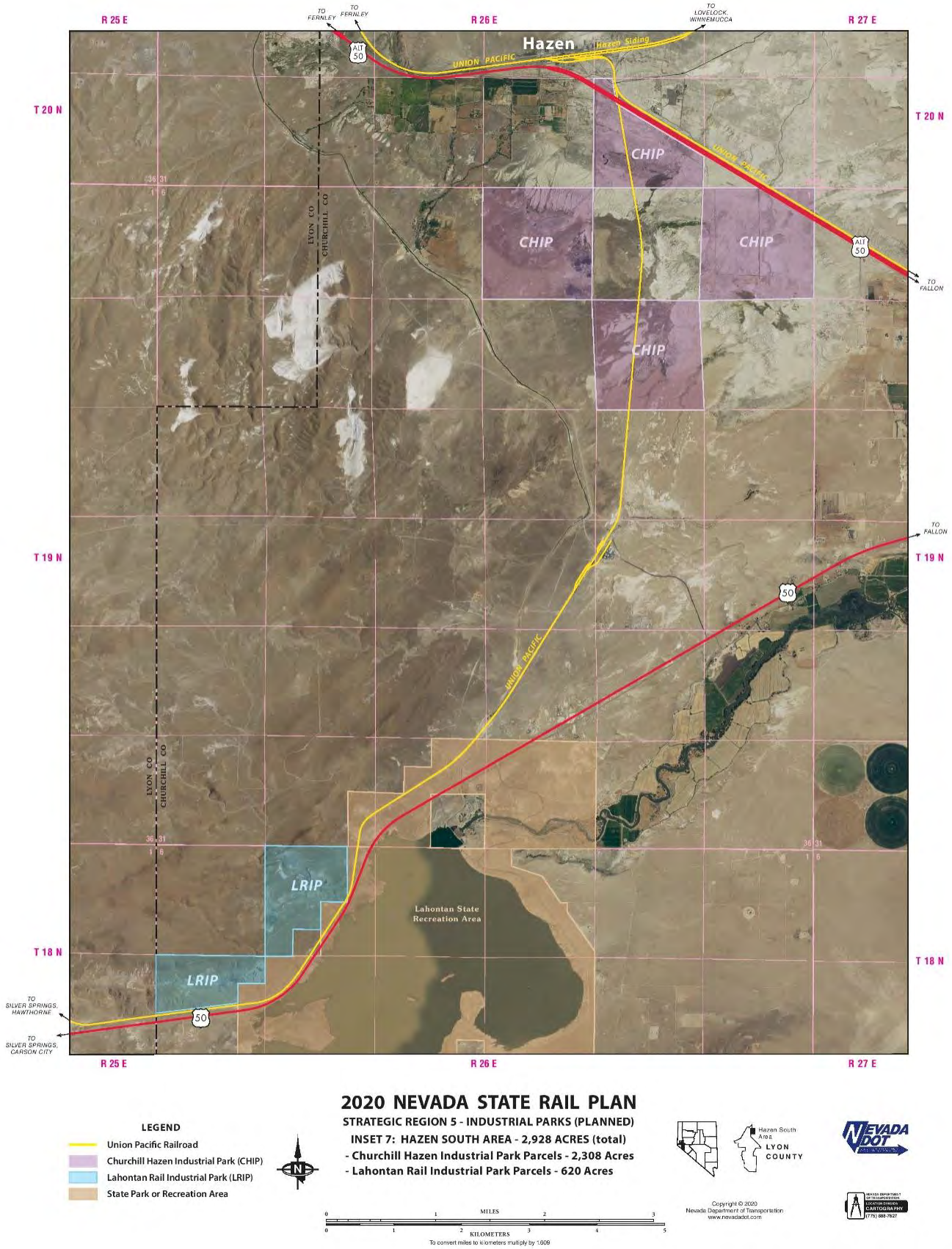
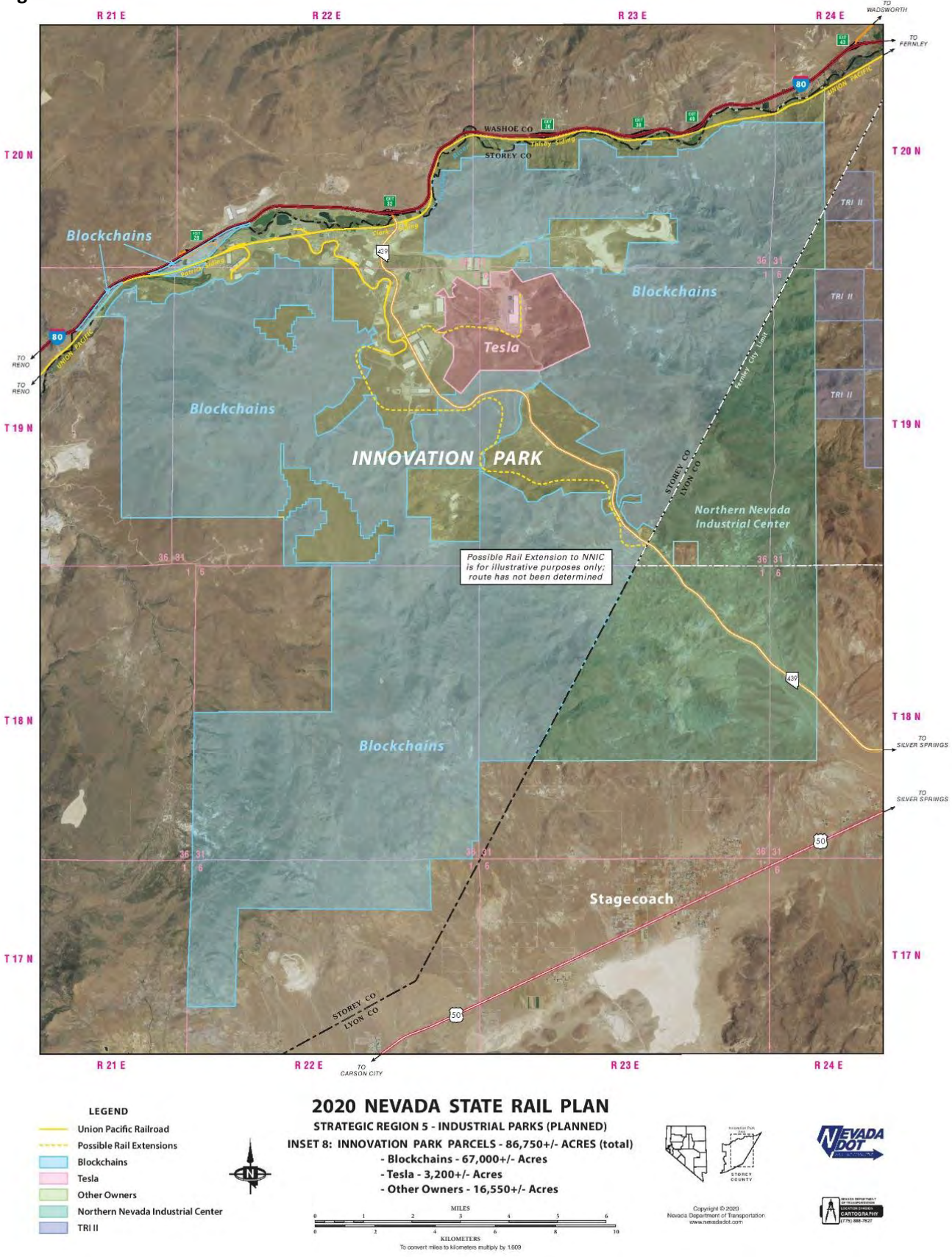


Figure 4-18: Innovation Park



LEGEND

- Union Pacific Railroad
- Possible Rail Extensions
- Blockchains
- Tesla
- Other Owners
- Northern Nevada Industrial Center
- TRI II

2020 NEVADA STATE RAIL PLAN

STRATEGIC REGION 5 - INDUSTRIAL PARKS (PLANNED)

INSET 8: INNOVATION PARK PARCELS - 86,750+/- ACRES (total)

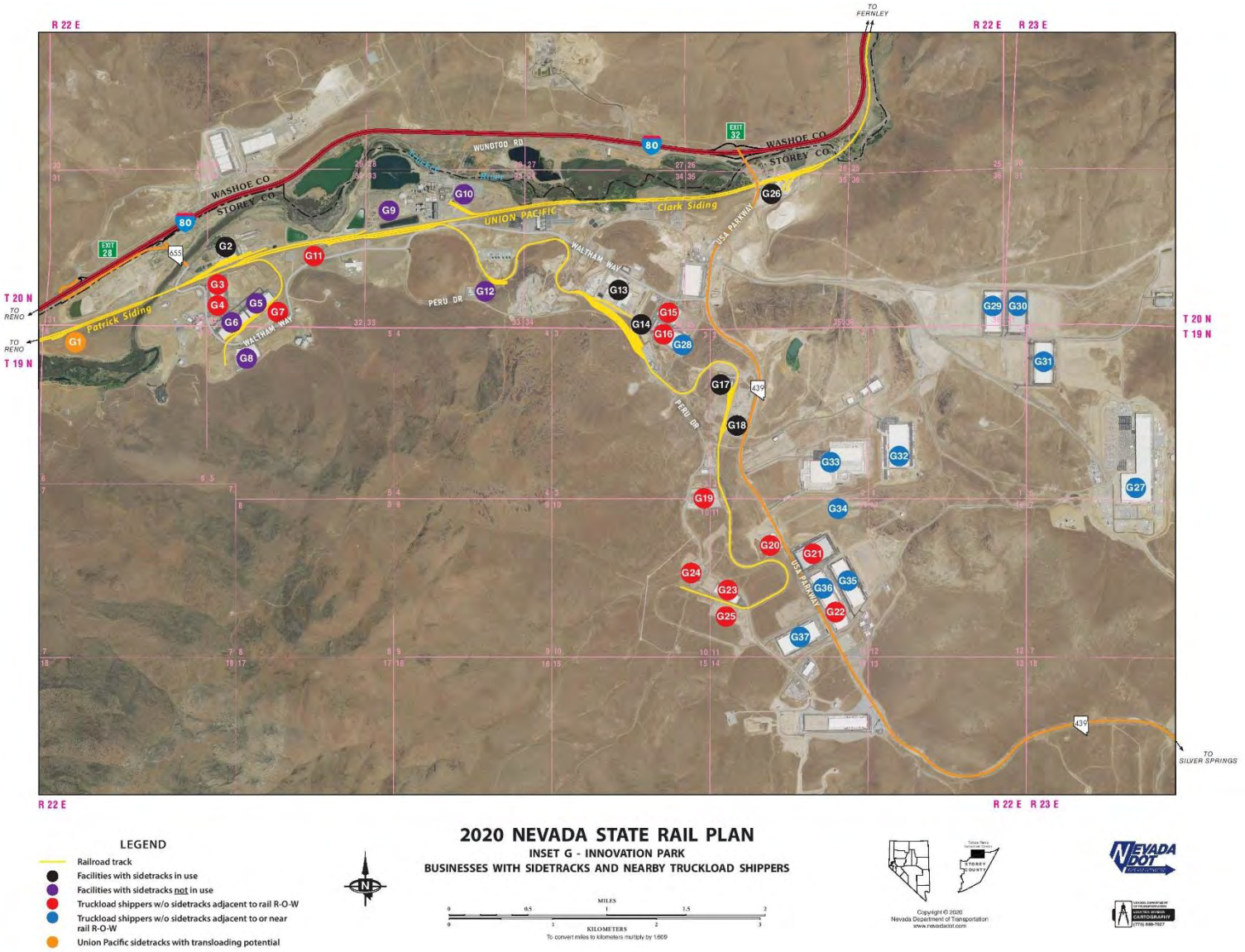
- **Blockchains - 67,000+/- Acres**
- **Tesla - 3,200+/- Acres**
- **Other Owners - 16,550+/- Acres**

MILES 0 1 2 3 4 5 6

KILOMETERS 0 2 4 6 8 10

To convert miles to kilometers multiply by 1.609

Figure 4-19: Innovation Park (Inset)



LEGEND

- Railroad track
- Facilities with sidetracks in use
- Facilities with sidetracks not in use
- Truckload shippers w/o sidetracks adjacent to rail R-O-W
- Truckload shippers w/o sidetracks adjacent to or near rail R-O-W
- Union Pacific sidetracks with transloading potential

2020 NEVADA STATE RAIL PLAN

INSET G - INNOVATION PARK

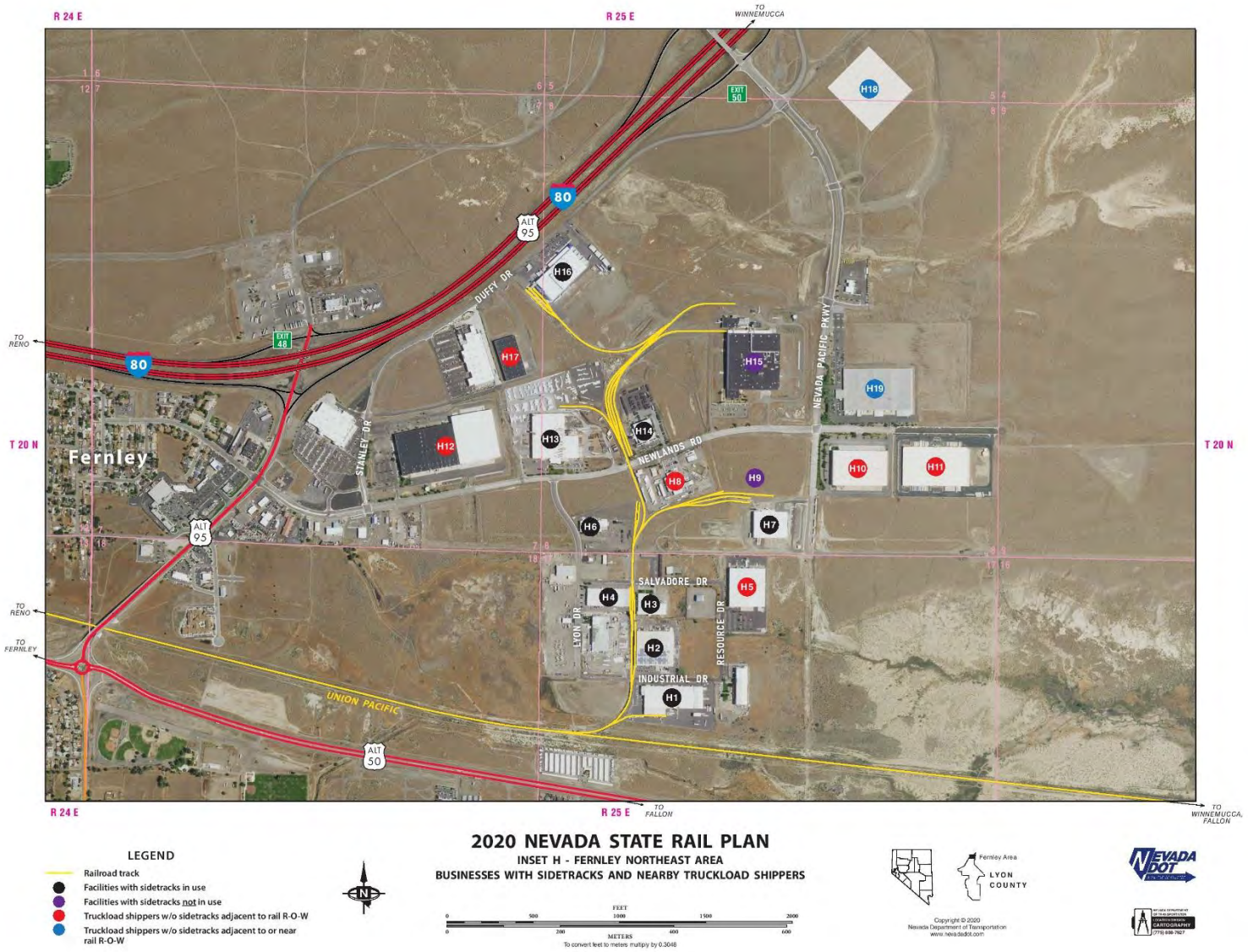
BUSINESSES WITH SIDETRACKS AND NEARBY TRUCKLOAD SHIPPERS

MILES 0 0.5 1 1.5 2

KILOMETERS 0 1 2 3

To convert miles to kilometers multiply by 1.609

Figure 4-20: Fernley NE



LEGEND

- Railroad track
- Facilities with sidetracks in use
- Facilities with sidetracks not in use
- Truckload shippers w/o sidetracks adjacent to rail R-O-W
- Truckload shippers w/o sidetracks adjacent to or near rail R-O-W

2020 NEVADA STATE RAIL PLAN

INSET H - FERNLEY NORTHEAST AREA

BUSINESSES WITH SIDETRACKS AND NEARBY TRUCKLOAD SHIPPERS

FEET 0 500 1000 1500 2000

METERS 0 200 400 600

To convert feet to meters multiply by 0.3048

Fernley Area

LYON COUNTY

Figure 4-21: Region 6 Reno Sparks Area

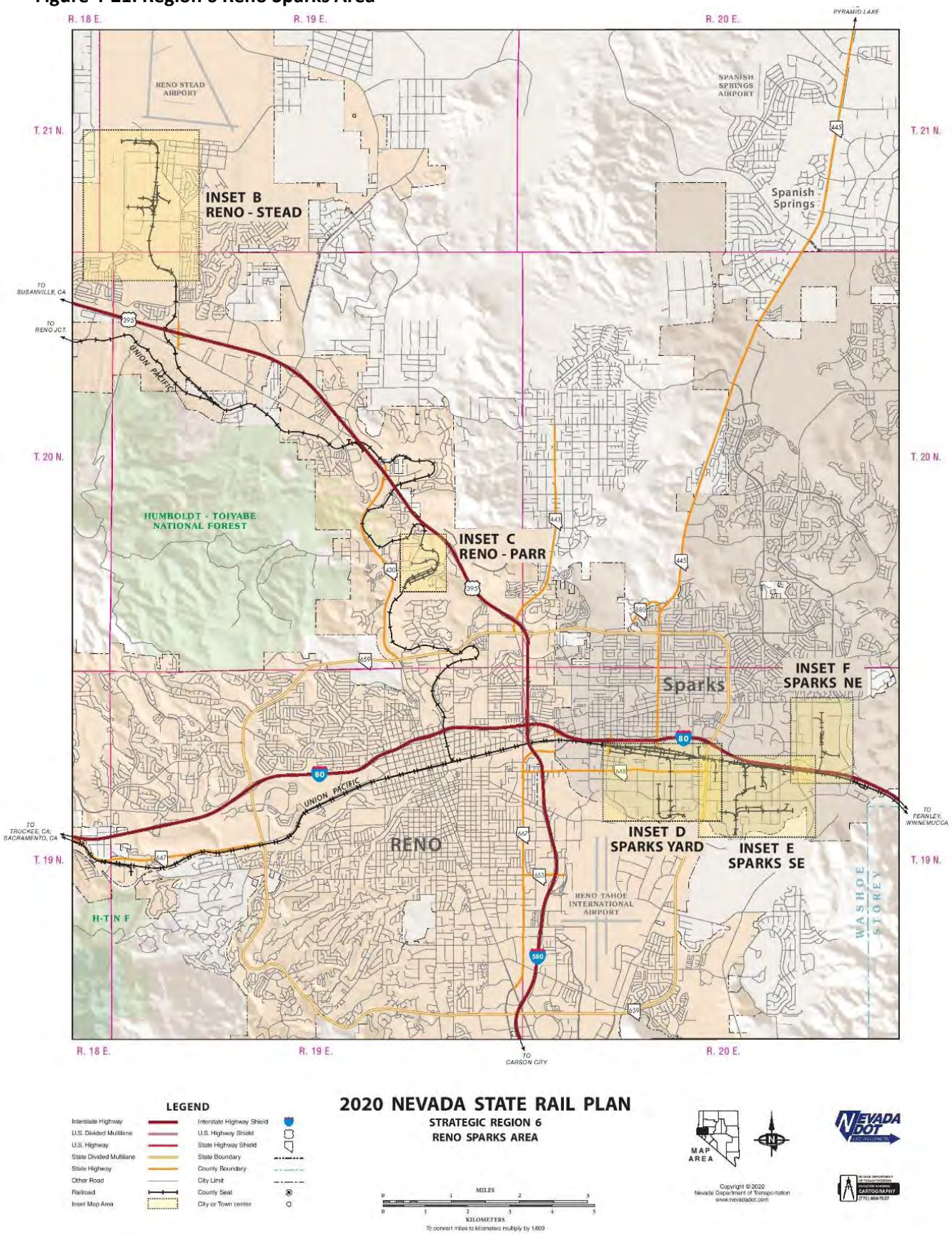


Figure 4-2221: Reno Stead Area

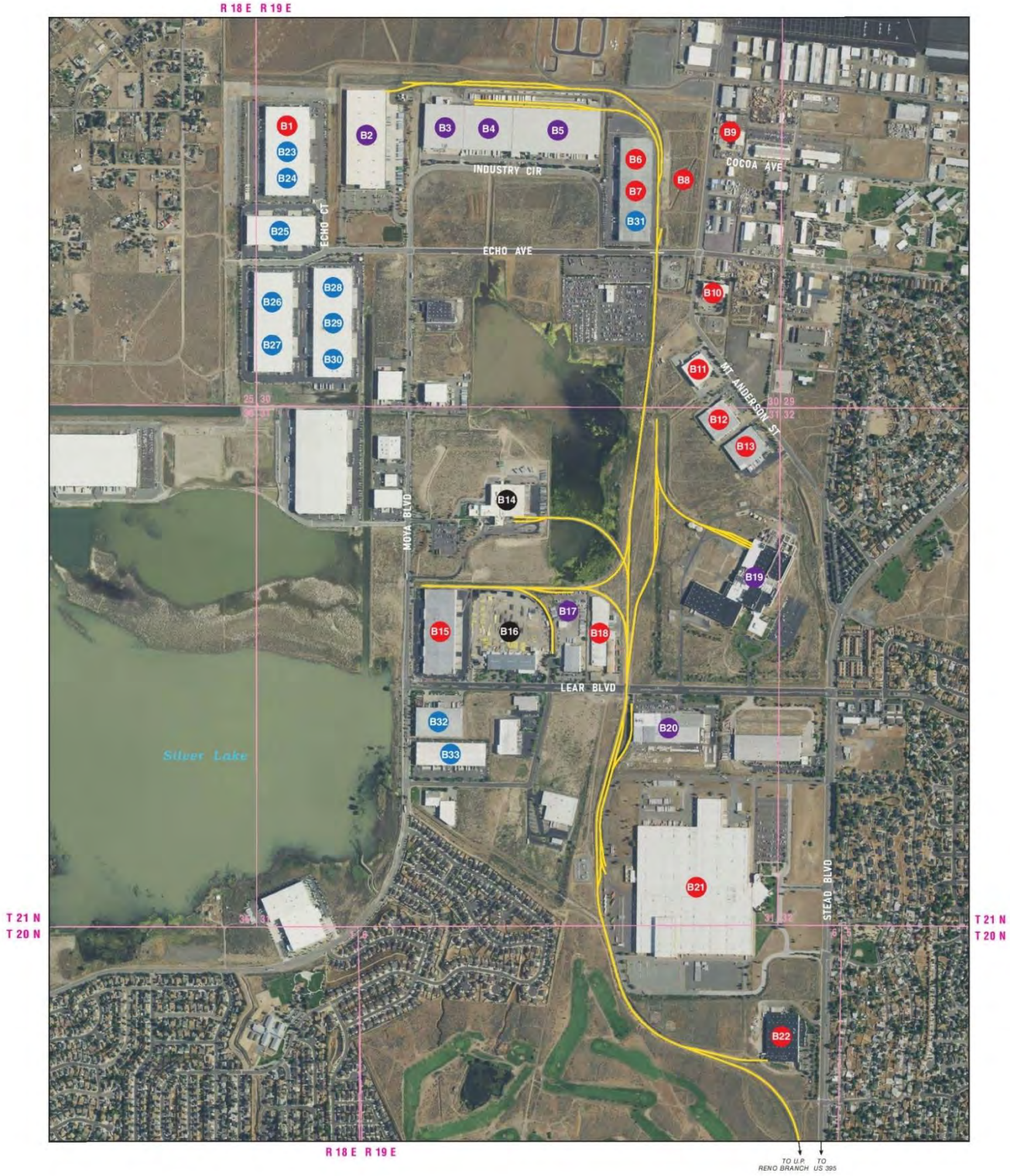
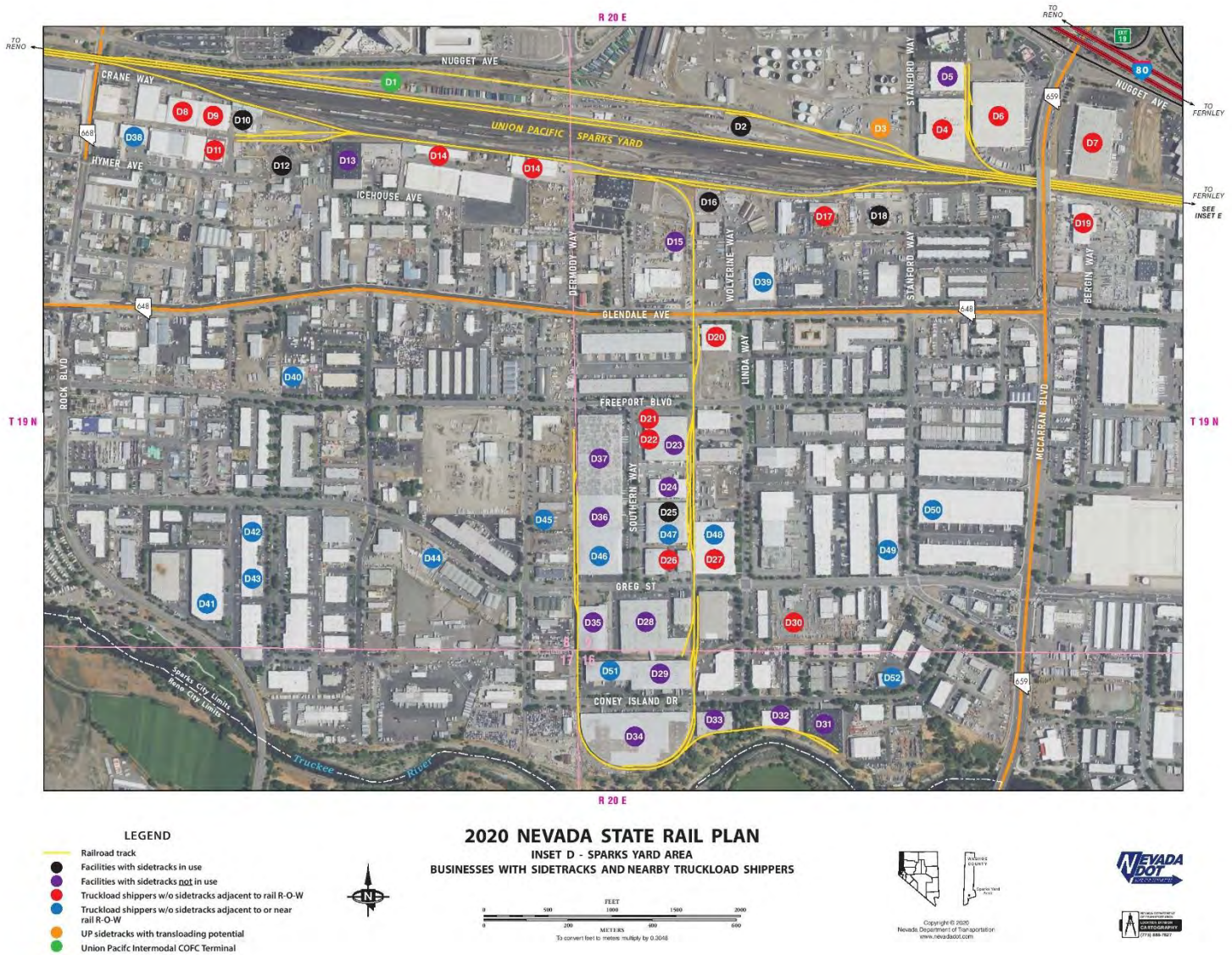


Figure 4-23: Reno Parr Area

Figure 4-22: Sparks Yard Area



LEGEND

- Railroad track
- Facilities with sidetracks in use
- Facilities with sidetracks not in use
- Truckload shippers w/o sidetracks adjacent to rail R-O-W
- Truckload shippers w/o sidetracks adjacent to or near rail R-O-W
- UP sidetracks with transloading potential
- Union Pacifc Intermodal COFC Terminal

2020 NEVADA STATE RAIL PLAN

INSET D - SPARKS YARD AREA

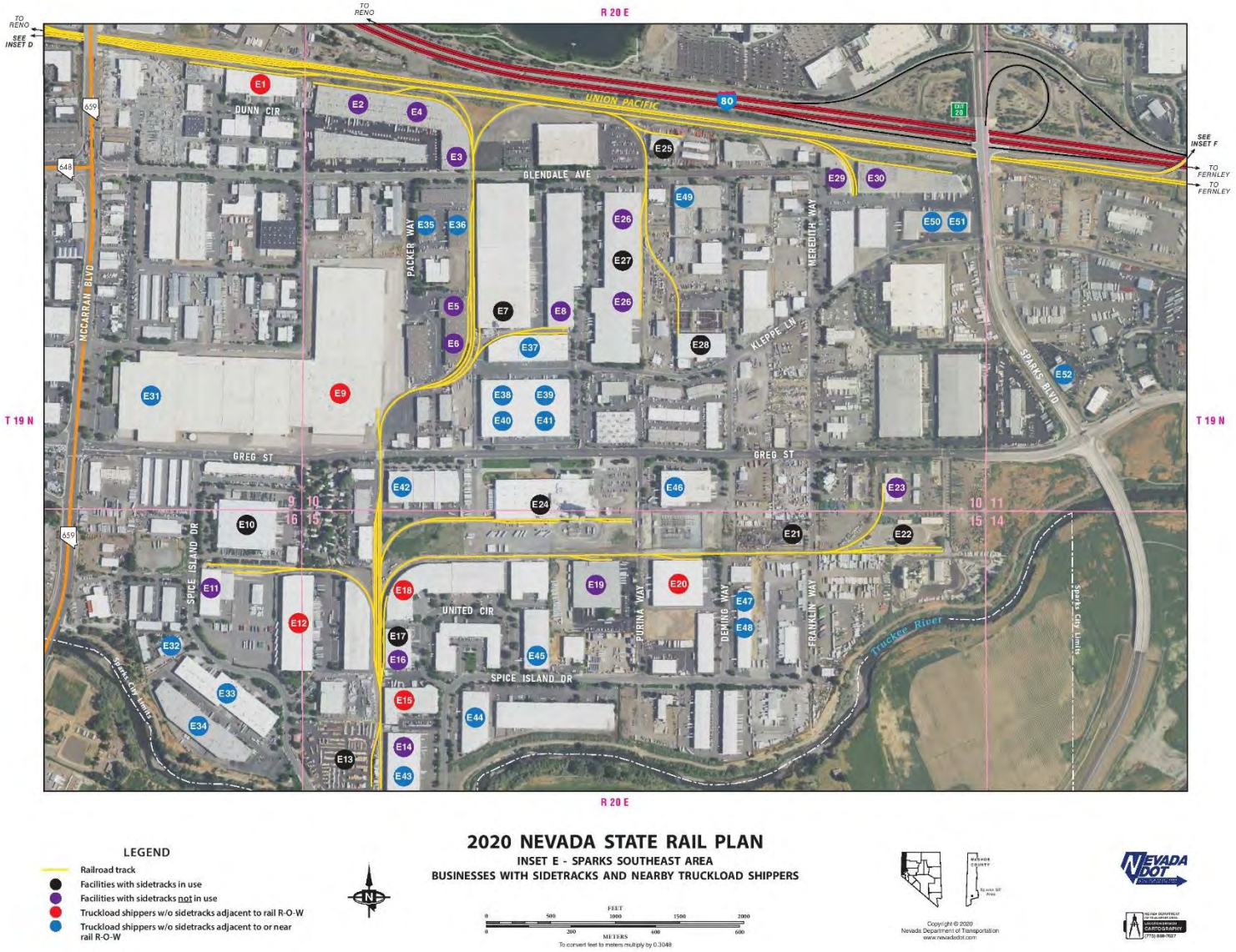
BUSINESSES WITH SIDETRACKS AND NEARBY TRUCKLOAD SHIPPERS

FEET 0 500 1000 1500 2000

METERS 0 200 400 600

To convert feet to meters multiply by 0.3048

Figure 4-25: Sparks SE Area



2020 NEVADA STATE RAIL PLAN

INSET E - SPARKS SOUTHEAST AREA

BUSINESSES WITH SIDETRACKS AND NEARBY TRUCKLOAD SHIPPERS

LEGEND

- Railroad track
- Facilities with sidetracks in use
- Facilities with sidetracks not in use
- Truckload shippers w/o sidetracks adjacent to rail R-O-W
- Truckload shippers w/o sidetracks adjacent to or near rail R-O-W

FEET 0 500 1000 1500 2000

METERS 0 200 400 600

To convert feet to meters multiply by 0.3048

Figure 4-26: Sparks NE Area

Figure 4-2723: Region 7 Mina Branch Area

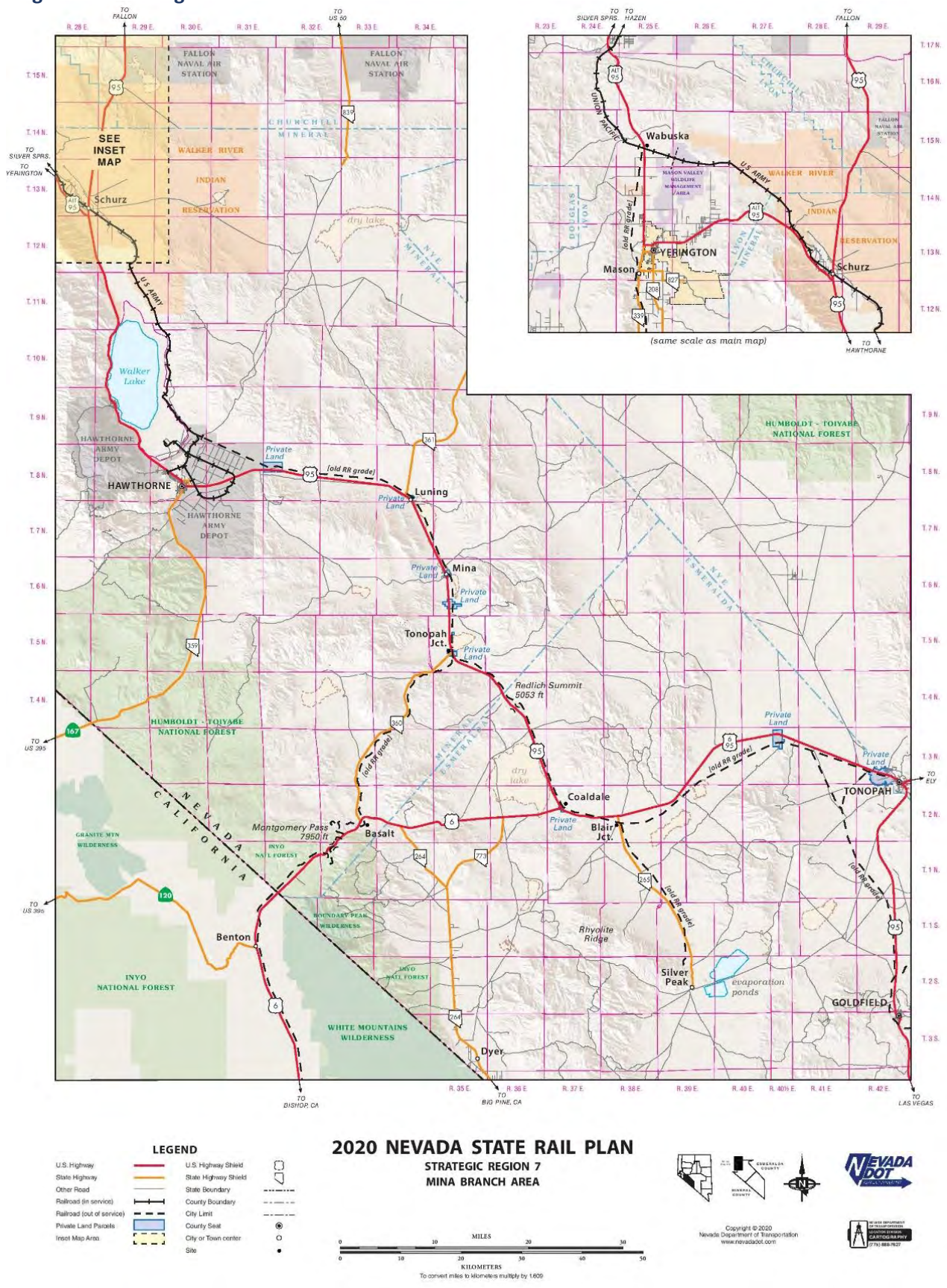


Figure 4-28: Region 8 Beatty/Pahrump Area

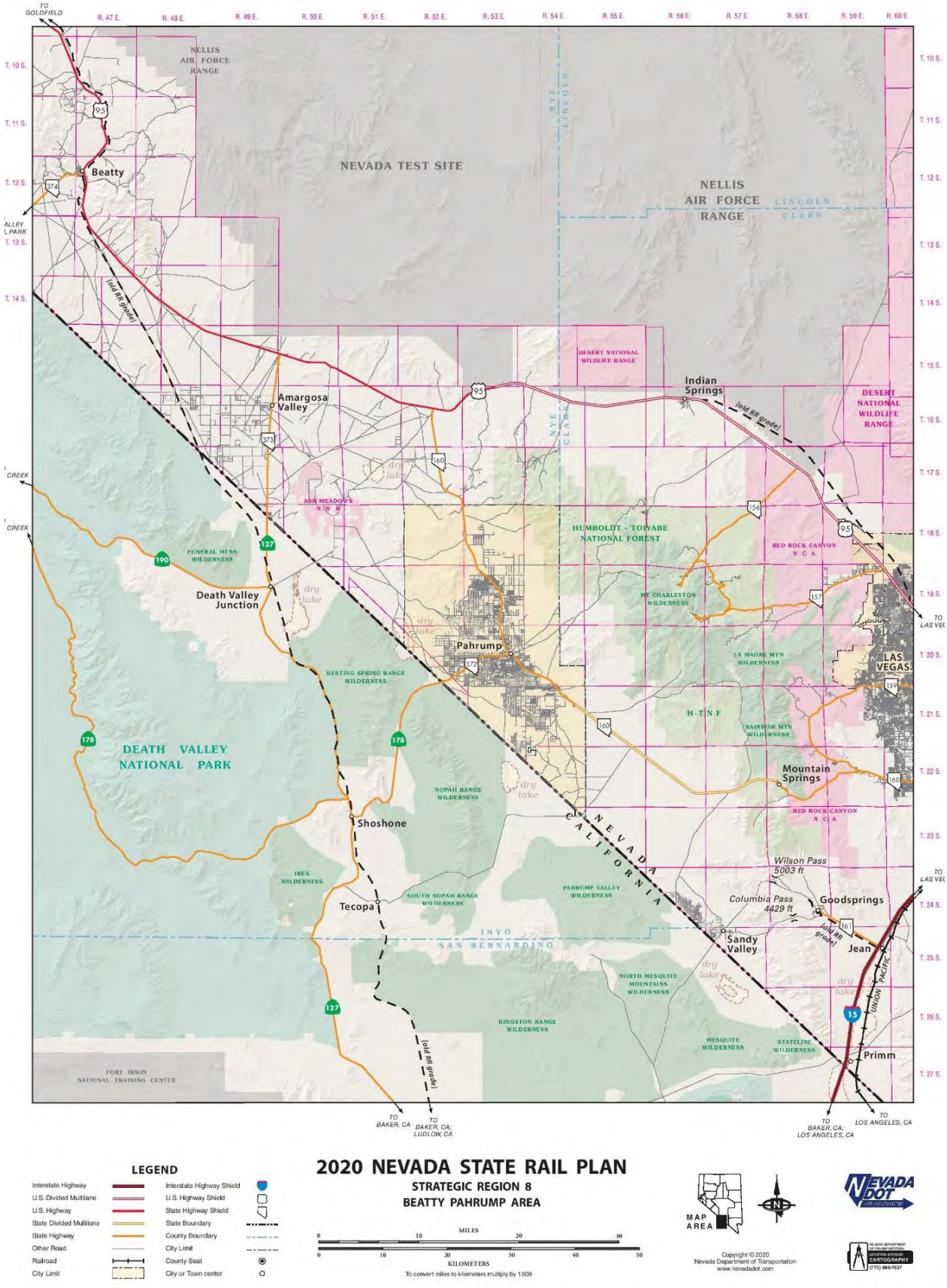


Figure 6-1: STRACNET and Defense Connector Lines

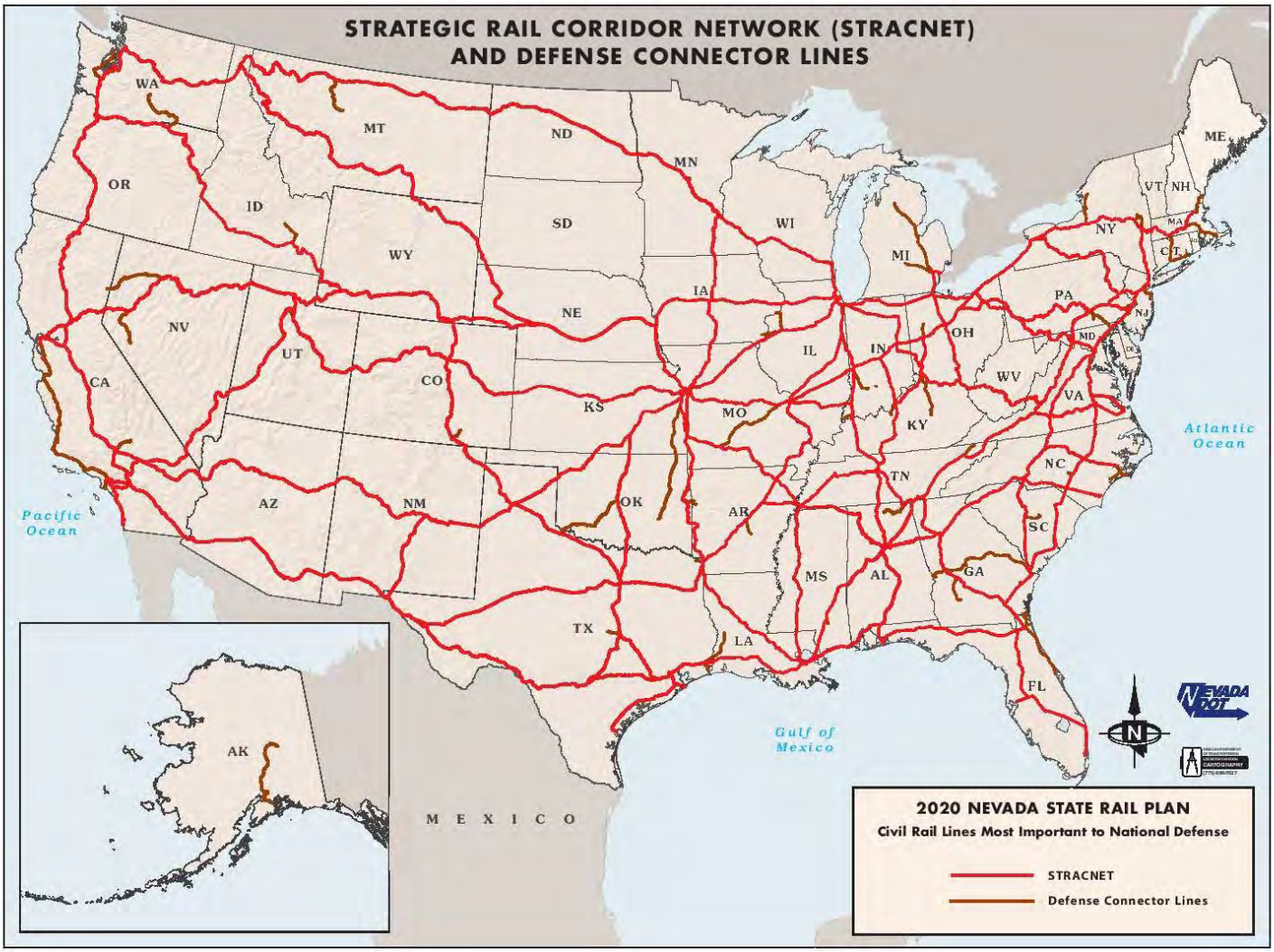
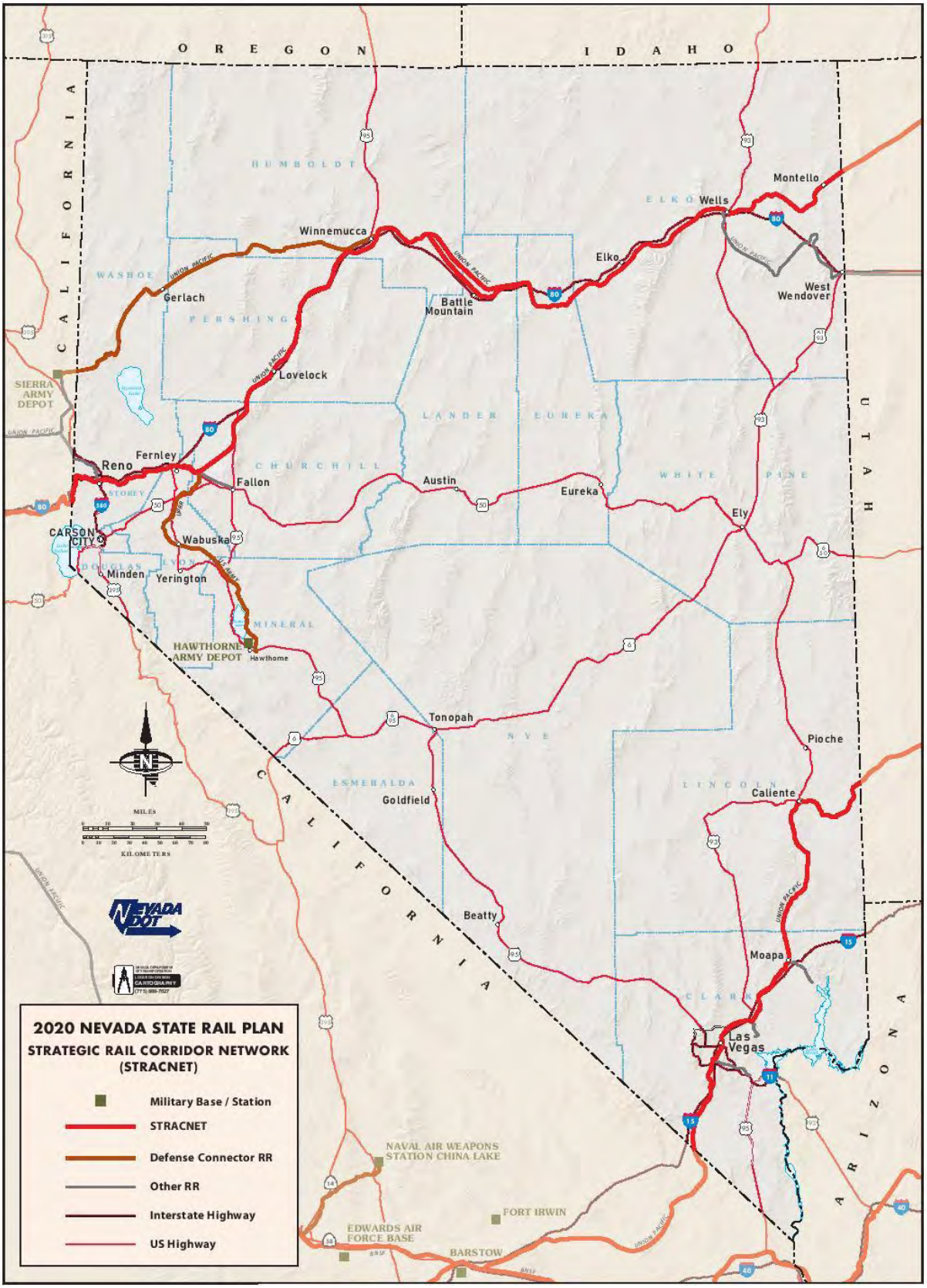


Figure 6-2: STRACNET in Nevada



Funding Resources and Strategies

Funding Resources and Strategies Table of Contents

1. Funding Rail Development in Nevada

The freight railroad industry is, at the most fundamental level, a support industry – an industry that enables efficient operations of other industries, such as mining, energy, automotive, and agriculture. Diverse Nevada industries need better connections to Class I railroads via new and revitalized short lines, industry tracks and yards, transload facilities, and intermodal terminals. Other sections of this strategic plan list many of these needs and opportunities, of varied sizes, regions, and stages of development. Today, in North America, *freight rail finance is essentially industrial development finance* on the project and local levels. While big railroads themselves do not need funding support, many of these customer projects do. Several will likely falter otherwise.

One might think the Class I railroads would directly support and even fund these industries' efforts to access their networks as a form of business development and customer service. That type of financial support in the scope and scale required is not forthcoming, due primarily to the following business realities:

1. *Class I railroads' focus is national and international, not local*. The big railroads achieve their financial objectives by increasingly moving long-haul freight for large customers at ever-higher operating efficiency. They could handle more Nevada rail traffic and earn solid profits doing so. However, divergent organizational priorities, and greater financial returns available elsewhere, consume large railroads' attention.
2. *Hurdle rates for Class Is prevent investment in local-level projects*. Railroads report return on invested capital (ROIC) at 15 percent or higher. Returns on new invested capital (RONIC) must be much higher to compensate for their massive investment in low-return capital maintenance activities. In new capacity projects by Class Is, RONIC typically exceed 28 or 30 percent compared to zero-risk capital deployment in stock repurchases. Very few small-scale industrial rail projects offer this type of high returns at so low a risk. Smaller-scale industrial rail projects can represent "bankable" transactions, yet they remain unattractive for Class I direct investment.
3. *The "80-20 rule" applies to rail customers*. If a single industrial prospect does not generate more than 5 or 6 carloads per day (2000+ carloads per year), the Class Is cannot afford to allocate business development resources over several years to advance that project. In reality, a business generating five cars (400 tons of freight) per day would mean a lot to the local community in jobs and tax base. It appears to fly beneath the radar of a Class I handling new daily carloads of 1.5 million tons (or more) per day. Class I railroads focus their business development attention on how the least number of customers and prospects might generate the bulk of their revenue.
4. *Precision Scheduled Railroading (PSR) strategies succeed by decreasing overhead expense* and increasing asset utilization. Overhead reductions inevitably impact staffing of marketing support and industrial development. The Class Is presently meet profit goals by reducing operating and capital expenses rather than through top-line revenue growth from new customers. Operating efficiency does create stronger and more reliable railroads to which customers with discretionary rail freight can connect.

Railroads do want new customers. Now more than ever, railroads will require new customer infrastructure projects to be presented fully funded and with well-conceived business plans that include realistic requirements of physical and operational interface.

This section, *Funding Rail Development in Nevada*, addresses these project funding requirements. The next section, *Stewarding Plans to Action*, addresses rail business development services that will directly support the funding of rail projects along with preparing Nevada businesses to successfully interface with the railroads.

Stated earlier: "State government should not have to fund freight rail development, as railroads and shippers are engaged in private-sector, income-producing activity that can attract private-sector funding." This statement is true for large rail projects and smaller projects. This is not the same as saying that those projects do not need public support, a distinction explained in this section.

> Large rail projects typically serve very large and well-capitalized enterprises. A new mining project might cost hundreds of millions of dollars and will include an associated rail yard and spur track that is viewed like any other piece of machinery or infrastructure required to support the core project. Finance of all supporting infrastructure assets (e.g., related rail facilities) will align with, and become secondary to, the broader project underwriting and finance. In this way, if the new mine gets financing then the supporting rail project gets financed, too.
>
> For the largest industrial projects, private-sector rail investors/operators will also turn-key, deliver, or purchase-leaseback rail assets embedded in industrial sites. For example, Dow Chemical and US Steel each recently announced intentions to sell their associated industrial rail assets to private investment funds and operators. These transactions are likely to exceed $300 million each. Direct administration of railroad financings on this scale typically resides outside the purview of state-level initiatives.
>
> Smaller rail projects have different needs. A distribution center, for example, may be weighing the relative advantages of receiving deliveries in five boxcars per day versus twenty trucks. How *does* it make sense for a non-railroader to weigh this opportunity without railroad expertise or to even have awareness of rail service as a transportation option? Once the business has decided on the commercial advantages of a rail solution, how can that business fund construction of switches, sidings, and rail dock doors? While this cannot be successful as a paint by numbers approach, it can be informed by a knowledge of rail operations and logistics and well-thought-out protocols.
>
> Smaller rail projects present difficulties for most banks and credit unions due to unique operational and commercial risk concentrations, nuanced regulations, unfamiliar contractual language, and misunderstood collateral value. Financing rail infrastructure, rolling stock, locomotives, and specialized rail equipment needs experience and knowledgeable support. Rail-project risks and collateral, financial opportunities, and other related considerations must be clarified to help a traditional lender get to "yes."

In each scenario, private capital can fund the rail projects while ancillary public support in proportion to public benefit can reduce private investment risk thereby incentivizing development of rail projects across Nevada. In almost every case, private commercial benefit and commercially justified private investment drive railroad project finance.

As in many situations of industrial development finance, unique projects require a special-purpose lender, described in the following section.

2. Nevada Freight Rail Development Fund

To combine rail business development expertise with rail-oriented financing of small projects, the NVSRP proposes establishment of a Nevada Freight Rail Development Fund (the "Fund"). The Fund is conceived as a partnership of NDOT, the Governor's Office of Economic Development, regional development authorities and others with missions compatible with creating jobs, attracting investment to Nevada, increasing tax revenues, and reducing pollution and other impacts of freight movement. This is accomplished, of course, in tandem with promoting rail-served development.

The proposed Fund would serve several purposes:

1. Raise and deploy capital as debt in small and mid-sized rail projects
2. Service loans from origination to maturity
3. Fund technical services through transaction fees and other arrangements

Ideally, the Fund would associate with—or even be sponsored by—an existing industrial development loan fund, an existing bank or credit union, or a non-profit economic development lender (e.g., a Community Development Financial Institution or a Small Business Investment Company) with a strong presence in Nevada. There are many benefits of such an affiliation, such as pre-existing expertise in debt underwriting, loan origination, and loan servicing. The sponsoring partner would ideally provide founding equity in the Fund and benefit from Fund success.

Fund capitalization would derive from a blend of private and public sources. Many economic development loan funds have done this, effectively leveraging fund equity with existing federal programs (such as the U.S. Department of Agriculture and Economic Development Administration), and private banks seeking to satisfy Community Reinvestment Act (CRA) requirements and/or secure applicable tax advantages.[1] Many industrial rail projects generate tax advantages that include tax credits (e.g., New Markets) or tax-exempt income (e.g., industrial revenue bonds).

The Fund should not be considered a source of grants or other handouts. Commercially viable rail projects can and do support reasonable returns on capital. *If a project cannot reasonably support debt, the Fund should not support the project.* Building the Nevada Freight Rail Development Fund from low-cost, long-term capital sources will help avoid challenges faced by the railroads as they address return expectations and the attractiveness of stock buybacks. The Fund will finance viable rail projects that benefit all stakeholders.

This Plan makes the following recommendations for Fund transaction characteristics:

1. Qualified Borrowers would include:
    a. Private businesses engaged in manufacturing, warehousing, agriculture, mining, or other businesses utilizing freight rail
    b. Rail service providers engaged in transloading, railcar storage, railcar and locomotive servicing, and similar railroad support activities
    c. Class II and Class III common carrier railroads owning or operating rail assets in Nevada

[1] Council of Development Finance Agencies, "Revolving Loan Funds & Development Finance" page, source link, accessed September 8, 2020.

d. Municipalities, Authorities, and Development Agencies engaged in development (or redevelopment) of rail-served industrial sites and business parks

2. Uses of funds are for capital expenditures and could reasonably fund up to 80 percent of total project costs defined as capital expenditures for land, design, permitting, construction, rolling stock, and on-site equipment. More specifically:
    a. Railroad right-of-way, railroad easements, and terminal land acquisition
    b. Railroad track construction, capital maintenance, or replacement of mainlines, sidings, spurs, and yards
    c. Railroad bridges, culverts, and drainage systems
    d. Rail freight loading and unloading equipment (e.g., rotary dumpers, pits, conveyors, fixed or mobile cranes or lifts)
    e. Rail freight storage facilities for the products being shipped primarily by rail (e.g., sheds, silos, domes, warehouses)
    f. Freight rail terminal site improvements (e.g., paving, grading, lighting, security, fencing, scales, gate facilities, administrative support offices)
    g. Locomotives, railcar movers, and railcars

3. Proposed loan structure should include:
    a. Loan terms of up to twenty-two years, allowing two years of interest only for construction and commissioning, then fully amortizing over a maximum of twenty years. This fits well with rail asset depreciation schedules averaging between 40 and 45 years.
    b. Fixed interest rates initially, then varying with an approved index (e.g., Wall Street Journal prime rate or the 10-year Treasury).
    c. Collateralization can include the financed assets and other real property or railroad assets. Subordinated collateralization relative to a primary project or corporate lender (i.e., mezzanine finance) would be acceptable in most circumstances.

4. Borrower equity should represent at least 20 percent of project costs with at least half of that equity being new cash investment (as compared to previous expenditures, owned land, etc.) not including grants, tax credits, and other public support.

5. Loans are intended for both construction and permanent financing and may be used to refinance lines of credit or other temporary debt facilities.

6. Transaction size could average a $1.0 million or more, higher than most dedicated state rail funds given the type of development in Nevada.
    a. Minimum transaction size should be approximately $300,000 and allow for smaller projects when phased project stages total $400,000 or $500,000.
    b. Maximum transaction size should be determined by the fund size to avoid over concentration of risk.

State rail loan programs have proven successful across the United States. Table 4-4 (below) provides a list of twelve state or federal agency rail programs that have made 686 loans totaling approximately $412 million. The average loan size was approximately $601,000. And at the time of this survey, the default rate on these loans was remarkably low at less than 0.44 percent.

Table 4-1: State Rail Loan Program Repayment History[2]

State or Agency	Number of Loans	Dollars Lent	Defaults
Wisconsin, 2013	105	$117,000,000	0
Illinois, 2016	7	$7,531,035	0
Michigan, 2012	37	$15,300,000	1
Idaho, 2013	3	$3,770,475	0
Iowa, 2015	108	$69,761,000	0
Minnesota, 2013	225	$95,700,000	0
Kansas, 2013	46	$16,903,380	0
North Dakota, 2016	42	$39,110,064	0
Mississippi, 2007	35	$12,000,000	0
Ohio, 2013	40	$33,464,731	1
Montana, 2013	4	$2,078,004	0
SBA, 2013	34	$14,400,000	1
Totals (as of year)	**686**	**$412,618,689**	**3**

While the Fund proposed for Nevada would not necessarily be directly operated by a state agency, it needs to align with Nevada's economic development priorities and this Strategic Plan.

Success of the Fund will depend upon well-planned projects, effective coordination with the connecting railroad, well-prepared loan applications, and careful underwriting. CRN would perform the following services to boost Fund success:

1. Identify prospective projects, help analyze the business case for using rail, and support applicants in planning and predevelopment efforts.
2. Successfully interface development projects with private railroads by advancing well-conceived, substantial projects that meet common interests of the railroads, businesses, and communities.
3. Provide technical assistance to Fund applicants (both as part of financing and as a fee for service) to mitigate rail-related risks, evaluate proposed collateral, and accurately present the commercial opportunity.
4. Provide post-closing support for project implementation to minimize Fund risk.

3. TRIPS Infrastructure and Defense Program

Implementation of the passenger rail initiatives described in this chapter will require a new dedicated source of public financing. The NVSRP team has developed an infrastructure funding initiative we call

[2] *Data gathered by Strategic Rail Finance/OnTrackNorthAmerica*

the Transportation Rebuilding and Improvement Plans for Success (TRIPS) Infrastructure and Defense Program (akin to the National Interstate and Defense Highways Act).

The goals of the TRIPS Infrastructure and Defense Program are to

- Generate over $500B annually nationwide by 2035 in new, dedicated transportation funding for all modes including the Interstate Highway System and STRACNET rail routes designated essential by the Department of Defense.
- Create at least $5B annually in federal and state funds for NDOT by 2035, approximately four times more than current annual revenues for NDOT.
- Fund rail, road, runway, and river segments of transportation infrastructure and defense network projects.
- Develop a designated federal/state/local TRIPS plan and establish an eligible network for each mode: air, highway, railroad, transit, and waterways.
- Disburse TRIPS infrastructure funding on an 80% federal/20% local match basis for each mode on the following formulas:
    - Air trips - 10%
    - Highway trips - 30%
    - Railroad trips - 30%
    - Transit trips - 20%
    - Waterway trips - 10%

TRIPS Infrastructure Program Funding Mechanisms

These are the potential funding sources for the TRIPS program:

Passenger TRIPS User Fees: Phase-in increases of ticket prices 5% every three years over 12 years to create a local match source that is 20% of ticket prices; convert airline Passenger Facility Charges (PFCs) to TRIPS User Fees. Nevada Passenger TRIPS User Fees on buses and monorail trips to generate local match.

Freight TRIPS User Fees: Phase-in increases of freight rate assessments of 5% every three years over 12 years to create a source equaling 20% of freight revenues. Nevada Freight TRIPS User Fees on local and in-state freight deliveries to generate local match.

TRIPS Indexed Assessment on Gas Prices: Index federal gas tax as a percentage of gas prices based on the last gas tax increase in 1993: 18.4 cents per gallon, average 1993 gas price of $1.11/gallon = 16.6%. Today $2.39/gallon = 39.7 cents/gallon. Phase-in gas tax indexing over three years. Convert Nevada State Gas Tax to an indexed assessment as a percentage of gas prices from the last increase (23 cents/gallon) allows market forces to determine gas tax revenues. No charge for zero-emission electric vehicles; high mileage vehicles pay less.

TRIPS Interstate Highway Miles Assessment: Vehicle Miles Traveled (VMT) using license plate scanners on trucks and cars.

TRIPS Real Estate Value Capture Assessments (VCAs): Phase-in 2% every two years for 10 years to total of 8% for Federal/2% for State sales of real estate at current sale price. VCA paid by seller based on value of location made possible by proximity to transportation services. Nevada Real Estate VCA of 2% helps fund local match.

TRIPS Billboard Assessments: Assessment on annual billboard revenues, phase-in increases of billboard revenue assessments 5% every three years over 12 years to create a new revenue source from 20% of annual billboard revenues. Nevada DOT receives 100% of TRIPS Billboard Assessments to help fund local match.

NDOT could consider the incentive of using Railroad Property Tax Credits for TRIPS projects for private railroads to allow the use of their lines for rail passenger service. The cost of the tax credits would be far less than the cost to purchase land to build separate lines for passenger service.

TRIPS Infrastructure Procurement and Project Delivery Plan

RFIs, RFQs, and RFPs would be issued for teams to design, engineer, finance, build, own, operate, and fund the maintenance of transportation infrastructure projects jointly financed with private funds and TRIPS Infrastructure funding.

Consortiums bidding will offer competitive proposals to maximize the use of private financing and minimize the use of public financing from the TRIPS Infrastructure fund for each transportation project.

Benefits for Nevada and State Rail Plan Goals/Objectives

The TRIPS Infrastructure Program helps fulfill the State Rail Plan vision for economically and environmentally sustainable travel within the state. The TRIPS Program creates additional sources of new multi-modal state and matching federal revenue for Nevada. This would allow Nevada to consider changing the law to provide state funding of rail, specifically passenger rail projects. Additional multi-billion-dollar annual federal/state funding generated for investment in transportation infrastructure would create jobs and transportation-related economic activity critical to the rebuilding and recovery of Nevada's economy from the COVID-19 economic crisis in 2020. TRIPS Infrastructure funding would also provide an important solution for COVID-19-related Nevada state budget deficits.

Finally, as discussed in Chapter 1, enabling legislation for the Nevada State Infrastructure Bank ("Nevada SIB") was signed into law June 2017 (NV AB-399).[3] However, the Bank has not been capitalized as required to "carry out the business of the Nevada State Infrastructure Bank". Funding generated by TRIPS from state and federal matches could be used to capitalize Nevada SIB. Additional consideration would need to be given to changing current law to allow state funding of rail projects.

Recommended Next Steps

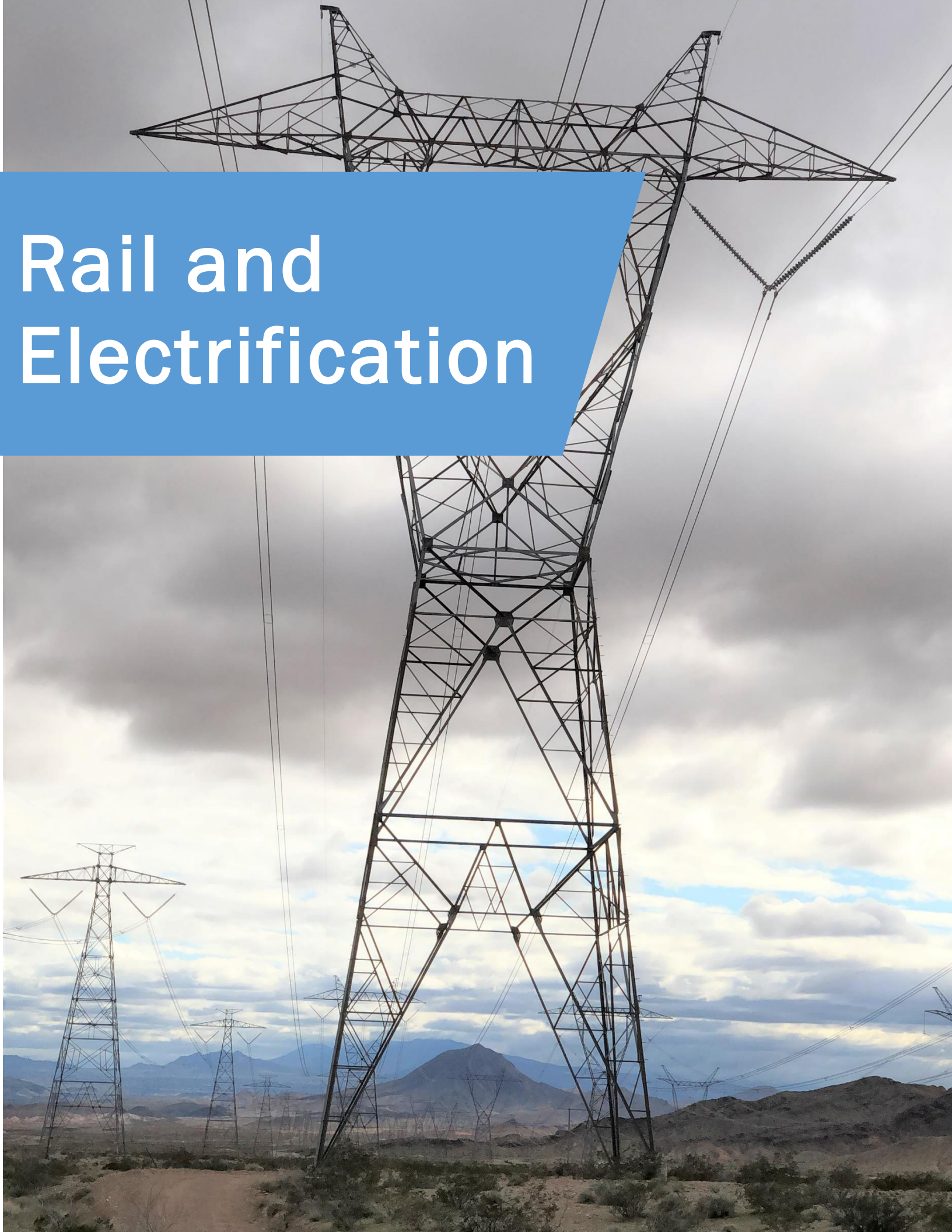
Develop a strategy to evaluate and implement the TRIPS Infrastructure Program in Nevada and pursue opportunities to support legislation at the federal level. Consider TRIPS Infrastructure bills for the next Nevada legislative session to begin generating new revenues as soon as possible along with other Nevada COVID-19 recovery initiatives.

[3]Nevada Assembly Bill 399, source link, effective June 2017.

4. Establish a Sovereign Wealth Fund

Sovereign Wealth Funds (SWF) are often used to smooth out public-sector revenues by calling on savings obtained from taxing natural resources (mitigating the necessity of funding substantial rainy-day funds out of general fund revenues). There are many examples of SWFs in the United States and around the world (see the list of U.S. states with sovereign wealth funds in Appendix C). Some states obtain modest revenues, although they can be vital in a crisis. New Mexico was able to shore up many small businesses early in the present crisis by calling on its SWF. Other states can use them in transformational ways: The University of Texas benefits from a Permanent University Fund that now exceeds $20 billion.

Nevada has several possible sources of revenue from which to draw in order to fill the fund. More important at this stage is to set in place an institution that was truly independent and transparent (many models exist). Voters may have reservations about revenue that disappears into the general fund. A sovereign wealth fund tasked by statute with supporting applied research for business and workforce development would increase the confidence of the voters that the revenues were being invested in the state's future (a model could be the Golden Leaf Foundation in North Carolina).



Rail and Electrification

Rail Electrification Council Statement on the Benefits of Rail Electrification for Nevada

I. Nevada and Rail Electrification

The Rail Electrification Council ("REC") advocates that all state rail plans should begin an exploration of the prospects for, and barriers to, electrification of rail operations. Such an analysis would ensure that plans and state transportation departments anticipate and prepare for challenges on the horizon. Forward-looking planning can also avoid investments in outdated technologies and operations.

REC believes that Nevada's rail plan should inaugurate an examination of the economic, operational, and environmental benefits of an electrified rail system.

Rail electrification can contribute to:

(1) enhancing the efficiency of in-state and interstate supply chains.

(2) helping foster job creation, new freight transload facilities, warehousing, and industrial development, particularly at mineral extraction sites. Bringing electric power to rail lines could also provide power to mining operations.

(3) improving the health and environment of Nevadans by reducing diesel emissions and promoting investment in renewable energy resources.

(4) supporting the production and transmission of electricity, particularly of Nevada's renewable energy resources, over high-voltage direct current (HVDC) lines located in railroad rights of way.

Freight rail companies are investing in infrastructure modernization. While investment in rail electrification would come on the heels of the costly deployment of Positive Train Control, diesel locomotive retrofit to reduce emissions, and current experimentation in battery electric locomotion, REC considers changing the motive power of locomotives and the transformation of the rail system to be in the realm of the strategic and attainable.

The challenges to electrification include potential costs,[1] prioritization of passenger rail electrification over freight, the ability of electric utilities to meet capacity demands of electrified rail operations, and the ability of utilities and other industry players to finance and build the necessary delivery infrastructure. Meanwhile, utilization of railroad real estate assets (especially trackside rights-of-way) as sites for longitudinal electric transmission or renewable energy facilities will potentially generate fresh revenues for the railroads that could offset the expense of electrification.

In sum, privately-owned rail transportation companies should be supported in pursuing electrification as feasible, strategically smart, and in their long-term economic self-interest. The public's interest will be

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[1] *Estimates of the cost of installing catenary facilities (overhead lines) for freight railways vary widely, at $300,000 to $5.5million per mile. At $2 million/mile, a build out of the U.S. military's strategic rail corridor network ("STRACNET"), which is comprised of 36,000 miles of rail serving 170 installations, would require an investment of $70 billion, not necessarily counting scale economies. The U.S. rail network today consists of about 150,000 miles of existing and retired or disused railroads. At $2 million each, replacing the Class 1 diesel fleet (25,000 units) would require investment of another $50 billion, not including the electric power delivery infrastructure. Of course, once fully developed, durable battery technology installed in locomotives as a substitute or a hybrid collaborator with overhead lines and possibly charged by renewable energy, could affect those costs significantly.*

served by a more modern, competitive, flexible freight rail system, a reduction in its environmental impact, and a contribution to the delivery of clean energy in the West.

II. Trends That Support Rail Electrification

Rail electrification appears with important questions of timing. The Federal Railroad Administration (FRA) believes that "rail will play a pivotal role in the Nation's transportation future." The 2021 Nevada State Rail Plan is being formulated in a transportation and energy environment that is increasingly transformational. Disruptive new technologies, changing demographics, and innovative public policies will make proper planning and strategic investment essential to maintaining economic competitiveness and quality of life.

The Council identifies three specific factors that call for a coordinated planning process among transportation providers, land and energy developers, and utility companies.

First, although FRA requires state-by-state rail plans, freight rail traffic is inherently **interstate**. Nowhere is that truer that in the Southwest. Nevada is becoming an industrial, commercial, and trans-shipment hub for commerce serving surrounding states. Just as Nevada's electric power industry must adapt to new technological, planning, and commercial developments, rail modernization in a potentially congested "megaregion" like the Southwest will require planning on a regional-wide as well as on a state-wide basis. The volume of truck movements between Nevada and California (over 70% of trucking in Nevada goes to or comes from California), regional air quality issues, the regional nature of electric transmission planning and development (e.g., TransWest Express Transmission Project would deliver 3000 MW of Wyoming wind to the Southwest)[2] all render the changes in the production and delivery of power as well as electrification inherently regional planning issues.

Second, Nevada will affect and be affected by **national** developments in technology and public policy.[3] Under the Passenger Rail Investment and Improvement Act of 2008, the FRA is developing a National Rail Plan. Just as the FRA intends to draw on state rail plans in that process, departments of transportation should consider important national trends such as the rising public policy focus on climate change, public health, air quality, electric grid integration, and the foreseeable electrification of highway transportation. The electric power industry and environmental interests are emphasizing the need for a national strategy to build-out the electric grid to permit delivery of location-constrained renewable resources to major power markets.[4] However, state facilities siting laws and land use restrictions often delay or reject major interstate electric transmission projects.[5] Although investment in high voltage transmission projects has

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[2] *TransWest Express LLC, Critical grid infrastructure to connect the West, source link. For a broad perspective on the importance of national grid integration for renewable energy, see "Macro Grid Initiative Launches to Expand and Upgrade America's Transmission Network", Press Release, American Council on Renewable Energy (ACORE) and Americans for a Clean Energy Grid, June 17, 2020, available at: source link*

[3] The Brattle Group, The Coming Electrification of the North American Economy, at ii (Mar. 2019) source link.
The Brattle Group found that increased electrification of the economy will require an investment of $3 – 7 Billion per year through 2030 (and far more annually through 2050 under some scenarios) to meet demand growth from electrification and integrate renewable energy resources.

[4] *For example, Southwest Power Pool, The Benefits of a Transmission Superhighway, source link.*

[5] *Clean Line Energy's Grain Belt Express project and its Plains & Eastern projects would have crossed multiple jurisdictions in delivering remote renewable resources to load; they ultimately failed to get regulatory or legislative approvals in the affected states.* Tomich, J., "*Battle reignites over $2.5B Midwest transmission line",* EnergyWire (Dec. 2019), source link; Postelwait, J., "*Grain Belt Express Transmission Line Moves Forward with Missouri Court*

increased in the past decade, driven by aging facilities and the desire to connect more low-cost renewable resources, major HVDC project proposals that would cross state, regional, or market boundaries have been denied approval due to state or landowner opposition during the permitting processes, disputes over the allocation of costs to state ratepayers, or lack of commitment by policy makers to the reliability and economic benefits of grid integration. Private transportation rights-of-way offer a significant potential pathway toward addressing this problem. Use of railroad networks can thereby help address the challenge of accessing renewable resources far from load as well as related issues like climate change. In other words, railroad rights-of-way should be part of the current effort to find attractive solutions to the intractable siting dilemma that inhibits or stops grid development.[6]

A third important variable is the advent of **new technologies** that will revolutionize the energy industry. Among those innovations are industrial-scale batteries (i.e., energy storage), distributed electric generation, high-voltage electric transmission facilities, fuel cells, and other improvements that will drive electrification in many industrial and transportation sectors.

III. Key Issues Analysis

Government Guidance and Support for Rail Electrification. Railroads' pursuit of emerging technologies that increase fuel efficiency and reduce emissions must be supported by a comprehensive policy and planning approach with State and Federal support. Railroads are investing in technological advances in response to the Passenger Rail Investment and Improvement Act of 2008. Conversion of rail operations to electric power or the siting of transmission on rail rights-of-way have not been well-explored in North America. The REC commends Nevada Department of Transportation for raising this issue as a strategic consideration for the state's economy.

A recent report[7] to Congress by federal regulatory staffs discussing the need for investment in new high voltage transmission addresses the potential for siting those longitudinal facilities within transportation corridors. Although mentioning issues that commonly arise when co-locating energy facilities near highways or railroads, the report failed to fully explore the potential role that the railroad system could play in facilitating delivery of remotely located renewable energy resources to major load centers. Unfortunately, these two network industries are planned and built in separate silos, without coordination or collaboration. This may be due in part to the absence of either a sound national rail plan or a national policy of facilitating a stronger interstate grid and electrification of systems – both of which are historically

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Decision", T&D World (Mar. 2020), source link. *Similarly, Eversource's Northern Pass project, designed to import Canadian hydroelectric power to the Eastern U.S., was essentially vetoed by one state siting regulator. See also*, e.g. POWERGRID International, July 19, 2019 "Eversource gives up on Northern Pass hydropower project". source link; *also*, e.g., American Society of Civil Engineers, Failure To Act: Electric Infrastructure Investment Gaps in a Rapidly Changing Environment (September 1, 2020), at p. 15. Also, Interviews with Jim Hoecker and Michael Skelly, "How Do We Accelerate Transmission Development," *Public Utilities Fortnightly* (December 2019), at 44, source link.

[6] *See generally Trans. Sec. Admin., Surface Transportation, source link (discussing the four general modes of land-based transportation as well as maritime transportation); Dept. of Homeland Sec., Transportation Systems, at 135-137 (May 2007), source link (providing a list of transportation assets broken down by sub-sector). See generally U.S. Government Accountability Office (GAO), Issues Associated with High-Voltage Direct-Current Transmission Lines Along Transportation Rights of Way, at 11 (February 2008), source link (refers to active transportation rights of way as railroads, highways, and pipelines).*

[7] *Staff report, Federal Energy Regulatory Commission, Report on Barriers and Opportunities for High Voltage Transmission: A Report to The Committees on Appropriations of Both Houses of Congress (June 2020).*

dependent on fossil fuels. Nevada has both important renewable resources and rail and highway corridors that could be used to make transmission development more efficient and responsive to state and national policies governing future energy, freight transport, and climate mitigation needs.

Supply Chain Disruption. Replacement of the locomotive power system must occur with the least amount of disruption to existing supply chains. Planning for continuity and efficiency requires an extended multi-year horizon, akin to the mid-20th century transition from steam to diesel locomotion. What may be less clear is the effect on the diesel supply chain of a potential conversion of highway trucking to electricity or the electrification of passenger vehicles that could stimulate the deployment of electric charging technology more quickly than expected. It is likely that a new, agile electric supply chain will emerge as rail operations become more integrated into the grid. For example, grid-connected locomotives can provide ancillary power generation services and storage to adjacent producers and consumers of electric power.

Interoperability. Rail operators achieve significant efficiencies by sharing locomotives and track capacity. This inter-operation typically requires that all railroads adopt the same systems – catenary, advanced battery power, third rail, and/or other electric drive systems – at the same time. Such shared operations may render battery-electric or hydrogen fuel cell technologies the best current candidates to replace diesel-electric drives, given their portability. The search for such solutions will only accelerate when regional or national public policy solutions catch up to the possibility and benefits of electrification.

Cost. Estimates of the total cost of electrification vary tremendously, in part because the technologies that will support electrification are yet to be determined. Clearly, the cost could rise to the hundreds of billions. The conversion could also have a cost impact on states and localities as grade crossings and other facilities require modification. To our knowledge, neither the rail industry nor power suppliers have yet contemplated how these costs will be incurred, allocated, and recovered and over what time period. It is never too early to confront those issues. Regulated utilities, which may be the primary electric service providers, are used to recovering costs in regulated rates over long periods. Railroads that provide the use of their real estate for transmission will need to negotiate new ratemaking structures that similarly recover revenues from their assets over time. There is a significant opportunity in these complex arrangements for public-private partnerships to facilitate the necessary capital investment, provided that the state and the railroad and energy companies calculate and consider the long-term benefits to consumers, the economy, the environment, and their companies of advancing these fundamental changes in operations.

Concluding Statement

The REC looks forward to supporting Nevada as it seeks to improve the Nevada's rail transportation, the State's commitment to the production of clean energy, and the state's economic development overall. The REC is a diverse coalition of manufacturers, electricity providers, and transportation firms that believes in a clean energy economy, a constructive approach to climate change mitigation, and economic development and job creation across North American economies. In seeking to anticipate, understand, and mold the likely economic and technological changes and new public policies that will affect the North American transportation and energy industries in the next two decades, the members of REC invite participation in a free exchange of information, data, and opinion about the future of our basic infrastructure.

Co-locating utilities harmoniously along rail lines reduces the land impact of development sprawl and the environmental impacts of utility corridors crisscrossing Nevada's pristine landscapes. It also gives Nevada another path to its climate goals by providing more cost-efficient access to carbon neutral power from wind and solar farms and geothermal sources whose rural locations are often uneconomic distances from electric grids.

Various utilities such as water, natural gas, and telecommunication lines can also be co-located with railroads in Nevada, facilitating lower-cost, lower impact development. The NVSRP team presented the benefits of utility and transportation corridor co-location to the leadership of the Nevada State Land Use Planning Advisory Council (SLUPAC). In response, discussions have ensued within SLUPAC on the rail development possibilities of NV Energy's Greenlink West[8] and Greenlink North[9] transmission projects. Shepherding this conversation between the literally parallel rail and electric power industries is one of the NVSRP recommendations.

[8] State of Nevada Clearinghouse website, "Docket No. 20-07025: Notice of Application for Federal Approval to Construct a Utility Facility", source link, accessed September 8, 2020.

[9] State of Nevada Clearinghouse website, "Docket No. 20-07024: Notice of Application for Federal Approval to Construct a Utility Facility", source link, accessed September 8, 2020.

Rail Plan Public Comments Record

Public Comment

Kenny Shepard kennyshepard@icloud.com

Hello to who this may concern,

If it's not too late to put a suggestion in for the type of trains. In addition, is it possible we can purchase the N700 Shinkansen and to operate on pylon tracks like with the Texas Central Rail project or purchase Euro Star/ICE European type trains? Basically, do citizens have the option to pick which manufactures to build the trains in referencing back to the first sentence? Thus, for the midwest high speed rail can that corridor operate at speeds of 125 mph instead of 110 mph? At 110 mph seems too slow. To illustrate, in regards to the true high speed rail corridors will the Brightline, CHSR, West Xpress or Xpress West, northeast and northwest corridors have complete free right away by not having interaction with grade crossings/rail crossings. Just flyovers, embankments and tunnels. To also have no single segment tracks and no sharing tracks with commuter rails, it'll just create major delays. Last but not least, will the stations and terminals have completely covered platforms with safety fence/gates along the platforms and electrified open and close doors like over in Japan, European and China? I just don't want American to build these projects the right way like countries in the eastern hemisphere PLEASE! Please keep my informed, I can be reach at 720-229-5249. Thank you for your time and consideration. I'm soo excited for America, it's ways overdue for true high speed bullet trains. Stay safe and God Elohim bless!

Sincerely,

Kenny Shepard

David Foster <dfoster342@aol.com>

1) The Draft NVSRP is well written and well organized, a credit to Michael Sussman, Charlie Banks, and anyone else who had a hand in creating it. In fact, it ranks as the best State Rail Plan I have seen, mostly because of its thoroughness and how comprehensive it is. The writing is cogent and grammatical. Furthermore, it is created to fit Nevada and its specific regions, not mindlessly spewed from a consultant's computer following a prepared template. The tables and maps are great, too. It actually has the capability to be an ongoing, interactive guide for rail policy and development in Nevada, not just a tome to sit on a shelf satisfying a federal mandate.

2) I am very disappointed that you have chosen to overlook the potential for open intermodal in the I-80 Corridor. RAIL Solution spent a lot of time and money evaluating and promoting this concept. During the public comment period last summer, at Lee Bonner's request, we prepared a one-page summary on this topic to facilitate its consideration and inclusion in the Plan. It is again attached. Trucks on trains are *congruent with several themes and goals of the Draft Plan.*

• In the Draft you perceptively included truck traffic. This is unusual in a State Rail Plan, but very important, as you have noted, as it is heavy truck traffic that represents opportunity for new rail business.

• In the Draft you also wisely considered adjacent states, including Utah and especially California. This accepts the need to analyze I-80 traffic flows holistically and not confined to Nevada alone.

• And in the Draft you also comment on the considerable incidence of truck crashes and congestion on I-80 in Nevada. Moving through trucks into, out of, and across Nevada by train clearly would enhance highway safety, as well as reducing wear and tear on roads. Reduced pollution is a corollary benefit and dovetails with the growing popular movement nationwide to "decarbonize" transportation.

Transporting trucks through the state of Nevada in the I-80 Corridor by rail rings all three of these bells.

3) Unfortunately the Plan's definition of Intermodal is too narrow to cover anything beyond traditional railroad double-stack trains. These are, of course, Intermodal, but you need to enlarge the definition to recognize that Intermodal freight is anything which in its journey travels on more than one mode. There are many other kinds of Intermodal shipments possible beyond double-stack containers and trailers in well cars. In fact in the Draft you recognize that this traditional concept serves Nevada poorly. It says there are only two conventional rail intermodal terminals in the state and they are underutilized. This should prompt you to ask why. By design rail double-stack trains require large volumes and long distances to make economic sense. Their vast terminals invite cost and delay, which then needs to be amortized over as many linehaul miles as possible. To truly serve the Intermodal needs of Nevada, a much more nimble service concept and design is needed, one that provides fast, frequent service to Nevada, not one designed to optimize 1,500-mile hauls.

4) The Draft's careful cataloguing of every sidetrack in Nevada is interesting, but the focus in the action tables for each region on reusing and reactivating these tracks in quite unrealistic. I can see Michael Sussman's handiwork here, and his strong focus on promoting rail service to each small shipper. Often however, there is a reason a siding is unused -- either it became uneconomic for the shipper or the railroad. That is unlikely to change to nearly the degree projected in the project tables. Shippers today lack the patience to deal with intransigent rail service, even if it may be a bit cheaper, and railroads today certainly lack the marketing and operating discipline to deal with small shippers.

5) This is a comparatively minor point, but throughout the chapter on passenger rail, Amtrak's *California Zephyr* is referred to as daily. Last year Amtrak downgraded its daily long distance trains to tri-weekly, and this included the *CZ.* While this was touted as a measure to adjust capacity to reduced demand levels during the pandemic, Amtrak has a long history of never restoring daily operation of trains relegated to tri-weekly status. The nearby *Sunset Limited* in the I-10 Corridor is a handy example. So it seems appropriate for the Draft NVSRP to state affirmatively as a goal that the *CZ* be resumed on a daily basis as soon as the pandemic is behind us.

6) And I close with a very minor point. In the write-up of the Nevada Northern Railway, you have included a nice color photo of the Nevada Southern. That would be much more appropriately moved several pages later under the description of the Nevada Southern.

GARY NEWMAN <airborndaddy@hotmail.com>

Hello,
My name is Gary Newman and I live in Reno,NV. I am a volunteer with the Rail Auxiliary Team, under the Washoe County Sheriffs Office. Although the plain does appear to be comprehensive, it does NOT appear to have any provisions or guidance for direct involvement with the public around and/or in the vicinity of rail operations. Our highly trained and highly competent group of an all volunteer team could more than fulfill that very necessary and imperative role. Than you, Gary Newman 775-379-5297.

Colin Ono-Moore colinonomoore@gmail.com

NV rail public comment,

Pardon such a long thought about things that I'm sure you all think extensively about, with better information and insight than I have.

What i was thinking and writing previously is not well thought out or researched. Only thinking about slow life, and a different economics for our state.

Researching such a project would take much more time than one day.

I see you have a meeting this Tuesday on the rail plan.

I did not read it.

The idea i presented is larger than anything that I can reasonably accomplish, and the state rail plan seems like a reasonable place to send such ideas for consideration, even if cursory.

This morning, i was happy to see that we have a rail plan. It seems like a good place for me to start looking into what Nevada is doing and has done.

Sincerely,

Colin

On Fri, Feb 5, 2021, 1:40 PM Colin Ono-Moore <colinonomoore@gmail.com> wrote:
NV Rail Public Comment,

This is sort of an organized ramble. I was born and raised in Nevada.

Two questions to push considerations:

How can trains be used?

How can any individual or a Nevada community participate with train use?

The people of Nevada could invest in a broad slow rail infrastructure connecting our main cities (Carson, Reno, Elko, Ely, Las Vegas) with branches to other cities/towns and areas, joined by private enterprises for commercial use and tourism. This is being thought of as a public transit type system along the lines of Nevada's (and the worlds) historical pattern of train use in the 1800's and early 1900s -- slow, enduring cultural patterns. It would be another way to integrate Nevada's open spaces in a regional-local manner.

Nevada has historic rail lines and historic trains that could be used for these commerce and tourism purposes already. The system would best be designed as an open system that allows for easy modifications and changes in the future, and designed with at least two parallel tracks, most places for flexibility and ease of use. This can be done with both public funds and private entrepreneurship. And the state and county and city levels could invest jointly, but differently based on sharing and system global vs local needs. The feds could invest too, i mean we're like 70% BLM land or something and then area 51 and various military instalments (what would the military use trains for?).

High grade rails for high freight loading possibilities is better than not. Make the lines robust and long term.

Maintaining a rough theme of the "old west" would reinforce the idea of slow tourism and allow a variety of tourism based events or themed rides to be created. Newer types of train systems (or other public transit methods) could of course be used for special sections, such as going to lake tahoe/ski resorts from Carson and Reno, or Vegas to Lee Canyon, or Las Vegas to Las Angeles.

I'm not advocating for frequent stops, like a passenger rail line in a city, but rather for old-west style slow travel to existing larger locations.. (local car or motorcycle or bicycle rental could then be a business, if it became popular enough, and trains carry automobiles (groups or families travel with a hotel sleeping car, without sacrificing the independence of an automobile.)

It is important to re-emphasize that this would be valuable as both a public transportation system and a commercial (tourism and freight) system. Nevada residents could use the system also for use of airports, and the airports could be used for tourism with things like the Burning Man Festival.

The slow train system would allow for new ways of looking at and dealing with sustainable *interactive* wild-land management use patterns in Nevada's land scapes (would have to manage with BLM etc), including cattle and sheep ranching and pasturage and wild land visiting. Thinking about it as "interactive" for tourism and for resident livelihoods. And working toward a "free safe passage" usufruct-law across even private property opens this possibility up enormously (gotta talk with ranchers and others about what would be tenable).

I am not advocating the removal of any roads paved or otherwise.. though more could be left as gravel/dirt perhaps over time.

It would generate employment for instalment, running, and maintenance over generations. (im' thinking long term, trains can be kept going, as Ely shows.)

The Shoshone and Paiute can be approached and asked if they would like to participate and find out how they think the trains can facilitate their current lives, or reclaiming some older cultural patterns if they see the possibility especially with usufruct-type laws (with adjusting tribal boundaries or something, possibly messy, but good).

The "old west" like theme also would integrate into other pre-existing cultural events and tourism, such as the Burning Man Festival noted previously, National Cowboy Poetry Gathering (that would be going on right about now in any other year), National Finals Rodeo in Las Vegas, National Basque Culture Festival, to name a few.

Alternative means of tourism can also be created or accessed more easily. Some thoughts that have passed through my mind are these:
-Hotel bundles with sleeping cars and casino cars and party cars (is this in that scary train series that's on now?)
-connection to outdoor and historic areas like the following:
--Great Basin National Park
--Red Rock Canyon National Conservation area
--designation of "Dark Sky Parks" such as Massacre Rim Wilderness Study Area (with development of tourism facilities based around dark sky viewing, telescopes, hotels, new green tech stuff, whatever)
--Burning Man (there are already tracks out there I hear)
--Rhyolite and other ghost towns, the pre-existing stretch to Virginia City
--ski resort access
--various historical sites or geological oddities via particular bundles (Come see Nevada and the Old West!!) (possibly via separate limited lines or something, mining rail gauge stuff or nearly so)
--shooting ranges? (we have open carry, and why not on the train too, I've grown up with people carrying guns); can elk and deer hunting be integrated somehow with cold storage?
--wildlife and animal sanctuary viewing or wild horse stuff: i.e. wild horse roping contests for cowboys to manage horse populations every few years or something, "rope it to keep it" (animal people would flip their shit! haha (I like animals a lot)) (again sustainable *interactive* wild land management practices)
--lake access for fishing and boating and camping, cold storage again.
-USPS mail delivery, or other parcel carriage for rural areas
-horse-back or horse and carriage or buggy taxi services could be made by local people with the knowledge or interest especially for the festivals
-we have the sports stadiums in Vegas that could be integrated
-ranching and range land management practices can be included or changed
-keep Amtrak separate but attempt to have some station connection locations (like the Reno one and then jointly extend into Utah and Salt Lake City.
-advocate for Utah to extend into southern Utah in a like manner (perhaps all the mountain west, even)
-advocate for extensions into LA, Phoenix, Boise, if those states are agreeable.
-advocate for a branch extending from Carson City to Bridgeport, CA, Lee Vining/Yosemite, Mammoth, Bishop, Death Valley to either Barstow stop or to Vegas (slow trains for tourism and outdoor recreation).

-advocate for Amtrak to have an auto-transport option and cold storage for hunters from the mid-west
-change development patterns and get more people in the state, but in a disbursed fashion with train access points, like the old west?, allow for nomadic type pastoral use of lands?
-managed forest lumber use for local city or county stuff, plus imports of course
-freights for hobby or tourism or local ranchers (slow, old-west style), such as motorcycles, bicycles (road/mountain), riding horses (horse back tours and camping), cattle or sheep for pasturage change, Trucks, dune buggies (the dunes), trucks with Hunting parties?, so many possibilities with trains.
-farm stuff hauling?

The train services don't have to be super precise (slow, old-west, two tracks, modern location tech), and can be seasonal.

It can and probably would need to be a multi-joint venture.

We can advocate for other states to look at their own state economies to support their own people in their own local/regional and historic ways, rather than via the federal government. Do the states rights things and take back power from the DC area.

Background:
This thought just came to me this morning. I was thinking about considerations of speed and quality, and how speed does not always lead to an improvement in quality; a slow train or slow boats might actually be better in ways. I was also watching the film The Economics Of Happiness, and reading about slow culture.

Thank you for your time,

Colin Ono-Moore

P.S. I will also suggest this to other rail enthusiasts and other people generally, as it is not a simple community venture without it becoming communist/socialist and is better completed in a democratic way with buy in from many individuals and many sectors of society, and even being completed in meaningful segments over many decades.

Also, you may share this with any individuals or groups for conveying the scope and breadth of the idea.

Ray Bacon, Exec Director, NV Manufacturers Assn, info@nvmanufacturers.org, Carson City, NV

Rail service to the manufacturing sites in Nevada has been terrible for decades and nothing in this plan indicates any commitment by the UP or BNSF to improve their delivery performance. If that is not or cannot be fixed then expanding route, building new track beds, expanding rail capacity will be a giant waste of money. As this plan spells out most of the investment is private money within some cases railroad investment too. The railroads have a terrible performance track record - one failure and this plan is smoke. The Sparks Rail yard needs to be replaced with something much better with more capacity at TRIC or perhaps Fernley. Once that happens, then

perhaps the RR can build creditability to proceed further. Most of the longer lines proposed in this are likely pure pipedream until there is some demonstrated performance for the railroads.

Nanette Redmond, Rail Auxiliary Team Volunteer, Washoe County Sheriff's CCP, nanetteredmond@hotmail.com, Eugene, OR

The plan is good but not as comprehensive as it could be. The Rail Auxiliary Team, part of the Washoe County Sheriff CCP program goes out to many places in Nevada and looks to ensure the safety of the public and the railroads themselves. We look for trespassers, possible suicides, people camping on railroad right of ways, unauthorized vehicles parked near railroad tracks and crossings as well as suspicious activity. We have been trained to perform these tasks and attend monthly educational classes. If we see this we call the Risk Management number in Omaha, Nebraska. Before calling we complete the required 9 line document. We work with the suicide prevention group in Nevada as well as Special Agent Scott to further increase our knowledge. None of our activities are mentioned in your document. Thus, this document is not as comprehensive as it could be. Nor, are our efforts acknowledged. Thank you, Nanette Redmond

Theron Gough, Retired, none, thorlxviiii@hotmail.com, Fallon, NV

I saw no mention of the Rail Auxiliary Team in this document. I believe they would be very instrumental in education about Rail Safety and they do currently provide observation of the railways in Northern Nevada. They have help to prevent 8 possible suicides by train and 38 other events to include accidental death due to trespassing on the railroad tracks and bridges. I very much hope you will consider including the Rail Auxiliary Team and the Department of Public Safety as part of the State's Rail Plan.

Lynn Sandell, Retired, Washoe County CERT & Railroad Auxiliary Team, lynn@sandell.us, Sparks, NV

After having read the 2021 Nevada State Rail Plan, I am encouraged by the desire to increase rail traffic and to rely less on truck transportation. A major concern that I did not see addressed is rail safety when it comes to trespassers. As a member of the Railroad Auxiliary Team, we are on the lookout for trespassers and are about trying to keep the public safe. Our being eyes and ears as we are out and about has already saved many lives. I think there needs to be more emphasis and dollars spent on the safety of people around the tracks. Thank you for taking this into consideration.

Carol Hill, Volunteer with Rail Auxiliary Team (RAT) in Reno, NV, Washoe County CERT (Community Emergency Response Team), chill968@aol.com, Washoe Valley, NV

I would like the State Rail Plan to include the work done by our Rail Auxiliary Team (RAT). We are the only rail safety team in the U.S. Our duties include patrolling the railways for safety and security. We alert Union Pacific when people trespass onto railroad property. This is to protect our citizens as well as the train crew. The team has suicide training which we hope will save lives. We also monitor for any potential terrorist activity along the rails. Because HazMat materials are shipped on freight trains throughout Nevada, we watch for potential leaks or

hazards. We work closely with local law enforcement and with the Union Pacific police officer assigned to our area. I would like to emphasize the importance of the work done by our Rail Auxiliary Team and hope that we can coordinate with the state to make Nevada a safe place for all residents.

Marcia Hurd, President, Lincoln County Authority of Tourism, marcia@starvalleynv.com, Caliente, NV

Thank you for allowing us to comment on NV State Rail Plan.

Lincoln County represents almost 10% of the landmass in the State of Nevada with over 10,000 square miles. Unfortunately, 98% of that land is currently controlled by Federal Agencies. Our county's economy struggles to support itself with our population and businesses occupying only a minute 213 square miles.

Two factors addressed in the Rail Plan are of great interest to Lincoln County. First, In order to make the most of our limited infrastructure, Lincoln County greatly relies on tourism. We believe we would significantly benefit if Passenger Rail service can be negotiated to come through Lincoln County with a stop in Caliente. Our historical train Depot building is being renovated and would make an excellent stop-over. Second, there is an industrial park very closely located to the Union Pacific lines running through Lincoln County and would help bring in future new businesses and provide a boost to economic development.

We strongly support any strategies that will bring more rail service through Lincoln County.

Garrett TerBerg, Principal Planner, Clark County NV Comprehensive Planning, gtb@clarkcountynv.gov, Las Vegas, NV

Good day!

I attended the 2021 Nevada State Railroad Virtual Summit on 16 February 2021 and was most encouraged by the speakers and the Plan for the Rail for the State of Nevada. We absolutely need this guidance to get "on track" to allow our State to have an active economic presence in the region and ultimately on the global stage. I am recommending that prominent references be made in our new County Comprehensive Master Plan through 2050 that is currently under development (see transformclarkcounty.com). During the Summit, I also indicated my desire to work with many of the speakers and others, so please keep me in the loop for future networking opportunities.

Thank you,

Garrett TerBerg III AICP | Principal Planner
APA NV Southern Section Director
Comprehensive Planning Department
Clark County, Nevada
500 S. Grand Central Parkway, Las Vegas, NV 89155
Office: 702.455.5617

Cell: 702.499.5264

Richard Vail, N/A, N/A, rvail@netzero.com, Surprise, AZ

Sir: There should be some kind of mapped route proposal for a Phoenix to Las Vegas standard speed passenger train. The least expensive route appears to partially re-use the existing former ATSF route between downtown Phoenix & Parker, AZ. Build some 40 miles of new tracks connecting Parker to Lake Havasu to Topock, AZ. Continue on ~12 miles of existing BNSF tracks (currently used by Amtrak's SW Chief), crossing the Colorado River to Needles, CA. Then construct some 80 more miles of new tracks from Needles to Laughlin to Boulder City, NV. Continue from Boulder City to Las Vegas on existing tracks. Of course, make the route also available for a new freight traffic route connecting Phoenix & Las Vegas.

Carol Hill, Volunteer with Rail Auxiliary Team (RAT) in Reno, NV, Washoe County CERT (Community Emergency Response Team), chill968@aol.com, Washoe Valley, NV

I would like the State Rail Plan to include the work done by our Rail Auxiliary Team (RAT). We are the only rail safety team in the U.S. Our duties include patrolling the railways for safety and security. We alert Union Pacific when people trespass onto railroad property. This is to protect our citizens as well as the train crew. The team has suicide training which we hope will save lives. We also monitor for any potential terrorist activity along the rails. Because HazMat materials are shipped on freight trains throughout Nevada, we watch for potential leaks or hazards. We work closely with local law enforcement and with the Union Pacific police officer assigned to our area. I would like to emphasize the importance of the work done by our Rail Auxiliary Team and hope that we can coordinate with the state to make Nevada a safe place for all residents.

Gary McNamara, President, NViaggio, Inc., gm.nviaggio@yahoo.com, Reno, NV

This is a response to the Nevada State Rail Plan as a result of reviewing both the study itself and attending the Nevada State Rail Summit held February 16th 2021. I represent a Nevada based company that has organized a group of international and industry best companies and individuals in anticipation of adding critical rail infrastructure in the Western United States.

Nevada needs to take takes a Nevada First approach, as we understand that the proper infrastructure to maximize the potential of our state will also create positive results for our neighbors as well. The 2021 Nevada Rail Plan presents a very unique freight and passenger rail plan for the State of Nevada. A tremendous amount of research and data gathered was undertaken through this process. NOW is the time to take all of that information and begin to conduct some very serious planning and implementation work to improve the quality of life for Nevada residents.

Freight Rail

The freight portion of the Rail Plan includes rail and truck commodity flow data that highlights the fact that the majority of freight tonnage (77%) moves by truck versus the 65% national

average. Seventy percent of those trucks are moving from California. Given that freight moved by rail is the most environmentally friendly method of transport, Nevada needs to develop a more efficient system of moving freight by rail.

In order to accomplish this transformation, it will be important to assemble government entities, shippers and carriers to work together to obtain:

- A better understanding of the transportation systems' strengths and weaknesses
- Engage in system-wide transportation and land use planning issues
- Obtain better understanding of what a more efficient transportation system in Nevada entails
- Prepare new project proposals that meet the overall transportation goals of both California and Nevada
- Work together to obtain access to both private and public funding for these projects

A more coordinated effort by shippers and carriers would reduce the amount of empty backhauls of aggregates and container movements between California and Nevada. Also, by coordinating freight movements, more opportunities would become available to ship commodities by rail instead of on the highway.

The Integrated Multimodal Cargo Transfer Facility (IMCTF) is a more efficient model to integrate the movement of freight between Northern Nevada and Northern California. However, in order for this transportation method to work, it would require a substantial investment in constructing this new facility. It would also require the BNSF and/or the Union Pacific Railroads' willingness to provide competitive freight rates and the ability to operate the rail service on a timely schedule in order to meet shipper needs. More research would also be required to determine if there would be sufficient demand to divert truck freight from Interstate 15 heading west to the Ports of Los Angeles and Long Beach (LA/LB). Provided the cost and travel times would be competitive, these trucks could be diverted to the IMCTF and loaded into ocean containers for the trip to the Port of Oakland. Shipping by rail to the Port of Oakland also has the advantage of accessing the port 24/7 rather than only during the 8AM to 5PM truck gate hours at the port. A significant amount of freight would be necessary in order for the IMCTF model to be viable in Northern Nevada.

Nevada's Mining Industry is a major industry generating $8 billion in gross value of produced minerals in 2018. The mining industry is a powerful economic generator for the State of Nevada, but could become more efficient in its efforts to reduce transportation costs. A Nevada Mining Industry Alliance should be established to coordinate its planning and shipping efforts. By working together, this alliance could generate tremendous transportation savings by utilizing Nevada's rail system. As new mines continue to open, more and more, rail will be become a very attractive transportation option to move products to market.

Northern Nevada is seeing tremendous business growth along the I-80 Corridor between Reno and Fernley. This growth is creating highway congestion both in Nevada and California. Despite the fact that rail is the most economical and environmentally friendly means to transport freight, much of this freight is moving by truck because there is no coordinated effort underway to take advantage of high volume shipping savings utilizing rail transportation. In Nevada, there is also a tremendous amount of rail infrastructure that is not being used. These underutilized

assets could assist in reducing transportation costs, reducing highway congestion and reducing emissions.

Passenger Rail

The first item that needs to be addressed is that Nevada needs a state of the art rail system that connects the two largest metro cities of our state. Nevada can no longer be dependent on its transportation systems originating out of state and must address its "Missing Middle"section that includes six rural counties.

The passenger rail section of the plan calls for both California Zephyr and Capitol Corridor as potential solutions for Nevada. Two key elements were not addressed, travel time and ridership both of which are critical to operating a successful passenger train service. The California Zephyr end points are Oakland California and Chicago. Currently, ridership is extremely limited between Reno and Salt Lake City so the addition of an Oakland to Chicago train is not in Amtrack's short term plans. For some 20 years, the Capitol Corridor has been studying extending to Reno but there has been no interest by the host railroad to allow passenger trains to operate over Donner Pass. More work will be required by the State of Nevada and California to make the case for a Northern California to Reno train.

The "C" route option of the proposal offers many challenges and limited solutions for Nevada passengers. A Reno to Las Vegas trip including multiple changes between bus and train, adding up to 14 plus hours of travel, is not an efficient option. Below, High Speed Rail in Nevada will be addressed for multiple reasons. To compare, during the time it would take a California Zephyr to travel from Reno to Sacramento, a High Speed Rail train would be able to travel from Reno to Las Vegas and back to Reno. Also, car travel time is approximately two hours from Reno to Sacramento so the thought of just one leg of the proposed trip taking this much time leads us to believe ridership for a 14- hour Reno to Las Vegas trip would be close to zero. Equipment technology used in multiple countries would need to be evaluated in an effort to cut time so a Sacramento to Reno trip would compete with vehicle travel.

Re-establishing a Los Angeles to Las Vegas passenger train would provide high amounts of ridership between two major destinations in the US. This service would reduce congestion on I-15 and make traveling a much more pleasant experience. Unfortunately, Brightline has experienced delays and is looking for Nevada to help bring this project to completion. Once again, with travel time and ridership in mind, Los Angeles to Las Vegas would need to be accomplished completely not just a Las Vegas to Victorville, CA service.

High Speed Rail

The biggest omission in the 2021 Nevada State Rail Plan is the failure to discuss a potential High Speed Rail system to connect Las Vegas and Reno. The State of Nevada needs an efficient transportation system to connect its two largest cities for both passenger and freight users. Preliminary findings, experts and current international operators understand that Nevada's topography is ideal for speeds of 220+ mph which enables travel time between Las Vegas and Reno in the two hour range which is more efficient than both airplane and automobile travel. Most importantly, High Speed Rail is a Zero emission system. The Northern Nevada Development Authority's "Nevada Technology Corridor" (NTC) would provide Nevada with the most efficient transportation system available today. The NTC would provide Nevada a first-class High Speed Rail system and high value/high priority freight service linking the two proposed

inland ports. In addition, the NTC would link six rural counties, five critical care hospitals and four opportunity zones. High Speed Rail paves the way for the NTC as the right-of-way for this project would provide access for the transportation of electricity, broadband technology, water and natural gas to portions of the state that do not have these amenities. Just as critical, the High Speed Rail NTC will provide multiple business development and workforce housing opportunities throughout the state. High Speed Rail will also provide the backbone for current and future commuter rail needs.

In conclusion, towards the end of the Nevada Rail Summit, a slide referencing "Dreams" was shown. The NTC is a solution that can be accomplished NOW. High Speed Rail, freight rail and connecting the two largest cities of the state along with the two proposed inland ports is a solution that helps Nevada thrive for generations to come. Proper investigation, research, and investors will enable current reputable operators to not only assist but invest in this effort. The proposed transportation corridor is very achievable.

Ron Kaminkow, Locomotive Engineer, Railroad Workers United; Rail Passengers Association, railroadworkersunited@gmail.com, Reno, NV

Capital Improvements Needed to Existing Rail Infrastructure

To facilitate freight and passenger movement between Nevada, California and beyond, it would be highly desirable to remove bottlenecks and obstacles where they currently exist. A number of infrastructure projects would greatly aid in the realization of the Nevada DOT State Rail Plan. In order to facilitate a more fluid and higher capacity mainline across Northern Nevada, it is obvious that additional infrastructure in California is also essential. So, while some of what follows necessarily pertains directly to the state of California, we see this as crucial for success here in Nevada.

1 – Construction of a second main track between Vista (MP 249) and Weso (MP 421) in places would expedite train movements. A second main did exist between Granite Point (MP 337) and Weso, but was removed by Southern Pacific in the 1980s. The roadbed remains intact today and would greatly facilitate an effort to restore the second main by joining the sidings (4 of them) between East Granite Point (CP 338) and Weso. From Fernley (MP 276) to Granite Point, there is generally ample room for a second track to be laid with limited need for additional cuts and fills. Vista to Fernley (25 miles) would be more challenging due to restricted clearance in the lower Truckee canyon and numerous bridges across the Truckee River.

2 - A third main track bypassing the Sparks yard (MP 244) to the north would facilitate Amtrak and regional passenger train movements and otherwise ease congestion at the terminal. A third main both between CP 249 Vista and CP 239 West Reno (or beyond) would greatly streamline operations at Reno - Sparks. Note: This third main would bypass the trench to the north between CP 239 and CP 242 where a vacant corridor currently exists. This main track would be used for regional passenger trains that would stop at the "Downtown Transit Center," to be located directly adjacent to (and between) the Amtrak station and regional RTC bus terminal. Here, connections would be made to both northbound (UNR - North Valleys- Bordertown)) and southbound (airport – Carson) regional trains, Amtrak trains, Amtrak thruway buses, local bus

service and Greyhound. Note: The easterly ¼ mile of this track currently serves as the UP Reno Branch.

3 – Rehabilitation of the Reno Branch from Reno to Bordertown and on to Reno Junction (35 miles) would facilitate expedited movement of freight from/to North Reno and Stead warehouses and industries. Installation of CTC/PTC would enable commuter rail operations to comingle with this lightly used secondary track (currently only used at night a few times a week). Local and through freight (both UP and BNSF) could be routed north as well as south (currently the only option is south) as necessary, and the route could act as a bypass and safety valve if/when the UP finds it desirable to route trains from the former SP east-west mainline to its former WP east-west mainline in either direction. The east leg of the Wye at Reno Junction could be replaced to facilitate universal movements.

4 - The second mainline from Emigrant Gap, CA (MP 171) to Shed 10 (MP 178) was removed by Southern Pacific (SP) in 1993, as was the second main track over Donner Pass, a combined total of just under 15 miles. Rumor had it that new owner Union Pacific – upon purchasing the SP in 1995 – had every intention of returning both segments to two main tracks in order to facilitate movement over the Sierra Nevada. Unfortunately, this project never happened, resulting in continued restriction of train movement over the mountain, especially in winter months and at times when the parallel route (former Western Pacific) is closed/limited due to rockslides, wildfires, trackwork, etc. This double tracking project needs to be a priority.

5 – A significant amount of trackage across the Sierra has never been modernized. Centralized Traffic Control (CTC) needs to be installed between East Truckee (MP 208) and West Reno (MP 239), and at other locations on the western slope. Currently, Newcastle (MP 120), Bowman (MP 129) and Colfax (MP 140) are equipped with single dual-controlled crossovers, while Floriston (MP 220) currently has a set of universal hand-throw crossovers and a 10-minute wait for all crossover movements. In combination with the double tracking referenced in #4 above, the installation of dual-controlled universal crossovers at all four of these locations would greatly serve to facilitate and expedite train movements over the mountain.

GLEE WILLIS, Retired, Member of the Rail Passengers Association, gleewillis@yahoo.com, Reno, NV

The need for additional Bay Area to Reno Service

Problem:

All passengers traveling by train for California points to Reno currently ride on Amtrak trains #5 and #6. Often the eastbound Amtrak train empties out at Reno, and fills up westbound. Unfortunately, these short-hauls often result in a “sold out” train for travelers wishing to make a longer haul to destinations east of Nevada. This can result in passengers being denied the opportunity to board and/or disembark from Amtrak trains in many California locations. Additionally, the train times are not the best for those who do ride the train. Many local/regional travelers to/from Reno are not happy with an 8:36 AM departure from Reno back to California.

When these Amtrak trains are often completely sold out from California to Reno, would be train travelers must either drive the challenging, semi-congested highway over Donner Pass, or completely opt out. In either case, valuable revenue is lost.

In winter conditions, when driving over the mountain passes is treacherous and slow (if they are not completely shut down), demand for train service greatly exceeds the current capacity.

Solution:

Additional daily frequency between the Bay Area and Reno, and the development of this as a new “corridor service". This additional service would solve a number of problems and greatly facilitate rail travel between California and Nevada.

1 - The additional train would ideally depart the Bay Area mid-day (vs Amtrak train #6 departure of 9:10 AM). This would not only give riders the choice of departure times, but it would allow for an early evening arrival (roughly 7 PM) in time for dinner, drinks, shows, and entertainment. Likewise, a mid-day departure would allow visitors time to sleep in, check out, enjoy breakfast, and leisurely depart Reno and be back in Sacramento (5 PM) and the Bay Area (7 PM) at a reasonable hour in time for the next day’s activities. Overall ridership would be dramatically increased.

2 – In addition to allowing customers more flexibility in travel times, Amtrak trains #5 and #6 would have additional space available for long distance travelers (i.e., increased ridership of these long-distance passengers).

3 – The additional trains would stop at all stations currently served by Amtrak trains #5 and #6. In addition, the new service should stop at Auburn, augmenting the now once daily service from that city to Sacramento and the Bay Area.

4 – With the infrastructure improvements suggested by Rail Passengers Association (RPA) Nevada state Rep Ron Kaminkow (see his Comment to the NDOT Plan), Union Pacific would have vastly increased flexibility to route not only its own trains across the Sierra Nevada, but easily be able to accommodate this additional service, whether it be single or multiple daily departures from both Reno and the Bay Area.

5 – In terms of equipment, these additional trains – given the nature of those travelling this route – would be wise to include first class service (private rooms) as well as a lounge/snack car, both of which would be well patronized. Note: In the recent past the “Reno Fun Train” provided a highly successful service as a “party train” of sorts. Amtrak could easily capitalize on the previous success with daily and year-round service.

Jason Doering, Nevada State Legislative Director, The International Association of Sheet Metal, Air, Rail and Transportation Workers (SMART), jason.doering@nvsmart-union.org, Las Vegas, NV

Rail labor supports the expansion of freight and passenger service, provided it is executed in a safe manner.

Nevada must maintain that a certified engineer and a certified conductor are working on every freight train. These two safety professionals work together to minimize the effects of fatigue, deal with emergency situations including hazardous materials accidents and incidents, operate advanced technologies and comply with a myriad of federal rail safety requirements. They also provide critical backup to one another as decisions are made that often save lives. A single crew-member cannot perform these tasks and still maintain the highest safety standards, which is what the carriers are striving to accomplish.

In addition, Nevada needs to be aware of the growing length of trains operating within the state, given the extreme territories for which they traverse. A 2-mile-plus-long train can interrupt crew radio communications, compromise in-train forces, block grade crossings for long periods, which hinder emergency vehicles and increase the probability of a mechanical failure; all while disrupting service, which in result jeopardizes the customer.

Moreover, we believe the state recognizes the importance of investing in infrastructure to support economic recovery and keeping Nevada's railroad system reliable and safe. We look forward to working with industry stakeholders to improve and expand passenger rail service throughout Nevada; including high-speed rail projects, and the restoration of Amtrak between Southern California and Las Vegas.

Kathy Canfield, Senior Planner, Storey County Planning Department

Storey County offers the following comments:

There is a Development Agreement (since 2000) in place that requires the “Tahoe-Reno Industrial Center” to be the name of the area within the agreement boundaries. Blockchains may call their land inside this boundary what they wish, however, that name may not apply to the remainder of the land within the Development Agreement area that they do not own. The Development Agreement and underlying zoning supports technology, data research and development, and other such “tech” uses proposed by companies in and out of the industrial center, and Storey County stands by its commitment to support these and other listed uses.

Art O'Connor, OC Engineering, Reno, NV, art@oceng.com

…As stated in the Plan, there is no Nevada money to implement the Plan. Instead, the Plan relies on private funding to construct the infrastructure. The point of my comment was you need to encourage the private entities to fund it. Rather than encouraging, the current tax structure is a disincentive. If we do not fix that, the money being spent on this Plan is a waste. The Plan needs to present some financial incentive to spur the private investment, other than the hope of increased traffic. It should be a major section of the Plan, but I find nothing significant in the Plan. Chapter 5 only says "The freight rail projects listed below have a total estimated cost of $578MM. This is a sum that private-sector infrastructure investors are well positioned to invest." Note the (sic) "MM" typo. Obviously, if the proposed projects were economically feasible (i.e., they would be profitable for the private businesses), they would have already been built. Ameliorating the taxes would help flip the dynamic. My suggestion is the taxes should be based on the traffic, not the base real estate value. This method of assessment will require a change in NRS. In order to get the Legislature to implement it, there needs to be a section in the Plan that plainly presents it and gives the representatives the facts they need to change the law.

Matthew Greene, Manufacturing, Reno, NV

After reading the executive summary, I support the recommendations made within. Increased use of rail lines will help ease congestion on our highways and help to make them safer. Furthermore, the benefits in regard to rail polluting less than trucks should not be minimized. Finally, it would be nice to explore the possibility of battery powered electric locomotives. If it can be done for semi-trucks, planes, cars, and ferries, why not locomotives? Thank you for allowing me to comment.

Alan Humphreys, Humphreys, Carson City, NV

Although it has been some 20 years since the 2000 Federal Highway Cost Allocation Study, the situation has changed but little. 80,000# single trucks were found to pay 80% of the damage that they do to the roads in taxes; Doubles pay 60%, and triples pay 70%. In most years, every single accident during inclement weather is caused by a truck, to the point that I-80 is closed to their use. Between safety, and economy, long haul trucking makes no sense whatsoever, so where rail lines are available, trucking should be at least discouraged by equitable taxing, if it can't be outlawed entirely.

Naomi Lewis, Planner I, City of Las Vegas, Henderson, NV

Excited to see NDOT meet these goals and work with the state of California!

Kristopher Schreier, Transportation, Union Pacific, Henderson, NV

I feel delivering goods by rail is the safest and most efficient way to transport goods. It makes our roads much safer by not having all the truck traffic. Delivering by rail means less contact with the general public. Our roads will need less maintenance where we can focus on more important areas.

John Gilbertson, Retired teacher, Las Vegas, NV

I fully support this plan. We must have daily rail service and need out long distance trains.

Daniel Robinson, Associate, Amazon.com, Concord, NC

There needs to be a passenger rail service to Reno from Las Vegas.

Gabriel Willaman, Track man, Gabe Willaman Railroad Construction, Reno, NV

Nevada should require all industrial tracks that transport hazardous material to have monthly inspections on their tracks.

Nevada Division of
STATE LANDS

STATE OF NEVADA
Department of Conservation & Natural Resources
Steve Sisolak, Governor
Bradley Crowell, *Director*
Charles C. Donohue, *Administrator*

January 21, 2021

To: Lee Bonner, Nevada Department of Transportation

From: Scott Carey, AICP State Lands Planner

RE: State Land Use Planning Agency Comments on Draft Nevada State Rail Plan

Lee,

On behalf of the State Land Use Planning Agency, I would like to Thank You for the opportunity to review and provide comments on the draft Nevada State Rail Plan. The purpose of this letter is to outline to the Nevada Department of Transportation (NDOT) the Agency's initial comments on the draft Nevada State Rail Plan.

1) Recommendation 14: Enact effective freight transportation land-use strategies page 35-36. The Agency support this recommendation and finds that this is an important goal for the State to pursue to achieve the main goals and objectives of the Nevada State Rail Plan. Achieving effective freight transportation development in Nevada is only going to be successful if future development complies and is compatible with regional and local government land use plans & policies. Local government coordination will be critical in implementing this recommendation. New freight transportation development should be encouraged in areas where adequate infrastructure exists or is accessible. Under the "What sensible approaches should Nevada consider?" section on page 4-36, the agency would suggest that the following bullet point be added to this section.

- Ensure that future freight transportation development is compatible with regional and local government land use plans & policies"

2) SLUPAC and Recommendation 14 page 4-36: The language on page 4-36 referencing the State Land Use Planning Advisory Council (SLUPAC) looks good, thank you for incorporating our earlier comments into this draft. As discussed with the project team at the August 13, 2020 SLUPAC meeting, the Council could be a good resource and avenue to help implement Recommendation 14. As the only Governor appointed Board with representatives from each of Nevada's 17 counties, SLUPAC can support the implementation of this recommendation by providing technical land use planning expertise and outreach to local governments throughout the state.

3) Regional Inset Maps Showing Businesses with Sidetracks and Nearby Truckload Shippers. As a general comment, the various inset maps for each region of the plan showing the location of rail lines and rail served businesses are a helpful resource. These maps provide a useful statewide inventory of the existing and future rail service for local governments to use in land use planning efforts. The information provided in these maps can be used by these entities to revise land use plans and update zoning codes to spur new freight transportation development and concentrate efforts to protect existing freight transportation developments. For instance, a local government may be considering a land use change and not be aware that the particular property has service availability. The local government can use the information in these to maps to consider a different land use on that property that supports freight transportation development instead. Once the Nevada State Rail Plan is adopted these maps should be shared with and be made readily accessible with regional planning agencies and local governments throughout the state for use in land use planning activities.

4) SLUPAC and Co-Location of utility and rail corridors page 4-23. The Agency appreciates the inclusion of the discussion from the August 13, 2020 SLUPAC meeting about co-locating utility and rail corridors. From a land use planning and environmental perspective, it makes a lot of sense to co locate future utility corridors along rail lines and vice versa. At its meeting the Council referenced the proposed NV Energy Greenlink transmission projects as examples of potential future rail corridors if these projects were approved by the appropriate Federal, State, and Local agencies.

5) Region 1 Project List addition page 4-46. The Agency recommends that the project team consider amending the Region 1 Project List to add a rail crossing and rail connection near the Nevada National Guard's Floyd Edsall Training Complex (FETC) in North Las Vegas. The FETC is currently bisected by the Union Pacific rail line and lacks access to the rail line itself. The existing rail line provides challenges to the National Guard's mission capabilities by limiting access to portions of the FETC for training and other uses. Access across the railroad is needed on the FETC site to allow the National Guard to fully utilize this property for heavy vehicle training. Without a rail crossing near the FETC, the National Guard's and other heavy vehicles in the area are unable cross the railroad tracks due to weight restrictions imposed by Union Pacific.

Additionally, the FETC site and other industrial developments in the area do not have access to the rail line. A new rail connection to the Union Pacific rail line near the FETC would benefit the National Guard's readiness to carry out its missions and response. Currently, the National Guard has equipment used to support readiness and response efforts stored off site FETC due of the lack of rail access. A rail connection near FETC would allow the National Guard to store its equipment onsite and transport this equipment more efficiency from the complex. Additionally, a new connection in this area would support the City of North Las Vegas' economic development efforts in this area by providing existing and planned industrial developments with new rail access. Before the plan is adopted, the Agency would like to set up a meeting with NDOT and the National Guard to explore these potential Region 1 rail projects in further detail.

The State Land Use Planning Agency appreciates the opportunity to review the draft plan and provide these comments. The agency looks forward to continuing to work with you and NDOT on implementing this plan in the future. If you have any questions or would like additional information concerning the Agency's comments for the Nevada State Rail Plan, please feel free to contact me at 775-684-2723 or scarey@lands.nv.gov.

Thank You,

Scott Carey, AICP
State Lands Planner
Nevada State Land Use Planning Agency

BRADLEY CROWELL
Director
Department of Conservation
and Natural Resources

CHARLES DONOHUE
Administrator

STEVE SISOLAK
Governor

State Land Use Planning Advisory Council
State Land Use Planning Agency

Address Reply to

State Land Use Planning Agency
901 S. Stewart St. Suite 5003
Carson City, Nevada 89701-5246
Phone: (775) 684-2723
Fax: (775) 684-2721
Web: lands.nv.gov/land-use-planning

STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

State Land Use Planning Advisory Council

March 1, 2021

Lee Bonner, State Railroad Coordinator
Nevada Department of Transportation
1263 S. Stewart Street
Carson City, Nevada 89712

RE: SLUPAC State Rail Plan Comments

Dear Lee:

I am writing this letter on behalf of the Nevada State Land Use Planning Advisory Council (SLUPAC) to provide our comments on the draft State Rail Plan and provide our overall support for the plan.

At their August 13, 2020 meeting, SLUPAC heard a presentation from NDOT on the status of the update to the State Rail Plan. Following the presentation, SLUPAC had a good discussion about increasing local rail service and its impact on local government land use plans. The Council also expressed a desire to help make local government planning departments around the state aware of the plan and encourage them to consider the State Rail Plan when updating their master plans.

SLUPAC is pleased to see the inclusion of Recommendation 14: "Enact effective freight transportation land-use strategies" in the draft plan. SLUPAC supports this recommendation and finds this is an important goal for the State to pursue to achieve the main goals and objectives of the Nevada State Rail Plan. Achieving effective freight transportation development in Nevada is only going to be successful if future development complies with and is compatible with regional and local government land use plans and policies. Local government coordination will be critical in implementing this recommendation. New freight transportation development should only be encouraged in areas where adequate infrastructure exists or is planned.

Working with local governments on the implementation of the State Rail Plan will be critical for the plan to be successful. SLUPAC encourages NDOT to continue to look to SLUPAC as a good resource and avenue to help implement Recommendation 14. As the only Governor-appointed Council with representatives from each of Nevada's 17

counties, SLUPAC can support the Nevada State Rail Plan by providing technical land use planning expertise and outreach to local governments throughout the state.

SLUPAC also appreciates the inclusion of its members' suggestion from the August 13, 2020 meeting to co-locate future utility and rail corridors within the State Rail Plan. From a land use planning and environmental perspective, it makes a lot of sense to co-locate future utility corridors along rail lines and vice versa. SLUPAC believes that co-location of future utility and rail corridors would reduce the impacts to natural lands, cultural resources, recreation, and other land uses. At its August 13th meeting, SLUPAC referenced the proposed NV Energy Greenlink transmission projects as examples of potential future rail corridors should these projects be approved by the appropriate federal, state, and local agencies.

The draft State Rail Plan's various inset maps for each region of the plan and the online mapping strategy showing the location of rail lines and rail-served businesses are helpful resources. These maps provide a useful statewide inventory of the existing and future rail service for local governments to use in their land use planning efforts. The information provided in these maps can be used by these entities to revise land use plans and update zoning codes to support new freight transportation development and concentrate efforts to protect existing freight transportation developments. Once the Nevada State Rail Plan is adopted these maps should be shared with and be made accessible to regional planning agencies and local governments throughout the state for use in land use planning activities.

SLUPAC appreciates the opportunity to review the draft plan and provide these comments and its overall support for the State Rail Plan. SLUPAC looks forward to continuing to work with you and NDOT in the future. If you have any questions or would like additional information concerning SLUPAC, please feel free to contact Scott Carey, State Lands Planner at 775-684-2723 or scarey@lands.nv.gov.

Sincerely,

Jake Tibbitts
Chair
State Land Use Planning Advisory Council

Battle Mountain
GENERAL HOSPITAL

535 South Humboldt Street Battle Mountain, Nevada 89820
Phone: 775-635-2550

Mr Will Maus.

Strategic Rail Finance

Philadelphia, Pennsylvania

February 19, 2021

Re: Amtrak and rural customers in Nevada

Dear Sir,

I want to thank you for giving me time today to discuss my thoughts on Amtrak making Battle Mountain a stop-over. For the last 18 months or so, I have been trying to generate support in the community in having Amtrak provide services to Battle Mountain.

As background, I want to explain that I am the Clinic Medical Director of the Battle Mountain General Hospital and so my interest in this topic is based on seeing how difficult it is for many patients to travel to the major centers for consultations and treatment.

I am rather passionate about this because residents in the Battle Mountain area community are severely affected by the lack of any public transport, whether it is for personal reasons they need transport or, as in the situation that I mostly deal with, in patients having adequate access to medical care that is provided only in the major cities. The latter often severely impacts patients' health outcomes when they are unable to access necessary services in a timely fashion. Many of the socially economically deprived have to rely on friends to transport them, often two to three hundred miles or more, and with lack of funds for fuel and old vehicles breaking down, these patients miss their appointments and in this era of COVID, that leads to significant delays in getting new appointments.

Once upon a time, Amtrak stopped in Battle Mountain and also in neighboring Lovelock. In the era of decreasing services to the rural communities, Amtrak stopped offering services in these two towns. With the cessation of Greyhound Bus services to Battle Mountain, a significant affordable travel resource was lost and adversely affected the ability of vulnerable people to travel conveniently.

It is part of the charter for federally funded entities to take care of certain individuals and this includes ADA and Veterans, both of whom require (easy) access to medical care. Without *any* public transport,

Battle Mountain
GENERAL HOSPITAL
535 South Humboldt Street Battle Mountain, Nevada 89820
Phone: 775-635-2550

their lives are adversely affected. Yet, one public transport entity DOES exist- Amtrak- but it doesn't stop here, it simply passes through!

I have had numerous discussions with the local county board and they are very enthusiastic about supporting a drive to have Amtrak stop in Battle Mountain. The county has said that it is willing to participate monetarily with the building of two platforms, one each on the East-West and West-East lines of the Amtrak system that passes through, and by, Battle Mountain. These MUST conform to ADA standards.

I hope this provides you with sufficient information to take this further. I promise I will be unrelenting in my drive to ensure that the citizens of Battle Mountain and the Lander County area have access to a very important part of the National public transport system.

Please do not hesitate to contact me if you have any questions or even suggestions that may help move this forward. Again, I thank you for giving me the time to discuss this issue with you.

Sincerely,

RJW

Robin J Willcourt M.D.

BUILDING AMERICA®

March 4, 2021

VIA EMAIL: nvrailpubliccomment@strategicrail.com

Nevada Department of Transportation
1263 South Stewart Street
Carson City, NV 89712

Re: Union Pacific Railroad's response to the DRAFT 2021 Nevada State Rail Plan

To Whom It May Concern:

Union Pacific Railroad (UPRR) thanks Nevada Department of Transportation (NDOT) and other involved state agencies for leading this valuable effort to promote the needs of rail within the state. We welcome the opportunity to directly engage in the development of the State Rail Plan, and appreciate that our comments are taken into consideration.

When reviewing state rail plans, UPRR's primary focus is on rail safety, protecting and growing the freight rail network, identifying and developing economic development opportunities for rail served sites, and advocating for state investment into the freight rail network. We appreciate that the drafted State Rail Plan touches directly and indirectly upon these important themes.

With those priorities in mind, we offer the following feedback to the plan:

Chapter 3

- Page 3-6: **ADA Improvements at Elko** UPRR has worked extensively with Amtrak to address ADA compliance issues at Elko and recommends that NDOT review these statements and descriptions with Amtrak for accuracy.
- Page 3-11: **Extension of Amtrak's Capitol Corridor to Reno-Sparks** Given the regular suspension of passenger rail service over Donner Pass during snow events, UPRR does not support the implied greater availability of the rail route versus I-80 during winter storms.
- Page 3-20: **Thruway Expansion & C Route: Reno to Las Vegas by Way of Central California** The proposed "C" route connecting Reno to Las Vegas appears to be routed in part over UPRR lines. Without understanding the full route, capacity, capabilities, and proposed passenger equipment, UPRR does not support including a statement estimating the potential running time between those two points as 12-14 hours.
- Page 3-23: **Las Vegas to Caliente Excursion**
    - UPRR has not been approached by, or engaged with, any entity regarding use of its lines for the proposed excursion service and requests that any reference to track speed, average speed, and potential run time between Las Vegas and Caliente be removed from the NVSRP.

UNION PACIFIC RAILROAD
1400 Douglas Street, Stop 1120
Omaha, Nebraska 68179

Peggy Harris
General Director
Network Development

P 402-544-5448
C 402-968-6589
E peharris@up.com

- UPRR has not been approached by, or engaged with, any entity regarding the operation of a demonstration service showcasing Stadler ZEMU equipment and requests that all reference to such a demonstration service be removed from the NVSRP.

- UPRR is only considering the use of conventional equipment on our right of way at this time. As safety, engineering and technological advances are made, UPRR may consider alternative equipment. Pursuant to that consideration, subject proposals will need to incorporate any necessary additional infrastructure and/or technology measures to ensure the safe, reliable and efficient operation of both freight and passenger trains.

- Pages 3-26 and 3-27: **Nevada Southern Railway – "The Hoover Dam Limited"**

  - UPRR has not been approached by, or engaged with, any entity regarding use of its lines for the proposed excursion service and requests that proposed transit schedules under the headings "HDL Group 1" and "HDL Group 2" implying use of those lines be removed from the document.

  - UPRR has not been approached by, or engaged with, any entity regarding use of its equipment for the proposed excursion service and requests that:

    - References to the use of "the Union Pacific steam-powered passenger train fleet" and the associated capacity of 300 passengers be removed from the NVSRP.
    - The figure on Page 3-27 depicting a locomotive with UPRR markings at a Boulder City platform be removed from the NVSRP.

  - The NVSRP should focus on what the state can do to facilitate external sponsorship of proposed services without naming particular parties. Any references to UPRR as a partner, sponsor, or beneficiary of the excursion proposal should be removed.

- Page 3-30: **Commuter Rail Improvements-Reno, Nevada, and Innovation Park (formerly Tahoe-Reno Industrial Center – "TRIC")** UPRR requests that the speculative statement "Operating slots may be available since Union Pacific seems to operate fewer than 20 trains a day through Reno" be removed from the NVSRP. UPRR reserves the right to determine the capacity and capability of its rail lines.

<u>Chapter 4</u>

- Pages 4-18 thru 4-23: **Rail Electrification Addresses Nevada Governor's Executive Order on Climate Change** UPRR finds the inclusion of the "Rail Electrification Council Statement on the Benefits of Rail Electrification for Nevada" as part of the NVSRP to be inappropriate. Beyond the fact that the state does not control rail infrastructure, UPRR would have considerable engineering, safety and operating issues/concerns with electrifying our main line corridors, including –

  - Employee safety
  - Clearances

- Potential electrical interference with UPRR systems
- Limited ability to utilize the full width and height of right of way due to the required infrastructure associated with rail electrification and/or electric transmission

UPRR is not evaluating any proposals on electrification of its routes in Nevada. Given the listed concerns, it is unlikely that UPRR would be able to accommodate either electrification for freight or passenger rail service or infrastructure for high voltage transmission within our right of way.

Chapter 5

- As part of the state's proposed Rail Service and Investment Program, UPRR offers the following projects for consideration to improve the fluidity and flexibility of freight movement in and between major terminals:
  - Elko, NV - run-through tracks to support fluid operation of thru trains, including existing passenger trains, around trains performing yard operations.
  - Las Vegas, NV – 3.3 miles second main track between Arden and Maul Ave to reduce congestion in a major metropolitan area.
  - South Central Route – Siding upgrades to support improved opportunities for trains to meet/pass on single track route.
- The Rail Service and Investment Program does not appear to address the need for blocked crossing mitigation via grade separation. UPRR proposes the inclusion of a review of locations where grade separations could increase overall multi-modal efficiency.

We recognize the significant amount of work the NDOT team undertook to complete the State Rail Plan and we support much of the content included within. However, considering the substantially increased passenger footprint implied by the projects highlighted in the NVSRP on the UPRR network in the state of Nevada, it is imperative that the NVSRP emphasize the entirely prospective nature of its passenger proposals. Necessary UPRR concurrence has neither been requested for the majority, nor granted for any, of the new or expanded services. UPRR looks forward to continue working with NDOT on the development of proposals which enhance the safety, efficiency, and competitiveness of UPRR's freight rail franchise.

Thank you for considering our comments.

Sincerely,

Peggy Harris

Peggy Harris
General Director Network Development

cc: Adrian Guerrero, Union Pacific
Lupe Valdez, Union Pacific
Francisco Castillo, Union Pacific
Maureen Haney, Union Pacific
Paul Marcinko, Union Pacific
Paul Rathgeber, Union Pacific

Railroad Workers United

Solidarity ● Unity ● Democracy

The Rank & File in Action!

Railroadworkersunited.org • (202) 798-3327 • info@railroadworkersunited.org

Comment on the 2021 Nevada State Rail Plan: Capital Improvements Needed to Existing Rail Infrastructure

(3/2/2021)

To facilitate freight and passenger movement between Nevada, California and beyond, it would be highly desirable to remove bottlenecks and obstacles where they currently exist. A number of infrastructure projects would greatly aid in the realization of the Nevada DOT State Rail Plan. In order to facilitate a more fluid and higher capacity mainline across Northern Nevada, it is obvious that additional infrastructure in California is also essential. So, while some of what follows necessarily pertains directly to the state of California, we see this as crucial for success here in Nevada.

1 – Construction of a second main track between Vista (MP 249) and Weso (MP 421) in places would expedite train movements. A second main did exist between Granite Point (MP 337) and Weso, but was removed by Southern Pacific in the 1980s. The roadbed remains intact today and would greatly facilitate an effort to restore the second main by joining the sidings (4 of them) between East Granite Point (CP 338) and Weso. From Fernley (MP 276) to Granite Point, there is generally ample room for a second track to be laid with limited need for additional cuts and fills. Vista to Fernley (25 miles) would be more challenging due to restricted clearance in the lower Truckee canyon and numerous bridges across the Truckee River.

2 - A third main track bypassing the Sparks yard (MP 244) to the north would facilitate Amtrak and regional passenger train movements and otherwise ease congestion at the terminal. A third main both between CP 249 Vista and CP 239 West Reno (or beyond) would greatly streamline operations at Reno - Sparks. Note: This third main would bypass the trench to the north between CP 239 and CP 242 where a vacant corridor currently exists. This main track would be used for regional passenger trains that would stop at the "Downtown Transit Center," to be located directly adjacent to (and between) the Amtrak station and regional RTC bus terminal. Here, connections would be made to both northbound (UNR - North Valleys- Bordertown)) and southbound (airport – Carson) regional trains, Amtrak trains, Amtrak thruway buses, local bus service and Greyhound. Note: The easterly ¼ mile of this track currently serves as the UP Reno Branch.

3 – Rehabilitation of the Reno Branch from Reno to Bordertown and on to Reno Junction (35 miles) would facilitate expedited movement of freight from/to North Reno and Stead warehouses and industries. Installation of CTC/PTC would enable commuter rail operations to comingle with this lightly used secondary track (currently only used at night a few times a week). Local and through freight (both UP and BNSF) could be routed north as well as south (currently the only option is south) as necessary, and the route could act as a bypass and safety valve if/when the UP finds it desirable to route trains from the former SP east-west mainline to its former WP east-west mainline in either direction. The east leg of the Wye at Reno Junction could be replaced to facilitate universal movements.

4 - The second mainline from Emigrant Gap, CA (MP 171) to Shed 10 (MP 178) was removed by Southern Pacific (SP) in 1993, as was the second main track over Donner Pass, a combined total of just under 15 miles. Rumor had it that new owner Union Pacific – upon purchasing the SP in 1995 – had every intention of returning both segments to two main tracks in order to facilitate movement over the Sierra Nevada. Unfortunately, this project never happened, resulting in continued restriction of train movement over the mountain, especially in winter months and at times when the parallel route (former Western Pacific) is closed/limited due to rockslides, wildfires, trackwork, etc. This double tracking project needs to be a priority.

5 – A significant amount of trackage across the Sierra has never been modernized. Centralized Traffic Control (CTC) needs to be installed between East Truckee (MP 208) and West Reno (MP 239), and at other locations on the western slope. Currently, Newcastle (MP 120), Bowman (MP 129) and Colfax (MP 140) are equipped with *single* dual-controlled crossovers, while Floriston (MP 220) currently has a set of universal *hand-throw* crossovers and a 10-minute wait for all crossover movements. In combination with the double tracking referenced in #4 above, the installation of dual-controlled universal crossovers at all four of these locations would greatly serve to facilitate and expedite train movements over the mountain

LithiumNevada

February 16, 2021

Mr. Lee Bonner
State Rail Coordinator
State of Nevada Department of Transportation
1263 S Stewart St.
Carson City, NV 89712

RE: Lithium Nevada Corp.
Nevada State Rail Plan Support Letter

Dear Mr. Bonner,

I am writing to express Lithium Nevada Corp's (LNC) support for the 2021 Nevada State Rail Plan. We commend the Nevada Department of Transportation for conduction a thorough analysis of the movement of goods throughout Nevada and determining how rail could be improved to create better logistical efficiencies, improve safety, reduce impacts on the environment, and lower shipping costs.

Lithium Nevada proposes to construct and operate a lithium mine and processing facility in northern Humboldt County. The Project, called Thacker Pass, is located approximately 60 miles north of Winnemucca near the town of Orovada. Production from the operation is anticipated to meet most or all of U.S. lithium demand, thereby significantly reducing exposure to foreign supplies. The Project will provide employment to approximately 1,000 workers during construction and 300 workers throughout operation.

Processing lithium at Thacker Pass will require the use of various materials and reagents, which will be imported to the site via a combination of rail and truck. LNC plans to utilize rail access and a transloading facility in or near Winnemucca to facilitate the safe and efficient transfer of products from rail to truck.

The 2021 Nevada State Rail plan envisions ways to best utilize existing rail spurs and the construction of new rail to assist with operations like Thacker Pass. We support adoption of this important report and look forward to the implementation of the recommendations within it.

Sincerely,

Alexi Zawadzki
CEO Lithium Nevada Corp.

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RailPAC
Rail Passenger Association
of California and Nevada

P.O. Box 22344
San Francisco CA 94122

www.railpac.org

3rd March 2021

Comments to Nevada State Rail Plan - 2021

The Rail Passenger Association of California and Nevada is a 501c3 all volunteer non-profit advocacy group. Since 1979 we have campaigned for enhanced mobility using passenger rail and connecting services as an environmentally friendly and effective transportation medium.

We applaud the approach of the studies leading to this Plan. This is the first such plan that we have seen that looks at the competition facing rail and the reasons why rail's market share is relatively low, both for passengers and freight.

Geography and economic development dictate that Nevada must work with adjacent states and nationally to enhance the rail offering for intercity passengers and freight. There is a recognition nationally that a network of intercity passenger trains has a significant role to play linking urban and rural America. We hope that Nevada's federal elected representatives will take note of the plan's contents and work in concert, especially with the western states, to preserve the national network.

Likewise, it is widely believed that the railroads should have a greater role in the distribution of goods, not just as a carrier of bulk commodities. RailPAC has always maintained that passenger rail should not be expanded to the detriment of freight service. On the contrary, improved passenger schedules can work pari passu with expedited merchandise freight trains running on enhanced infrastructure.

Amtrak Service: Amtrak is desperately short of rolling stock and the existing fleet is old and in need of major overhaul and upgrade. Nevada federal representatives should join their colleagues in the western states to call for a national program to build the next generation of trains. Multiple skills are required in the construction of passenger rail vehicles, with many components and sub systems. This offers many career opportunities in a number of fields, and we should not be relying on imports or imported major components.

California Zephyr ("CZ") service: The CZ performs multiple mobility functions along its route between Chicago and the California Bay Area. Its utility to Nevadans can be enhanced with two additional stops that we believe can be achieved without detriment to the schedule. These are West Wendover and Lovelock, both of which have had passenger rail service in the past. These stops would serve large rural catchment areas and help those traveling to Reno, e.g. for medical appointments, as well as offering interstate service to point east and west.

Desert Wind reinstatement: Amtrak's former service between Chicago and Los Angeles

via Las Vegas ran as part of the CZ between Chicago and Salt Lake City. Reinstatement of this train provides an option for southern Nevadans to Salt Lake City, Denver, Omaha and Chicago with connections beyond. This is in addition to a daily service to the Los Angeles region. Additional rolling stock would be required (see above) but we note that the populations of all the cities along the route have grown considerably since the service was withdrawn in 1997, and we are confident that this train would be popular once again.

Rail Infrastructure enhancements over Donner Pass can bring growth to passengers and freight, but the key is a joint program with California. We concur with the comments presented by Rail Passenger Association, Ron Kaminkow.

Public transit and regional rail: RailPAC supports the implementation of regional rail systems in both the Reno region and in and around Las Vegas. However, regional rail must be seen from the outset as part of the bus and transit rail system with fully integrated fare and information systems, not a separate entity.

Brightline Service to Southern California: RailPAC supports Brightline as an important first stage of a project to link Las Vegas and southern California. We are concerned that Brightline needs to move forward quickly with extensions into the Los Angeles basin and Los Angeles Union Station, as well as closer to the Las Vegas strip and downtown Las Vegas.

Expanded passenger rail is the logical choice to serve multiple communities; those without air service, with a fear of flying, those unable to drive long distances, tourists wishing to see America, and locally, those tired of congestion and the frustrations of their daily commute. We appreciate the good work done putting this plan together and will be happy to assist with its implementation.

For RailPAC
Paul Dyson, President Emeritus.

[statement from David Foster, Executive Director of ***RAIL Solution***]

Where extremely heavy truck freight volume exists in a highway corridor, congestion often results. Transportation planners, seeking solutions, must consider all options for adding new capacity. Especially when a railroad mainline parallels the highway, a life-cycle cost and benefit analysis needs to compare the economic and environmental costs of adding new freight capacity on the highway or on the railroad, ensuring that taxpayers' dollars are well spent.

In 2015 Nevada DOT, in conjunction with the Transportation Center at UNLV, pursued a feasibility study of moving trucks through Nevada on trains as an alternative to new construction on Interstate 80. While the study was not detailed or rigorous enough to inform future transportation investments, their concept represents creative, out-of-the-box thinking and should not be discarded hastily.

In spite of the growth and development of railroad double-stack intermodal service in recent decades, overwhelmingly freight continues to move by truck on Interstate highways. Limitations to the double-stack business model preclude the railroads' capturing more of this traffic. A more efficient, nimble, and responsive "open intermodal" concept is needed to lure trucks in markets under 1,000 miles and to accommodate all kinds of trucks. Only containers and specially designed dry van trailers can move in rail intermodal trains today, so open intermodal can bring freight efficiency and reliability to new traffic and new markets.

In an open intermodal operation, entire trucks drive on, and drive off, trains. Terminals are compact and loading and unloading is rapid. Truckers benefit by having their trucks continue to move while they get mandatory rest, a big productivity benefit. This also reduces asset and inventory holding cost, and leverages local and regional economic development with competitive, lower cost access, (e.g., to/from the Tahoe Reno Industrial Center). Railroads get new freight traffic. The public sees fewer trucks on the highway, reducing congestion and improving safety. The environment benefits from less fuel consumption and lowered pollution, congruent with the decarbonization of transportation that climate advocates seek.

Nearly all Nevada's trucks on I-80 are moving to or from California. This concentrated freight flow makes it a suitable candidate for a successful drive-on, drive-off open intermodal operation. Because the private sector railroads would be involved, a public/ private partnership, along the lines of a Joint Powers Authority, would be needed to offer highway-competitive speed, reliability, and cost for these trains. Connect Rail Nevada could facilitate such a partnership to assess rigorously the financial, engineering, and market feasibility of this concept. Hupac, RAlpin, and Ökombi are examples of private companies in Europe offering a wide range of "rolling highway" service, as it is known there. They handle loading and unloading of trains, which are turned over to railroads for transportation.

Because railroads in the United States are privately owned, virtually all public investment in surface transportation has gone to highways, shortchanging the public and depriving them of many energy, economic, and environmental benefits that increased use of rail could provide. In a State Rail Plan it is appropriate to ask what can be done to broaden the use of rail and thereby enhance public benefit. A prototype open intermodal operation

is a singular investment strategy with potential to actually remove trucks from the road, and it merits retention for analysis of its applicability to Nevada's transportation future.

[Statement from Richard Gent of Rail Auxiliary]

PUBLIC COMMENT ON 2021 NEVADA STATE RAIL PLAN (NVSRP):

The Nevada 2021 State Rail Plan is an outstanding document outlining how to increase the use of rail within the State. The NVSRP also emphasizes the safety aspect of rail transportation. An important aspect to keep trains safe is to address the issue of rail public safety. The Nevada Rail Auxiliary can be a partner to ensure that trains traveling through and within the State can be safe, secure and travel at velocity.

Railroad trespassing has been a significant problem in Nevada. According to the Federal Railroad Administration (FRA) there was a 433% increase in trespass incidents from 2017 through 2019. From 2019 through 2020 the number significantly dropped with a 12.5% increase; however, data is still coming in from 2020. Of note, of these incidents 20 were fatalities.

Suicide on the railroad is an issue that has recently come to the attention of safety advocates. In Nevada from 2017 through 2020 there were 5 incidents according to the FRA.

Crime and terrorism are an area where statistics are few. However, according to the Federal Bureau of Investigation as well as reports from law enforcement theft, sabotage (example: shunting in Washington State) and other crimes are occurring on the railroad. Graffiti on train cars, bridges and structures is a crime also, which can place the graffiti artist in harm's way

Ensuring safe rail equipment has been a priority for the railroad. Numerous track detectors are in place to provide warning of a possible equipment malfunction. However, these sensors are spaced apart which could delay reporting. The Rail Auxiliary is trained to identify rail car issues and has reported problems such as stuck brakes.

Finally, the NVSRP does discuss railroad grade crossing safety. Much emphasis is placed upon engineering solutions. However, not all crossings can be engineered to eliminate human actions. Proven programs such as the Rail Auxiliary active awareness effort improved positive driver reaction at the grade crossings by 14%.

Ensuring safe passage of trains through the State will guarantee economic success. Addressing trespass, suicide and crime needs to be part of a successful safety program. Currently, three State agencies deal with rail safety, Nevada Department of Transportation (NDOT) (which has two subunits), Nevada Department of Public Safety (NVDPS) and the Nevada Public Utility Commission (NVPUC). The NVPUC focuses on four disciplines outside of rail public safety.

A review of mission statements of the two primary rail public safety agencies (NDOT/NVDPS) appears very similar when it comes to safety. NVDPS: "provides services in support of protecting our citizens and visitors by promoting safer communities through prevention, preparedness, response, recovery, education and enforcement." NDOT: "Provide, operate, and preserve a transportation system that enhances safety."

Both agencies appear to primarily focus on highway rail grade crossing safety. NDOT is the primary agency through the State Action Plan which deals, based upon documentation, solely with highway-rail grade crossing. Trespassing, suicide and security should also be addressed in a viable State Rail Plan, but which agency should take the lead?

State programs such as Nevada Operation Lifesaver address the trespass issue through education alone. However, recently funding from the National organization has been eliminated which reduces the ability

of this organizations ability to reach the public. Currently, the Nevada Office of Traffic Safety has provided grant funding for this organization.

The Rail Auxiliary, which is currently sponsored by local law enforcement, addresses rail suicide, rail trespass and rail crimes. This organization has been recognized by a Nevada State Senator and the Nevada Office of Suicide Prevention (whose program is part of the Rail Auxiliary) has been recognized in the FRA publication: Review of Suicide Intervention Training Programs. The Rail Auxiliary program deals with all critical rail public safety areas (grade crossing, trespass, suicide and crime). The program has documented successes as evidenced in the attached yearly reports.

Therefore, we recommend:

1). the following paragraph be included Chapter 2 Existing Nevada Rail System D.6 Community Impacts Page 2-87 Safety: "The NVSRP recognizes the need to address other rail safety issues such as railroad trespass, rail suicide and rail security. Partnering with the Nevada Department of Public Safety, which supports rail public safety programs, as well as embracing rail programs developed by local law enforcement such as the Rail Auxiliary can ensure trains travel safety, securely and at velocity within the State."

2). A State lead be identified to address rail trespass, rail suicide and rail crime. Based upon mission statements, the most likely choice would be the Nevada Department of Public Safety.

RAIL AUXILIARY TEAMS 2020

Results not excuses in a challenging environment.

A one-page report.

JANUARY 19, 2021

Rail Auxiliary Team Leader
Richard Gent
Washoe, Storey, Humboldt and Eureka
Counties, Nevada

Rail Auxiliary Teams adapt and overcome

2020 has been a year of challenges and Nevada's Rail Auxiliary Teams adapted to ensure trains moved safely and securely though Nevada's communities.

- Over *37 reportable situations* to the Nevada Class One railroad critical call center = 37 potential rail incidents averted. We continue to increase the reporting every year.
- 10 one-hour online training sessions. 6 face to face classroom settings with COVID practices. Total of 266 volunteer hours (excluding travel for face-to-face training).
- 8 field exercises totaling 92 volunteer hours (excluding travel time) at documented rail trespass "hotspots".
- One 7-hour Rail Auxiliary Academy with 6 graduates.
- 40 non-Rail Auxiliary students reached during one-hour rail safety lectures.
- 3 reports of grade crossing issues.

Supporting Other Rail Areas

- Developed an "active awareness" program at two rail crossings identified as "bad crossings." The program *improved driver behavior by an average of 15%* using UPCARES™ slogans.
- Supported wild mustang/livestock removal from railroad property
- Coordinating the Rail Auxiliary Rail Suicide Prevention program with Action Alliance.
- Acted on information regarding rail security.

Media Outreach

- Published article in regional newspaper on importance of keeping trains moving in a COVID environment.
- Published advertisement in NV Mining Quarterly using UPCARES™ slogan.
- One television report on the Rail Auxiliary Team training and field exercises.
- Rail Auxiliary successes documented on Twitter and Facebook.

"148 fully trained eyes and ears on the tracks in Nevada to efficiently, effectively and accurately report situations on the tracks to the right action organization for the right response"

RAIL AUXILIARY TEAMS 2019

a one-page report on our success

FEBRUARY 15, 2020

Rail Auxiliary Team Leader
Richard Gent
Washoe and Storey Counties, Nevada

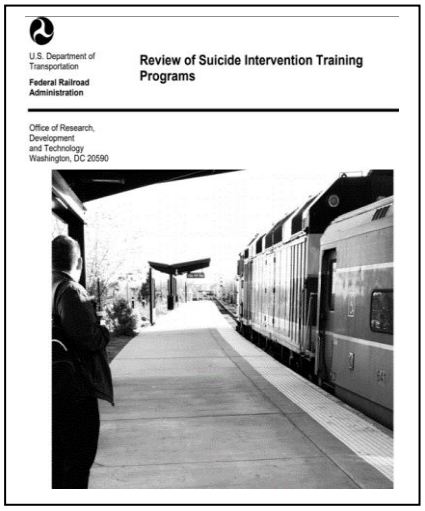
The “Team’s” 2019 success story

- 40 new graduates from the 7-hour Rail Auxiliary Academy for a total of 142 trained eyes and ears on the rail infrastructure.

- Over 20 reportable situations to the Nevada Class One railroad critical call center; 20 potential rail incidents averted.
- 3 reports to other railroad Class One and short line railroad’s critical call centers outside of Nevada.
- 11 one-hour classroom training sessions for a total of 330 volunteer hours (excluding travel).
- 11 field exercises totaling 110 volunteer hours (excluding travel time) at predicable rail trespass and at-grade “hotspots”.
- 130 non-Rail Auxiliary students reached during one-hour rail safety lectures.

Supporting Other Rail Areas

- Provided public safety control at two events for a Nevada Class One railroad.
- Supported 16 AMTRAK RailSafe requests at the Reno Nevada AMTRAK station and at 3 rail at-grade crossings to influence driver behavior.



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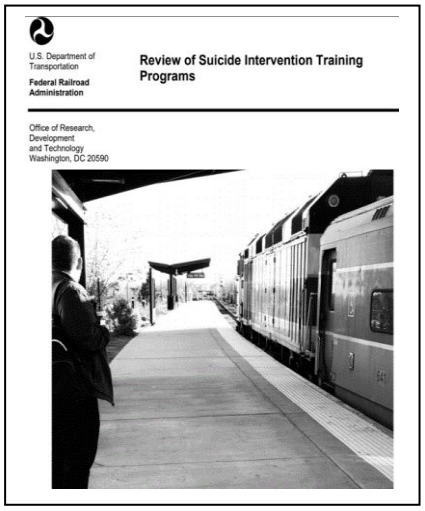

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SIERRA CLUB
TOIYABE CHAPTER

PO Box 8096
Reno, NV 89507

February 25, 2021

Rail Planning Team
Nevada Department of Transportation

RE: Toiyabe Chapter Sierra Club Comments on Draft Nevada State Rail Plan 2021

Dear NDOT Rail Planning Team:

Thank you for the opportunity to review this draft plan. First, we agree strongly with the stated purpose of the Rail Plan, to support "Nevada's commitment to creating a balanced transportation system that moves goods and people sustainably." Next, we appreciate the detailed description of and proposals for ways to meet this goal, including addressing legal and ownership challenges and the need to identify funding both private and public. We also recognize the extensive outreach to user groups, businesses, communities, and other organizations throughout the state. We think this unprecedented (in our experience) outreach makes it a better plan, and identifies a constituency that may help implement the ambitious goals.

We note that much of the plan covers freight services. We support the detailed analysis of and proposals for a private sector, business-driven-and-funded freight rail system. We understand that rebuilding or building anew a robust freight rail system in and through Nevada will go far to help meet the Sierra Club's goals to move freight nationally in a way that is less fossil-fuel intensive, less polluting, and that uses less land than the current system with its overemphasis on truck transport on interstate highways. We appreciate the comprehensive approach taken in this plan to rebuilding a freight rail system, and we especially **support the better-integrated land use, economic, and rail/transportation planning called for in this plan.**

Most of our following comments, however, are about the passenger rail proposals described in Chapter 3, the Nevada Passenger Rail Strategic Plan, and in the lists of projects in Chapter 5, The State's Rail Service Investment Program.

We support all the passenger and commuter rail services outlined in Chapter 3, specifically including:
Amtrak improvements including station ADA upgrades, new stations, equipment upgrades, and more frequent service.

- The plan correctly points out that Amtrak service is critical to rural Nevada, especially for those who cannot drive. In the towns it passes through, it is the only public transportation

option. Therefore, **we strongly support the Amtrak improvements in the plan, and we urge that they all be completed in the 0-4-year timeframe,** including the addition of more daily trains.

Commuter rail service between Reno and Innovation Park, and other northern Nevada transit improvements.

- We see the development of an industrial park with businesses employing thousands, without any public transportation to the workplaces, as a spectacular example of poor transportation planning. It should not have happened, and we are pleased that this plan starts to remedy that by proposing a commuter rail service between Reno and Innovation Park. **We strongly support this proposal,** and we suggest that the commuter service between Reno and Innovation Park is the first step in a commuter rail system for northern Nevada, as outlined in the Sierra Club's **Proposal for Rail Passenger Service in Northern Nevada.** (Chapter 3, PP 3-31 and 32.)

Capitol Corridor Extension to Reno

- We strongly support extension of the existing Bay Area-Sacramento Capitol Corridor service to Reno, and we urge that NDOT cooperate with Caltrans to establish this service. **We think that since this will be a popular service on existing tracks with existing equipment, it should be moved to completion in the 0-4 year time frame** rather than in the 5-20 year time frame that is currently in the plan.

Southern California to Las Vegas high speed rail coordinated with new commuter rail connections in Las Vegas.

- We are encouraged at news reports that say that the Brightline West Express project between Rancho Cucamunga and Las Vegas will break ground this year. We **support the plan's proposed development of commuter rail options** to bring riders from the Brightline station to the Las Vegas core.

TRIPS funding proposal

- **We see this as a critical component of this plan.** The Sierra Club - both nationally and in Nevada - understands that, with the exception of modern commuter rail systems in some cities, we lag behind most other developed countries in rail transportation. One of the reasons for this lag is lack of funding. **We will support any new state law needed to create TRIPS Infrastructure Funding**, and we will rally our members in support when it is introduced in the Nevada Legislature.

Thank you again for creating this robust rail plan for the state of Nevada. We look forward to continuing to support the implementation of this plan and working towards our collective goals for passenger rail.

Sincerely,

Anne Macquarie
Sierra Club Toiyabe Chapter Transportation Team

2021 Nevada Rail Summmit Attendance

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