



Beckwourth Pass is the lowest mountain pass in the Sierra Nevada at an elevation of 5,221 feet and thus a focus of transportation history. In 1850, James Beckwourth discovered Beckwourth Pass and developed the Beckwourth Trail from Reno through the pass to Marysville, California, in the Central Valley. The first railroad to build near the area was the Nevada & Oregon Railroad, which in 1880 planned a narrow gauge line from the Central Pacific transcontinental line at Reno, Nevada, to the Columbia River at The Dalles to service cattle ranches and farms in northeastern California and eastern Oregon. Survey and grading work began in December 1880 and in October 1882 the N&O reached Oneida, California, 30 miles from Reno and a few miles southeast of Beckwourth Pass, with plans to head north (not west toward the pass). Regular service between Reno and Oneida began a month later, but in April 1884, a bank took full control of the railroad and spent the next few years improving the line and building up business.

The Sierra Valley & Mohawk Railroad was incorporated October 1, 1885, to build a narrow gauge line westerly from the end of the N&O at Oneida, by then called Plumas Junction, over Beckwourth Pass to Mohawk, near the town of Blairsden, California, to access timber and agricultural traffic in and around the Sierra Valley. The name of the slow-building line changed to Sierra Valley Railroad before the line was completed in 1896. Meanwhile, in 1885, the N&O was renamed the Nevada & California Railroad (I don't know if or how this relates to the SP's N&C) and completed another 50 miles of narrow gauge line north to Amadee in 1890. On January 1, 1893, the name of the railroad was changed to the Nevada–California–Oregon, so by the time the SV was completed in 1896, it was a narrow gauge branch of the narrow gauge N-C-O and came under the control of the N-C-O in 1900.

In 1909, the Western Pacific Railroad's Feather River Route was completed between Oakland, California, and Salt Lake City, Utah, via Beckwourth Pass, to compete with the Southern Pacific's (original Central Pacific (1869)) route over Donner Pass. While significantly longer, the WP's crossing of the Pacific Crest at Beckwourth Pass is about 2,000 feet lower than the SP/CP Donner Pass Route (elevation about 7,000 feet). However, Beckwourth Pass and Sierra Valley drain to the Middle Fork Feather River, but the lower reaches of the Middle Fork are so rugged that a railroad there is impossible. The engineering key to the WP's Feather River Route was a crossing from the North Fork Feather River watershed to the Middle Fork watershed – to avoid the lower part of the Middle Fork – at a location called Spring Garden, which required the longest tunnel on the route (longer than the summit tunnel, explored below) as well as a loop.

In 1917, with the purpose of accessing Reno traffic, the WP purchased the portion of the N-C-O south of the crossing point of the two roads at Herlong; on the SWRRH Map, this purchase corresponds to the N&O (1882n) and the southern two-thirds of the Nevada & California (1890n). The WP re-aligned and standard-gauged the former SV and N&O trackage between Beckwourth Pass and Reno, including dual-gauge track between Reno and the point east of the pass where the new WP Reno Branch diverged from the N-C-O narrow gauge track. The new junction of the Reno Branch with the WP mainline became Reno Junction (this location). In 1918, the WP abandoned the parallel SV (1896n), including the portion over Beckwourth Pass.

Southeastward view south of the WP Reno Branch, one mile east of the WP mainline at Reno Junction. This standard gauge alignment was built in 1917 by the WP to replace the SV alignment, which is out of the picture on the right, where it ascends the slope higher than the WP because the WP uses a tunnel to cross Beckwourth Pass at a lower elevation than the SV crossing.



This northwest ward view of the WP Reno Branch shows that the eastern escarpment of the Sierra Nevada in this area is more subdued than to the south. Beckwourth Pass and Reno Junction are around the bend to left and the SV is out of the picture on the left and higher on the hill. The dirt roads are not old railroad grades. The WP (1909) mainline is barely visible in the left distance, behind the two telephone poles.

Of the 33 miles of the WP branch from Reno Junction to Reno, two segments aggregating 15.5 miles are on the former N&O/SV narrow gauge grade and the remaining 17.5 miles are new grading, including the segment in this view (on the SWRRH Map, the WP 1917 Reno Branch alignment is not differentiated from the N&O/SV alignment).



The WP mainline, which was built through Reno Junction in 1906-1907 and completed to Salt Lake City in 1909, runs across the image in the distance of this northward view of the Reno Junction wye. The wye is the interchange with the 1917 WP Reno Branch of the, in the foreground. Beckwourth Pass and the WP-built Chilcoot Tunnel are just out of the picture to the left (west).



In this westward view at Reno Junction, the west branch of the wye for the WP Reno Branch is in the foreground, it connects to a siding, and the WP mainline is behind and higher than the siding. The Chilcoot Tunnel carries the WP mainline under Beckwourth Pass in the distance.



In 1906, the WP built the Chilcoat Tunnel beneath Beckwourth Pass at the high point of its Feather River Route. In this view of the east entrance to the Chilcoat Tunnel, the 1906-1907 WP mainline is on the right, with upgraded welded rails and concrete ties, and the 1917 siding is on left with bolted rail and wooden ties.



Closer view of the Reno Junction switch between the WP mainline and the siding for the Reno Branch. The original Chilcoot Tunnel was shored with timbers, which burned in 1912. A temporary “shoofly” track was constructed over the pass in 10 days and served as the mainline crossing until the current tunnel was completed in 1913.



The east end of the Chilcoot Tunnel is in the Great Basin and the west end -- the light at the end of the tunnel in this view -- is in the Pacific Slope.



Eastward view from the Chilcoat Tunnel. Note the groundwater draining from the east end of the tunnel. The range in the background is Petersen Mountain, just across the state line in Nevada and the first of many normal-fault-bounded mountain ranges that extend across Nevada and into Utah.





Eastward view of the WP mainline and siding at its connection to the WP Reno Branch. Petersen Mountain is in the background. Note the bundle of ties laid on the siding (right-hand track) just beyond the switch.



This bundle of ties marks the end of the Reno Junction siding, with the mainline and Petersen Mountain behind.



The end of the siding tracks, a few feet beyond the previous picture and the bundle of ties.



This is the east branch of the Reno Junction wye, which once connected with the WP siding here. This switch has since been removed; note the end of the siding in the brush to the left (seen better in the previous photo). The active WP/UP mainline towers above all.



In this southward view of the end of the east branch of the Reno Junction wye, the WP Reno Branch is the grade in the middle distance, California Highway 70 is the prominent grade just beyond the utility poles, and the grade at the top of the image is the SV narrow gauge grade as it ascends eastward (to the right) toward Beckwourth Pass.



Northeastward view of a container train on the WP (now UP) as it enters the Chilcoot Tunnel (out of sight on the left). The siding and the abandoned branch of the wye are barely visible to the far right.



Northeastward view at the northern shoulder of Beckwourth Pass. The dirt road to the left is the WP shoofly alignment used 1912-1913 while the Chilcoot Tunnel was being repaired below the pass. The pavement is an earlier version of California Highway 70, which used the shoofly alignment at the pass but took a steeper grade to the east.



Westward view at the northern shoulder of Beckwourth Pass, a quarter mile west of the previous location. The dirt road is or is very near the WP shoofly alignment used 1912-1913 while the Chilcoot Tunnel was being repaired below. The earlier version of California Highway 70 is now under the current roadway. The west entrance of the Chilcoot Tunnel is a half mile farther west and just to the left (south) of Highway 70. Note the flat, expansive Sierra Valley in the distance, one of many ancient lake beds along the Pacific Crest.





Southeastward view of the SV (1896n) cut grade on the hillside, with California Highway 70 below it, just east of Beckwourth Pass.



Southeastward view of the SV (1896) fill grade on the hillside on the southern shoulder of Beckwourth Pass.



Northwestward view of the SV (1896) grade on the approach to Beckwourth Pass, same location as previous.



Westward view of the SV (1896) grade at Beckwourth Pass, 300 feet west of previous location. Highway 70 is to the right (north).