

# THE MIDWEST CHALLENGER SPECIAL

Saturday, November 7, 1992

Kansas City

Sedalia

Jefferson City

Washington, Mo.

St. Louis

Sponsored by the St. Louis Chapter, National Railway Historical Society  
In Cooperation with Union Pacific Railroad

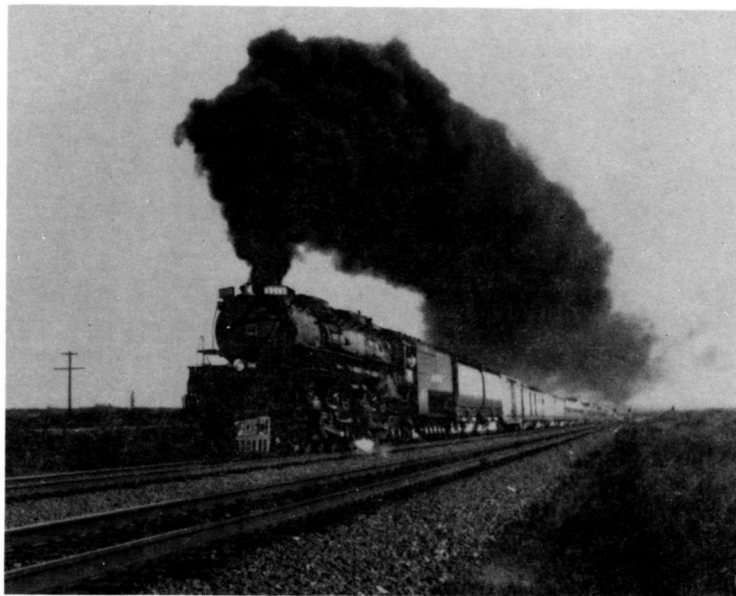
## Welcome Aboard!

Your hosts in the St. Louis Chapter of the National Railway Historical Society (NRHS), along with the members of the St. Louis Steam Train Association, and Union Pacific Railroad, welcome you aboard this special steam-powered excursion train.

Today's excursion is powered by the world's largest operating steam locomotive, Union Pacific 3985. Built in 1942 by the American Locomotive Company of Schenectady, N.Y. for the Union Pacific, the 3985 was a powerful workhorse pulling freight trains across the railroad's rugged territory in the West.

Our trip today is also part of the 1992 Union Pacific Steam Excursion Program, the nation's oldest continuous program of steam-powered rail passenger excursions. Of all American railroads, only Union Pacific never fully retired its entire steam locomotive roster, maintaining its big Northern-type locomotive no. 844 (formerly 8444) in service without retirement to the present day. Later, the 3985, the world's only operating Challenger-type, was returned to service through restoration.

We are pleased and privileged to host this unusual late autumn steam excursion, made possible as the 3985 heads east onto the CSX system to pull the 50th anniversary trip of the **Santa Claus Special** on the former Clinchfield Railroad in Kentucky, Virginia and Tennessee. Sincere thanks to Union Pacific Railroad for its generous cooperation in making this very special excursion possible.



*Union Pacific 3985 with a special excursion for the Union Pacific Historical Society convention earlier this year. Photo courtesy Union Pacific Historical Museum.*

## For Your Safety and Comfort

**Safety First!** These are the two most important words on the railroad, and they should be your two most important words today, too. For safety's sake:

- \* **Always watch your step!** Be especially careful...
- \* Getting on or off the train, or
- \* When walking about the train or between cars.
  
- \* At stops, watch your footing on uneven ground, gravel, and track ballast stone.
- \* Always step **over**, *never* on top of, a rail.
- \* Always **walk**, *never* run.
- \* Keep your head, hands and arms fully inside the train at all times!
  
- \* If you get a wind-blown particle in your eye in a vestibule area or while in the baggage car, do not rub the eye. Let the eye's natural watering action remove the particle.
- \* A medical team is on board. **For medical assistance, contact any crew member.**
- \* Children should not play in the aisles.
- \* Packages, camera bags, suitcases etc. must be kept out of aisles and off seats. Please use the overhead baggage racks.
- \* Union Pacific does not permit coolers to be brought aboard the train. Your cooperation is appreciated.
- \* Please always follow the instructions of your car host or other NRHS or railroad crew members, especially at photo stops.
- \* No sandals, thongs or bare feet permitted. We reserve the right to insist on appropriate, safe footwear.
- \* **Alcoholic beverages may not be brought aboard or consumed on the train, nor anywhere on railroad property.**

# THE FIRST RAILROAD WEST OF THE MISSISSIPPI



"A Service Institution"

1928 logo

Your trip today on Union Pacific Railroad's Sedalia Subdivision will take you over one of the most historic rail routes in North America: the oldest operating locomotive-hauled common carrier railroad west of

the Mississippi River. Railroading, so crucial to the settlement and development of the American West, began in the trans-Mississippi West on this line.

## To the Pacific!

The year 1848 brought two events which were crucial to western expansion and railroad development: the annexation of California by the United States from Mexico as a result of the treaty between the two countries concluding the Mexican War; and the discovery of gold in California. Pressure mounted to find an easier and faster way west. The 49ers, as they would come to be called, wanted a fast route to the gold fields; farmers and ranchers had their eyes on the rich prairie soils and vast grasslands. Most importantly, the government wanted to tie the developing country together, lest it split in two. Until this time the main transportation choices to the Pacific coast were a long sea voyage around South America, Atlantic and Pacific voyages combined with a gruelling and dangerous trek across the Central American isthmus, or the long overland journey across the new lands west of the Mississippi.

Business and civic leaders in St. Louis concluded they could provide the vital service, make a profit, and promote the city by building a railroad westward. Accordingly, in February 1848, Missouri Senator Thomas Hart Benton submitted a plan to Congress for a railroad to the Pacific from St. Louis. It was only one of a number of such plans at the time, and was in fact one of the least practical. Benton had become smitten with the idea that a line directly west from St. Louis across

the Rocky Mountains and on the Pacific coast was the most desirable. While the line across Missouri and Kansas was not particularly problematical, Benton's proposed route would have taken the line across some of the most rugged sections of Rockies in Colorado, rather than skirting them to the north or south, as in other plans.

Nonetheless, the Missouri Legislature, focusing as much on local needs within the state as the broader goals of a railroad to the Pacific coast, chartered the Pacific Railroad of Missouri on March 12, 1849. Thomas Allen, an energetic St. Louis businessman, was named president of the road. Its charter was to build from St. Louis west to Jefferson City and on to near Kansas City, with an ultimate goal of reaching the Pacific coast.

## Early Development

On July 4, 1851, amid a great celebration that included parades, fireworks and speeches, St. Louis Mayor Luther Kennett broke ground for the Pacific Railroad just south and east of present-day St. Louis Union Station. Actual construction got underway very quickly, and within a year more than five miles of track had been laid to Cheltenham. Common wisdom at the time was that the mighty Mississippi River would never be bridged, so James Kirkwood, chief engineer of the railroad envisioned a completely independent railroad with no connection to the railroads of the east. Based upon this presumption, he recommended that the track be laid with a gauge of 5 feet 6 inches instead of the soon-to-be "standard gauge" of 4 feet 8½ inches.

On August 20, 1852, the first locomotive of the Pacific Railroad arrived at St. Louis by steamboat. It was appropriately named the *Pacific*, and assigned the number 3. History was made on December 9, 1852 when the locomotive pulled two coaches over the first five miles to Cheltenham – the first locomotive-hauled train west of the Mississippi River.

Further work progressed quickly. Less than a year after the first operation, the rails had been pushed almost 30 miles to Franklin, today known as Pacific. Railroad operations between Franklin and St. Louis began

immediately. However, in reaching Franklin the railroad made a serious mistake which affects operations even today.

### **The Route West From St. Louis**

The original route survey approved by chief engineer Kirkwood took the line northwest out of St. Louis along Deer Creek, through the present-day communities of Ladue and Creve Coeur, past Creve Coeur Lake, and then along the Missouri River west to Jefferson City. Under pressure from landowners and hoping for a more direct route, the Pacific's management decided instead to build the line westward from St. Louis over the divide between the River Des Peres and Meramec River valleys to what is today the city of Kirkwood. From there, the line dropped down into the Meramec River valley to Franklin, where it then left the Meramec valley to cross another divide to reach the Missouri River. This route, shorter in mileage but harder to build and operate, resulted in two steep grades and operating conditions which would hamper the railroad to the present day.

The more notable of these two grades is Kirkwood Hill, crossing the ridge between the River Des Peres and Meramec River watersheds. Halfway down the western side of the hill, two tunnels were constructed at Barretts, the present site of the National Museum of Transport. These tunnels, the first built west of the Mississippi, still exist today on the museum grounds. Due to their early date of construction, they were soon undersized as locomotives and cars grew in size, and they restricted the size of locomotives allowed on the line.

Construction over the other divide, between the Meramec and the Missouri River valleys at Gray Summit, also required heavy grades. As a result, construction between Franklin and Washington, Mo., a distance of 17 miles, took 19 months to complete. The rails finally reached Washington on February 11, 1855. Construction along the Missouri River, where a low water-level gradient made work much easier, moved along handsomely. Progress was so rapid that by November 1855 the tracks had reached Jefferson City, the state capital.

### **The Gasconade Disaster**

The haste to operate the first train to the capital city led to miscalculation and the Pacific Railroad's first major tragedy. On the morning of November 1, 1855 locomotive no. 8, the *Missouri*, was coupled to fourteen coaches and left Hermann for Jefferson City. The train

was filled with St. Louis civic leaders and other prominent people traveling to ceremonies at Jefferson City. The main span of the Gasconade River bridge had been completed, but the approach spans had not. In order to meet the deadline for the special train, temporary trestles were hastily built. As the *Missouri* entered the east approach span, the temporary trestle failed. The locomotive made it over the first section, but the first eight coaches did not, pulling the locomotive backwards and into the river. In all, 31 people were killed, and another 70 injured. Among the fatalities were Thomas O'Sullivan, James Kirkwood's successor as chief engineer, prominent St. Louis businessmen Henry Chouteau and E.C. Yost, and several state legislators. The injured included St. Louis Mayor Washington King, then-Congressman Luther Kennett, and Hudson Bridge, president of the Pacific Railroad. Clean-up after the accident and the subsequent rebuilding of the bridge approaches delayed the arrival of the first train in Jefferson City until March 13, 1856.

### **The Impact of the Civil War**

The Missouri River turns to the northwest at Jefferson City, but to achieve a more direct route to Kansas City the Pacific built straight west across Missouri's great rolling western prairie. By May 14, 1858 the rails had extended 25 miles to California, Missouri. Tipton was reached on July 26, and on August 1 they had reached another six miles to Syracuse, 168 miles from St. Louis. Sedalia was attained by February 1, 1861 and Dresden became the western terminus on May 10.

But progress soon slowed due to the Civil War. The Pacific passed through a part of the state active with raids by Confederate forces. For this reason the track beyond Tipton was rarely used, and Tipton was considered the end of the line. In 1861 forces led by pro-Confederate Missouri governor C.F. Jackson partially destroyed the Osage and Gasconade River bridges, and tore up track west of Jefferson City. Despite Union troops guarding the line, Confederate guerrillas staged a number of raids against the railroad and its trains. In the last raid, Confederate troops under General Sterling Price destroyed tracks, bridges, depots and equipment worth more than a million dollars.

### **Completion Across Missouri**

When the war ended repairs were made to the line and westward construction continued. The line reached Pleasant Hill on July 26, 1865. Equipment was then sent to Kansas City in order to begin building eastward.

Finally, in September 1865 the last spike was driven at Little Blue, near Independence, and the railroad between St. Louis and Kansas City was complete.

The first through train to traverse the entire route left Kansas City at 3:00 am on September 2, 1865, arriving at St. Louis some 14 hours later. At the same time a mail and passenger train was initiated, taking 18 hours to complete its trip, including 44 scheduled stops. The first scheduled through freight train required 28 hours from terminal to terminal.

### A Strategy to Head West

At the time Kansas City was not nearly as large as St. Louis. In the early years of construction, Kansas City was seen mainly as a temporary goal on the way to the Pacific coast. As time passed, Kansas City became more significant as terminal in its own right due to construction of the Kansas Pacific Railroad westward from Kansas City to Colorado. The decision by the federal government to make Omaha the starting point of the first "transcontinental railroad", which would become the original line of the Union Pacific Railroad, was also important. Management increasingly realized that the Pacific Railroad's role would most likely be as a bridge line between the eastern and western railroads, such as the Kansas Pacific and Union Pacific. As a result, to compliment the Kansas Pacific line, and to reach the Union Pacific at Omaha, the company in 1869 leased the Leavenworth, Atchison & Northwestern Railroad, which ran north from Kansas City toward Omaha.

In that same year James Buchanan Eads began work on his bridge over the Mississippi River at St. Louis, the city's first. The Eads Bridge opened on July 4, 1874. In anticipation of this connection to the railroads east of the Mississippi, and the growing importance of the western connections, the Pacific's management decided to change the gauge of the railroad from 5 feet 6 inches to the more common 4 feet 8½ inches. This was accomplished on July 18, 1869, in the amazing time of 18 hours. When the day was over, the entire line from St. Louis to Leavenworth, Kans. had been converted without the cancellation of any regular train.

In 1872 the Pacific Railroad of Missouri was leased to the Atlantic & Pacific for 999 years. This allowed \$4,000,000 in bonds to be executed, backed by a third mortgage resulting from the lease. But by late 1876, the A&P had defaulted on the bonds. In October 1876 the Pacific Railroad was sold to the new Missouri Pacific Railway Company, created solely to make the purchase.



1884 Gould System logo

### The Gould Era of Development

After creation of the Missouri Pacific, legendary rail baron Jay Gould entered and dramatically changed the road's history. By 1879 Gould had control of the Union Pacific, and had as his goal the creation of a "Southwestern System" of railroads. His strategy was to buy competing railroads where he could, and to interfere with those he couldn't. He gained control of the Kansas Pacific in part to interfere with the Missouri Pacific as it looked westward.

But by November 1879, Gould had found a better way to deal with the Missouri Pacific—he bought controlling interest in it. He then strongly encouraged the construction of its lines to enlarge his "Southwest System", and to ultimately connect the MoPac at Pueblo, Colo. with the routes of his Denver & Rio Grande.



1909 logo

In 1892 Jay Gould died, and his son George took over his interests. Under George Gould, expansion continued. But the Panic of 1907 ended the system's expansion, and George Gould's fortunes turned sour. As the younger Gould lost control of his empire, the financial situation of its companies deteriorated. By August 19, 1915

the Missouri Pacific was in receivership.

On May 12, 1917, the Missouri Pacific Railway was reorganized and combined with the St. Louis, Iron Mountain and Southern to form the Missouri Pacific Railroad Company.

## Conquering the Hills



1921 logo

Due to heavy traffic and operations—impeding grades, it was decided in 1927 to double-track the eastern half of the line from Jefferson City to St. Louis, and to realign it to reduce curvature and grades. As a part of this major reconstruction, the cuts and tunnels at Labadie and Gray Summit were constructed in 1929, reducing the crest of the

historically troublesome grade by nearly 400 feet. The line was then realigned along the Meramec River from Eureka eastward for seven miles in 1930. This resulted in some major new cuts and fills to level the grade, and two new bridges over the Meramec River. In 1944 another major realignment was completed at Barretts; the line was double-tracked and deep new cuts were excavated to bypass the old restrictive tunnels that caused so many operating problems on the west side of Kirkwood Hill.

## The Van Sweringen Legacy

As the Missouri Pacific had once attracted Jay Gould, in 1930 it lured two equally notable railroad investors of this century, Oris Paxton Van Sweringen and his brother Mantis James Van Sweringen. "The Vans", as they were known, formed the Alleghany Corp. in 1929 as a holding company for their vast railway interests. In 1930 the brothers bought a controlling interest in the MoPac for \$100 million. But their financial empire, a hollow pyramid supported by increasingly worthless securities as the nation plunged into the Great Depression, soon collapsed. In 1933 the MoPac became the first major railroad to file for bankruptcy under the new Section 77 of the Bankruptcy Act. It did not emerge from receivership until 1956. Even then it was hampered by a difficult division of stock ownership into two classes which would constrain management as the modern era of large-scale mergers began in the 1960s.

But under the capable financial oversight of William Marbury, and the steady management of its president and later chairman, Downing B. Jenks, the MoPac still managed a remarkable turnaround and physical revitalization. In 1974 the troublesome Class "B" stock was bought back, and the MoPac was fully free to seek its destiny with little encumbrance.

## To the Pacific – At Last!

It found that destiny with the Union Pacific, one of the two railroads which had over a century before completed the nation's first line to the Pacific coast, the Union Pacific. On April 18, 1980, the stockholders of both the Missouri Pacific and Union Pacific Railroads approved a merger which would make MoPac a wholly-owned subsidiary of Union Pacific Corporation. The merger was approved by the Interstate Commerce Commission on October 20, 1982, and went into effect on December 22 the same year. The Missouri Pacific Railroad became part of the 22,000-mile Union Pacific Railroad, finally reaching after more than a century the goal of its founders, the Pacific coast.

Today the line over which we travel is a vital link in the Union Pacific system. It is maintained to very high standards, and carries a large amount of freight traffic, including tightly scheduled merchandise trains hauling time-sensitive freight in doublestacked intermodal shipping containers. There are two Amtrak trains in each direction daily between St. Louis and Kansas City. In years past, it hosted some of the Missouri Pacific's top passenger trains, such as the **Pacific Limited** to the West coast via a MoPac – Rio Grande – Western Pacific Gould System routing, the **Scenic Limited** to and through the heart of the Rockies via the Rio Grande, and the post-World War II domeliner, the **Colorado Eagle**.

– Matthew Taylor, St. Louis Chapter NRHS



1974 MP and 1983 UP logos

# A Guide to the Route

## Union Pacific Sedalia Subdivision

(Kansas City, Midwest and St. Louis Divisions)

Former stations no longer in service indicated by brackets [ ].  
Other non-station locations of interest indicated by asterisk \*.

### Milepost (MP) and station name or location of interest

#### Kansas City Division

##### 278.2 Neff Yard

Starting point for today's trip in Kansas City. A principal classification yard for the Missouri Pacific and today the Union Pacific, it is named for Paul J. Neff, a past president of the Missouri Pacific Railroad.

##### 276.9 Southwest Junction

Kansas City Southern crossing. Once called K.C. & S.W. Jct.

##### 276.8 Rock Creek Junction

The UP's River Subdivision branches off here to follow the Missouri River to Jefferson City. Most eastbound freights are routed via the River Subdivision to take advantage of its easier gradients. The Kansas City Terminal Railway from Union Station, used by Amtrak, joins our track to the south (right).

#### Midwest Division

##### 273.2 Independence

The first non-Indian settlers arrived here in 1825, and the town was platted as the Jackson County seat in 1827. In 1831 Joseph Smith and other Mormon leaders announced that the area had been revealed as the promised land of the Mormons, and bought 40 acres of land on which to build a temple. By 1834 persecution and mob violence forced the Mormons, by then numbering 1,500, to flee Jackson County.

The first overland mail stagecoach route started at Independence for Santa Fe in 1846. With the gold rush of 1849 Independence became the focal point for assembling wagon trains to California. During the Civil War the city was held by Confederate troops twice, each time for only a day. After the war Kansas City became a great livestock market and packing center, with

Independence a major suburb. The city was home to President Harry S Truman, and is the location of the Truman Library and grave.

The track curving away from the main line to the north (left) at the Independence depot is the original line of what is now the River Subdivision line to Jefferson City.

Milepost Equation: MP 270.4 = MP 270.7

##### 271.2 Independence Jct.

End of double track from Rock Creek Jct. The line here passes over the track of the Gateway Western Railway at MP 271.5

##### 265.1 Little Blue

The final spike of the Pacific Railroad, the first railroad west of the Mississippi, was driven here in 1865 as the line from St. Louis was joined to a small section built from near Kansas City.

##### 261.0 Western Electric

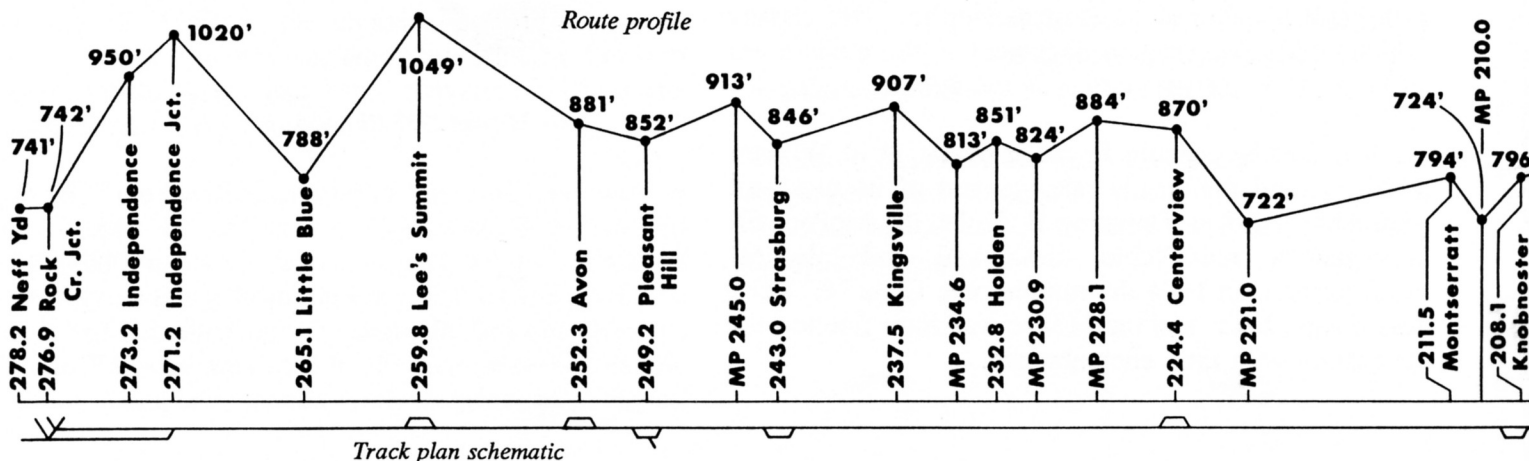
##### 259.8 Lees Summit

Named for Dr. Pleasant Lea who was kidnapped and murdered here during the Civil War. When the town was platted in October, 1865, the railroad is said to have provided a boxcar for a depot. Painted on its side was "Lee's Summit" in honor of Dr. Lea and the town's location at the highest point on the line. The misspelling was never corrected. Most highway maps and commercial maps and atlases give the town's name without an apostrophe, but most railroad timetables and maps include the apostrophe.

##### 257.3 Missouri Public Spur

##### 252.3 Avon

Between here and Pleasant Hill the remains of the Rock Island's St. Louis to Kansas City line can be seen to the south (right) of the train, purchased in 1982 by Southern Pacific subsidiary St. Louis Southwestern (Cotton Belt) which today uses only the easternmost portion. Cotton Belt/SP trains now use UP's Sedalia and River Subdivisions between Kansas City and St. Louis.



### 249.2 Pleasant Hill

The former MP station can be seen to the north (left) of the train, while the UP's Carthage Branch to Arkansas diverges to the south (right).

### 243.0 Strasburg

### 237.5 Kingsville

### 232.8 Holden

For several years the home of militant prohibitionist Carrie Nation, who arrived in 1867 as the bride of Dr. William Gloyd. When Gloyd died of alcoholism in 1868, she married David Nation, a minister and lawyer from Warrensburg, and moved to Texas a short time later.

### 224.4 Centerview

Settled in 1865 by emigres from Kentucky, Tennessee and Virginia seeking to escape the ravages of the Civil War.

### 218.4 Warrensburg

One of the oldest towns on Missouri's western prairie, dating to 1833 when Martin Warren, a Revolutionary War veteran from Kentucky, settled here. His settlement was selected as the Johnson County seat in 1836. During the Civil War both Union and Confederate troops drilled here, despite the town's being the home of Francis Cockrell, leader of "Cockrell's Brigade," a legendary Confederate unit. Warrensburg is the site of Central Missouri State University, founded in 1871.

### 211.5 Montserrat

### 208.1 Knobnoster

Founded in 1858 by Samuel Workman, Knobnoster, a combination of English and Latin words meaning "our knobs", was named by a school teacher. Three miles south of town is Whiteman Air Force Base, home of the 'Stealth' bomber fleet.

### 195.7 Dresden

### [190.5 Lexington Branch Jct.]

The former branch north through Higginsville to the River Sub at Lexington diverged to the left.

### 188.9 Sedalia

Home of the Missouri State Fair, Sedalia was founded by George R. Smith who in 1852 tried without success to interest the citizens of nearby Georgetown in diverting the Pacific Railroad from its proposed course to their town. In November, 1857, after being appointed to the railroad's board of directors, he purchased and platted the town of Sedville, named after his daughter Sed.

In October of 1860 he filed a second plat, including the original Sedville, and called it Sedalia. The first passenger train arrived here on January 17, 1861. During the Civil War became a military post until late 1864. Shortly thereafter it was incorporated and the county seat moved here from Georgetown. Naturally, Mr. Smith was the first mayor.

In 1905 the Missouri Pacific built its steam locomotive shops here, the on the railroad. Its buildings, today Union Pacific's signal shop, can be seen from the north (left) side of the train. The Missouri-Kansas-Texas, or Katy, also built through town on its way to Boonville and St. Louis in the early 1890s. The former M-K-T depot can be seen on the south (right) side as the train leaves the downtown area. The MoPac's former branch south to Warsaw, originally the narrow gauge Sedalia, Warsaw & Southern Railway, built in 1880 and acquired by the MoPac in 1910, also once connected here.

### 181.1 Smithton

Platted in 1859 by William E. Combs and named for George R. Smith of Sedalia fame. The town was the home of Colonel Louis M. Monsees, once the nation's leading jack (mule) breeder.

### 175.7 Otterville

Near here at MP 173.9, a point known as Jesse James Cut, the James gang held up a Pacific Railroad train on July 1, 1876.

### 174.5 Lamine River Bridge \*

### 168.1 Syracuse

Platted in 1859 where the old State Road from Booneville to the southwest crossed the Pacific Railroad.

### 166.1 Dow

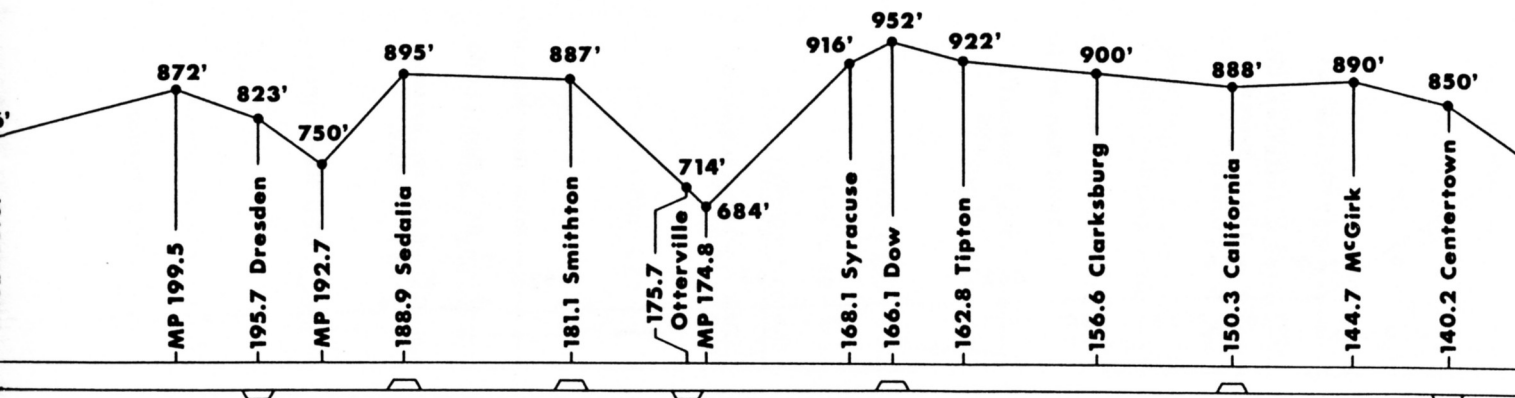
8,556-foot passing siding.

### 162.8 Tipton

Platted in 1848 and named for Tipton Sealey, who donated the land for the town. It was the earliest western terminus of the Pacific Railroad, and the starting point for the Overland Mail in 1858. Successive occupations by Confederate and Union troops caused little damage. After the war, Jesse James is said to have operated a livery stable here for about a year. Tipton was once a junction with the Boonville, St. Louis & Southern.

### 156.6 Clarksburg

Named for the Clark Brothers, the first settlers in the region.



### 150.3 California

Originally named Boonetown when Moniteau County was formed in 1845, one tradition holds that it was renamed California in 1847 after one "California" Wilson, who purportedly donated a demijohn of liquor to each voter who cast a ballot to perpetuate his nickname.

### 144.7 McGirk

### 140.2 Centertown

Originally known as Look Out Grove, the town changed its name to Centertown in 1915. The name is appropriate, as it is halfway between Kansas City and St. Louis on the railroad.

### 127.9 River Junction

Originally named Cole Junction. The River Subdivision, following the Missouri River from Kansas City, rejoins the Sedalia Subdivision here. The line from here to St. Louis is mostly double track, dispatched by centralized traffic control.

### 125.5 Jefferson City

Population 33,619. Capital of Missouri. The State Capitol is prominent atop the bluff to the south (right) of the train. The city was selected to be the seat of state government in 1821, and Major Elias Bancroft platted the site in 1822. The town incorporated in 1825 and the General Assembly moved here from St. Charles, the first capital, in 1826. The original Capitol burned in 1837, and a new \$175,000 structure was completed in 1842 on the site of the present Capitol, itself completed in 1917. The Pacific Railroad reached Jefferson City in 1855, but the Gasconade River bridge disaster delayed train service until 1856. Here Missouri's possible secession from the Union was debated. A state convention voted to remain in the Union but Governor Frank Blair, a Southern sympathizer, formed a 50,000-man state militia and joined Confederates at Boonville. Federal troops took possession of the city, making camp on Capitol Hill. Lincoln University, founded as Lincoln Institute in 1866, is located just east of the downtown area.

The Bagnell spur leaves the main line through the paved parking lot on the south (right) side of the tracks west of the Capitol. The spur was built to Cooper as the Jefferson City, Lebanon & Southwestern Railway, sold to the MoPac in 1883, and completed to Bagnell 1884. The line was heavily used from 1929 to 1931 in building Bagnell Dam, which impounds the Lake of the Ozarks. It was abandoned beyond Jefferson City in the early 1960s.

The railroad closely follows the south bank of the Missouri River through some of the most beautiful scenery in the Midwest for the next 75 miles.

### 124.3 Moreau

Control point and crossovers between tracks.

### [118.5 Algoa Farms]

The Algoa State Prison is on the north (left).

### [117.4 Osage]

Site of former depot for the community of Osage City.

### 117.3 Osage Junction

Single track begins for .5 mile to cross the Osage River.

### 116.8 Bonnot Junction

Resume double track. Formerly called C.N. Junction.

### 113.1 Bonnot's Mill

Originally called Dauphine, it is named for Felix Bonnot, who platted the town and built a grist mill here in 1852.

### 102.0 Ames

### 100.2 Chamois

Named for a goat-like animal of the lofty peaks of Europe and Western Asia by Morgan Harbor, an early settler. It is thought that the name may have been inspired by the bluffs and hills surrounding the town. Established in 1856, a year after the Pacific Railroad built through the area, Chamois was a division point on the railroad from 1873 to 1896, when the division headquarters was moved to Jefferson City. The wide area between the tracks for about a mile east of Chamois was occupied by a 5,277-foot passing siding between the tracks.

### [92.9 Morrison]

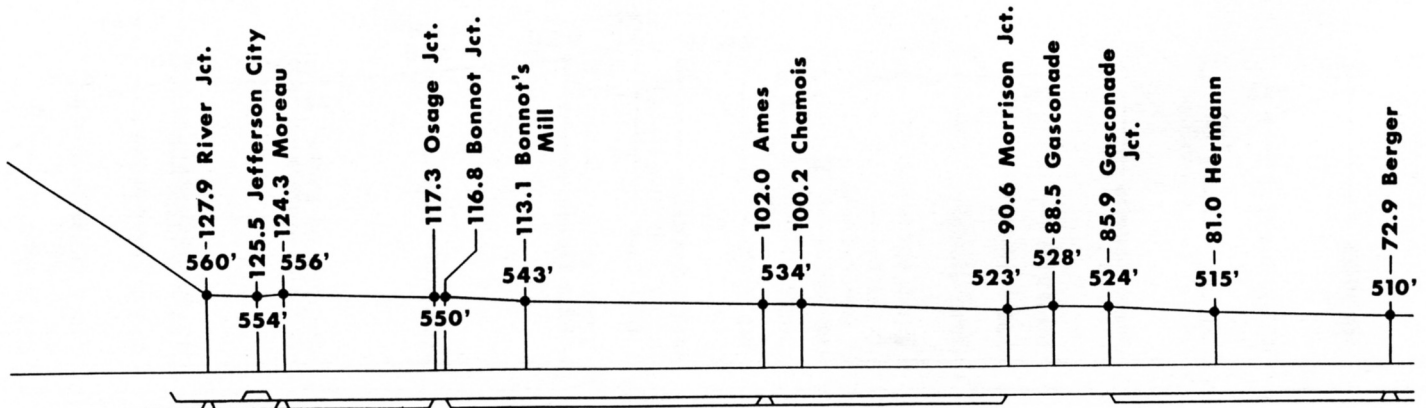
Site of former depot, built 1879, for the town of Morrison.

### 90.6 Morrison Junction

Single track begins for almost five miles to cross the Gasconade River. A 5,577-foot center passing siding between the main tracks formerly began here, extending to Gasconade.

### 88.5 Gasconade

Named for the crossing here of the Gasconade River on an 817-foot bridge. On November 1, 1855, the Pacific Railroad's first train to Jefferson City, carrying dignitaries including the





railroad's president and chief engineer, crossed a temporary trestle spanning the river here. As the train rolled onto the trestle at 25 mph, the first pier collapsed and eight coaches plunged through, dragging the engine back on them.

**[88.2 D.O. Junction]**

Former end of single track, now ending at Gasconade Jct.

**85.9 Gasconade Junction**

Current location for resumption of double track.

**81.0 Hermann**

Founded in 1837 by the German Settlement Society of Philadelphia in hopes that German families living in partial isolation would enjoy both the advantages of America and the cultural life of their home country. Planned in Philadelphia with four squares to be used as recreation areas, it separated from the society in 1839. The first vineyards were started in 1844, and Hermann gained fame in 1853 when its Catawba wine was judged at the New York State Fair as the best made west of the Mississippi River. River trade also flourished. Hermann retains its German heritage and is a leading producer of fine Missouri wines. The German festivals of Maifest in May and Oktoberfest in October are celebrated here each year.

**[78.5 D.F. Siding]**

West end of former 5,209-foot center passing siding.

**72.9 Berger**

Another of the German settlements of the area, Berger was established as a settlement in April 1856, about one year after the Pacific Railroad built through the area.

**[70.9 Etlah]**

Site of a former depot, and east end of former center siding.

**67.3 New Haven**

Originally named Blishs Mills when the Post Office was established in 1850. In 1855, after the arrival of the Pacific Railroad, it was renamed Millers Landing. In 1860, for reasons unknown, it became New Haven.

**57.7 Pace**

Control point and crossovers between tracks.

*Milepost Equation: MP 51.8 = MP 54.8*

**51.7 Washington**

Platted in 1828 by William G. Owens, the town's German influence began after twelve families from Hanover, Germany arrived by boat from St. Louis in October, 1833. During the 1850s they were joined by other German families, developing a social and cultural life centered around the *Theaterverein*, or dramatic society and later the *Turnverein*, or athletic societies. Washington is famous for the production of corn cob pipes, known as Missouri Meerschaums. The Missouri Meerschaum Co. factory, the world's only producer of such pipes, may be seen to the right opposite the freight and passenger depots.

**46.5 South Point**

Control point and crossovers between tracks. Appropriately named, this is the southernmost point reached by the Missouri River, which turns back to the north and east here.

**[44.7 Boles]**

Just east of Boles, the line turns away from the Missouri River to cross a rugged divide separating the Missouri and Meramec River valleys. The line in this area was extensively rebuilt in 1929, with heavily engineered cuts, fills, tall bridges over valleys, and two major tunnels.

**43.7 West Labadie**

The spur to Union Electric's coal-fired Labadie Plant diverges to the north (left.) Coal for the plant is delivered by UP in unit trains of about 100 cars. Most coal used originates at the Kerr-McGee Coal Company's Galatia Mine near Galatia, Ill., but increasingly includes lower-sulfur western coal.

**43.0 Labadie Tunnel \***

552 feet long with a .3 percent ascending grade, built 1929.

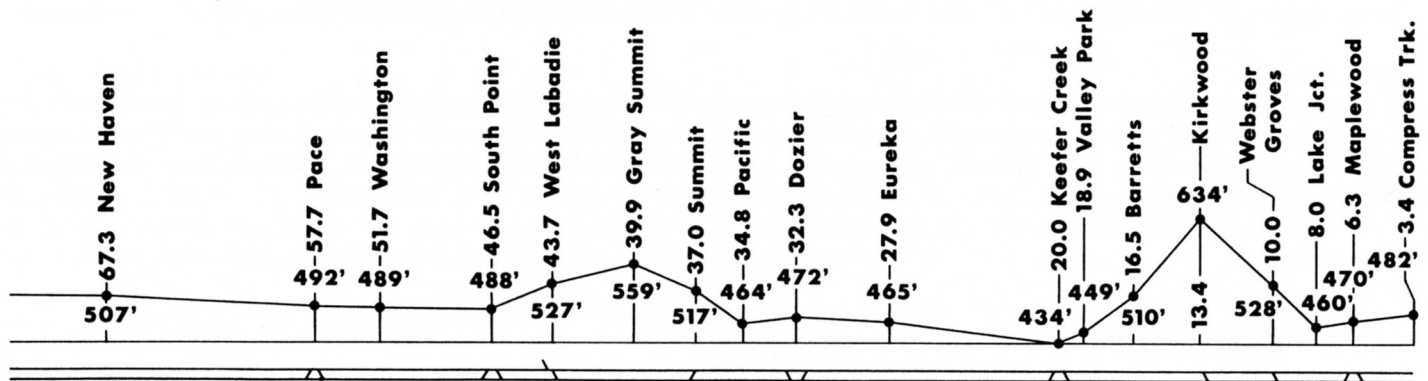
**[41.8 Labadie]**

The former Rock Island St. Louis-Kansas City line (today St. Louis Southwestern, or Cotton Belt) is crossed overhead just east of Labadie Tunnel.

**39.9 Gray Summit**

Named in part for Daniel Gray, who settled here in 1845, and in part because it is the highest point on the line in this area. On the crest between the Meramec and Missouri River valleys, the town is located where two of Missouri's oldest highways crossed - the Wagon Road to the southwest (later U.S. 66 and Interstate 44) and the State Road (later Missouri 100) to Jefferson City. The railroad formed a junction with them here in the 1850s.

*Route profile and track plan schematic  
by Brian T. McQuitty, St. Louis Chapter NRHS*





Station and track area, Sedalia, Mo. June 13, 1931. John Barriger photo, St. Louis Mercantile Library.

### 39.4 Gray Summit Tunnel \*

1,580 feet, with a .3 percent descending grade, built 1929. The tunnel carries the line beneath the town of Gray Summit.

### 37.0 Summit

Control point and crossovers between tracks.

### [35.1 K. Tower]

Site of former tower at which the original main line diverged to the north (left) prior to the 1929 realignment and construction of the Labadie and Gray Summit tunnels.

### 34.8 Pacific

Founded as Franklin in 1852 and renamed Pacific in 1860. The South-West Branch of the Pacific Railroad diverged from the Kansas City route, later becoming the St. Louis-San Francisco Railway, or Frisco. The Missouri Pacific operated commuter service from here to

St. Louis into the early 1960s. Silica mines tunneling into the St. Peter sandstone bluffs may be seen to the north (left) side as the train passes here into the Meramec River valley. Our route will parallel the Burlington Northern's ex-Frisco line (on the right) for the next seven miles.

### 32.3 Dozier

Control point and crossovers. To the north (left) of the train is the Eastern Missouri Correctional Institution.

### 27.9 Eureka

Originally the site of a railroad construction camp, Eureka is said to have been named by a survey engineer who found a route through this valley to eliminate many cuts through and grades over adjacent hills. Over the next seven miles the line follows a heavily engineered realignment constructed in 1929, first crossing the Meramec River, then bisecting the rugged Crescent Hills in a deep cut before crossing the Meramec once again to rejoin the original alignment on the north bank.

### [24.1 J.B. Junction]

The original line, following the north bank of the Meramec River on its broad bend to the northwest through Yeatman and Glencoe, diverged here to the north (left.) Part of this former right-of-way is now the one-foot-gauge Wabash, Frisco & Pacific live-steam railway, operating every Sunday afternoon from May to October at nearby Glencoe.

### 20.0 Keefer Creek

Control point and track crossovers, recently installed at this location, and replacing control point and crossovers at Boyd, MP 23.4.

### 18.9 Valley Park

Just west of Valley Park is the beginning of Kirkwood Hill, where the railroad leaves the Meramec River valley and crosses a dividing ridge over to the River Des Peres watershed. Kirkwood Hill is a grueling 5.7-mile grade averaging .54 percent with considerable curvature, and with brief stretches of up to 1.23 percent gradient. From the earliest days of the Pacific Railroad, it was a challenge to the MoPac's operations. The Burlington Northern's ex-Frisco line to Springfield, Mo. may once again be seen on the south (right).

### [17.5 L.H. Junction]

Also formerly known as Lake Hill Junction. Double track formerly ended here, and single track was used from here for three tough miles up Kirkwood Hill to Milepost 14.5 until replaced by present double track alignment in 1945.

### 16.5 Barretts

At this point, about halfway up Kirkwood Hill, the original single-track line passed through the first two railroad tunnels built west of the Mississippi, at about former milepost 16.3 and 16.8, just to the north (left) of the present alignment. They were bypassed during double-tracking of the line in 1945. Both still exist on property of the National Museum of Transport, visible on the north (left), along with the old Barretts depot.

*St. Louis Division*

### 13.4 Kirkwood

Founded in 1854 by a group of St. Louis businessmen after construction of the Pacific Railroad began. They purchased 240 acres of land and platted a town as a suburban home for families "who desired pure air and to raise their family away from the contaminating influence of the large city." Incorporated in 1865, it is named for James P. Kirkwood, the chief engineer of the Pacific Railroad, who also oversaw construction of the Erie's famed Starucca Viaduct. The lovely former Missouri Pacific depot, now owned by the city of Kirkwood and used by Amtrak, may be seen to the left. The station stands almost at the crest of Kirkwood Hill.



*Missouri Pacific's famed Scenic Limited, bound for Colorado and points west, departs St. Louis Union Station on its inaugural trip in the spring of 1915.*

### 13.2 Kirk Junction

Control point and crossovers, and crest of Kirkwood Hill. The downgrade on the east side of the hill begins here, continuing about five miles to near Lake Junction. Its gradient averages .57 percent, with maximum of .89 percent near Tuxedo Park. At Kirk Jct., the former Carondelet Branch diverges to the south (right). Over the next 10 miles were numerous former stations about one-half mile apart. Each of these were served by MoPac commuter trains from Union Station to Pacific. Depots still stand at Webster Groves and Tuxedo Park.

### 10.8 Webster

Control point and crossovers between tracks.

### 10.0 Webster Groves

The city's name comes from Webster College, founded in 1853. The Pacific Railroad established a station named Webster in the 1850s, and in 1884 the second part of the name was added when the post office was established. The restored Webster Groves depot, built in 1908 and today used as a retail establishment, is on the south (right) side at Gore Avenue.

### [9.4 Tuxedo Park]

The attractive rustic stone depot, today owned by the Webster Groves Historical Society, is to the south (right.)

### [8.5 Lake Junction]

The MoPac's Chapman Branch, which once cut northwest along Deer Creek through Ladue and Creve Coeur to near Creve Coeur Lake, diverged here to the north (left.) The line is in service today only as an industrial spur north into Rock Hill. The abandoned Terminal Association of St. Louis (TRRA) West Belt is crossed nearby on an overhead bridge at MP 7.8.

### 6.3 Maplewood

Control point and crossovers. Originally part of a large land grant made by the Spanish government to Charles Gratiot in 1785. The area was first known as Sutton after James Sutton, who bought part of the grant in 1825. In 1890 the Maplewood Realty Co. purchased land Sutton's heirs for development. In 1908 Maplewood was incorporated. The line enters the City of St. Louis, and swings to the south on a sweeping new alignment recently completed behind a new shopping center on the site of the former Scullin Steel Co. mill.

### [5.2 Cheltenham]

Here, very close to the present-day intersection of Manchester and Sulphur Avenues, and just east of the Hampton Avenue viaduct over the tracks and the River Des Peres, the first train of the Pacific Railroad, consisting of the locomotive *Pacific* and two coaches, completed its gala inaugural trip on December 9, 1852.

### [3.6 Tower Grove]

Site of the former Tower Grove station of the MoPac at the overhead viaduct intersection of Tower Grove and Vandeventer Avenues.

### 3.4 Compress Track \*

This siding in central St. Louis is named for its location near the site of former St. Louis Cotton Compress Company. Today's excursion concludes here. Buses will take passengers to designated parking lots and hotels. Thank you for traveling with us. We hope you've enjoyed your trip, and we look forward to having you on board again.

# The World's Largest Operating Steam Locomotive

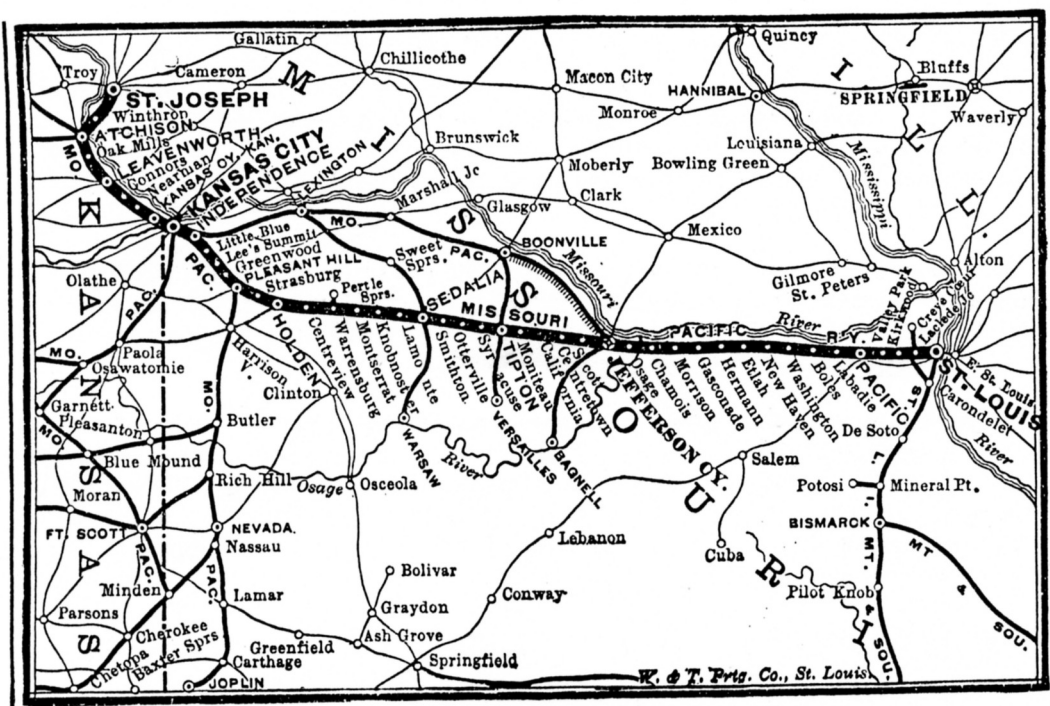


The magnificent steam locomotive powering our train today was built in 1943 by the American Locomotive Company (Alco) of Schenectady, N.Y. to a design developed by Union Pacific. Locomotives such as the 3985 are known as "Challenger"-types, having a 4-6-6-4 wheel arrangement. A four-wheel pilot truck at the front of the locomotive guides the engine into curves; six coupled driving wheels are powered from the forward steam cylinders; another six coupled driving wheels are powered from the rear steam cylinders; and a four-wheel trailing truck supports the rear of the locomotive, including the cab and the massive firebox. The 3985 is the only operating Challenger-type in the world today.

The 3985's twelve driving wheels gave the locomotive tremendous pulling power. But the length of the wheelbase for these twelve drivers (over 24 feet) would, if rigid, make it impossible to operate the engine on virtually any but straight track. To gain the advantages of more driving wheels on rail and thus more pulling power, but to avoid excessive wheelbase length, steam locomotive designers used **articulation** to effectively break the long wheelbase into two halves. A specially hinged frame permits the two sets of driving wheels to rotate on independent axes. This effectively permits the locomotive's very long wheelbase to "bend" in the middle. The advantages of articulation are visible when the 3985 tracks through a curve. As it does, you will see the long rigid boiler swing out to the side independently of the wheels beneath the boiler. Then the front set of drivers on their own axis begin to track through the curve, followed by the rear sets of drivers, rotating independently on their own axis on the hinged frame.

It was such advantages that led Union Pacific to develop the Challenger-type for fast freight use on its rugged operating profile in the West, especially over its crest of the Rockies at Sherman Hill, west of Cheyenne, Wyoming. In all, the UP purchased 105 Challengers between 1936 and 1943. Challengers occasionally pulled passenger trains, but were primarily used in freight service. After a long career, the 3985 was retired in 1962 and stored in the roundhouse at its home terminal of Cheyenne. In 1975 it was placed on display near the Cheyenne depot. A group of volunteer employees restored the engine to service in 1981, and in 1990 it was converted from coal to burn fuel oil. Today's excursion marks the 3985's first visit to Missouri.

<b>Total Engine Weight</b>	627,900 pounds (in working order)
<b>Tender Weight</b>	441,900 pounds (loaded)
<b>Main Driving Wheels</b>	69-inch diameters
<b>Fire Box Dimensions</b>	187 x 108 inches (15.58 x 9 feet)
<b>Main Tender Fuel Capacity</b>	5,945 gallons
<b>Main Tender Water Capacity</b>	25,000 gallons
<b>Boiler Dimensions</b>	94-11/16 inches inside diameter
<b>Boiler Pressure</b>	280 pounds per square inch
<b>Cylinders - Bore/Stroke</b>	21 inches x 32 inches
<b>Tractive Effort</b>	97,350 pounds (pulling power)
<b>Length - Engine and Tender</b>	121 feet 10 7/8 inches
<b>Weight - Engine and Tender</b>	1,069,800 pounds (in working order)



This map and logo, from a rare July 1897 Missouri Pacific public timetable, shows the route of today's excursion between Kansas City and St. Louis.

Map, historic logos of the Missouri Pacific, and research assistance for this publication were provided by the Barriger Railroad Collection, St. Louis Mercantile Library.