



CITY OF SNOQUALMIE LANDMARKS COMMISSION
PO Box 987
Snoqualmie, Washington 98065

LANDMARK REGISTRATION FORM

PART I: PROPERTY INFORMATION

1. Name of Property

historic name: PUGET SOUND ELECTRIC RAILWAY ELECTRIC INTERURBAN CAR 523
other names/site number:

2. Location

street address: This is a mobile resource and at the time of this writing is located at 9320 Stone Quarry Rd., Snoqualmie
parcel no(s): n/a
legal description(s): n/a

3. Classification

Ownership of Property:	Category of Property:	Name of related multiple property listing:
<input checked="" type="checkbox"/> private	<input type="checkbox"/> building(s)	(Enter "N/A" if property is not part of a
<input type="checkbox"/> public-local	<input type="checkbox"/> district	multiple property listing.)
<input type="checkbox"/> public-State	<input type="checkbox"/> site	
<input type="checkbox"/> public-Federal	<input type="checkbox"/> structure	
	<input checked="" type="checkbox"/> object	

4. Property Owner(s)

name: The Northwest Railway Museum
street: 9312 Stone Quarry Road, PO Box 459
city: Snoqualmie state: WA zip: 98065

5. Form Prepared By

name/title: Richard R. Anderson, Executive Director
organization: The Northwest Railway Museum date: 10 November 2017

6. Nomination Checklist

- Site Map (REQUIRED)
- Photographs (REQUIRED): *please label or caption photographs and include an index*
- Continuation Sheets
- Other (please indicate):

PART II: PHYSICAL DESCRIPTION

7. Alterations

Check the appropriate box if there have been changes to plan, cladding, windows, interior features or other significant elements. These changes should be described specifically in the narrative section below.

- | | | | | | |
|---|-----------------------------|--|---|-----------------------------|--|
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | Plan (i.e. no additions to footprint, relocation of walls, or roof plan) | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | Interior features (woodwork, finishes, flooring, fixtures) |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | Cladding | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | Other elements |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | Windows | | | |

Narrative Description

Use the space below to describe the present and original (if known) physical appearance, condition, architectural characteristics, and the above-noted alterations (use continuation sheet if necessary).

Car 523 is a rare surviving example of an electric interurban car that operated between Seattle and Tacoma between 1908 and 1928. It is a clerestory-roofed wooden railway car manufactured in 1907 as a combination coach/parlor/observation car for the Puget Sound Electric Railway ("PSER").

OVERVIEW

523 is approximately 55 feet long, nine feet six inches wide, and when mounted on trucks towers more than 13 feet above the rails. It weighs approximately 56,000 pounds as a trailer car, but its weight increases to more than 73,000 pounds when equipped with electric propulsion motors, electrical switch gear, wiring, and an air compressor.

ORIGINAL CONFIGURATION

Suspend belief and imagine you are walking through car 523 in February 1908, when it entered service between Seattle and Tacoma. The car has a two part roof consisting of an upper and lower deck. It is clad with tongue and groove boards contoured to match the roof rib (called a carline) curvature. The roof hoods incorporate the compound curves found at the ends of the car and are clad with wood lath that fits over these tightly curved surfaces. The entire roof surface is covered with a canvas membrane treated with water-proofing canvas stain, with copper flashing along the intersection of the upper and lower decks. The lower edges of both the upper and lower decks are outfitted with a combination drip rail/nailing strip that provides a place to attach the bottom edge of the canvas, and includes a contoured edge along the bottom designed to shed water away from the car side.

Arched clerestory windows adorn the roof in the vertical space between the upper and lower roof. They are assembled from colored glass and provide light to the interior. At either end of the car at the same elevation as the clerestory windows are a set of square marker and classification lights with colored lenses designed to alert following trains to the 523's presence, advise passing trains when it was safe to proceed, and make other trains aware when another train could be following the 523.

Extending the length of the car along the top deck are wooden running boards, which allow railway workers to walk along the roof of the car. To get up or down, the left front and the right rear of the car

have horizontal boards mounted on the lower deck just inboard of the platform. These boards are approximately 24 inches long and match with a series of four tiny folding steps attached to the side of the car.

The car sides are clad with tongue and groove wood siding of a profile typical in the railcar industry, such as the siding on Landmark-listed chapel car 5 Messenger of Peace. This cladding is painted dark green, and gold leaf adorns lettering and striping. The siding is nailed into longitudinal blocking with cut nails. The blocking consists of long sections - 16 or more feet - of wood which are attached to the car's window posts and studs with large wood screws.

Two versions of car lettering appeared between 1907 and 1928, with an earlier version spelling out "Puget Sound Electric Railway," and a later version simply lettering "P S E RY." The car number and simple decorative striping appeared in the earlier version while in the simplified later version all striping is absent but the car number appears in six places: above each side of each bolster and on each end.

Window posts and studs are supported by a side sill. Set into and between the studs and posts is blocking that forms part of the truss system (compression truss) to support the center of the car.

Completing this truss is the truss rod (tension truss), which is visible below the car and extends between the bolsters. Under the car and between the truss rods in the center of the car is a mechanism to charge/apply/release brakes, an electrically-powered air compressor, an air reservoir, and brake cylinder all of which together comprise the air brake system.

Windows are set into the side of the car. They consist of an upper sash that incorporates a shallow arch, and a lower sash with clear glass that features a design allowing the window to open by lowering it into the car side. The dimensions of these windows vary by location. The upper sash is glazed with clear glass that was either etched with an arch motif or assembled as individual pieces of arch-shaped glass using lead or zinc came. The lower sashes sit on a sash rest that caps the belt rail.

A distinguishing feature of this car versus typical electric interurban coaches used on this railway is the restroom window. When delivered, two gender-specific restrooms featured oval windows glazed with privacy-enhancing cast glass. One was located on each side of the car to the rear of the coach section in almost the very center of the car.

523 features platforms on the front and rear of the car that include controls for a motorman to operate a train. These platforms also provide the car ingress and egress, while a set of metal stairs mounted in each corner of the car provide access to the car's platforms to track level platforms.

Beneath the platforms on either end of the car are an unusual drawbar arrangement used to connect cars to one another. Also located here are hose connections for the air brakes and electrical connections to allow a lead car to control those following (called M.U. or multiple unit).

The interior of 523 is appointed with fine mahogany veneers. Panels between windows are inlaid with

a tulip motif that extends to the panel above each adjacent window. Above, a dark green ceiling covers the inside of the lower deck. Further up on the inside of the top deck, an empire ceiling is painted dark green and a decorative pattern is laid along the edges in gold leaf. The empire ceiling accentuates the clerestory windows and their colored glass.

The clerestory windows had another important function: ventilation. The clerestory windows open when an interior handle located near the top of the lower roof deck is turned either direction. In one direction the front window pops out at an angle. In the other direction the rear window pops out at an angle. This was practical because it allowed differing intensities, depending on the direction of travel.

The interior of the car presents a tongue and groove wood floor, varnished in the coach section and "probably" carpeted in the parlor car section. Beginning at the front of the car, there is a platform used for ingress and egress. Passengers enter the car through a sliding door located in the center of the car. Entering the coach section, a passenger is presented with reverseable seats upholstered with leather mounted to the walls on both sides of the car.

In the center of the car, a passenger encounters two restrooms, the women's on the right side of the car and the men's on the left side. Quickly peering inside a restroom, a passenger notes they are low maintenance models that appear to have a "do not flush in the station" label and provide ample fertilizer for the farmlands along the route.

Proceeding from the restrooms, a passenger passes through a doorway into the parlor section where individual leather-covered seats are loosely positioned up both sides of the car. Walking through the parlor section which is four windows long, a passenger encounters a wood partition separating the parlor from the next section, the observation section. Individual seats also adorn the observation section, but notable are spittoons strategically placed near the center of the floor. The rear of the observation room is open to the atmosphere, but off to each side are a set of sliding doors which allow it to be closed in during inclement weather.

ALTERATIONS

A 1910 renovation was an extensive rework of the car, which fundamentally changed how the car was used. 523 was upgraded and became a powered car, and the parlor car section was reduced in size to increase the number of coach seats. Electrical propulsion components and related equipment were added including:

- Under the car between the truss rods: an air compressor, electrical switch gear, resistor grids.
- Forward truck: replaced lead truck with a Baldwin 78-30 with GE model 90 motors.
- Roof: two trolley poles, one at each end, to allow operation in either direction.
- Platforms: rear platform permanently closed in and motorman's controls added.
- Interior: right side restroom removed and oval window replaced with single upper/lower sash. Left restroom relocated towards rear of car by approximately 8 feet 2 inches and original opening replaced with single upper/lower sash. Adjacent double window changed to single upper/lower sash for forward section and restroom window relocated into rear portion of double window. Additional coach seating installed in areas vacated by relocated restroom and removed restroom.

-Unseen: High voltage/high current wiring for motors, high voltage/low current wiring for electric lighting.

A 1914 safety upgrade installed a pneumatic bell on the front (called the "A" end) upper deck hood. A carbon arc headlight was installed on the fascia board on the front of the car, just below the upper deck hood.

A 1922 rework of the car added a second power truck, a Baldwin 78-30 with GE model 90 motors. All remaining parlor car seating (loose) was removed and reversible coach seating was installed throughout.

In 1928 the Puget Sound Electric Railway shut down. In 1929 the 523 was auctioned off to the Tacoma Municipal Belt Line. At that time, the trucks, air compressor, all brake equipment, bell and headlights, and all electrical equipment were removed from the car. It was set on the ground near today's Tacoma Rail yard offices and during this ownership the upper window sash arch motif was removed and replaced with clear glass. At least one oil stove was installed - where the original men's restroom had been located - and at least some of the interior seating was removed.

Circa 1940 the car was adaptively reused as a home in Federal Way. At that time all remaining seats were removed. A "modern" tile floor was installed and a kitchen was fit into the front 12 feet of the car.

Circa 1963 the home owner passed away and the son and his wife arranged to dispose of the car. The 523 was preserved privately by Mr. Paul Class and wife and moved to Oregon for storage. At this time the residential kitchen cabinets and oil stoves were removed. Wall panels which had been partially painted over (date unknown) were stripped and revarnished.

The 523 car moved several times and has been stored for periods of time in the blimp hangers in Tillamook, and then a King County warehouse when it was considered for use on the George Benson waterfront streetcar, and finally under a tarp in Petaluma, California when it was considered for use in a trolley project there which would have been similar to King County's waterfront streetcar. Unfortunately for Petaluma, this project did not proceed and the car was no longer needed. So in August 2017 it was donated to the Northwest Railway Museum and today it is located in Snoqualmie.

CONFIGURATION TODAY

Car 523 remains remarkably intact for a 110-year-old railway car.

The remains of the last roof membrane - a roll roof consisting of heavy tar paper - has been removed. All remains of the running boards along the roof have been removed. The trolley poles and their mounts are gone. All the roof decking is exposed and is approximately 95% intact.

All clerestory windows but one remain in place.

On the car sides, all but a small section of exterior cladding has been removed, but about 90% of the underlying blocking is intact and in good condition.

523 has a damaged side sill on the front left side of the car. Approximately 16 feet of sill and associated window posts, studs, and blocking has been removed and this portion of the carbody remains open and exposed. Also, the left side truss rod was removed and stored inside the carbody.

On the right side of the car, a door was cut in the center, compromising the car's wooden truss. This modification provided access while the car was used as a residence, and there is additional damage to the floor inside this opening caused by water intrusion.

All lower window sashes have been removed and are in fair condition, stored inside the car. All but three upper window sashes are intact but in poor condition. They remain in place, though glazed with clear glass instead of the arch motif seen in period photos.

Couplers and all underbody electrical systems are no longer in place.

Trucks are no longer in place.

Inside the car, the empire ceilings remain largely intact though there is evidence of water damage and the surfaces have been painted over with gloss white paint.

Hat racks have all been removed.

Interior paneling is in poor to fair condition. Interior wall paneling remains in place, but there are wide spread indications of water damage. Wall panels above the sash rest have a decorative inlay featuring a tulip motif, and most has been refinished with a polyurethane varnish. Several sections of wall paneling were removed or destroyed as part of the car's ongoing use, or renovations in 1910 that removed one restroom and relocated another. Since 1928, two interior partitions have been removed. One was located across the hall and parallel to the rear wall of the restroom. The other panel was located towards the front of the car, on the left side. It was across the hall from the extant partition.

Most door and window hardware has been removed and are missing.

The interior floor exhibits many blemishes but is approximately 85% intact.

CONCLUSION

Car 523 is remarkably intact for a conveyance designed with a useful life of 30 or less years. While a number of key components are missing, most were mass produced and can be reasonably replaced.

The car's "foot print" remains unchanged, interior paneling is substantially intact, and an impressive body of information regarding its period of significance survives. 523 is an excellent example of early 20th Century electric railroading.

PART III: HISTORICAL / ARCHITECTURAL SIGNIFICANCE

8. Evaluation Criteria

Designation Criteria:

- A1 Property is associated with events that have made a significant contribution to the broad patterns of national, state, or local history.
- A2 Property is associated with the lives of persons significant in national, state, or local history.
- A3 Property embodies the distinctive characteristics of a type, period, style, or method of design or construction or represents a significant and distinguishable entity whose components lack individual distinction.
- A4 Property has yielded, or is likely to yield, information important in prehistory or history.
- A5 Property is an outstanding work of a designer or builder who has made a substantial contribution to the art.

Criteria Considerations:

Property is

- a cemetery, birthplace, or grave or property owned by a religious institution/used for religious purposes
- moved from its original location
- a reconstructed historic building
- a commemorative property
- less than 40 years old or achieving significance within the last 40 years

Historical Data (if known)

Date(s) of Construction: 1907	Other Date(s) of Significance: 1907 through 1928	
Architect: St. Louis Car Company	Builder: St. Louis Car Company	Engineer: St. Louis Car Company

Statement of Significance

Describe in detail the chronological history of the property and how it meets the landmark designation criteria. Please provide a summary in the first paragraph (use continuation sheets if necessary). If using a Multiple Property Nomination that is already on record, or another historical context narrative, please reference it by name and source.

Puget Sound Electric Railway car 523 is a rare and outstanding surviving example of the once common interurban car. Similar cars operated in most urban areas of North America and played a decisive role in settlement patterns of the communities they connected. For King County, 523 represents an electrically-powered conveyance that connected Seattle with Tacoma, and the dozens of communities along today's highway 169 corridor. It had a connection with a variety of early 20th Century events including the Alaska - Yukon - Pacific Exposition, and the extensive troop movements during and after WW I, and was powered with electricity generated at Snoqualmie Falls, the world's first

underground power station, and the Georgetown Steam Plant, among the first commercially-viable steam turbines. And the 523 - built by noted manufacturer St. Louis Car Company - is particularly remarkable in that it represents an unusual opportunity to interpret both the no-frills coach experience and the extra fare parlor car experience.

Car 523 is the only known surviving car or locomotive of the Puget Sound Electric Railway. The only other remaining artifacts include former substations in Puyallup (Pierce County) and near Milton. However, much of the original right of way remains under the ownership of successor company Puget Sound Energy, and a public trail called the Interurban Trail has been built on the original alignment.

THE INTERURBAN

Across North America electrically-powered interurbans were once ubiquitous. Beginning in the late 19th Century, interurban railways appeared all across the country from major cities to small rural centers. For most areas in the United States, their era incorporated approximately 30 years and can best be likened as a transition between horse-drawn wagons and carriages and the private automobile.

Typically, interurban lines were built to connect rural and suburban areas. They consist of conventional railway track that is equipped with either an overhead electric line called catenary or a power rail next to the track called a third rail. With the introduction of scheduled trains, adjacent land values climbed and ridership grew. With increased population there was pressure to build roads and highways and then as private vehicle ownership grew, interurban ridership declined. In larger communities, commuter service was replaced with a trackless trolley or bus. In smaller communities the interurbans simply ceased to operate and the community may have lost its public transportation option.

Seattle and Tacoma were connected by steam railroads, and steam ships offered a competing maritime highway option. However, the electric interurban was built because the steam ships were slow, and the steam railroads did not provide a viable commuter service in King County. Consequently, King County had two major interurban railways, but both were owned by the same company, Stone and Webster, the predecessor of today's Puget Sound Energy. The Pacific Northwest Traction Company operated an electric interurban line between Seattle and Everett. The Puget Sound Electric Railway operated an electric interurban between Seattle and Tacoma.

ST. LOUIS CAR COMPANY

The St. Louis Car Company was a noteworthy producer of railroad equipment, and was one of the largest manufacturers of streetcar and interurban vehicles in the United States. Founded in 1887, St. Louis Car built streetcars, railroad passenger cars, trolley buses, locomotives, subway cars, interurban cars and even airport jetways. In 1907 they manufactured four electric interurban coach/parlor/observation cars for the Puget Sound Electric Railway. These cars were built to a unique design unique to the railway, though hundreds of similar interurban electrics were built for lines across North America and overseas.

For more than 87 years, St. Louis, Missouri was home to the St. Louis Car Company where they competed directly with the J.G. Brill Company. The Cincinnati Car Company was also a major competitor. St. Louis Car found their early success - at least in part - by specializing in streetcar and interurban design and construction rather than trying to also compete in the design and construction of mainline passenger cars. Later, a decline in streetcar and interurban car orders forced them to diversify in order to remain in business.

Though they ceased operation in 1974, the company's products survive in museums into the 21st Century. During a nearly 100 year production run, St Louis Car produced thousands of interurbans, streetcars, passenger cars and more. In all, more than 500 examples of St Louis Car Company rail cars, trolleys, cable cars, subway cars, and streetcars have been preserved, but just 37 of the early wood cars (including car 523) built before 1910 survive in museums. There are no similar vehicles in King County, though the Issaquah History Museum operates a former Lisbon, Portugal trolley in downtown Issaquah.

Diversity of customers ranged from regional power companies such as the Seattle Electric Company, to the Chicago Transit Authority, New York transit subway cars, and the Paris (France) Metro, and passenger cars for major railways including the Northern Pacific Railway and Great Northern Railway, which operated between Seattle and St. Paul, Minnesota. One of St. Louis Car's railway kitchen cars was produced in 1953 – United States Army Medical Service USA 89601 – and is now held in the collection of the Northwest Railway Museum. And a variety of late model St Louis-built streetcars remain in service on San Francisco's Muni System.

PUGET SOUND ELECTRIC RAILWAY

Interest in an interurban railway to link Seattle with Tacoma developed in the late 19th Century and was engendered by feelings of antipathy towards the Northern Pacific Railway with its costly fares and unfavorable schedules.

In October 1900 Fred E. Sander secured the first franchise to build an interurban line between Seattle and Tacoma. Sander owned the narrow gauge Grant Street streetcar line that extended south to Georgetown, and envisioned the interurban as an extension of that line that would be simultaneously double tracked and rebuilt to a standard gauge of 56 ½ inches between the rails. Construction began in February 1901 supported by more than \$1 million in capital secured in eastern markets, but it was insufficient to complete the work. Sander's dream sold at foreclosure just six months later, on July 10, 1901. It, along with the Grant Street streetcar, was eventually brought under the control of the Seattle Electric Company.

Meanwhile, a second interurban company was formed in December 1900. Headed by Northern Bank President Jacob Furth, it was also backed by Tacoma promoters Henry Bucey and John Collins. There was some minor controversy as the interurban line's precise route was decided, but during its early phase of construction the enterprise was purchased by Stone and Webster, a Boston-based company

that owned street cars, interurbans and electric utilities all across the country, and who the year prior created Seattle Electric Company with the merger of Seattle's street railways. A few months later, Stone and Webster also purchased the Snoqualmie Falls power station.

Shortly after service to Tacoma began, the Seattle Tacoma Interurban was renamed the Puget Sound Electric Railway. Incorporated as a subsidiary of Puget Sound Power, Light and Traction, the entire operation was owned by Stone and Webster of Boston who had designs on an electric interurban network that would stretch from Portland, Oregon to Vancouver, British Columbia.

Completed in 1902, the PSER operated between Seattle and Tacoma on a 38-mile main line. Using conventional overhead of municipal streetcar lines in the urban areas of Seattle and Tacoma, and third rail on its own track in the country, the PSER provided service between downtown Seattle and downtown Tacoma at speeds up to 60 miles per hour.

The PSER advertised a ride full of, "Pleasure, Safety, Economy and Reliability." The trains were electrically-powered so the trip was free of smoke and cinders, and was smooth and quiet. The 75-minute "Limited" trip between Pioneer Square at the intersection of Occidental and Yesler in downtown Seattle and downtown Tacoma's car barn at 7th and A streets featured just two stops. However, all trains - including those that stopped at all 22 stations and took considerably longer than 75 minutes - featured the excitement of traveling at more than one mile per minute down the Kent Valley.

Initially, the PSER had 22 stops between Seattle and Tacoma. Communities known today included Fife, Milton, and Kent, but also many no longer remembered included Orillia, Farrow and O'Brien. The PSER enabled these communities to thrive by allowing residents to commute to work in Seattle or Tacoma. Kent, for example, instantly became a commute to downtown Seattle comparable in duration to one from North Seattle. Larger communities such as Auburn had a station building while smaller villages had just a platform.

Initially, trains operated with three cars. Later, when cars such as the 523 were added, shorter trains of just two cars were able to handle as many passengers as the original three car trains, and also offer parlor car service. By the teens, there were single car trains operating too.

As the PSER increased in popularity and ridership grew the company added branch lines. For instance, a short branch between the mainline and Renton soon saw 33 trains per day. Puyallup was connected to the mainline with a new 6-mile branch added in 1908.

Operation of the PSER was at the forefront of modern practice. From the beginning, a dispatching office in Kent controlled trains using timetable and train order. Instructions were issued by the dispatcher via telegraph and operators at each station wrote out the instruction on a form called a train order. Train orders could be given to the motorman (train driver) in person or handed off with a train order hoop, which occurred while the train was moving. The instructions on the train order were the authority to occupy the main track, and could allow the train to proceed, take a siding, or even

hold the train for a period of time. A typical station stop was just as long as it took for passengers to get on and off, not unlike a Sounder light rail train.

In August 1913 PSER announced it would spend more than \$60,000 to purchase and install a new automatic block system. This signal system was cutting-edge technology for the era and was designed to allow trains to safely and efficiently operate at high speed with frequent departures.

Changes in ridership and revenue began appearing after WW I. Construction of highway 99 combined with increasing rates of ownership of private automobiles resulted in a rapid decline in patronage. By the late 1920s, revenues were no longer sufficient to pay the cost of capital, and this resulted in a default on bond payments. Competition from highway buses and steam railroads proved insurmountable and parent company Puget Sound Power and Light refused to bail the railway out. The last train operated on December 30, 1928; tracks were removed beginning in 1930.

Portions of the PSER right of way survive as the Interurban Trail, a 14-mile trail corridor developed and maintained by King County Parks, but which remain under ownership of successor company Puget Sound Energy.

AYP EXPOSITION

In 1909 Seattle hosted the Alaska –Yukon – Pacific Exposition. The fair opened June 1st and continued through October 16; it was considered a tremendous success. The Puget Sound Electric Railway and parlor car 523 transported many fair-goers between Tacoma and Seattle, or from points in between. Connections to what we now know as the main campus of the University of Washington were provided by streetcar lines of the Seattle Electric Company, a Stone and Webster Company (same owners as the Puget Sound Electric Railway).

This accessibility via streetcar was a critical factor in convincing civic leaders of the day to agree to the fair site north of Montlake, which at the time was difficult to reach. Parlor car 523 was heavily patronized during the fair, and during this era was staffed with a porter. In July 1909 the PSE General Manager's report spoke of a "particularly gratifying ... month being due to the A.Y.P. Exposition in Seattle. It would perhaps be well to call special attention to the parlor car earnings which brought us in a total revenue of \$3,865 for the month."

FORT LEWIS

Camp Lewis was established in Pierce County in 1917. It was made possible by a county bond measure that purchased the land at tax payer expense and donated it to the Federal Government for the purpose of establishing an army base. With the ramp up to WW I and the thousands of troops that were discharged from there after the war, there was a tremendous surge in business to and from Seattle. This created peak ridership on the Puget Sound Electric Railway, which occurred in 1919.

SNOQUALMIE FALLS POWER

Charles Baker was an engineer working for the Seattle, Lake Shore and Eastern Railway when he first saw Snoqualmie Falls. He soon realized its potential to build a power station that would not need a flume or diversion dam. With help from his father's fortune, the world's first underground power station was constructed in Snoqualmie. The Snoqualmie Falls Power Company first produced power in 1898 and by mid 1899 power transmission to Renton and beyond to Seattle had begun. Electric streetcars in Seattle were among the first customers.

In 1899 electric railways were big business for power companies. They represented the largest industrial customers and in many instances common ownership developed. By the time car 523 entered service in 1908, both the Puget Sound Electric Railway and the Snoqualmie Falls Power Company successor were owned by Stone and Webster.

GEORGETOWN STEAM PLANT

The Seattle Electric Company needed power. With streetcars and an interurban extending between Seattle and Tacoma, they had some of the greatest power requirements in the region. And most of the power was purchased from other companies, especially the Snoqualmie Falls Power Company. At this time, the Snoqualmie Falls operation was owned by a company that itself had proposed construction of an electric interurban railway between Seattle and Tacoma to compete with the Puget Sound Electric Railway. However, this plan was never developed. Notwithstanding, power demand continued to increase and the decision to build commercial-scale steam power plant was made.

In 1906 the Seattle Electric Company opened the Georgetown Steam Plant, a steam-powered electric plant that supplied both alternating current for local home and business use and direct current to power the streetcars of the Seattle Electric Company and the interurbans of the Puget Sound Electric Railway. Steam was generated by burning coal mined from the Puget Sound Electric Railway's mines in Renton, but the plant later burned oil.

Despite early issues with the steam turbines, the Georgetown Steam Plant supplied power to the northern end of the Puget Sound Electric Railway. By the time car 523 became a power car in November 1910, Georgetown power was flowing through its motors.

CAR 523

523 was built in St. Louis by the St. Louis Car Company as one of four identical cars (521, 523, 525 & 527); they were frequently simply called "parlor cars." When first placed in service in February 1908, these cars were notable for the extra-fare parlor and observation car service, which up until this time had been a no-frills conveyance. The objective in adding these extra value cars was to attract a more affluent clientele.

The four parlor cars were purchased as car bodies, which means they did not come with trucks or wheels. At the same time, PSER also purchased two coaches. (It was not unusual for electric railways to purchase car bodies and separately acquire the other components.) The completed car bodies – all

six - were shipped to the railway's workshops in Kent in late September 1907. By December one train was ready; work on the remaining cars was completed in January 1910.

The 523 was originally configured as a trailer car, which means it was pulled by other interurban cars. Its "trucks" - assemblies which included wheels, axles, brake shoes and the suspension - do not incorporate any means of propulsion. On an electric interurban line, powered cars are usually equipped with electric motors on each axle, which is the same design Sound Transit light rail trains of the 21st Century utilize. By contrast, all cars on conventional steam railroads were pulled by a steam locomotive. 523 – at least initially – did not operate by itself because it was pulled by a powered car.

523 is a car built during the period when construction methods transitioned from wood to steel. Its car body is predominantly built of wood but the side sills – critical structural elements that run up each side of the car – are formed from rolled steel beams faced with a wood sill contoured to fit flush. The car sides are framed with window posts and studs made from a suitable wood (usually southern yellow pine) and blocking and cladding are also made from wood (usually yellow poplar). Window sash frames were made from mahogany, and would be expected to match the Cuban or Honduras mahogany used in the interior paneling, but these mahogonies were usually selected for windows because they were resistant to rot.

Passengers traveling between Seattle and Tacoma – or points in between – could pay an additional fare of 25¢ to ride in the parlor or observation car section, a significant upcharge from the basic 60¢ fare. Yet this service was wildly popular when introduced in February 1908. Within the first week of operation, PSER was reporting \$20 to \$30 per day in additional revenue. A month later, the company had received more than \$1,000 in "extra fare" on trains operating between Tacoma and Seattle.

Changes were to come for the 523 just a year later, in 1910. In 1909 parlor cars were attended by porters. However, by 1910 the porters were withdrawn, probably in response to declining ridership in the aftermath of the A.Y.P. Exposition. Also introduced in late 1909 were increased fares, which were widely and wildly unpopular.

1910 was also a year of change for 523. It received its first rebuild, and was outfitted with motorman's controls and a two-motor truck. It also reportedly received changes to interior partitions, which were relocated to reduce the size of the parlor car section and increase the number of coach seats. After refurbishment in November 1910, one restroom and its unique window was relocated towards the rear of the car while the other restroom and window was removed.

In 1914 the car received a locomotive bell; the entire roster of powered cars on the railway received the same. The bell was mounted on a small platform attached to the end hood of the upper clerestory roof. At approximately the same time a carbon arc headlamp was installed. Anecdotally, it appears these improvements were made in response to the cattle and other livestock struck along the right of way, and to the number of foggy weather delays.

LOCATION

Although the 523 is no longer in its original location, the Northwest Railway Museum has returned it to King County from Northern California where it served no useful interpretive purpose. In Snoqualmie it is able to regain most of its appropriate context because it is again situated on an active railroad. 523 is also able to have access to the specialized skills and equipment required to assure its long-term care.

CONCLUSION

Puget Sound Electric Railway car 523 is a rare surviving example of the electric interurban railway that extended between Seattle and Tacoma. Although it began as a no-frills commuter line, its success soon allowed it to offer extras in the form of combination coach/parlor/observation cars of which 523 is an example. And this combination of classes allows interpretation of both basic passage and extra fare service. The Puget Sound Electric Railway and the 523 had a connection with many local history themes, and was an influence that can still be felt today.

Criterion A1 - 523 Association

- Early mass transit between Seattle and Tacoma
- Settlement and development of communities along the route between Seattle and Tacoma, creating early commuter options - and therefore residential developments - from "remote" communities such as Kent, Auburn, and Edgewood.
- Major customer for early electric power plants including Snoqualmie Falls Power Company and the Georgetown Steam Plant.
- Carried many passengers to and from Seattle on their visit to the 1909 A-Y-P Exposition.
- Carried troops during and after WW I, particularly for the new Camp (later Fort) Lewis, located south of Tacoma.

Criterion A3 - 523 is an excellent example of the once ubiquitous electric interurban/trolley car, and illustrates value added options used by business of the day to boost revenue and expand audience.

Criterion A5 - 523 is an excellent example of design and construction from the St. Louis Car Company, a leading builder of street railway and interurban cars.

PART IV: MAJOR BIBLIOGRAPHICAL REFERENCES

9. Previous Documentation

Use the space below to cite the books, articles, and other sources used in preparing this form (use continuation sheet if necessary).

Previous documentation on file:

- included in King County Historic Resource Inventory #
- previously designated an King County Landmark
- previously designated a Community Landmark
- listed in Washington State Register of Historic Places
- preliminary determination of individual listing
- (36 CFR 67) has been requested
- previously listed in the National Register
- previously determined eligible for the National Register

Primary location of additional data:

- State Historic Preservation Office
- Other State agency
- Federal agency
- King County Historic Preservation Program
- Local government
- University
- Other (specify repository)

Northwest Railway Museum library & archives, Snoqualmie, WA.

Center for Pacific Northwest Studies at the University of Western Washington, Bellingham, WA.

- designated a National Historic Landmark
- recorded by Historic American Buildings, Survey #:
- recorded by Historic American Engineering, Rec. #:

Bibliography

Branford Electric Railway Association preserved car web site, accessed 14 December 2017:
<http://www.bera.org/pnaerc.html>

Class, Paul. Emails received in 2017 recounting his experiences with 523, which he acquired circa 1963.

Dorpat, Paul Seattle Now and Then, Volume II. Self-published.

King County Department of Planning and Community Development Parks and Recreation Division
Interurban Trail King County, September 1981.

Puget Sound Electric Railway Company. Corporate records held at the Center for Pacific Northwest Studies, University of Western Washington, Bellingham, WA.

Swett, Ira L. Interurbans Special 23: The Puget Sound Electric Railway. Interurbans Press, 1960.

Traction Heritage, Volume 3, Number 5, September 1970. Selections from 1909 Electric Railway Journal.

Trolley Sparks, Bulletin 95. Central Electric Railfans' Association, Chicago, Ill, November 1951

Bibliography (continued)

Wing, Warren W. Personal collection of photographs and ephemera held at the Northwest Railway Museum in Snoqualmie, WA.

Wing, Warren W. To Tacoma By Trolley: The Puget Sound Electric Railway Pacific Fast Mail, Edmonds, WA: 1995.

Young, Andrew D. Interurbans Special 91: St. Louis Car Company Album: A Photographic Record. Interurbans Press, Glendale, CA: 1984.