

The *Celebrating 60+ Years* Trainmaster

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ZOOLINER AT 60



Photo of the Zooliner on May 28th, 2018 by Kevin Shofner

On June 9th, The Zooliner will be celebrating 60 years of service at the Washington Park and Zoo Railway at the Oregon Zoo! The diesel-powered *Zooliner* was built in 1958. A 5/8-scale replica of General Motors' *Aerotrain*, the engine's original 140 horsepower (now 165 hp) was transmitted to eight driving wheels through a hydraulic-type torque converter transmission and spiral gears. These gears were replaced with bevel gears in 1962. Safety features include a "deadman control" to ease the train to a halt in an emergency. A governor at one time held the train to its current 12-mile-per-hour maximum speed. A conventional automatic air brake system updated in the mid 1980s to a two-line truck air brake system provides safe train handling. The rearmost car was rebuilt in late 2005 to resemble a dome car, in connection with installation of a larger and more powerful wheelchair lift. (For more Information, See the June 2018 *Trainmaster* Special Edition for the *Zooliner* 60th Anniversary)

MOVING PARLOR CAR 1799 – PART 1

By Arlen L. Shel Drake



The Northwest Railway Museum has acquired a Northern Pacific parlor car built by Pullman in 1901 that is known to have been in service in Washington state. It was built entirely of wood and was never upgraded with steel components as so many other wooden cars were. It was purchased from NP by an Auburn railroad worker in 1941 and moved to Whidbey Island on the Puget Sound for use as a cottage, a use that continued for 77 years.

The 1799 was protected for 40 years by a protective shelter built out of western red cedar that protected it from the elements. In 2017, Car 1799 was listed on the Washington Trust for Historic Preservation's 2017 Most Endangered List. The car was donated by the Jana and Dan Shaw family of Everett to NRM after their visiting NRM for a Thomas the Tank Engine event.

Parlor car 1799 was situated on a beautiful island beach on Puget Sound. The car will be moved by barge and truck to the Train Shed Exhibit building at NRM. However, first it needs wheels.

Repurposed as a cottage in 1941, car 1799 has been supported with pilings for more than 77 years and has retained all its original elegance. After the shelter was dismantled, the moving phase began.

Nickel Bros specializes in transportation of homes and other structures, and they are a natural partner for a wood railroad car that lacks its truss rods. Nickel's team uses a set of hydraulic jacks to lift structures. They assemble a steel frame under and beside the building, then place wheel dollies under the completed assembly.



No. 1799 on the Beach

The 1799 is particularly challenging because it has original structure in the car sides that could be easily damaged if jacked carelessly. Furthermore, the car weighs 80,000 pounds and must be jacked evenly to avoid the potential for broken windows.

Nickel's solution includes two monstrous H beams that are designed to evenly support the entire car. Smaller beams extend from one side to the other perpendicular to the large beams. They directly bear on the bottom of the car and simultaneously pick up the side, intermediate and center sills. The jacking began quickly and uneventfully; there were no unusual sounds or movement. The frame had enough integrity that it was self-supporting for short periods of times as the jacks caught up. This is truly a testament to the car builders at Pullman, Illinois.

Once the car was jacked up sufficiently, the wheel dollies were hoisted into place. A double set of wheels was installed to spread the mass over the 14 feet of width. These rubber-tired dollies have independent steer and adjustable height, both valuable features in avoiding complication on a difficult site.

This story will continue with the 1799 taking a swim.

The Northwest Railway Museum is in Snoqualmie, Washington. Donations for the restoration of the NP 1799, other NRM projects or generally may be made at www.trainmuseum.com or by USPS to: PO Box 459, Snoqualmie WA 98065-0459.

Information for this article extracted from the Northwest Railway Museum Weblog (trainmuseum.blogspot.com), April 30 & April 27 as well as email messages from Richard Anderson, NRM Executive Director. Article developed by Arlen Shel Drake.

Graphics: (all from NRM with permission from Richard Anderson to use them)



Original Lights in the 1799



No. 1799 on Rubber Wheels

EATING OUR WAY TO AND THROUGH LA

by David Larsen

This year's Library-Archives field trip concentrated on the Los Angeles area. Four of us departed on the Coast Starlight on Thursday April 26th. It turned out to be a memorable trip because the Starlight was rerouted out of Oakland through the Central Valley and over Tehachapi Pass on a very scenic rare mileage run due to repairs being conducted on the Coast Line. One man we met on the trip had flown up from San Diego to Sacramento for his eighth trip over Tehachapi.

Another first for all of us was turning the nine car Starlight in the Altamont Pass area on a wye to access the line through the valley. We all adjourned to the last coach to watch the Amtrak conductor and UP pilots execute the backup into the wye on a very busy freight line. In addition, we got to watch some heavy police action in the residential area next to the tracks at the wye.

The news is filled with Amtrak announcements curtailing premium services including the demise of the Pacific Parlor cars on the Starlight. We found the on board crew to be very friendly and upbeat. One improvement noted was the availability of WIFI services throughout the train. The only hitch was that there was no Amtrak relief crew in Bakersfield for over an hour. As a result, we arrived in LA a half an hour late.

We seemed to spend a lot of time in the dining car. This began with lunch and waving to Arlen Sheldrake at the ORHC. We had our Friday dinner crossing Tehachapi. This was a theme that continued throughout our journey, eating our way to and through Los Angeles.

Los Angeles Union Passenger Terminal remains one of the great American passenger stations. The main waiting area is beautifully restored complete with leather covered chairs and benches. The station is very busy accommodating Amtrak, all LA commuter services, buses and the Gold Line Metro. It was packed late on a Friday night.

Our hotel, the Metro Plaza, was a mere two blocks from the station and turned out to be probably the best bargain in downtown LA. It was a short walk from Olvera Street, a must visit pedestrian street filled with shops, entertainment and Mexican restaurants. In addition, our hotel was very close to Phillippe's, an LA institution with sawdust on the floors and a small railroad "museum" in a back room. Phillippe's figured in one of our culinary adventures, "The French Dip Challenge," details later.

On Saturday morning, we took a cab to pick up our car which turned into a harrowing thrill ride. The author admits to being close to terrified as the cabby squeezed our vehicle between two city buses. One luckily turned left just as we were about to be pancaked. The driver looked at me and said, "I scared you, huh!"

Our first visit was the Orange Empire Railroad Museum. This is a terrific operation encompassing trolleys, interurbans, narrow gauge steam, an archives building, a Harvey Girls museum and standard gauge class 1 railroads, mostly diesel.

We successfully found PE business car 1299 converted from a former Portland Red Electric. We also viewed former PE Hollywood car 717, which ran on Portland Traction for a time. Our search for the former Red Electric box motor was not successful. It was in the "way, way back" and the museum people were not sure if it was covered. We rode two LA narrow gauge streetcars, 3001, a pre-war PCC and 1201, a 1920's steel street car. We also could have ridden behind a fully restored SP GE U25B as well as a San Diego light rail unit of relatively recent vintage now retired. The breadth of the collection is massive particularly in the Pacific Electric and LA street railway areas. We spent most of the day there and as a result ran out of time to hit our second destination, the Pacific Railroad Society in San Dimas.



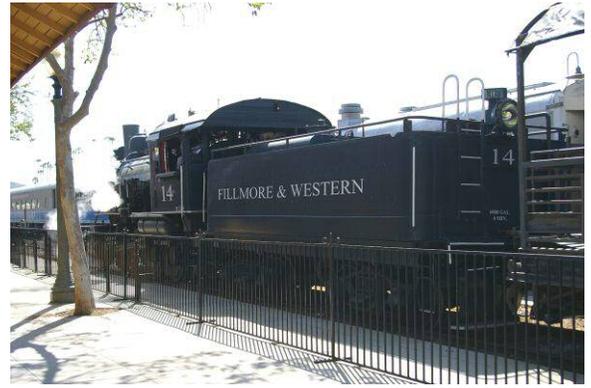
Stuart Adams and Bill Hyde in the Dining Car



At the Orange Empire Railroad Museum



On Sunday, we headed out to the Fillmore and Western in Fillmore for Steam Railfest. The railroad is a favorite for shooting movies. The most recent was the Lone Ranger movie with Johnny Depp as Tonto. As you drive into town, you pass a fake tunnel built for that film. They also have two fake steam locomotives built as movie props. However, they have one operating engine, Number 14, a 2-8-0, Baldwin 1913, originally from the Duluth and Northeastern. We had bought tickets for a one hour train ride out past miles of nursery stock and mostly fruit orchards heavy with oranges, lemons and avocados. However, we were in for a surprise. We were talking to a group from the local rail group that was putting on the festival when they found out we were from



No. 14 at the Fillmore and Western



Portland. It turned out their fireman on 14 was our old friend J.J. Thompson, who has visited us many times in the archives looking for bridge plans on the Oregon Coast Scenic. J.J. is a regular on the OCS and came down just to do this job. The train ride was great and we got to meet a number of interesting

people on the packed train.

On the return trip the plan was to visit Travel Town in Griffith Park, but two other stops got worked in, the Rancho Camulos Museum, a beautiful 1853 Spanish land grant rancho preserved in its natural state with 100 foot palm trees and many historic buildings. The other side trip was Griffith Park Observatory. Travel Town was a disappointment in that so much of what is preserved there is in bad shape, in need of cosmetic restoration.

On Monday, we returned our car and walked the short distance to Angel's Flight. It is beautifully restored and a fun ride up and down Bunker Hill. Almost next door is the old Pacific Electric subway terminal. The station and tunnels are still intact under the building. They were featured in the Amazon series BOSCH, season four, along with Angels Flight. There are occasional underground tours. Then we headed for the Grand Central Market, an LA institution featuring many places to eat or buy various ethnic foods and spices. Across the street from the back entrance of the market is the Bradbury Building. It doesn't look like much from the outside, but go into the lobby and be amazed. It was built in 1893 and has been used in numerous movies and TV shows. There were numerous foreign tourists taking pictures along with us. I first remember seeing it in the original Blade Runner.

Our final stop in downtown LA was the Pacific Electric Building at sixth and Main. Back in the day the red cars entered and exited through the giant portal on Main. Behind the building was a multi-track 2nd floor elevated terminal.

The elevated structure is gone, but from Main, the building looks the same. This leads to the "French Dip Challenge".

Two restaurants claim to have invented the French Dip sandwich, the aforementioned Phillippe's and Coles in the basement of the PE building which has been there since 1908. Coles has ambiance befitting its age. It even has an old speakeasy room that opens at 7 PM. It has a special booth that was LA gangster, Mickey Cohen's, private booth. We got that, big enough for six.

I had the same meal at both places. The meat and roll were equally good. Coles gave you a cup of au jus with your sandwich. At Phillippe's, you have to order it dipped the way you want it because they don't give you extra juice, points for Coles. Phillippe's has a better selection of pies, points Phillippe's. I am a sucker for pickled eggs. The eggs at Coles were exceptional. I had



A View of Tehachpi (Photo by Bill Hyde)

two they were so good, points Coles. Beer was a push. Railroad connection, both have it, but Coles is so much stronger, points Coles. Coles wins!

There are easy bus connections from LAUPT to LAX. We were back in Portland by 7:30 PM. The LA area has many options for a rail fan including the many metro lines. We only had time for a few after a great train ride down. A good time was had by all, but we wish we had made it to San Dimas. By all means visit Olvera Street, Phillippe's and Coles if you are in LA.



PNW RAIL NEWS

by Arlen L. Sheldrake



Through its partnership with the National Park Foundation, Union Pacific will build on its legacy of supporting travel to the western National Parks by encouraging young adventurers to explore America's national parks. Union Pacific's partnership supports the National Park Foundations Open OutDoors for Kids program, which connects kids to parks. The railroad's support will provide national park experiences for thousands of students across the 23 states where Union Pacific operates. This is a multi-year, \$3 million partnership with the National Park Foundation. **www.up.com 4/28/2018.**



BUILDING AMERICA

Union Pacific pulls locomotives out of storage, adds employees to 'overload' part of congested network. Some 650 locomotives are being pulled out of storage with additional staffing to 'overload' the southern part of its network, particularly in Texas in an effort to ease railcar congestion there. **Omaha World-Herald 4/27/2018.** [A local railroad owner has used the term "constipated" to describe the current UP railcar situation.]

To learn more about the Albany & Eastern Railroad suit against the state of Oregon for being excluded from Connect Oregon funds go to the AERC web site: **albanyeastern.com.** On the web site is the April 11th AERC press release and the U.S. District Court filing.



There are several train magazines available for free in digital form to Multnomah County Library and Fort Vancouver Regional Library cardholders. Both libraries access the magazines through RBDigital'sZinio service.

- Multnomah County has: Trains, Model Railroader, The Railway Magazine, and Heritage Railway. See: multcolib.org/resource/rbdigital.
- Fort Vancouver has: Trains, Classic Trains, Rail Express, and Model Rail. See: fvri.org/resources/magazines-newspapers.

Multnomah County Library cards are free to residents in many areas outside of the county – see: multcolib.org/library-cards-non-residents. Fort Vancouver Regional Library cards are also free to residents in many areas outside of the district – see: fvri.org/other-libraries. **Information supplied by Michael Byrnes 4/28/2018 & 5/13/2018.**

BNSF's Vancouver, Washington, Yard is one of the busiest in the Pacific Northwest and a major hub for freight and passenger trains. For decades, it was also a choke point. In 2016, BNSF completed a 10-year construction project to address these constraints. Given the number of outside parties and the need to maintain full-time train operations, the Vancouver Bypass team had to overcome unique challenges and requirements. The work included significant civil work, constructing 3 miles of new mainline track, reconstructing nearly 8 miles of yard track and building a new highway overpass. Today, what was once a 10 mph single track route is now a double, 25 mph signalized track lead, significantly improving throughput and velocity of freight and passenger trains. **Railway, The Employee Magazine of Team BNSF Spring/Summer 2017.** [Old information but I thought interesting.]



Some more information about the MAX TriMet improvements that were completed in early May. The work was done on SW 18th and included replacing the concrete blocks under the roadway that were installed with spring-clips, insulated plates and bolts, with asphalt filled in between the rails. Over time this asphalt has broken down, and that resulted in that side-to-side movement. The swaying movement can cause mechanical issues with our trains. The rails were replaced and fitted into pre-formed rubber jackets. Then concrete and special type of grout, which are more durable than asphalt, was filled in between the rails. This all will hold the rails in place better. Crews also replaced outdated switch machines and improved the drainage underneath them. The size of the drainage pipes underneath was also increased. **How We Roll 5/2/2018.**



TriMet is launching a major elevator improvement program to upgrade or replace 19 elevators throughout the system during a multi-year, \$22 million project. The project includes elevators on the MAX Blue, Green and Red lines in northeast Portland. The project begins May 17 with the elevator at the NE 60th Ave MAX station. This elevator has been in service since the MAX Blue Line began service in 1986, 30+ years ago. This is the first of three MAX stations that will undergo upgrades this year with 3 to 5 elevators upgraded each year in the coming years. The elevators at NE 82nd Avenue and Hollywood/NE 42nd Avenue Transit Center are next in line. **TriMet News 5/1/2018.**

On Friday, April 13th, the Coos Bay Rail Link (CBR) reported that the Coos Bay Swing Span Bridge failed to complete its rotation to return the bridge to the open to river navigation position. On April 15th, the Port staff, CBR, and outside engineers and a local marine towing company moved the bridge to clear the channel, with restrictions, for navigation. On April 16th crews completed efforts to safety rotate and secure the bridge to its fully open position, restoring full maritime traffic, south of the bridge. Since the major structural failure on April 13th, Coos Bay Rail Link has embargoed the line south of the bridge. Preliminary repair estimates are in the low millions but no timeline has been set yet on when repairs will be made and rail traffic will resume. There are currently 47 railcars and one locomotive stranded on the “wrong” side of the bridge. Four of the railroad's 11 customers are severed from direct rail service. AAR Embargo Details: CBR000118, Effective Date: 4-18-2018, Expiration Date: 4-16-2019; Destinations: North Bend, Coos Bay, Coquille. **Port of Coos Bay 4/16/2018 news release, RAILINC AAREmbargo System, & Bob Melbo 5/2/2018 email.** [Two timber approaches, the north approach is 315' and the south approach is 555', in between are 12 steel trusses totaling 2,168', with the mammoth swing span adding another 458' in total bridge length. Total length = 3.055', built 1914. Bridgehunter.com]

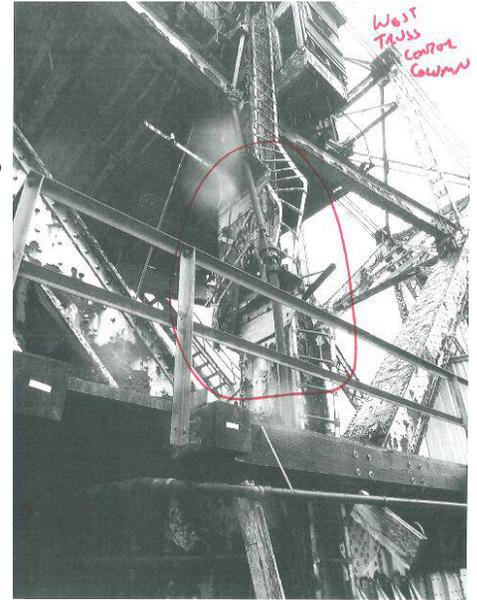


Photo of the Bridge, West Side Center Column, April 13, 2018

The Oregon International Port of Coos Bay and our engineering consultants have completed an analysis of the failure and are finalizing a construction plan to get the bridge back in working order. At this point, we are expecting a three-month time frame to conclude the repairs needed to get the bridge back to operational status. While the ultimate cost of repairs is not yet known, the Port will cover expenses by leveraging funding already in place to execute the required repairs. In a true sense of community, there has been a great deal of hard work done by the Port, Jordan Cove and local rail shippers to quickly stand up an interim solution connecting local shippers to the national rail network and ensuring ongoing production of Coos Bay products. Thanks in large part to Jordan Cove who have provided a site to facilitate an intermodal transfer area to be used as an interim solution until the bridge is operable. [Jordan Cove is located on the North Spit and is a proposed LNG terminal location.] **Port of Coos Bay 5/3/2018 news release.**



Roseburg Forest Products is in development of its own permanent trans-load site as a precaution to the Coos Bay Swing Span Railroad Bridge not getting repaired. In fact, Roseburg Forest Products started the trans-load site development some 60 days prior to the April 13th bridge failure just in case of this type of problem. The Port anticipates repairs are still 90 days out as the problem resolution is still in the engineering phase. **The World 5/11/2018.**



Transload decision down to Millersburg or Brooks. Proposals to develop intermodal transload facilities in Millersburg and Brooks will move forward to the planning phase according to Matt Garrett, director of the Oregon Department of Transportation. Both the Millersburg and Brooks proposals will now get planning money and will be eligible to have ODOT staff work with them on their actual proposal. The Albany-Millersburg Economic Development Corp. wants to develop the 190-acre former International Paper plant in Millersburg. The location already has a 60,000-square-foot warehouse with rail siding and Interstate access at its door. The property is next to 135 acres of property already zoned for industrial uses that is owned by the city of Millersburg. The Brooks project would be sited on land owned by NORPAC and near Antique Powerland, which has 62 acres north of Brookdale Road and 19 acres near Portland & Western rail line in Hopmere. **Albany Democrat-Herald 2/21/2018.** (insert connectoregon.logo)



Red Rock Biofuels has received final approval to start building a renewable-biofuels plant in south-central Oregon; Lakeview. The facility is expected to convert forestry waste into renewable fuels for the aviation industry. Construction is estimated to take 18 months, with operations planned to start in 2020. **Herald and News 4/16/2018.**



TransLink on April 30th released details of the \$7.3 billion investment in Metro Vancouver's [Canada] transit and

transportation system through the Phase 2 Investment Plan. Phase Two of the 10-Year Mayors' Vision for Transportation includes significant increases to bus and SkyTrain service as well as construction of two new rapid transit projects that have been in planning stages for years. The Investment Plan includes:

- Extension of the Millennium Line and construction of 6 new SkyTrain stations along Broadway from VCC-Clark to Arbutus Street.
- Construction of the Surrey-Newton-Guildford LRT Line along 104 Avenue, City Parkway and King George Boulevard.
- Planning and design for Surrey-Langley rapid transit.
- 108 new SkyTrain cars for Expo and Millennium Lines, as well as 95 replacement cars for the existing fleet.
- Increase Expo and Millennium Line service during rush hours, mid-day, and weekends starting in 2019.
- Increase Canada Line service during rush hours, evenings, and weekends starting in 2020.
- Modernization of Expo-Millennium Line infrastructure including upgrades at Brentwood and Burrard Stations.
- Plus other bus, pedestrian and cycling improvements.



TransLink 4/30/3018 news release.

The following is from a February 6th letter from **Hamilton Construction Company** to the City of Sherwood regarding the Portland & Western Railroad (PNWR) Trestle, Bridge 758.47 Westside Subdivision:



Photo of the Trestle Construction

- The work being performed is for a private entity (PNWR) and the construction of the bridge will be performed within the existing railroad right-of-way. The right of way is owned by Union Pacific and has been leased to Genesee & Wyoming (GW). GW operates on this rail line as PNWR.
- GW is responsible for the maintenance of the property under this lease. Therefore, they are required to replace the bridge that burned down.
- The Federal Rail Administration (FRA) requires that all new structures are built to current freight rail standards. This means the new bridge has to be capable of carrying Cooper E-80 loading. Union Pacific additionally requires that all new bridges be built according to their standards. Timber construction is not recognized as part of these standards. Also as a side note, new wood railroad bridges are not built anymore. We do repair them from time to time, but the industry quit building wood bridges.
- As all of the construction is being done within the railroad right of way and is being done in a manner that has no negative impact to the wetlands, we have been issued notice by the USCOE to proceed with construction. The new bridge will have less impact to the flood plain than the previous bridge.
- We have installed access to the existing bridge end of the east side. We will begin mobilizing materials and equipment to the site in the next couple of weeks. We currently anticipate construction to begin the week of March 5th. Construction will take approximately 5 to 6 months depending on pile driving conditions.
- We will be driving steel piling during this process. We will be working 5 days per week, 8 to 10 hours per day depending on schedule. I would expect that pile driving will occur roughly once per week and will last for one to two days each time.



[Hamilton Construction, based in Springfield Oregon, also did the BNSF Washougal River Bridge Replacement project in Camas, Washington that began February 2015 and was finished December 2017.]

Oregon Operation Lifesaver has a new director. Long time director Claudia Howells retired at the end of 2017. Steve Kreins, who works for Union Pacific Railroad in emergency response education, has taken on the role. Thanks to **Terry Kimzey** for this information.



BHP Billton Canada Inc. (BHP) is evaluating a development at the Port of Grays Harbor in Hoquiam, WA for a potential potash export facility. Subject to regulatory and BHP project approvals, the project would redevelop the existing Terminal 3 industrial site to unload and store potash that would be transported to the site via rail from the potential Jansen Potash Mine in Saskatchewan, Canada. The potash would then be shipped to international markets on built ocean-going vessels. The Jansen Potash Mine is expected to produce upwards of 8 million tonnes per annum (Mtpa). The following site and construction activities are planned at the Port:

- Rail improvements, including a rail loop to accommodate an 8,500-foot train, with two inbound tracks, one

outbound track, and one circulation track.

- Railcar unloading facility, including receiving gates, hoppers and railcar unloading facility.
- Potash storage building.
- Conveyors, dust collectors and other transfer facilities.
- Marine ship loading structures and ship berth.
- Dredging to accommodate construction of new berth pocket.



Work has been on-going to develop the Jansen Potash Project mine (about 140 kilometers east of Saskatoon) in Canada. Information from: www.bhpbilliton.com. [The Port of Grays Harbor is served by Puget Sound & Pacific Railroad.]

The replacement Gideon Overcrossing bicycle/pedestrian bridge has been funded by the Federal Transit Administration. The estimated \$7.5 million project will extend from SE 14th Avenue across both MAX and Union Pacific tracks to connect with SE 13th Place in Portland. The original wooden bridge was torn down for the MAX Orange line construction and the replacement awaited approval to use the remaining funds from the Portland – Milwaukie light rail project. Construction is anticipated to begin in the fall of 2019; it will be a 103-foot truss bridge like the existing SE Lafayette pedestrian/bicycle bridge. **The Bee May 2018.**



Despite promises, little progress on reviving the dormant Vancouver Island railway. There may be a new government, but the discussion over Vancouver Island's 234-kilometre rail line remains the same. The E&N Rail Line, which stretches from Victoria to Courtenay (with a midpoint extension to Port Alberni) has sat dormant since 2011, despite public ownership of the tracks and land. Despite promises the new government has not made any progress. It has been seven years since passenger trains ran on the Esquimalt & Nanaimo Railway line on Vancouver Island. **CBC News 5/10/2018.**



White Pass and Yukon Route Railroad upgrades safety infrastructure following 2017 rockslides. Last year, two rockslides came down right beside Skagway's largest cruise ship dock. The second slide on September 5th overcame the existing 6-7-foot hillside net. The new net is 35 feet tall and channels rock fall into a catchment basin. The 2017 rock slides almost came up to the dock. In addition to the much larger net, the company installed survey markers to monitor movement of the mountain. **KHNS 5/10/2018.** [Not many places in this world exist anymore where one can walk off a cruise ship and walk directly onto a passenger train.]



On May 17th the Washington State Parks and Recreation Commission voted unanimously to rename the cross-state trail from John Wayne Pioneer Trail to Palouse to Cascades State Park Trail. The state purchased the trail corridor from the Chicago, Milwaukee, St. Paul and Pacific Railroad in 1981. The trail goes from North Bend and ends at the Idaho border near Tekoa, Washington. However, the Washington State Parks and Recreation Department does not own all sections of the trail. The Department of Natural Resources owns some sections as do private landowners. The Iron Horse State Park is between 100 and 200 feet wide; the roughly 10-foot-wide John Wayne Pioneer Trail was contained within the middle of this state park. **The**



Spokesman-Review 5/18/2018.

A quarter-sized sensor installed on the Union Pacific tracks near Weatherly, about 30 miles southeast of Baker City, is the newest technology designed to reduce the risk of a railroad accident. The device is called SensorX. UP crews are installing 200 of the sensors in the Pacific Northwest as part of a test group. The goal, according to Aaron Hunt, director of public affairs for Union Pacific, is to eventually install these sensors every two miles along the track. The tiny device was developed by UP engineers as a more manageable version of Machine Vision, a scaffolding structure containing lasers, high-speed cameras, heat sensors and thermometers that collect data as trains pass by. When train cars roll over a sensor, it records vibration, load, and rail wheel information. The sensors require proximity to a signal hut and positive train control antennae. **Baker City Herald 5/18/2018.**



The stack of legal briefs supporting a federal lawsuit over a proposed coal terminal in Longview continues to grow.



The Association of American Railroads filed an amicus brief May 15 arguing that state regulators' denial of permits for Millennium Bulk Terminals' \$680 million export facility represents an illegal attempt to limit rail traffic. And the Western States Petroleum Association filed an amicus brief May 16 arguing that a series of permit denials have contradicted federal polity by threatening to

disrupt the sale of U.S. Energy to the nation's allies. The associations join a list of groups supporting the project that includes Cowlitz County, four national trade associations and the states of Montana, Wyoming, Utah, South Dakota, Nebraska and Kansas. At full buildout, the terminal would move up to 44 million metric tons of coal from mines in Montana and Wyoming to Asia through the site of the old Reynolds Metals Co. aluminum plant in West Longview. That would result in about eight 1.5-mile-long trains passing through the city every day, according to the project's final environmental review. The terminal would boost U.S. coal exports by 40 percent. **The Daily News 5/17/2018.**

One of the stories we Docents tell our visitors at the Oregon Rail Heritage Center when talking about the steam locomotive OR&N 197 is how the city of Portland became known as the City of Roses. While officially the City didn't adopt the nickname until 2003, the serious planting of roses began in the City ahead of the 1905 Lewis & Clark Centennial Exposition as City leaders asked everyone to plant roses in front of their Victorian-era residences. The nickname can be traced directly back to this very successful planting effort. The 197 was purchased by the OR&N to help pull the passenger loads for the Exposition. Madame Caroline Testout: *The Rose That Made Portland Famous*; this exhibit continues at the Oregon Historical Society museum through June 17. **The Oregonian 5/20/2018.**



Memories (*mostly positive*) of the 2005 NRHS convention, *Go By Train*, hosted by the Chapter, were refreshed with the PRPA Spring 2018 newsletter, *Whistle Up The Columbia*, cover photo showing the SP&S 700/SP 4449 eastbound double header event trip to Wishram. The SP&S 700 led eastbound, the SP 4449 westbound. While the picture isn't captioned, it certainly is the Chapter's convention trip and reminds me of how the rail groups came together for this epic adventure called a NRHS convention.

The annual report from the Northwest Seaport Alliance (Seattle & Tacoma ports):

- \$75,278,008,817 in total value of two-way international trade.
- No. 1 = China \$32.8 billion, top international trading partner.
- No. 2 = Japan, \$16.7 billion.

Value of international imports = \$58,318,133,546. Value of international exports = \$16,959,875,271. **Northwest Seaport Alliance 2017 Annual Report.**



Portland Streetcar sees record ridership in April. The 16,650 weekday riders in April set a record for the city's 17-year-old system. The previous highest average weekday ridership was 16,351 in February 2017. Daily ridership averages by line: NS Line = 9,226; A/B Loop = 7,424. The Streetcar averaged on-time performance of 84 percent in April. **Portland Streetcar 5/15/2018 news release.**

Oregon Public Broadcasting on May 22 did a video shoot at the Oregon Rail Heritage Center. The purpose of the shoot was to tape fund raising segments for the June 5th fund raising appeal during the showing of the **Best of Trains Around North America** segment. The OPB producer, Lisa Grace, camera man, sound man, make up lady and grip along with the series creator Robert Van Camp were a pleasure to work with and watch "perform" their duties. Robert is quite the rail fan and rail car owner. This segment airs on OPB TV June 5th from 8 to 10 pm.....check out the backgrounds as the fund raising appeals run. The ORHC working museum facility was provided to OPB at no charge and was closed for the shoot as most sounds including the MAX crossing signals are a bother for video taping.



Many thanks to *Trainmaster* Editor T. Trent Stetz for putting together the 8-page *Zooliner* 60th Birthday special edition of the *Trainmaster*. Copies will be available to the public at the Chapter booth during the birthday party at the Oregon Zoo on June 9th. One of the next major tasks that the Chapter's Zoo Railway Task Group will be meeting with the Explore Washington Park board of directors to see how we can cooperate to get the railway again operating to the Rose Garden. The task group believes the Zoo Railway is a major tourist attraction and can provide much needed transportation capability within Washington Park.



As the weather gets better, many get out for activities including road trips. On May 27th Rita and I again visited Maryhill Museum...Sam Hill's most interesting mansion in the Columbia River Gorge. Many interesting facts surrounding Sam Hill and the building.....one is Queen Marie of Romania dedicating the Maryhill Museum of Art on November 3, 1926 and her 85-person retinue arriving via seven private rail cars donated by officials of various railway companies at the Maryhill station (**HistoryLink.org Essay 5318**). While the history is great, taking a break with a nice beer on the outside deck overlooking the Columbia River watching BNSF and UP trains is hard to beat.

May Membership Meeting Minutes

Pacific Northwest Chapter - National Railway Historical Society

Held on May 18, 2017

The May, 2018 meeting was called to order at 7:35pm by President Keith Fleschner.

President Fleschner called the membership attention to the fact that George Hickok was in good enough health to attend the meeting.

The minutes of the April meeting were called. Bryan Ackler made a motion to approve the minutes, Doug Auburg seconded and the membership voted to approve the minutes.

There was no Treasurers report.

Ron McCoy again had a sign-up list for those wishing to purchase a new name tag. Mr. McCoy then announced that the chapter has been invited to participate the 60th Anniversary of the *Zooliner* Train and the Washington Park and Zoo Railway on June 9, 2018. He is looking for volunteers to help with our display from 10:00am to 4:00pm, or any part of that.

Dave Larsen advised of the Great Oregon Steam-up, July 28-29 and August 4-5, 2018. He is requesting volunteers to help at our concessions tent. Please contact him if you can help, at larsen.david47@gmail.com.

President Fleschner announced that Amtrak has lowered their restrictions on private rail excursions that are more than one single trip. There is a Travel America excursion now operating but it does not stop in Portland. He also reminded the membership that Portland Train Day is tomorrow.

Mark Reynolds announced that our 'donated' building is on the way from Michigan.

Bob Wyant reported that the Union Pacific has announced that the Big Boy will be out soon on tour. The meeting was adjourned at 8:00pm.



Dick Raub Provided the Presentation



George Hickok at the Meeting!



Lila Stephens Provided the Snacks

Jean Hickok announced that today is the birthday of George Hickok, and after we sing Happy Birthday to him she will cut the birthday cake.

Snack time was again provided by Lila Stephens. Thank you again. REMINDER: Please contribute \$3 to the "Kitty" for the snacks. Thank You!

The program for the evening was presented by Dick Raab, who showed slides of his recent trip to India with emphasis on the railroads.

Very interesting and informative. Thank you Dick

Respectfully submitted by Jim Hokinson, Secretary



Powerland Heritage Park
Home of the Great Oregon Steam-Up

Join the Chapter at the 48th Annual Great Oregon Steam Up on **July 28-29** and **August 4-5**,
Celebrating Garden Tractors and Foreign Tractors this year!



Bruce Strange at the 2017 Steam-Up Chapter Booth

Contact Dave Larsen (Larsen.David47@gmail.com) to volunteer at the Chapter Booth!

UPDATED HOME FOR THE OREGON PONY



The pavilion in Cascade Locks for the 1861 *Oregon Pony* is in the process of getting a needed update. (Photo by T. Trent Stetz)

LENDING LIBRARY AND ARCHIVES at Portland Union Station Annex at NW Irving and 5th Ave will be open Saturday, June 16th afternoon. The Library and Archives is also open every Monday from 10:00 AM to 1:00 PM. (Not open on major holidays). See thousands of books, periodicals, Books and videos are available for member check-out. Catalog on chapter website.



Bill of Lading

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President	Keith Fleschner	503.516.9272
Vice President	Mark Reynolds	503.638.7411
Treasurer	George Hickok	503.649.5762
Secretary	Jim Hokinson	503.635.4826
National Rep.	Al Baker	503.645.9079

Chapter Directors-at-Large

Phil Barney (2nd Term)	2016-2018	503.706.0498
Chuck Fagan (1st Term)	2016-2018	
Bryan Ackler (2nd Term)	2018-2020	503.246.2165
David Cautley (2nd Term)	2018-2020	503.631.7516
Rolf Schuler (1st Term)	2017-2019	503.285.7941
Bruce Strange (1st Term)	2017-2019	503.901.7815

Committee Chairs

Activities	Ron McCoy	503.310.4811
Archives	William Hyde	503.666.5530
Auditor	Bob McCoy	360.459.3251
Car Host	Mark Reynolds	503.638.7411
Concessions	Dave Larsen (Acting)	
Chapter Rep., Oregon Rail Heritage Foundation		
	Keith Fleschner	503.516.9272
Chapter Rep. Powerland	Mark Reynolds	503.638.7411
Elections	Jim Loomis	503.253.3926
Excursions	Vacant	
Flanger Restoration	Phil Barney	503.706.0498
Library	Bruce Strange	503.901.7815
Meeting Programs	Al Baker	503.645.9079
Membership	Lila Stephens	503.246.2165
Rolling Stock	George Hickok	503.649.5762
	Keith Fleschner	503.516.9272
Chief Mech. Officer	Peter Rodabaugh	503.701.7040
Car Rental Agt.	Bob Jackson	503.231.4808
Safety Officer	Keith Fleschner	503.516.9272
S-2 Restoration	Mark Reynolds	503.638.7411
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PACIFIC NORTHWEST CHAPTER TIMETABLE N^o. 671

Membership Meetings: St. Mark's Lutheran Church, 5415 SE Powell Blvd. 7:30 pm
Guests Most Welcome! Chapter Meetings held on the 3rd Friday of each month.

June 15: *F Units in Action:* This video documents the rise and fall of some of the most successful diesel locomotives in railroad history. These are the machines that convinced the railroads to convert from steam. Hear about the breakthroughs that led to EMD's success and see these pioneering diesels in action.

July 20: *Do you have a presentation for the Chapter?*

Forward program ideas to Al Baker, 503.645.9079 or albaker33@comcast.net

Board of Director's Meetings: **Jun. 07,** Thursday, Oregon Rail Heritage Center, 2250 SE Water Ave, 7:30pm
Jul. 12, Thursday, Oregon Rail Heritage Center, 2250 SE Water Ave, 7:30pm
(Open to all Chapter Members. Note **Location** for Chapter Board meetings)

NOTABLE NON-CHAPTER EVENTS:

☆ ☆ ☆ ☆ ☆ ☆ ☆ 2018 ☆ ☆ ☆ ☆ ☆ ☆ ☆

Jun. 6-9 *Friends of Burlington Northern Railroad Convention*, Aurora IL, www.fobnr.org

Jun. 9 *Zooliner 60th Anniversary Celebration*, Oregon Zoo, 9:30am to 6pm
www.oregonzoo.org/zooliner

Jun. 16 *Trains In The Garden Summer Tour*, Rose City Garden Railway Society,
www.rcgrs.com

Jun. 25 – Jul. 1 *Train Mountain Triennial*, Chiloquin OR, www.trainmtn.org

Jul. 1.4 & 15 *Clamshell Railroad Days*, Ilwaco WA,
www.columbiapacificheritagemuseum.org

Jul. 18-21 *Union Pacific Historical Society Convention*, Olympia WA, www.uphs.org
(joint w/Milwaukee Road)

Jul. 28-29 *Great Oregon Steam-Up*, Powerland Heritage Park,
www.antiquepowerland.com

Jul. 29-Aug 5. *RailCamp Northwest*, www.nrhs.com/program/railcamp

Aug. 4-5 *Great Oregon Steam-Up*, Powerland Heritage Park,
www.antiquepowerland.com

Aug. 7-12 *NRHS Convention*, Cumberland MD, www.nrhs.com

Aug. 17-19 *Snoqualmie Railroad Days*, Northwest Railway Museum, www.railroaddays.com

Sep. 7-9 *SP&S Historical Society Convention*, Chehalis WA, www.spshts.org (tentative dates)

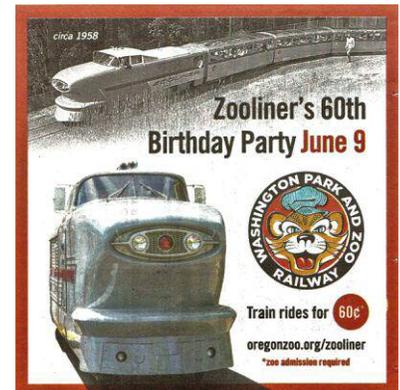
Sep. 12-15 *NP Railway Historical Society 2018 Convention*, Tumwater, WA, store.nprha.org/2018-convention

Sep. 15-19 *GN Railway Historical Society 2018 Convention*, Bellingham, WA, www.gnrhs.org

Oct. 12 *Fall Colors Train*, Sumpter Valley Railroad, www.sumptervalleyrailroad.org

Oct. 13 & 14 *Photographer's Weekend*, Sumpter Valley Railroad, www.sumptervalleygnrhrailroad.org

Oct. 31 – Nov. 3 *SP Historical & Technical Society Convention*, Monterey, CA, sphts.org



PNWC – NRHS MISSION

To preserve and interpret Pacific Northwest railroad history and historical artifacts for the education and enjoyment of current and future generations.

The Celebrating 60+ Years Trainmaster

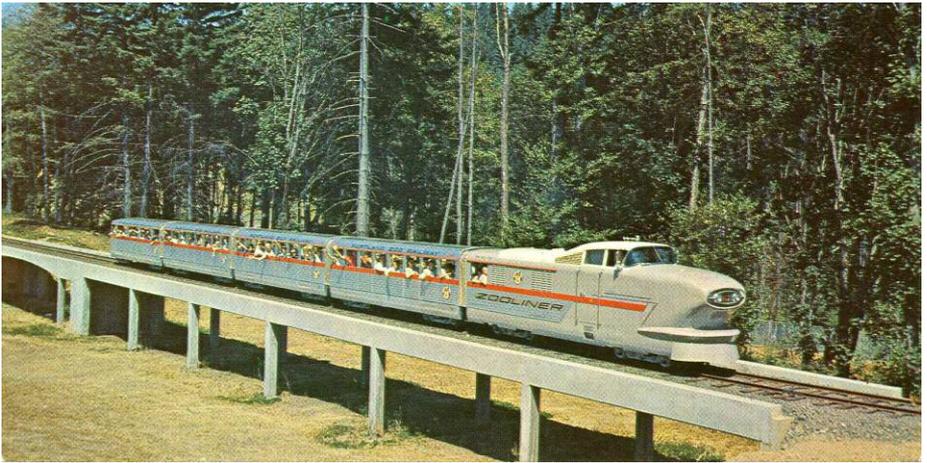
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JUNE 9, 1958 - JUNE 9, 2018 60TH ANNIVERSARY OF THE ZOO LINER WASHINGTON PARK AND ZOO RAILWAY



1960s Postcard View of the Zooliner
(Published for Portland Zoological Society by Colourpicture Publishers, Inc)

When plans were unveiled for the 30-inch gauge line, train fans from around the region pitched in with suggestions, fund-raising efforts and manual labor. The initial planning group included members of the Pacific Northwest Chapter of the National Railway Historical Society, the Columbia Gorge Model Railroad Club, and the Pacific Northwest Live Steamers.

The Portland Zoo Railway began operation on the first section of track on June 7, 1958 with the *Zooliner*, the first train. The *Zooliner* is still used as the primary train. In 1960, the 1.5 mile extension to Washington Park opened. The line was surveyed by the Southern Pacific Railroad and was constructed with the help of the Spokane, Portland and Seattle Railway (now part of the Burlington Northern Santa Fe Railway) and the Northern Pacific (now Portland) Terminal Railroad Company. The Union Pacific hauled 40 rail cars of ballast donated by the school children in Prineville, Oregon at no charge. In 1978, the railroad was renamed Washington Park and Zoo Railway when the

City of Portland turned over operation of the zoo to the Metropolitan Service District (METRO). This name better reflects the service provided by the zoo railway.

The diesel-powered *Zooliner* was built in 1958. A 5/8-scale replica of General Motors' *Aerotrain*, the engine's original 140 horsepower (now 165 hp) was transmitted to eight driving wheels through a hydraulic-type torque converter transmission and spiral gears. These gears were replaced with bevel gears in 1962. Safety features include a "deadman control" to ease the train to a halt in an emergency. A governor at one time held the train to its current 12-mile-per-hour maximum speed. A conventional automatic air brake system updated in the mid 1980s to a two-line truck air brake system provides safe train handling. The rearmost car was rebuilt in late 2005 to resemble a dome car, in connection with installation of a larger and more powerful wheelchair lift.

In the summer of 1959, the Portland Zoo Railway operated trains at two different sites. The *Zooliner* and the steamer *Oregon* were used on a temporary railway line on the grounds of the Oregon Centennial Exposition.

The railway extension to Washington Park to the new station near the Rose Gardens was opened on May 28, 1960. The last revenue train to Washington Park ran on Sept. 23, 2013.

The current route within the zoo opened in Nov. 22, 2014 for ZooLights.



The crew from the Hirschberger Company standing in front of the newly built *Zooliner* coaches. Waldo Hirschberger at the far left, Jerry Hirschberger at the far right.



Construction of the *Zooliner* locomotive at the H. Hirschberger Company. The *Zooliner* was designed by Northwest Marine Iron Works and built by Hirschberger, both of Portland. Outshopped in 1958 as the passenger workhorse, the *Zooliner* was, and is, a popular attraction on the railroad. The train was modeled after the General Motors *Aerotrain*, which at the time was projected to be the passenger train of the future. It was not successful, but the *Zooliner* was, and is. Above and below: Construction photos at the H. Hirschberger Company.



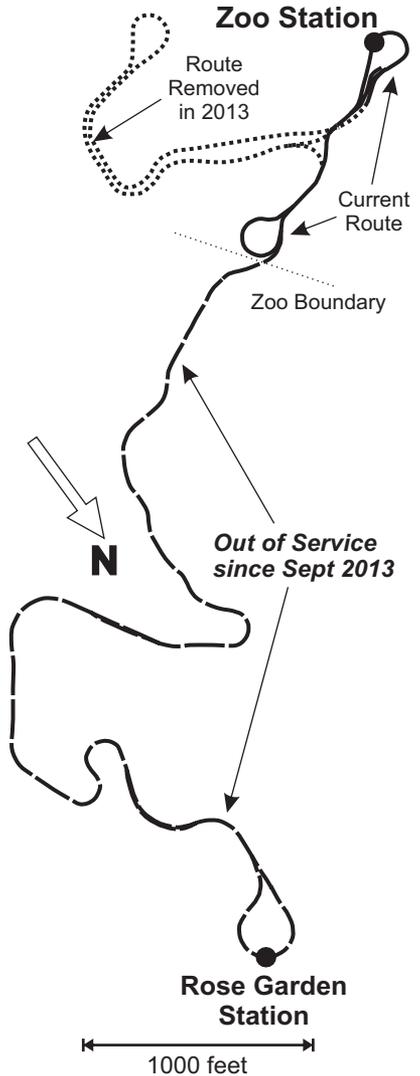
THE ROUTE OF THE WASHINGTON PARK AND ZOO RAILWAY



Laying the track in the spring of 1958



In May of 1958, crews are ballasting and tamping the new track where the train station would later be built. In the background is a flat-bed tractor-trailer truck from Northwest Marine Iron Works delivering the trucks (wheel sets) for the entire *Zooliner* train. Just beyond the tractor can be seen the "construction train."



The route of the Washington Park and Zoo Railway as it existed previously and today.



Delivery of the Zooliner to the new zoo railway. The locomotive is sitting over the service pit, still used today, adjacent to where the tunnel and shops would later be built.

The zoo was far from complete in 1958, but the railroad started carrying passengers in June and continued through the summer season. Approximately 200,000 fare paying passengers were carried in three months. - Edward M. Miller



The *Zooliner* was a big hit from the first day it started running in 1958. Look at all the people waiting to ride the new train! Also notice what you don't see, parts of the new zoo yet to built; the feline building (replaced by Stellar Cove), the permanent train station, the entry plaza to the right, and the hill covering the railroad tunnel and shops to the left.



The dedication of the Portland Zoo Railway and the new *Zooliner* on June 9, 1958. John H. "Jack" Jones is presiding. Mr. Jones was General Manager of the Northern Pacific Railroad Co. of Portland and President of the Portland Zoo Railway.

SPECIFICATIONS FOR THE *ZOOLINER*, AS BUILT IN 1958:

Designed: by John Flaschner of Northwest Marine Iron Works, Portland. Modeled after the General Motors *Aerotrain* from a concept suggested by Waldo and Jerry Hirschberger. Approximately one-half (5/8) the size of standard American trains. Mechanical portions of the train and base frames built by Northwest Marine; Coach work by H. Hirschberger Company. Built in 1957-58 from City of Portland funds. Cost: Design = \$5,487.64; Construction = \$97,030.80; Modifications = \$11,896.71; Total cost = \$114,415.15.

Locomotive: Length, 23 feet, plus bellows (diaphragm), 23 feet 6 inches. Width, 6 feet plus slight flare in forward portion; height, 6 feet in rear, up to 7 feet 3 inches at cab. Weight, 15,830 pounds. Blinker type headlight. Powered originally by 140 hp diesel, later changed to 191 hp General Motors truck engine with automatic gear shift. Four axle drive. Required about 15 gallons of diesel oil per operating day.

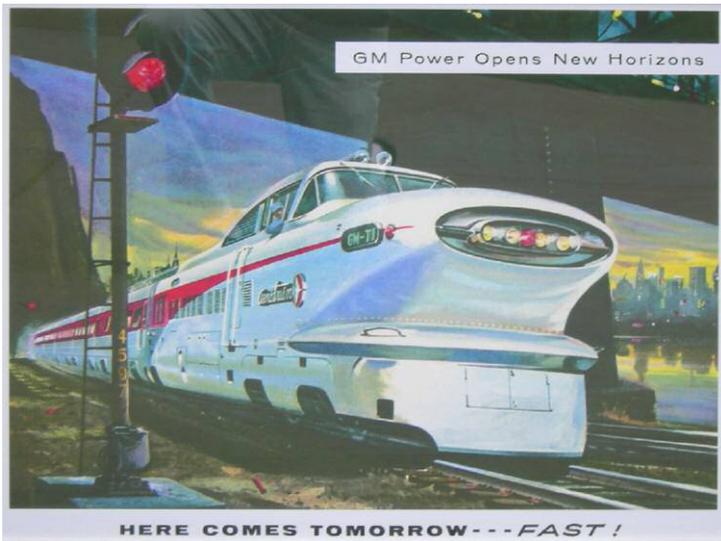
Coaches: Steel frames (16 gauge steel box section), aluminum formed siding. Coaches 21 feet 2 inches long plus 13 inches accordion diaphragms; 5 feet wide; 6 feet 3.5 inches height. Tops, plexiglass in frames. Seats 57 inches wide, 20 inches deep, 8 inches off the floor, backs 32 inches. Each coach has eight seats. Seats back to back in rear (club) car, seats in other coaches face forward. Backs of all seats, 32 inches. Club car has three windows, 25 inches long, 18 inches high. Other cars have eight windows 25 inches long, 18 inches high. Finished in floor covering. Doors at each seat; original power locks replaced with hand lever pulled to open. Color, aluminum. Weight of coaches, 7,200 pounds each.

- Four cars – each 21 ft long, 8 ft high; Capacity = 24 adults or 32 kids.
- Train capacity = 96 adults or 132 children. Train length = 122 ft
- Drum brakes = stock truck equipment; original drum type brakes later changed to shoe brakes.
- Wheels = 16 inch diameter. Track gauge = 2 foot 6 inches (30 inches).
- Couplers are standard American railroad design supplemented with safety chains.
- First public runs = June 6-7, 1958 carrying 6,085 paying passengers.

The *Zooliner* at the train station. In 1958, the station consisted of a wood-decked platform, a small wood ticket booth, and a refreshment shack. A permanent station featuring glue-lam arches was completed on this



site in 1960. The arches outlived their life span and were removed in the mid-1990s. The current station was built on the same site in 2015.



This advertising poster illustrates General Motors' *Aerotrain*. Two trainsets were constructed in 1956 and were touted to be the future of passenger train design. Like all of GM's body designs of this mid-century era, this train was first brought to life in GM's Styling Section. Chuck Jordan was in charge of designing the *Aerotrain* as Chief Designer of Special Projects. It utilized the experimental EMD LWT12 locomotive (U.S. Patent D177,814), coupled to a set of modified GM Truck & Coach Division 40-seat intercity highway bus bodies (U.S. Patent D179,006). The cars each rode on two axles with an air suspension system. The two Aero trains logged over 600,000 miles. Unfortunately, the train didn't capture the public's imagination and production ceased after the first two demonstrators. The *Zooliner* of the Washington Park and Zoo Railway, patterned after these trains, has far outlived the service life of its prototype and continues to be a highly successful transportation vehicle.

HAPPY 60th! Congratulations to the Oregon Zoo and METRO for providing this wonderful, now sixty-year-old, attraction. In many ways, the Pacific Northwest Chapter, National Railway Historical Society (PNWC-NRHS), grew up with the zoo railway. The Chapter was formed in 1955 and shortly thereafter began work helping to develop the zoo railway. We are very pleased to be a part of this special "Diamond" anniversary celebration and fully intend to be a part of the 100th anniversary, as well. Please join us in thanking the Oregon Zoo management and the METRO Council for their continued support of this important Oregon asset. Learn more about the PNWC-NRHS at www.pnwc-nrhs.org. Our thanks to Jeff Honeyman, the late John Labbe, and the late Lloyd Graham for providing these historical images of the Zoo Railway, and to Glen Comstock and Bill Hyde for locating many of them from the PNWC-NRHS archives for this special edition.

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