

# TROLLEY FARE

Volume 66 Number 3

July-August-September 2019



August 9, Commissioner Larry Maggi drives the first Golden Spike to kick off the dedication ceremony for the new Fairgrounds platform.  
Bill Monaghan photo

## Fairgrounds Platform Golden Spike Ceremony

By Scott R. Becker, Executive Director

The sounds of golden spikes being driven into new oak crossties could be heard ringing up the Arden Valley on August 9 as the completion of a new trolley platform and bridge over Arden Creek was celebrated! A large number of dignitaries were there including Senator Camera Bartolotta, Washington County Commissioners Larry Maggi, Diana Irey Vaughan and Harlan Shober as well as representatives from the Washington County Agricultural Fair, Pennsylvania Department of Transportation, and Pennsylvania Trolley Museum. This 3-year 3-phase project involved a tremendous effort by PTM Volunteers and Staff, Washington County Planning Commission, Pennsylvania Department of Transportation and the Washington County Fair Board. Over 5,500 man-hours (and woman-hours!) were invested in the project by PTM volunteers in the design of the project, the preparation of Museum-furnished

materials, the demolition of the old overhead trolley and signal systems, the oversight of work performed by Washington County contractors, the construction of the new overhead trolley line system, the construction of the signal systems, the installation and tamping of the ballast stone, and other miscellaneous support to the project. Special recognition goes to Larry Lovejoy, PTM's Director of Engineering, who was involved every step of the way through both the Phase 1 Bridge and Phase 2 Platform aspects of the project. Special recognition also goes to Bill Piper who volunteered to be on-site during the Phase 1 Bridge portion of the project and to Kevin Zebley who spearheaded the power & signal portion of the Phase 2 Platform project. Special thanks to Washington County for seeking the funding for this project and to Washington Auto Mall for sponsoring the lunch following the event!



Fairgrounds Platform Artist's Rendering Craig Thorpe Artist

We are now working on Phase 3 which will see the installation of a Canopy over the south end of the new platform. This will provide all weather protection for our visitors taking the trolley to the Fair and would utilize three of the historic Pittsburgh & Lake Erie Canopy Supports that were donated to us earlier this year. We recently were awarded a \$10,000 grant from the Fairbanks-Horix Foundation bringing us to approximately \$31,000 raised of an estimated \$73, 000 needed to complete the project. The canopy supports have been carefully cleaned and painted by Camber Corporation and we expect them to be installed at the Fairgrounds Platform soon. The roof portion will be done as we raise funds; all donations large and small will be appreciated!



A Barry Stout memorabilia display was presented by family friend Kacey Miller at Barry Stout Day. Scott Becker photo

We had a second celebration on Saturday September 14 which we dubbed Barry Stout Day. Thanks to a generous donation by Bill Stout, a brother of the late Senator J. Barry Stout, we had free admission all day and a special presentation and tour for prospective donors to the future Barry Stout Park. This park and playground area is planned to be located between the Trolley Display Building and to-be-built Trolley Street. There will be a children's play area patterned after trolleys; gazebo and benches where people can relax; and a sculpture in memory of Senator Stout commissioned by his brother Bill. Barry Stout Park will be a fitting reminder of this ultimate community supporter

# TROLLEY FARE

is the quarterly publication of the Pennsylvania Trolley Museum Inc.

1 Museum Road, Washington Pennsylvania 15301

Phone: (724) 228-9256

Fax: (724) 228-9675

Email: ptm@pa-trolley.org

Online: patrolley.org

(ISSN 1041-9632)

## OFFICERS 2019

President:	Chris Golofski
Vice President:	Laura A. Wells
Treasurer:	Joe Stelmack
Corporate & Recording Secretary	Ralph Ciccone
Controller & Membership Secretary	Walt Pilof

## TRUSTEES:

Dennis Bockus.....	Robert Scott Davis
Jack Demmyan.....	Arthur W. Ellis
Robert A. Frank .....	Jim Herrington
Bob Jordan .....	Jeff King
Armand Latour .....	Ed Moraczyszk
Tom Sterling.....	Kevin Zebley

Voting members in good standing are invited to attend Board of Trustees meetings which are held on the fourth Wednesday of each month. Meetings are held in the Events Room at the Pennsylvania Trolley Museum and begin at 7:00 PM.

## DEPARTMENT MANAGERS

Archives & Publications .....	Christopher Walker
Archivist Emeritus.....	Edward H. Lybarger
Buildings .....	Mary Jordan
Chief Electrical Engineer .....	Dennis Bockus
Education & Interpretation.....	Mike Ziviello
Engineering.....	Lawrence G. Lovejoy P.E.
Grounds, Way & Track .....	Daniel J. Bower
Mobile Equipment.....	Dave Hamley
Newsletter Distribution & Pre-press .....	Cindy & Bruce Wells
Operations .....	Kevin Zebley
Power & Signals.....	Robert Scott Davis
Restoration and Shops.....	Bruce Wells
Trolley Maintenance.....	Bernie Orient

## STAFF:

Business Manager .....	Kris Rosenwald .....	businessmanager@patrolley.org
Development Assistant.....	Jessica Garda.....	development@patrolley.org
Educator .....	Sarah Lerch.....	education@patrolley.org
Education-VSM Assistant .....	Kristin Fredricksen.....	assistant@patrolley.org
Executive Director .....	Scott R. Becker .....	director@patrolley.org
Museum Host & Store Specialist.....	Diana Myers .....	store@patrolley.org
Visitor Services Manager .....	Madelon Cline .....	visitorservices@patrolley.org
Volunteer Coordinator .....	Kaylee Horvat .....	volunteer@patrolley.org

## Annual Membership dues:

Family \$75      Couple \$60      Regular \$40      Associate \$30      Student \$20  
Address changes should be directed to: businessmanager@patrolley.org



## Mission Statement

The Mission of the Pennsylvania Trolley Museum is to communicate the story of Pennsylvania's Trolley Era to a diverse audience through the preservation, interpretation and use of its collection of electric railway and railroad equipment, associated artifacts and photo/document archives, to ensure that visitors have an enjoyable and rewarding educational experience.



Stout Family photo September 14.

*Scott Becker photo*

who did much to improved quality of life in Washington County. Plans for the park were presented to the group and a nice luncheon was donated by The Spring House.

Our "On Track for the Future" Capital Campaign continues to roll down the tracks! I am very pleased to report that the 20th Century Electric Railway Foundation has made a \$1,000,000 gift to the Campaign! This new unrestricted gift is on top of their previous \$250,000 gift for the naming rights to the Theatre in the new Welcome & Education Center. Our heartfelt thanks go to them for their many years of support and for this tremendous gift! We have now surpassed the Allegheny Foundation's Challenge Grant goal of \$3,500,000 nearly sixteen months ahead of their deadline!

Behind the scenes work on developing our East Campus Development continues at a rapid pace. PTM Volunteers and Staff are working diligently with a team of consultants led by LLI Construction (our project manager) to get this important project moving along. This team includes Desmone Architects, Allen & Shariff, Gateway Engineers and Mackin Engineering who are developing design work for key elements: Barry Stout Park, Trolley Street and the Welcome & Education Center. Fund raising continues for various aspects of this project and we hope to have plans & specifications completed soon. Work also continues with the Carnegie Science Center to develop interactive STEM exhibits for the Welcome & Education Center and the Trolley Display Building. We are most appreciative of a \$25,000 grant from the Washington County Tourism Promotion Agency to assist with this effort! We also thank Koppers Industries for donating all the switch timbers and



Cutting Ribbon for the new bridge.

*Scott Becker photo*

railroad ties needed for both Trolley Street and track maintenance. This complements generous donations by Koppers some 20 years ago of the poles and ties needed for the track extension to McClane Loop and the Trolley Display Building. Thank you Koppers Industries for your continued support!

We are very pleased to announce that three informational kiosks were installed in the Trolley Display Building in September and Exhibit Partitions. Please see Sarah Lerch's column for more details on this important visitor upgrade. Funding was provided in part by The Remmel Foundation through PNC Charitable Trusts, Allegheny Foundation and from the Pennsylvania Department of Conservation and Natural Resources, Bureau of Recreation and Conservation, Environmental Stewardship Fund, administered by the Rivers of Steel Heritage Corp. Funding was also received from the PNC Charitable Trust and the Allegheny Foundation. Carrie Wardzinski, our new Archives Manager and Research Librarian, was instrumental in helping to get this project finalized. Carrie is part time and is assisting Sarah in seeking archival material for use in developing exhibits. Please see Carrie's Archives article where she will give her insight into our collection. As we wind up our 2019 season, I would encourage you to support your trolley museum. We have made wonderful progress and are really poised to make tremendous progress with the future opening of the Welcome & Education Center. There are two ways you can help: through financial contributions and by volunteering. Please consider being more involved as we move into the 2020 season. I wish you all the best during the Holidays! 

What's new at the Trolley Museum? If someone were to ask that question, I wouldn't know where to begin. Others have covered a lot of what's been going on elsewhere in this issue. But, let me add a few items of my own.

When you leave the Visitor's Center/Store, and follow the "Blue Line" toward Richfol, one of the first things you'll see is the "Welcome" sign. You may not pay too much attention to this small detail, it's been there forever. That's the problem, it's been there forever and it was in sad condition.



*Michael Buchta (right) directed Eagle Scouts on the project.*

Michael Buchta, one of our very active volunteers, high school student, member of the Chartiers High School Band, Eagle Scout, PTM Shop volunteer, conductor, tour guide, greeter, store salesperson, maintenance equipment operator apprentice, future operator and probably a few other positions that I've missed. His Dad, Dave and a group volunteers constructed a new sign and installed it as part of Michael's Eagle Scout project. This minor, perhaps insignificant detail is part of the big picture. Being one of the first things our visitors see, it's a very important part of the overall impression they have of our operation. A job well done, thank you.

County Fair 2019 has come and gone, and what a week it was. For a change, we were blessed with good weather for most of the week. The Operations Department did an outstanding job of moving visitors from our parking lots to the fair. The new platform got its "Baptism by Fire", and handled the crowds with ease. At one point, we were operating seven cars with four cars staged at Fairgrounds to handle the crowds. Everything went as smooth as silk and the professionalism of everyone involved was very impressive, another outstanding job by our Operations Team.

If you've been to the Museum since the last issue of Trolley Fare, you may have seen some new faces. First, is Carrie Wardzinski, our new Archives Manager & Research Librarian, who came on board after the articles were submitted for the last issue of Trolley Fare. Carrie manages our Archives Department and spends most of her time at Eaton, but does make an occasional appearance at the main campus. In addition to archives management, she is assisting Sarah Lerch with developing the new exhibits for the East Campus. The other new face



*Thank you Dennis, for **Everything** you do!*

you may have seen is Kristen Fredriksen, another new staff member who is our Events & Programs Assistant. Kristen comes to us from Georgia where she worked at the Southeastern Railway Museum and the Delta Flight Museum. Kristen is working with Maddy Cline, our Visitor Services Manager and Sarah Lerch, our Educator. Welcome to both of our new part-time staff members!

I would also like to welcome Kathy Sabol to the Pennsylvania Trolley Museum. Ms. Sabol was appointed to fill the vacant community member seat on the Board of Trustees. She comes to us with a very impressive resume as Executive Director of the Washington County Bar Association and has considerable experience in the management of non-profit organizations. In the short time Ms. Sabol has been with us, she's proving to be a real asset. Welcome aboard!

I would like to thank Dennis Cramer who is retiring from the position of Chief Instructor. Dennis has done a great job over the years leading our instruction / dispatch team. Dennis plans to concentrate on working in publications. You may still see him helping out as a dispatcher or operator when needed. Thank you for a job well done.

The results of the 2020 Board of Trustees election are in. Bob Jordan and Scott Davis are rotating off due to reaching their term limits. Thank you both for all your hard work and effort over the years! Current members Jeff King and Laura Wells

were reelected to serve another three year term and, I welcome new members to the Board, Walt Pilof and Don Bailey, congratulations! These new Board members will be seated at the December 2019 meeting and serve through 2022. 

## The Heyday of Exhibits

If you have visited the museum recently to see Buddy the Dinosaur, pick a pumpkin, or take a guided tour, you may have noticed some new changes in the Trolley Display Building! Magic Lantern, a local exhibit company who specializes in audio and visual arts, recently installed three video kiosks in the Trolley Display Building. These new exhibits feature short videos that utilize historic images and film to delve deeper into the Trolley Era.

Learn about the evolution from animal powered wagons to horsecars on iron rails and finally the electric streetcar that quite literally got society out of the mud. See the impact of the trolleys on society during the heyday of the Trolley Era through historic film and popular cartoons like the "Toonerville Trolley" and television shows like "Mister Rogers"

Sarah Lerch, Museum Educator



*End of an Era kiosk.*

*Scott Becker photo*

Neighborhood." Listen to Judy Garland sing "The Trolley Song" and the clank of the automobile assembly line that brought steep competition to the streetcar industry. Is the Trolley Era truly over and what might the future of electric transportation look like? Next time you're in the TDB, come find out!

The new exhibit kiosks are an example of the future direction of exhibits at the Pennsylvania Trolley Museum. In conjunction with the Carnegie Science Center, PTM is working to create interactive exhibits designed to spark interest about the Trolley Era and learn about the past, present, and future of public transportation.

The Museum is continuing our partnership with the Carnegie Science Center to develop new exhibits for the planned Welcome & Education Center. The first of six phases of this process, Master Development & Design, during which we determined the main themes for the exhibits, the interactive components, and the overall design approach including materials, cabinetry, signage, and text panels, has been completed. Throughout this process, we carefully selected the stories and themes for each interactive based on history, culture, and STEM-standards. We are now on the second phase called Fabrication Drawings and Prototype Development, which will explore the design of the interactive to ensure ADA-compliance and evaluate the activity and message of each exhibit. This phase has just gotten underway and runs until next August. Ultimately, we anticipate upwards of 15 interactive exhibits that include the trolley simulator and focus on the starting, running, and stopping of the trolley.



*Out of the Mud: From Horsepower to the Electric Age kiosk.  
Scott Becker photo*



*Heyday of the Trolleys: This kiosk resides near the 15" gauge Toonerville Trolley PTM acquired in 2013. Bruce Wells photo*

Each exhibit will explore a different aspect of trolley technology and history to provide an overview of the Trolley Era and the evolution of transportation. Additionally, we will have a History Wall which will include a timeline of the Trolley Era with informational text panels, video screens, and artifacts. We also will be revamping exhibits in the Trolley Display Building to further showcase Trolley Era history.

The Video Kiosk project was completed in partnership with the Rivers of Steel Heritage Area.

## **New Year's Resolution- VOLUNTEER!**

As the end of the year nears, it brings with it promises of positive change and productivity. The New Year suggests the excitement of new beginnings, and many make goals to better themselves. What better way to check all the boxes of positive change, productivity and self-betterment than by volunteering? By volunteering you not only provide services to those in need, you gain benefits to your physical and mental health, learn new skills, and meet people with similar interests.

One of our very own volunteers, Art Ellis, who turned 100 in November, attributes his volunteer experience at the Museum to helping keep him going and retaining some purpose in life. We cannot thank Art enough for sharing over half of his life with the Museum, and we are so glad that volunteering at the Museum has had such a positive impact on his life.

The New Year is the perfect time to get involved with the Trolley Museum as a volunteer. The Year 2020 brings with it promises of positive change, productivity and self-betterment as the Museum looks forward to starting the new facilities at the East Campus. PTM relies on the time, dedication, and skills of many volunteers to keep its everyday operations going.



Ned Apalakian and Ron Ivanick are Clevelanders who are actively volunteering to return Shaker Heights Rapid Transit to its original appearance for display at the TDB.

Funding was provided in part by a grant from the Pennsylvania Department of Conservation and Natural Resources, Bureau of Recreation and Conservation, Environmental Stewardship Fund, administered by the Rivers of Steel Heritage Corp. Additional funding generously provided by the Remmel Foundation through the PNC Charitable Trust and the Allegheny Foundation. Special thanks go to Magic Lantern and PTM Archives Department: Carrie Wardzinski, Ed Lybarger, Chris Walker, and Archives volunteers. 

*by Kaylee Horvat, Volunteer Coordinator*

Whether donating a little time or a lot, every little bit makes a positive impact on your life AND the Trolley Museum's goals. One little thing everyone can do to make a difference, whether you have time to volunteer or not, is advocate for the Trolley Museum. Our supporters, members and volunteers are PTM's best advocates.

Mobile Equipment volunteer, Dave Hamley, began volunteering at PTM over 65 years ago due to friend and "enthusiastic promoter" of PTM, Lou Redman. Dave says Lou kept him interested in the Museum with "visions of great things to come." Likewise, Dave's friend, Dick Rhoton, recently became a volunteer based on a recommendation from Dave.

Sometimes the simplest acts can make the biggest impacts. It just takes a second to tell friends and family the "great things to come" at the Pennsylvania Trolley Museum. It just takes a second to share a Facebook post that the Museum is looking for volunteers. These small acts could make a difference in your life, in someone else's life, and at PTM. Make your New Year's resolution to volunteer and/or advocate for the Pennsylvania Trolley Museum today! Contact [volunteer@patrolley.org](mailto:volunteer@patrolley.org) for more information on volunteer needs. 



Operations is a great way to Volunteer. Ray Lonabaugh and Tom Pawlesh enjoy the day motoring and conducting on Pittsburgh Railways 4398. *Scott Becker photo*

Archives are an integral part of any museum, and the history of the archives at the Pennsylvania Trolley Museum upholds this statement. When the museum – then a trolley club – started in the post-war years, an archives grew organically alongside the museum. In those days founding member Mac McGrew was the archivist and the collection was stored in a room in the basement of his home. It contained items related to the trolley era, mostly things like photographs, books, and transfers. As the museum grew, so did the archives. Retirement and sale of the McGrew's long time home required that the archives move. Oliver Miller became archivist and the collection moved to the basement of a business in Canonsburg arranged for by Bill Fronczek. Sadly Ollie passed away in the mid-90s, his personal collection greatly boosted the archival holdings and the collection moved to the current space in the former RCA facility. Ed Lybarger and Scott Becker were instrumental in acquiring donation of this space and Ed undertook the duties of Archivist. Over the intervening years additional space was negotiated and currently it occupies approximately 9,000 square feet on two floors of the Eaton Crouse-Hinds building. We thank Eaton for continuing to make this space available to us!



Carrie Wardzinski, Archives Manager & Research Librarian shows off part of collaborative effort to provide images and scripts for the new video kiosks that were unveiled at the Trolley Display Building (TDB) prior to the Pumpkin Patch event.

And in the same way that the museum is continuing to change and expand, so is the Archives. There are preliminary plans to license an archives-specific database so that objects and collections can be added to it. This is huge because it will enable objects to be identified and found much more quickly. It will also allow us to determine exactly what we have in our archives. The sheer number of objects we have coupled with limited space necessitates that we know so we do not duplicate items and so we can actively seek out items that fill gaps in our collections. In the near future we also hope to put the archives and the museum on the same network. This will allow for more collaboration among staff and facilitate discovery of objects within the archives more easily.

Most people think of archives as a warehouse of fragile objects that can only be touched with white gloves and not readily accessible to the average person. Certainly, there can be an element of that when working with rare or delicate objects where longevity and preservation are of utmost concern, but archives were never intended to be private entities. Archives are the places where people go to gather firsthand facts, data, and evidence from letters, reports, notes, memos, photographs, and other primary sources. Our archives is no exception to this. It is one of the very few places where the history of the trolleys is kept, preserved, and given context. This means that anyone – from the average western Pennsylvania resident with passing curiosity to the professional historian or the GIS analyst looking for specific, firsthand information – are able to come to the archives for information. This also means that you, as a member, can (and should) use the archives. It does not matter if it is for personal or professional reasons; this is your personal invitation to utilize the archives in whatever way you want or need.

Something that the staff and volunteers of the archives are always eager to do is share interesting or unique objects or collections with the members of the Pennsylvania Trolley Museum. Trolley Fare is an excellent opportunity to share our treasures with you. Please look for articles in future issues to learn more about some of the treasures we have in the archives.

Each year the museum likes to bring something new to the visitor experience. We like to introduce new exhibit panels, fresh paint, and sometimes even new trolleys. This year, 2019, was one for the books in terms of new spaces, people, and items. We introduced the public to a re-merchandized Museum Store and a new floor and additional highchairs in the Events Room. But those items, while large in scale, pale in comparison to the three items I want to focus on in this spotlight.

### A New Room:

Many of you have visited during Special Events and found yourselves in the Trolley Display Building. This building is a jewel for the museum: housing more than 30 cars from our collection, and is a key in telling the story of the Trolley Era. Visitors are immediately immersed in a storyline of the trolleys typically in chronological order. Everywhere you turn you see the magnificent work that our volunteers and staff have done to preserve this beautiful collection. This is the reason that the museum wants to make sure that while visitors are enjoying their experience, we are also providing them with additional services that truly makes it a comfortable visit.

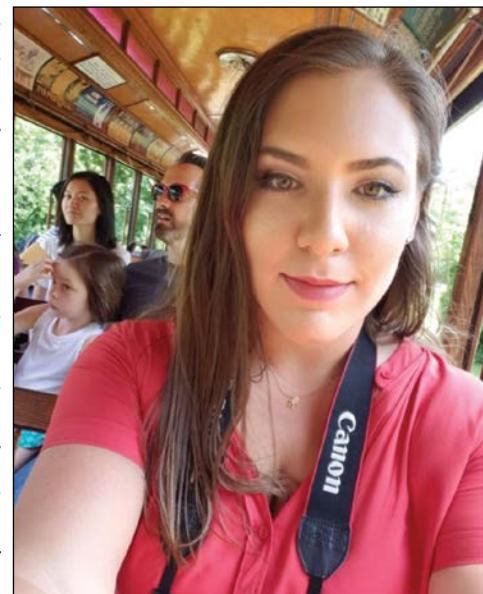
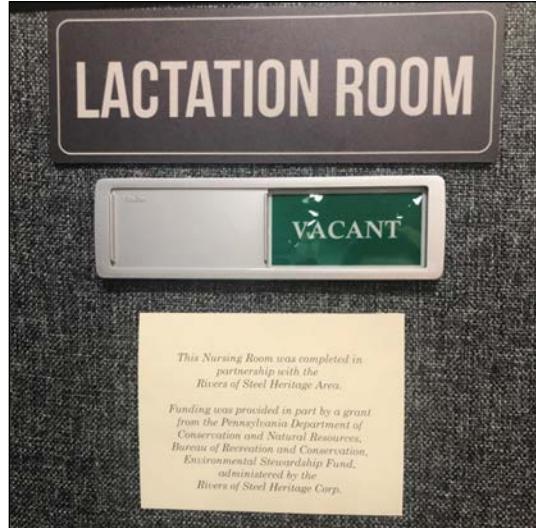
While the Trolley Display Building currently does not have restrooms, Ohio Valley Septic is generous enough to donate port-a-potties for our guests. We are beyond thankful for our community partnerships and how they allow us to enhance the visitor experience. That is why the museum was beyond ecstatic to learn in early 2019 that we had the ability to create a Lactation/Nursing Room in the Trolley Display Building. The room was completed in partnership with the Rivers of Steel Heritage Area. Funding for this room was provided in part by a grant from the Pennsylvania Department of Conservation and Natural Resources, Bureau of Recreation and Conservation, Environmental Stewardship Fund, administered by the Rivers of Steel Heritage Corp. When visitors walk in to the Trolley Display Building, they will at some point be greeted by large movable partitions that form the Lactation/Nursing Room. With the ease of having a mobile unit, the partitions can be placed in different areas allowing accessibility to different parts of the Trolley Display Building during special events and regular visitation days.

Within the Lactation/Nursing room, visitors have access to a comfortable rocker and matching ottoman. The room also houses a changing table, children's carpet, changing mat, trash receptacle, and hand sanitizer. We thank the Laurel Foundation for supporting the purchase of this equipment! As the Museum looks to the future, we will be excited to house a permanent Lactation Room in our new facility!

### New Faces:

In the past year, you have probably seen the museum staff grow quite significantly from four full-time staff and three part-time to now having our four full-time staff and seven part-time staff members. This year alone, we have welcomed a new Store Associate, Archives Manager & Research Librarian, Volunteer Coordinator, and most recently, the Events & Programs Assistant, Kristen Fredriksen.

Kristen is joining us from Atlanta, Georgia where she previously worked as a Museum Agent at the Delta Flight Museum and as the Media Coordinator at the Southeastern Railway Museum. Her passion for the world of transportation can be seen in several of her hobbies which include visiting transportation museums around the globe and learning about the Space Race. But her aptitude for this position does not stop there, Kristen is creative and her abilities can be found in her space related nail art blog 'Space: The Fine Nail Frontier'. This position will be working directly with the Museum Educator and Visitor Services Manager in developing new programs, growing our events, enhancing the visitor experience and much more. The Museum is very excited to welcome her aboard and greatly look forward to the future with her part of our team! 



## A New Sign:

As our guests walk into the Pennsylvania Trolley Museum, they are immediately greeted by a sign on the road, a “We’re Open” sign on the door, and hundreds of signs as they walk into our ticketing area. But one sign will stand out and that’s our new Welcome to the Pennsylvania Trolley Museum sign at the beginning of our walkway. As guests make their way to the platform to ride one of the Museum’s trolleys, they will immediately be greeted by the maroon sign with a flower bed at its base, a flower box at its center, and a well-constructed peaked roof. This was all part of Michael Buchta’s 2019 Eagle Scout Project. As a volunteer of the museum, Michael can commonly be seen in his Conductor’s uniform on a trolley, assisting visitors in the Museum Store, and in the Maintenance Shop. His passion for volunteering was one of the biggest contributing factors to why he chose to complete his Eagle Scout Project at the Pennsylvania Trolley Museum.

Michael Buchta originally approached the Museum during the summer of 2018 about his proposal to build a new Welcome Sign. The project proposal was later approved by the Boy Scouts of America and after several meetings with staff members and volunteers, the project got underway. The now completed sign is a beautiful addition to the Museum grounds. Thank you to Troop 1378 and Michael for building this sign!

As this article shows, 2019 was a great year for new things at the Pennsylvania Trolley Museum. We are beyond excited to see what 2020 brings to the museum grounds and thankful that you all are a part of our growth. If you would like to begin volunteering at the museum to help us accomplish more each year, please contact our Volunteer Coordinator, Kaylee Horvat at [volunteer@patrolley.org](mailto:volunteer@patrolley.org) 

## Philadelphia Notes

On July 10, between 5:00 and 5:15 pm, an outbound car became disabled in the subway at 36th Street Station, creating a backup in the tunnel. Cars that were still operating on the street were diverted to Market Street Subway Station at 40th and Market Streets until the tunnel could be cleared. Route 36 was closed on July 12 due to a water main issue on Elmwood Avenue between 61st and 62nd Streets. The line stayed down for much of August even after the break had been repaired because SEPTA began a job to replace the track and switches between Island Avenue and the entrance to Elmwood Car House. While the line was closed, regular subway service was maintained by operating extra Route 36 cars between Juniper Street Station and the 40th Street Portal, these cars laying over at the portal between trips. These cars accessed the tunnel via Island



Here are some more photos of sign construction activity and the finished product decked out for our Pumpkin Patch event.

Maddy Cline photo



By George Gula

Avenue and Route 11 (Woodland Avenue). Routes 11 and 36 ARE still detouring from Woodland and 49th via 49th Street and Chester Avenue to Woodland while a bridge over Amtrak is rebuilt. On the evening of August 25, a school bus traveling on 70th Street collided with a Route 36 eastbound trolley on Elmwood Avenue at 70th Street in Southwest Philadelphia. Two adults on the school bus and 12 passengers on the trolley suffered minor injuries.

Route 10 returned to rail operation around July 21 following the completion of new trackwork between Girard & Lancaster Avenues and 54th Street & Lansdowne Avenue. Immediately afterward, Route 15 PCC cars were withdrawn so the water department could perform major work along Girard Avenue at 26th Street. The cars were gone for much of August but had returned to service by August 26. Route



*SEPTA LRV 9094 has been decorated for Halloween by Callowhill Depot operator Gary Mason and his son Telvin. LRV 9094 is seen on route 10 at 63rd and Malvern Avenue*

*Bill Monaghan photo*

10 Kawasaki cars were moved from Callowhill to Elmwood Depot during this period. The PCC cars are approaching their 12th year in service, the amount of time that the Federal Government required them to be in service in return for funding their rebuilding, and there has been rumors and speculation on how long they may continue to operate beyond that period. On August 27 at about 2:00 p.m., The Greater Bible Way Temple, located at 52nd Street and Lancaster Avenue, caught fire and quickly became a multiple-alarm affair. As more and more fire trucks rolled up on the scene, 52nd Street was closed to all traffic, creating gridlock on nearby Girard Avenue just as Route 10 cars began detouring over Girard Avenue between Girard and 63rd Street. I personally watched the chaos as PCC's mingled with Kawasaki cars tied up in stalled traffic. As the blockade stalled rail equipment, SEPTA placed shuttle buses into service on both lines. This operation continued through much of the rush-hour until the massive fire could be contained. Starting Friday, August 9, 2019 at 10:00 p.m. and continuing until Monday, August 19, 2019 at 5:00 a.m., SEPTA began its annual Trolley Tunnel Blitz, working around the clock to accomplish critical track, power maintenance and upgrades, station upgrades and painting, tile replacement, and maintenance work; and intensive tunnel, track area, and station cleaning. This 10-day project will

be SEPTA's seventh consecutive blitz in the century-old, five-mile tunnel. Rather than complete the work intermittently, with 700 trolleys operating through the subway on an average weekday, SEPTA opts to shut down the tunnel for a sustained period, which SEPTA spokesperson Andrew Busch said is "the most effective and efficient way to do a large amount of work in a relatively short period of time. SEPTA holds the "blitz" in the summer because schools are out and it's the peak vacation season. But that leaves the 62,400 people who use it each workday in need of an alternative during the shutdown. Some are resigned to the inconvenience while others see it as a welcome change of pace.

This year, SEPTA is replacing curved rail along the eastbound and westbound sides of the Tunnel at 15th St and 36th Streets, and the eastbound side at the 40th St portal. A switch at the 40th St. Portal is also being replaced. An aggressive cleaning campaign that includes vacuuming the entire track bed and drainage system and power washing the entire track bed at all stations and all of the track right of way will be undertaken.

Old low-pressure sodium light fixtures will be replaced with new high efficiency LED light fixtures in the tunnel between 36th & 37th Street Stations, heavy cleaning, inspection, and maintenance will occur at all stations including plumbing, tile, railings



*Electronic signs allow for hacking to allow them to display routings from anywhere.*

*Bill Monaghan photo*

and partition screen repairs, general painting and graffiti removal will be performed and a major beam repair will take place at the 19th St. Station. Working in Conjunction with the Track Department, Communications and Signals will replace and upgrade track circuits and signal wires, inspect and complete maintenance on the entire signal system while replacing old incandescent lamps with new, higher efficiency LED lamps. C&S will also perform full maintenance on the track switches in the tunnel.

The agency also plans to remove almost a mile of retired steel piping and communications cable in the tunnel between 19th and 22nd Streets and replace about one quarter mile of old wood overhead protection boards with a new fiberglass protection board system between 19th & 22nd Street. Working in coordination with the Track Department, Power will replace and upgrade rail return wires associated

with the track work and will also perform heavy substation maintenance and cleaning, replace of all overhead section insulators in the tunnel and test and maintain the emergency lighting backup power generation system. A new leak prevention method will be installed and tested at two locations: near 33rd St. westbound and between the 36th and 37th Street westbound Stations and install shielding at the roof of the tunnel to support future improvements at the 30th Street Market-Frankford Station. The SEPTA Key project will be installing and testing equipment at 33rd, 36th, & 37th Street Stations.

The detours are the normal ones. All five trolley routes will be diverted to 40th & Market Street where riders can connect with the Market-Frankford Subway-Elevated system for rides to and from downtown. Tents will be set up as temporary shelters for transferring customers. 

## **Power & Signals Report**

*By Scott Davis*

Attention for the most part on preparation for Trolley St construction. Street lights, traffic signals, and safety island lights have been pulled from storage and are being gone over. In addition, parts are being ordered for overhead construction. Pole locations have also been staked, and poles laid out. Some of our readers may know that we received a donation of platform canopy parts

formally from the P&LE station. The first group of canopies will be installed at Fairgrounds platform. To help make overhead space for the equipment setting each vertical column, Kevin Zebley, Laura Wells and Jeff King moved the messenger run and lights were temporarily removed.

As usual, many thanks to those who regularly help out: Jeff King, Kevin Zebley, and Scott Davis. 



*Scott Davis took a break from his usual Power and Signal work to operate his favorite cars during County Fair when seven cars (at one time) were on the line to handle the large crowds at our McClane School Loop parking area.*

*Bruce Wells photo*

## **Electric Car Maintenance**

*By Bernie Orient*

I'll start out with the efforts on West Penn 832. A combined team of maintenance and restoration volunteers plus project Manager Bob Jordan and wife Mary, nine individuals in all, succeeded in installing all four newly re-worked traction motors. As I may have mentioned before the design of West Penn 832's trucks make it quite difficult to remove or install the motors from the top as we always have done with other cars in the fleet. So we simply reversed the plan used in the removal of three of the motors on February 22 this year. We pre-positioned the refurbished motors on the pit floor, two at a time with our mobile Pettibone Crane 029. Then we moved the motor-less trucks by hand over the proper motor, threaded the hook from the crane between an axle and the neighboring motor mount bar. We then used a "load-leveler" device borrowed from Art Rizzino, our air brake specialist, to help keep the motors aligned with the axle while positioning them in the truck. This scenario got us through the first two motors but the leveler failed on the third motor so the fourth lift was back to the seat-of-the pants method, rigging two slings progressively off-center until an acceptable yaw was achieved. All told we did the job with 57 volunteer hours. Throughout the following weeks

combined teams reconnected the wiring and brake linkages and the motors performed quite well on the first, of many, test runs on July 17. An annoying and moderately severe vibration occurred around full series. After considerable measurement, deliberation and contortions we removed some excess rubber dampers beneath the bolster internal leaf springs things smoothed out considerably. I added some isolation pads in the air compressor supports to soften the hard vibrations transmitted to the floor above. Other areas of remediation were the air valves on some door motors and a leaking dead-man due to accumulated debris within the valve body causing a valve not to seat.

On the very same day and hour of the above mentioned motor replacement, Pittsburgh PCC 1711 crippled at County Home siding. As all shop personnel were fully involved at the time Jeff King towed the car to the Area 31 pit and discovered the problem was a few welded accelerator drum contacts, which he easily rectified. 1711 is on the deferred maintenance list for a lower drum renovation this coming winter similar to what we accomplished on 2711 last season.

Amidst West Penn 832 activities Scott Becker reported odd gear noises from power to

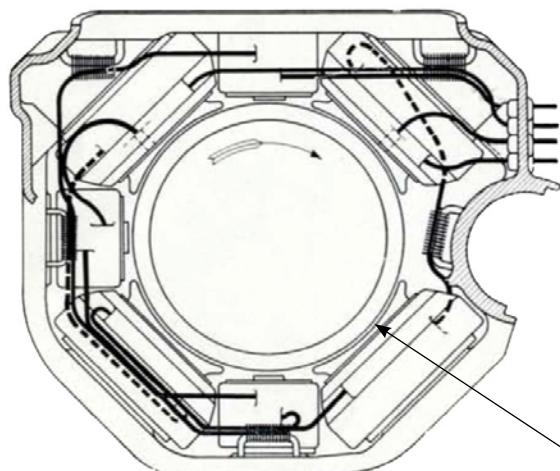
## Constructional Details



**Motor Frame Complete with Armature Bearing Housings Removed**

### Frame

The split between the axle cap and frame is at such an angle that the weight of the motor is largely taken off the axle-cap bolts.



**Cutaway shows close (1/8") proximity of armature and fields**

### Wiring Around Frame

Note the substantial manner in which the wiring is held by staples and cleats, preventing vibration and breakdown.

### Housing Clamping

The housing fits in a circular opening in the frame. It has a machined flange resting against a machined seat on the ends of the frame held by axial tap bolts.



**Sectioned Bearing Housing**

### Bearings and Lubrication

The bronze motor bearings are in dust proof housings on the shaft. Axle bearings will be furnished either in babbitted malleable iron or bronze. Oil and waste lubrication for both armature and axle bearings needs no further introduction, since the reliability and economy of this design has been proved many times.

*Details of traction motor construction.*

coast emanating from open car 1758. July 12 we removed gear case covers and found alarming vertical movement in all four motors, the worst by far being the #4 motor which measured 5/16" (at the outer end of the motor shaft). This indicated that the armature was dangerously close to bottoming out on the motor fields. Machinist Art Ellis subsequently double checked the motors, and concurred that this amount of movement was unacceptable and agreed that action was needed. July 27 the Trustees approved funding for the motor repairs and Art took on the job of rebuilding the two motors in house. With this we began the task of disconnecting brake rigging and motor lead wiring with father-son team of Matt and Quinn Basch tackling the unique "shepherd's hook" springs in order to clear our steel lifting beams. Ever since the outer steps on 1758 were installed

*Westinghouse Electric Corp.*

I have dreaded the eventuality of jacking the car but convinced myself it could be done without excessive disassembly. The trick was to slide the lifting beams between the upper step and the toe-kick board above the lower step. In reality, the toe-kick board was an afterthought on the renovation and it was located where it was convenient to fasten it and without precognition for the present predicament. But the plan did work and the car was jacked and motors 3 and 4 were removed on August 3 by myself and Eric Weinbrenner. The following week we returned the motor-less truck to the car and lowered the body and towed 1758 to the Area 31 pit until such time as the motors could be repaired. I should note that the car ran in service for only eight years but, of scant conciliation, it's been a bad run for traction motors at PTM.

Dump Car M551 replaced 1758 in the shop, as



John Habak, Fred Cooley and Bob Jordan testing West Penn 832 after successful installation of the motors.



Bob Jordan and Arthur W. Ellis. spent considerable time studying and adjusting the truck assemblies on West Penn 832 to determine the source of vibration.

Brian Hudson photo

an adventure that began on December 16, 2014 enters what will hopefully be its final chapter. M551's trucks had been “repurposed” for rebuild and use on the M283 crane car, mainly because the M551 trucks were in need of arch-bar, bolster and spring replacements, and the car sees very limited use. Other components, such as brake rods, air tanks and line switch were removed in addition to the trucks. M551 has spent the intervening years atop C50P high-floor trucks with its side-dump capabilities retained and had been unceremoniously towed about to mitigate natural disasters and some Fairgrounds ballast hauling. Many notes were taken at the time of the dismemberment some indiscretions were not memorialized. As mentioned in various newsletters, the trucks taken from M283 were known to us as not the original “fabric of the car”. One subtle though important difference is that former M283 trucks had bolsters that were flat or essentially at the same elevation as the top arch bar. This allowed scant room for the brake rigging which was, in itself, a “unique” design. We corrected this on the donor trucks with re-constructed bolsters having a five inch lift. So we were facing possibly a related issue with the flat-top bolsters not perfectly mating with the dump body frame. We noticed a failed lower center bearing, #2 end truck and replaced it with a weldment. While under M551 to confirm the fit of the product I noticed one missing nut of four on the upper center bearing assembly. Under the illusion that simple bolt replacement would be just that, I embarked on a six hour exercise to remove a like number of 5/8” bolts, the first two having come out easily. But alas, this well intentioned intervention led to the discovery of a failed upper center bearing casting on #1 end. For those

unfamiliar with center bearings they consist of two nesting castings, the lower one on the truck, a bowl-shape with a rectangular base, and the upper one on the car body frame, an upside-down bowl shape again with a rectangular base. Basically one fits inside the other and there is a large round steel bar (the “king” pin) that passes through both to help contain things under adverse conditions, like a derailment. Normally these items are a low maintenance system. We periodically jack cars and grease the bowls and check clearances at two year intervals. In the case of M551 an internal hub had broken from the main body in an upper casting and obvious only after disassembly. As time was becoming short for M551's shop stay I decided to stabilize the broken piece by fashioning a wooden doughnut piece that would confine the broken hub to its proper location. Fortunately, Groundskeeper Kate Imler had completed her vegetation control rounds for the day and tackled this task. We got the car lowered to the trucks on Sep. 11 and trimmed the side bolster plates to adequate clearances. By the end of this report period we had the jacks and beams pulled and the ladder steps repaired, extended by one rung each and installed on the body. Steve Hudspetch, Doug Kirkpatrick Jr and George Greenbaum took care of the welding and Brett Freithaler, Wayne Wicks and Ken Ringer did the installation. Both air tanks were hung under the car and pipe connections were progressing. The brake beams, rods and clevises have been detailed and are in the fabrication phase.

PST 66 was serviced in advance of Santa use. The center doors became a focal point as they had been slamming and not always closing properly. Bob Powischill adjusted all of the door motor stops to ensure no door went past the center of the opening.



*Eric Weinbrenner puts the finishing touches on the cab of Pittsburgh side dump car M551.*  
Bob Jordan photo



*The crew working on Pittsburgh dump car M551. L to R, Bob Powischill, Bernie Orient, Eric Weinbrenner, Fred Cooley and Ken Ringer.*  
Bob Jordan photo

He also added some shims under an upper door rail to relieve pressure and binding on a bottom track. I found discrepancies in the crank arm length of two door engines and evened them out which resulted in a much smoother operation for the combination.

We closed out the month and quarter with M283 crane car. Still apprehensive over the armature failure with 1758 I had all of the gear cases removed on M283 and checked for excessive clearances, which were minimal and acceptable. We also encountered some reverser problems that were attributed to some weak finger tensions. I'll be sourcing some new ones.

This year's County Fair epilogue reads quite positive. Cars 14, 1711, 4004 and 2711 saw little if any action. Everything else that ran, did so. There were some burned-out interior lights and one failed marker light. The only cripple was Pittsburgh 4145 which entered the fray mid-

week after a brake cylinder repair. The car failed to take power at Richfol after a non-revenue run. Unable to quickly effect repairs I resorted to the sticks-in-the line switch trick (it has a two in series arrangement) to move the car off the line on its own power. I diagnosed multiple minor issues with the low-current interlock at the bottom of the controller and a loose contact within the line switch. 4145 was back in the lineup within three hours. Another Pittsburgh car, 4398, ran until the last day of the Fair and received extensive controller service.

Activity on trolley pole base rebuilds has slowed. My records show there are only two Ohio Brass Form 11s (two spring) left to inspect, three Form 10s (four spring) and one Nuttall-US 13. One of the Form 10s has been completed and installed on car 14 and the second base is currently being rebuilt. The remnants of a seventh Nuttall US 13 base has been reduced to parts pending determination if repairs are feasible. The goal of having available reconditioned spares has been accomplished.

Winter is catch-up time for deferred maintenance. These are typically those items that can or have limped along for a while but would involve notable out-of-service time to accomplish. This year's list includes repairs to the mechanical door linkages on N832, accelerator drum repairs on 1711, and hopefully motor installation on 1758 open car, and much more on M551 should we run out of work. There is always room and tools for more hands! Join up with our home team of Fred Cooley, Eric Weinbrenner, Bob Powischill, Wayne Wicks, Ken Ringer and Brett Freithaler plus occasional pinch-hitters mentioned in the article.



*Dump car in the shop.*

## Remembering Tim Dailey

By Scott R. Becker

Long-time PTM volunteer Tim Dailey passed away on May 29th at age 60 after an illness. Tim was an active volunteer at the Museum going back to 1983. He served as the Grounds Manager and was manager of the Museum Store in the 1990s and played a major part in reorganizing the Museum Store. In addition Tim served in operations, special events as well as

Trolley Fare Design & Production Editor. Our thoughts and prayers go to Dan Bower, Tim's long-time partner who is also a long-time PTM volunteer and department manager.

You can recognize Tim's involvement at PTM when you visit the Pittsburgh History Center and stop by the PCC 1724 exhibit, where his image continues to greet visitors.



Dan Bower and Tim Dailey pose with PAT tamper 880 sometime in the 90s.

Scott Becker photo



**We Thank our  
Generous  
Corporate Sponsors!**



**Wabtec**  
CORPORATION

**South Hills**  
**Toyota**  
Washington Auto Mall 

**EPIC** | **METALS®**