

TROLLEY FARE

Volume 65 Number 3

July - August - September 2018



On Track for the Future

By Scott R. Becker, Executive Director

On Track for the Future is an apt headline this issue. President Bob Jordan is shown above receiving a \$25,000 check from Tripp Kline representing the Washington County Community Foundation (WCCF) on August 14. This capacity building grant enables PTM to hire the Carnegie Science Center to help with the final floor plan and exhibit design for our new Welcome & Education Center. We thank WCCF for their continued support.

This grant is very timely because on September 11, the Commonwealth of Pennsylvania announced that \$2,500,000 in Redevelopment Assistance Capital Program (RACP) funds have been awarded to our Welcome & Education Center project! With this grant, the On Track for the Future Campaign has now achieved over \$12.5 million toward an immediate goal of \$13.5 million to open the Welcome & Education Center for a complete visitor experience and to construct Trolley Street and the new access road.

A second phase goal of an additional \$3 million will further enhance the site's amenities. This grant is a culmination of a two-year effort by many people. Special thanks go to Governor Tom Wolf, Senator Camera Bartolotta, Representative Tim O'Neal, Washington County Commissioners Larry Maggi, Diana Irey Vaughan and Harlan Shoher, and DCED Secretary Dennis Davin. A tip of the hat goes to our campaign steering committee including Committee Chairman Ray Betler, Jim Roddey, and Tom Rooney. Significant assistance was received from consultants, Buchanan Ingersoll & Rooney, PC, and Teeter Associates.

Other recent grants include \$14,000 from The Treadway Foundation, \$10,000 each from the Apgar-Black Foundation and Rimmel Foundation (through PNC Charitable Trust), \$2,000 from Key Bank, and \$1,000 each from the Pittsburgh History & Landmarks Foundation and Tom E. Dailey Foundation. We also received some significant individ-

ual donations to the campaign and encourage you to contribute. All this support is matched dollar for dollar by the Allegheny Foundation!

The Museum's access road project took a dramatic leap forward this summer when a contract was awarded to Cast & Baker Corporation for its construction. They moved the project along smartly and it was largely complete by the end of September. The new Fairgrounds entrance bridge was put into service a few weeks before the Washington County Fair and work on the Fairgrounds Platform project also went into high gear as Museum volunteers removed trolley wire after the Washington County Fair ended. Contractor CH&D Enterprises, along with subcontractor Frontier Railroad Construction, removed track and the old platform. Special thanks to Larry Lovejoy and Bill Piper for many hours of work on both projects!

The Museum thanks the Port Authority of Allegheny County for its recent donation of the Kershaw Ballast Regulator M-4. This broad-gauge machine shapes and distributes gravel track ballast that lies under our rails. It is in good operating condition and was replaced at Port Authority by a larger new machine. We thank Frontier Railroad Construction for donating the transport of this equipment to the Museum. It will be very handy for our upcoming Fairgrounds Platform and Trolley Street projects!

I am very pleased to report that our new Trolley Operator Simulator exhibit has been placed in service! This is a state of the art exhibit that electronically interlocks an authentic controller and brake

stand into three video screens that are set in what looks like the end of a Pittsburgh Railways low-floor streetcar. This is a beta version of what will eventually be in our new Welcome & Education Center. It has been very popular with our visitors, both young and old alike, and we have done some special marketing for it. This exhibit is funded in part by Highmark Blue Cross Blue Shield and was designed and built by The Magic Lantern in Pittsburgh with help from Bob Jordan, Bruce Wells, Artie Ellis and Laura Wells. We encourage you to consider getting involved with your Trolley Museum.

Look for our year end appeal which will be in the mail soon. Your support allows us to maintain our operations and helps us to grow. We appreciate your continued support!



Art Ellis test drives the Trolley Operator Simulator.

Scott Becker photo

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 2018

President: Robert L. Jordan
 Vice President: Jim Herrington
 Treasurer: Joe Stelmack
 Assistant Treasurer: Mary Jordan
 Corporate & Recording Secretary: Ralph Ciccone
 Controller & Membership Secretary: Walt Pilof

TRUSTEES:

Dennis Bockus
 Robert Scott Davis
 Chris Golofski
 Lee Gregory
 Jeff King
 Tom Rooney

J. Bracken Burns
 Jack Demnyan
 Robert A. Frank
 Jim Herrington
 Armand Latour
 Tom Sterling
 Laura A. Wells

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 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 Cindy Wells
 Operations Kevin Zebley
 Power & Signals Robert Scott Davis
 Marketing & Development Tom Rooney
 Restoration and Shops Bruce Wells
 Trolley Fare Chris Walker & Bruce Wells
 Trolley Maintenance Bernie Orient

STAFF:

Business Manager Kris Rosenwald businessmanager@pa-trolley.org
Development Assistant Jessica Garda development@pa-trolley.org
Educator Sarah Lerch educator@pa-trolley.org
Executive Director Scott R. Becker sbecker@pa-trolley.org
Museum Host & Store Specialist Diana Myers store@pa-trolley.org
Visitor Services Manager Madelon Cline vsm@pa-trolley.org

Annual Membership dues:

Family \$75 Couple \$60 Regular \$40 Associate \$30 Student \$20
 Address changes should be addressed to: businessmanager@pa-trolley.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.

By now you are likely familiar with our *On Track for the Future* campaign, and I hope you've stepped up to be a part of this enormous effort. You might also recall in the last issue I talked a little about the strategic planning process we have undertaken to make sure PTM is ready for the future when we get there. After some back-room brainstorming, we started interviewing community leaders, business leaders, PTM leaders, and visitors. The purpose of these listening sessions was to get a better handle on what we are doing well, what we need to do better, and what the future of a first-class electric railway heritage attraction should look like.

Next, in early September we conducted a charrette to which we invited essentially any interested PTM person. About 30 members and staff participated in the first step of a strategic planning process called a SWOT which stands for Strengths, Weaknesses, Opportunities, and Threats. Lead by Paul Overby, Wabtec VP of Strategic Planning, this session was conducted on the premise that there is no such thing as a bad idea, and was not intended to weed out any, but rather to get all ideas out on the table (or wall). We were hoping for good participation and we got it. We blew through numerous pads of sticky notes as everyone posted their ideas and concerns in a variety of areas. Al Biehler and Laurie Andrews then produced a record of all those sticky notes and also produced a summary matrix of the SWOT comments. Scott, Larry Lovejoy, and I have since met directly or by phone with Paul, Al, and Laurie in an effort to clarify some confusing references and terminology.

The SWOT summary yielded some very interesting results; some expected, and some unexpected.



Matt Rutkowski, Programmer for The Magic Lantern, installs the Trolley Operator Simulator *Scott Becker photo*

Paul and his team will be presenting the summary at an upcoming Board of Trustees meeting, followed by a reconvening of the original large group to present a more in-depth report for further discussion and development of actions. Among the things we know we need to do is further development of STEM and workforce initiatives, management and communications practices, updated financial projections, and recruitment of additional volunteers from resources like trade unions and tech schools.

What's the point of all this? First, as we work with our Architect and prepare to actually build the new Welcome & Education Center, we need to be sure we are meeting the needs of our visitors and are ready to actually receive the projected throngs of new visitors who may have never visited the Pennsylvania Trolley Museum, or in fact may not have any idea whatsoever what to expect. This might include such things as space utilization, exhibit layout, tour flow, access control, and perhaps most importantly, staffing. Obviously, we will need additional staff, including volunteer staff, in place when we open the doors to the new facility, but we also need to grow that staff in a responsible way. Without going into too much detail, I know of two such facilities that ramped up staff to meet an expected major surge of visitors, then had to cut back. A lot of work has gone into right-sizing the physical facility, but we need to right-size the staff as well and grow it in a controlled way, and an updated strategic plan with a defined set of actions will be of significant help. In



New Fairgrounds Bridge.

Scott Becker photo

short, as we approach the end of the tunnel, we want the only light to be a clear signal to an exciting future, not the headlight of an approaching freight.

Elsewhere in this issue look for reports of progress on the new Fairgrounds Platform; the East Campus access road is finished; we're engaging in a

collaborative effort with the Carnegie Science Center and the Trolley Simulator is now up and running and is a huge hit with visitors.

So, until next time, keep the shiny side up, run on good signals, and please remain seated until the car comes to a complete stop.

Faces of the Museum

By Madelon Cline & Sarah Lerch

It is quite often that when you talk to people about places they visited that they provide you, in very descriptive detail, the way buildings looked, how trees swayed and water sparkled. Then you talk to people about their visit to the Pennsylvania Trolley Museum and you'll hear, Oh, we rode the red trolley and that gentleman named John gave us a great tour. They then go on to describe what this person looked like. They'll remember the trolleys, where they were from and how they looked, but years down the road they'll come back and say "Does a gentleman named John still volunteer here? This is because the Pennsylvania Trolley Museum has prided itself on the many faces that make this Museum run. From the staff members to one of the volunteers, we greet new visitors and volunteers on a daily basis.

This is why we wanted to have an article about the Faces of the Museum. With 4 full-time staff members, 3 part-time and 150 active volunteers who work in many capacities at the Museum, there are some roles and new faces that not everyone has seen, but still provide a crucial role in helping the Museum!

Name: *Quinn Blanch*

Activities you're involved in at the museum: Maintenance

When you started volunteering at the museum: *I began volunteering in Maintenance in June of 2018.*

How you found out about the museum: *I found out about the museum from my family, taking me to visit as a little kid.*

What do you enjoy about volunteering at the museum? *I enjoy working on the trolleys, and learning about how they were built 100 years ago.*

What would you say to others who may be interested in volunteering? *I would tell others who may be interested in volunteering that no matter what you're interested in, there is a position at the museum for you.*

Name: *John M. Habak*

Activities you're involved in at the museum: *Operation cars maintenance, Restoration, Events*

When you started volunteering at the museum: *8-10 years ago*

How you found out about the museum: *I must have first learned of PTM in the late Fall, Winter or early Spring. I say this because I remember seeing the grounds from I-79 southbound.*

What do you enjoy about volunteering at the museum? *The People are the best reason for volunteering at the Museum. The subject material (cars, maintenance, projects, etc.) may draw us in, however, it is the People that cause us to stay. I heard it said that, "you just don't want to let your buddy down".*

Our diverse backgrounds, interests and abilities are what creates our strength and our success. Everyone brings something different to the table. The knowledge base of our people is astounding. And, if they do not know the answer, we will find it. Through sharing, comes learning.

What would you say to others who may be interested in volunteering?

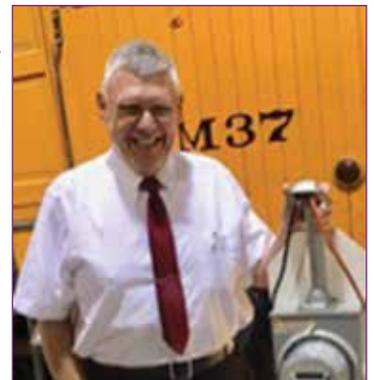
I would encourage anyone who is even a little bit interested to come and try us out. We are not just about flanged wheels on the steel rails. We have a broad spectrum of areas of interest for everyone. If you do not care to stay, we understand.

Name: *Michael Buchta*

Activities you're involved in at the museum: *Car Maintenance, Conductor, Groundskeeping and Car Restoration.*

When you started volunteering at the museum: *March of 2017*

How you found out about the museum: *I've always lived close and known about it just from driving*



around, but it wasn't until Fair week of 2016 that I really got interested. Just simply riding the cars around all day and not even caring about the fair made it so much fun and I really enjoyed the idea of a week for mass transit.

What do you enjoy about volunteering at the museum? I really enjoy working on, with, and under old pieces of history. It truly is amazing what some of the technology was like back in the early to mid 20th century. I also enjoy getting to know everyone at the museum. It really feels like one great big family and a second home to me and I love spending my time there.

What would you say to others who may be interested in volunteering? Come on down and enjoy the fun! It's a great place with so much opportunity for the museum and you! You'll get to learn more than you could ever imagine and not to mention developing great public speaking skills! If you come down, you won't be disappointed!

Name: Jennifer Shaeffer

Activities you're involved in at the museum: Events Visitor Greeter
Answering Visitor Questions. I am looking forward to Spring Operator Training!

When you started volunteering at the museum: September 2018

How you found out about the museum: Family. My first visit to the museum was with my parents in the late 1970's.

What do you enjoy about volunteering at the museum? I strongly believe in preserving history for current and future generations to learn from. Volunteering at the museum gives me an opportunity to help preserve history and others learn about the importance of the trolley era. I enjoy interacting with the visitors and seeing kids' excitement, especially if it is their first trolley ride. The kids are the museum's future and you never know when a trolley ride will spark a lifelong interest.

What would you say to others who may be interested in volunteering? Give volunteering a try! Everyone at the museum is very welcoming. I had been thinking about volunteering for several years, but was concerned that it would be too much of a time commitment. One talk with Sarah and that concern was alleviated. I can volunteer at whatever level I feel comfortable. I've greatly enjoyed volunteering and wish that I had decided to do this sooner.

Name: Ian Gray

What activities you're involved in at the museum: Volunteer with the archives, operations and interpretation

When you started volunteering at the museum: November 2017

How you found out about the museum: Pittsburgh native and always knew about the museum and when I was in Wheeling last year it made sense to volunteer since I was so close.

What do you enjoy about volunteering at the museum? Coming from two generations of railroaders (my father and grandfather were track workers), I love being able to share my passion of transportation history with the public and sparking that interest in others. Also, seeing the smiles on kids faces as they ride trolleys is priceless!

What would you say to others who may be interested in volunteering?
DO IT. It's a great group of folks who love what they do and are always happy to welcome new folks into the fold.

Our volunteers come from all over the area. For several years now, the Museum has participated in McGuffey School District's Community Based Vocational Program. This year we are working with students, Alexa Chipps and McKay Vargo.

Name: Alexa Chipps

Activities you're involved in at the museum: Cutting Paper/Preparing Tickets

When you started volunteering at the museum: I started volunteering during my 9th grade year of school.

How you found out about the museum: I would like to say it's a fun place to visit. I have visited the museum in the past on holidays and for a birthday party.

What do you enjoy about volunteering at the museum? I enjoy greeting people and cutting paper.

The museum has been working with students participating in McGuffey School District's Community Based Vocational Program for several years. We have had



Alexa and McKay

the pleasure of working with three students over the past year. The students have been a tremendous help, assisting with field trips and preparation for Dinosaur Train and Pumpkin Patch. They even got to be some of the first testers of the new Trolley Simulator! Whether it is folding, cutting, organizing, cleaning, or prepping for events, the students are ready and willing to help. We greatly appreciate their positive attitudes and smiling faces!

PTM depends on a volunteer force for continued operation and success. Volunteers serve in every capacity and are involved in the day-to-day operation of the museum. We greatly appreciate all the dedication and time volunteers have given and continue

to give to the museum. Many work diligently behind the scenes on maintenance, restoration, grounds work, and event set up and decoration. Others work on the front lines and serve as operators and tour guides. Some even do both!

Come join us! We strongly encourage anyone with a passion for trolleys, regional history, or serving their community to volunteer with us. There are positions that range from trolley maintenance and operations to special events and field trips. At PTM you become part of a community that is dedicated to sharing the Trolley Era with the public. With the museum currently engaged in an expansion program, it's an exciting time to be involved. See you soon! 

Pittsburgh Points

By Chris Walker

This summer's big news on the Pittsburgh transit scene was, undoubtedly, the major Norfolk Southern derailment at Station Square.

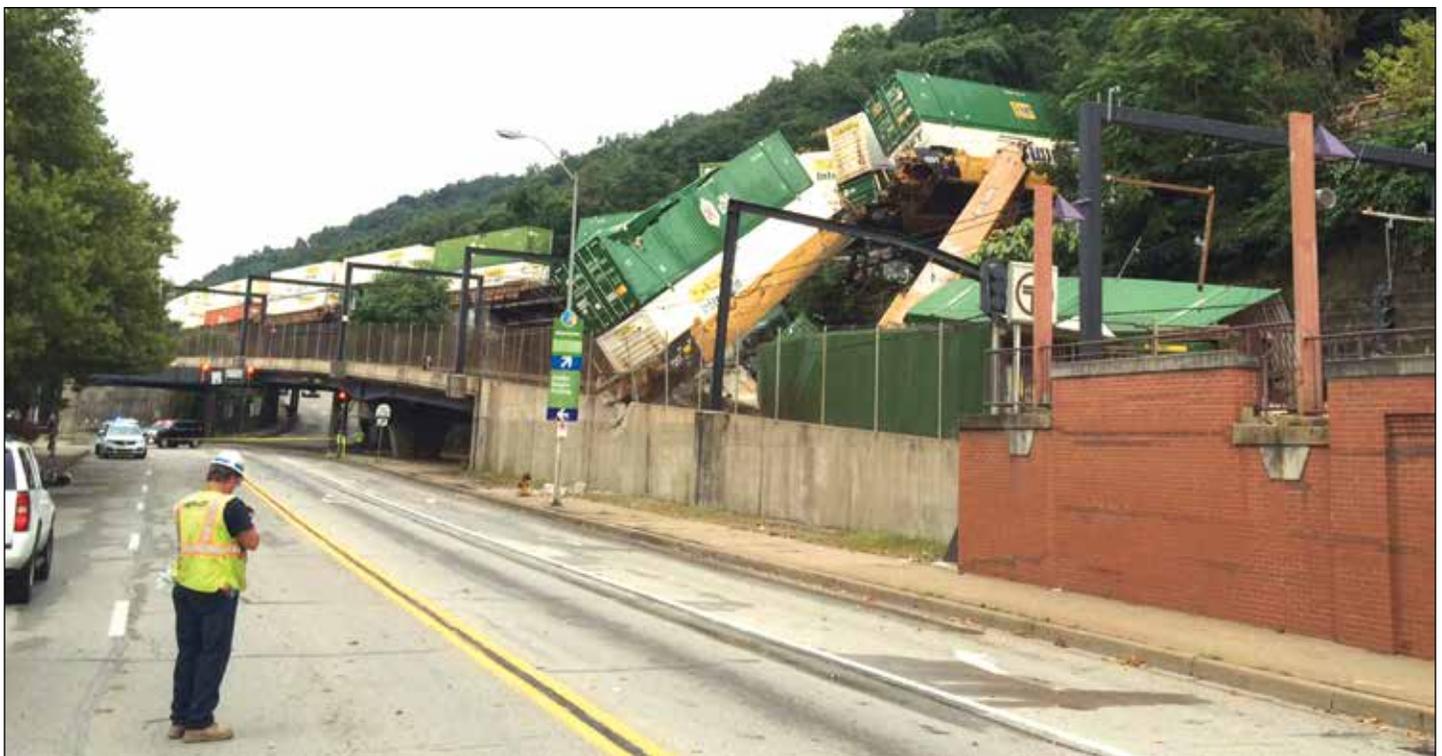
On Sunday afternoon, August 5, an NS double stack train traveling west on the Monongahela Incline tracks above Carson Street derailed, sending the containers and their articulated well cars toppling onto the tracks of the Panhandle Bridge ramp and South Busway slip ramp below. The tracks of the light rail system were severely damaged, along with the overhead catenary system and support structures.

By some miracle, no one was injured in the incident, and no bus or rail cars were near the scene when the derailment occurred. A few passengers waiting on the platforms at Station Square imme-

diately began running as the thunderous crash began, and the fare collector on duty wasted no time in shepherding the patrons to safety. The cars came to rest mere yards from the east end of the platforms.

The pile up shut the rail system down for the rest of the day. Shuttle buses handled the remainder of Sunday's passengers while a plan was developed for how to deal with the unprecedented situation at hand.

Monday morning's commute began what turned out to be almost a month of detours – all service was rerouted via the Allentown line. But with a combined 30 trains an hour in both directions trying to squeeze through a single track bottleneck between Arlington Avenue and the Panhandle bridge in the



The scene from West Carson Street not long after the incident occurred.

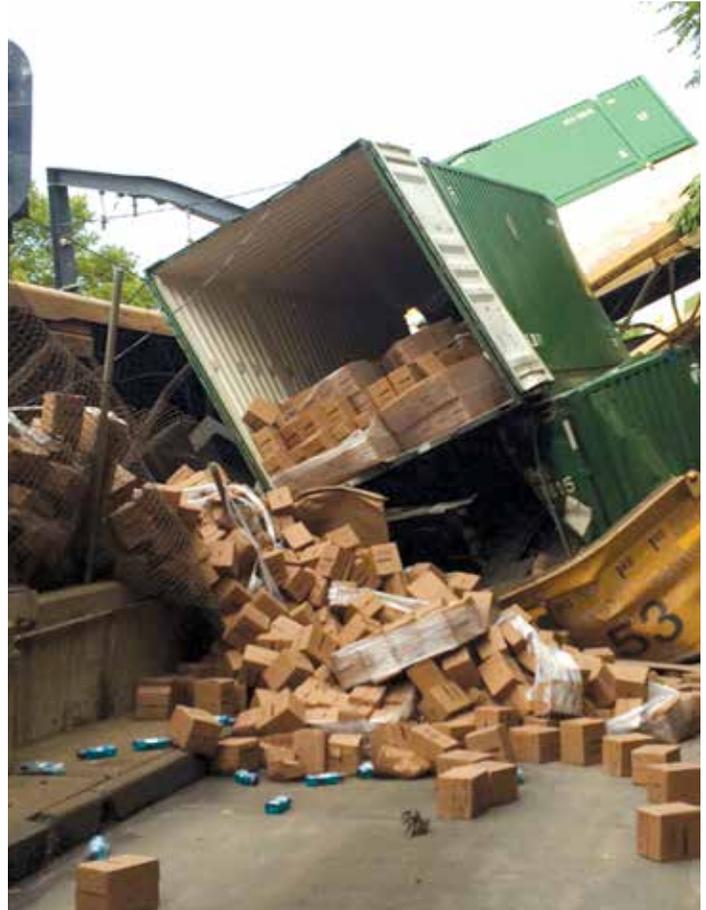
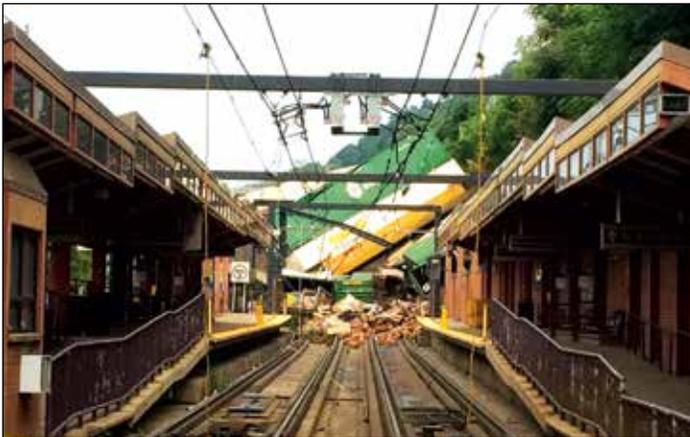
Jeff King photo

busiest periods, delays cascaded quickly. Rail ridership took a definite drop during the weeks that followed (on top of the already reduced numbers from the Library shutdown, still ongoing from late June).

Following reconstruction efforts (and outside contractor help), the station reopened and service resumed on September 2. It capped off what had been a long and arduous summer for rail system riders.

The Library line reopened on September 15, following reconstruction work stemming from

June's severe storm (recounted in the last issue). Even though free parking continued at the South Hills Village garage for the rest of the month, most of the Library line's commuters returned to their normal routine. Blue Line – South Hills Village trains were frequently crowded during the shut-down, and getting a seat for the ride seemed to have won out over the free parking. Not to mention, perhaps, getting a few extra winks in before having to start the day. 🚂



A container that fell onto the Station Square platform and the bus roadway behind, famously (here in Pittsburgh), spilled its contents of minty Listerine creating a very memorable fragrance at the scene. As a first responder Jeff captured these amazing close-up images. The news picked up the story spreading it nationwide. Jeff King photo

The fifth annual subway maintenance blitz occurred over two weekends and five weekdays, beginning Friday, July 13 at 10 a.m. and lasting Monday, July 23 until 4 a.m. The subway was completely closed to LRVs, and routes 11, 13, 34 and 36 used the diversion routes to 40th and Market Streets where passengers would transfer to the Market-Frankford Subway-Elevated line to complete their rides. Route 10 LRVs were diverted to 40th and Filbert Streets to drop off and pick up passengers. For nine days, maintenance forces worked around the clock making critical improvements throughout the five-mile long Center City tunnel.

Major work included: replacing a switch inside the 40th Street tunnel portal at the bypass track; replacing the eastbound curved track entering the portal with girder rail; renewal of the east and westbound tracks entering and exiting the 36th Street Portal with girder rail (including new paving); and replacing the westbound curve rails east of 15th Street West Plaza Station with girder rail. The Track Department also worked on clearing clogged track drains throughout the tunnel. The Power Department removed approximately 15,000 feet of abandoned conduit and communication cables on the north wall of the tunnel between 19th and 30th Street stations. The Power Department also performed a variety of maintenance work in the substation. New energy efficient lighting was installed within the tunnel between the 36th and 37th Street Stations, relays were tested, and maintenance was performed on switches at Ludlow Interlocking. Emergency lighting were also inspected

and tested throughout the tunnel, inspection and maintenance was performed on track circuits and other signal aspects (visual indication) at both portals and throughout the tunnel and signal heads were upgraded to incorporate LED technology between 22nd and 30th Street Stations. Additionally, crews performed heavy maintenance tasks at all stations including graffiti removal, tile repair, painting, track bed cleaning and heavy cleaning at all stations and addressed water leaks at stations and in the tunnel through crack-injection and other rehabilitation methods. While work progressed inside the tunnel, tangent track was reconstructed both east and westbound on Woodland Avenue between the Portal and Chester Avenue and a completely new street surface was installed.

SEPTA General Manager Jeffrey Knueppel, in discussing the importance of the shutdown to news media, said the trolley tunnel is in use 24 hours a day, making it difficult for our crews to get productive work windows to complete necessary repairs and improvements. The Blitzes have allowed our crews to replace switches and thousands of feet of rail and overhead wire, and to undertake an aggressive improvement and cleaning program at the trolley stations. The program we implemented five years ago and have executed over the past four summers has made a significant difference on how the Trolley Tunnel infrastructure performs over the course of the year.”

In September, the NTSB released its report concerning a January 2017 collision of two westbound Subway Surface trolleys on Lancaster Avenue at 38th

Philly Trolley Driver update...

By Bill Monaghan

Due to a bridge replacement project on Woodland Avenue, SEPTA trolley service is currently suspended on Woodland Avenue between 49th Street and the 40th Street Trolley Portal. In order to maintain trolley service on routes 11 and 36 during the construction period, these lines are detouring on Chester Avenue from 49th Street to 40th Street, sharing this trackage with regular route 13 Chester Avenue trolleys. Route 36 streetcar 9018 is seen on its detour route crossing 42nd Street and Chester Avenue on July 13, 2018.



Street, indicating the collision was likely caused by an overly-fatigued operator who had taken repeated doses of Benadryl. Fifty people were injured in the accident when a moving streetcar crashed into a stationary one that was stopped ahead of it. The final report filed on September 11 determined that neither trolley had exceeded the speed limit of 10 mph, despite reports from passengers that the trolley initiating the collision had been speeding. According to the report, the operator's failure to slow and stop his trolley before colliding with the stopped one was caused "because of his impairment from fatigue and the sedating effects of the repeated doses of the over-the-counter antihistamine diphenhydramine." Diphenhydramine is the active ingredient found in Benadryl. The report also indicated the trolley operator was ill during the collision, which negatively affected his medical fitness for duty. According to SEPTA, the operator responsible for the collision is no longer employed by the company.

In February, new ACS-64 electric locomotives arrived in Philadelphia and entered their testing period. On Wednesday July 11, following a brief ceremony, locomotive 901, the first of its new ACS-64 locomotives, made its inaugural run from SEPTA's Chestnut Hill East station to downtown, in advance of beginning its work on the Paoli-Thorndale Line, Regional Rail's busiest. SEPTA had ordered 15 of the Siemens-built electric locomotives at a cost of \$154 million. At the ceremony, SEPTA General Manager Jeffrey D. Knueppel said the agency had already received eight of the engines. Four more were in route from the factory in Sacramento, California with delivery of the remaining three expected to occur in August. Knueppel also stated that the new engines are key to the modernization of the agency's aging Regional Rail fleet. It is expected that they will initially be assigned to the Paoli-Thorndale trains, allowing them to be kept close to their maintenance at Frazer Shop. West Trenton runs will probably

receive them last because these trains are stored overnight in West Trenton.

In September, Delaware River Port Authority Commissioners received an update on plans to resurrect the long-closed Franklin Square PATCO station in Center City Philadelphia. Ongoing plans for the \$26.4 million project include a new entrance to the underground station near 7th and Race Streets that blends in well with the surrounding park and lets in a lot of sunlight. It is hoped that all planning will be completed by the end of 2019 so the bidding and construction phases can begin in 2020. Since the station was closed in 1979, several half-hearted attempts to reopen it have failed. This time around, there's no turning back. The project is fully funded in DPRAs five-year capital plan and is set to be completed in late 2022.

After years of planning, the University City District (UCD) unveiled the 40th Street Trolley Portal Gardens on September 27th, bringing public space to the 40th Street trolley portal, once a drab area consisting of concrete slabs, overhead wires and rails. This public space includes a brick walkway surrounded by greenery, benches, and colorful orange and purple chairs. Planters and Elm trees sit throughout the gardens, incorporating more natural elements into the space. At the end of the space is a 150-seat restaurant called the Trolley Car Station, serving breakfast, lunch and dinner-style food. UCD hopes the gardens will be a place where people will come to relax and enjoy themselves before taking a trolley into Center City. It brings dignity to the public transit experience says Andrew Stober, UCD's Vice President of Planning and Economic Development. He added that the portal gardens will welcome visitors and residents from other parts of the city to West Philly and University City and will serve to enhance the Baltimore Avenue corridor. The \$4.5 million project was the result of meetings between

UCD and West Philadelphia and University City residents who wanted to make the space more attractive. Construction finally began in 2017 after several years of fundraising. The money for the space came from philanthropic funding and local and state grants, Stober said.

As the full transition of the SEPTA Key for Transit program continued, the end of an era occurred on Tuesday July 31 when the last paper transfers were sold on SEPTA's five-county system. The very last transfers were sold at the end of the service day. As of August 1, customers must have a SEPTA Key Card with money loaded on the Travel Wallet to pay for and use a transfer (\$1.00). All customers eligi-



SEPTA #51, #80, #906 and #907 at Wayne Junction Shops on August 15, 2018. *Bill Monaghan photo*



Route 34 SEPTA streetcar 9099 emerging from the 40th Street subway portal with the new Trolley Car Station restaurant in the background. The owners of the restaurant also own the Trolley Car Diner on Germantown Avenue. *Bill Monaghan photo*

ble for the Reduced Fare program must also have a SEPTA Key Reduced Fare Card with money loaded on the Travel Wallet to pay for and use a transfer (\$.50). In early August, SEPTA introduced riders to the Regional Rail Early Adopters Program, which allows the authority to begin sharing the benefits of the Key with Regional Rail riders while work continues on system-wide implementation. The program began with Monthly TrailPass customers who travel to-and-from one of 19 selected Zone 4 stations, when the August Monthly Passes went on sale starting July 20th; these new key cards were good for travel effective Wednesday, August 1.

SEPTA General Manager Jeffrey Knueppel said this is a major step forward in the SEPTA Key fare modernization project. We are excited to begin sharing the SEPTA Key with Regional Rail riders through the Early Adopters program. SEPTA brought its Mobile Fare Kiosk truck out to the Early Adopter Stations for events where customers were able to purchase a Key card, buy a Zone 4 TrailPass, and register their new card to protect it in the event of loss or theft. Key cards were made available for purchase at SEPTA's Regional Rail Sales Offices located at Center City Stations. While Regional Rail

TrailPass transactions were not available at Fare Kiosks during the initial rollout, customers were able to reload Monthly TrailPasses online or by calling the SEPTA Key Customer Service Center. When the Key Card program for Regional Rail expands, customers will be able to purchase Weekly TrailPasses, add funds to the Travel Wallet, and TrailPass purchases will be expanded to Zone 1, 2, and 3 riders. Until then all existing fare instruments, including magnetic strip passes and paper tickets, will remain available for purchase until further notice.

While railroads nationwide are struggling to install the train safety system Positive Train Control (PTC) in time to meet a congressionally mandated deadline at the end of this year, SEPTA has its system fully in place. PTC automatically control train speed or braking to prevent accidents caused by human error. SEPTA's system is active on all Regional Rail trains but is not yet fully compatible with the freight trains that use about 42 miles of Regional Rail track. Officials were quick to point out that those trains run largely at night, when commuter trains do not operate.

SEPTA installed its \$344 million PTC system through what's called a design-build model, in which

a contractor in SEPTA's case, Hitachi Rail both designs the installation and does the construction itself allowing the installation to progress more quickly on its 280 miles of track. The authority still has to make its system compatible with the other railroads that share track with it, including Amtrak and freight carriers CSX and Norfolk Southern. That is less of a problem than it might have been, due to some decisions SEPTA made early in the process by using

ACES, the form of PTC also used by Amtrak, making it much easier for the railroads to operate in sync. But it also addressed the problem of interoperability between railroads by separating itself from another railroad entirely. The West Trenton Line shared track with CSX, but from 2013 to 2015 SEPTA spent \$32 million to add a separate six-mile track for its own trains to run on, eliminating the need to integrate CSX into its system on that busy route. 

Power and Signal Report

By Robert Scott Davis

As some may know, the Fairgrounds Siding rebuilding project has been in full swing since the end of August. All pole line hardware including the signal primary, DC feeder wire, trolley overhead, line poles and the signal equipment has been removed from the site. This also includes the rails and ties. I would personally like to thank Kevin Zebley for spearheading the planned demolition of all the P&S related equipment on the site.

Once all the above equipment was on the ground, the sorting, grading, storage, and reconditioning of the various components has been completed and organized for future use. Procurement is also in full swing. We have new span wire and

and a new roll of trolley wire on the property for both the Fairgrounds and Trolley Street projects.

Signals for the project have not been ignored. Eight new concrete signal foundations have been poured in forms created by Kevin and his crew. Five of the eight foundations have been moved to the construction site and are waiting completion of the grading before they can be set in place. PVC conduit is also on hand for all the underground wiring runs.

As always, I'd like to thank all the people who made this progress possible: Gary Baker, Doug and Kevin Zebley, Jeff King, Laura, Patrick and Sarah Wells, Fr Jack Demnyan, Larissa Gula, Larry Lovejoy and Scott Davis. 



Kevin Zebley and Sarah Wells work to rebuild forms for the second batch of signal foundations to be installed at Fairgrounds siding as part of the over all reconstruction project. Inset photo shows the foundations in place. Laura Wells photo

I'll start off with wrapping up the open ends from last quarter with P&WCT 78. In that report I mentioned some brake links atop the truck that needed attention. I mention annually that car 78 uses double the brake hardware as any other car in the operating fleet because of its clasp-shoe design. This arrangement, two shoes per wheel, applies little side thrust to the axles and journal bearings plus the brake shoes last much longer than the typical single shoe per wheel version. Getting to the point, about one third of the brake rigging of 78 is virtually invisible from below the car and inaccessible from the top unless the body is off the trucks. So we had this condition while the traction motor was removed for repairs so we seized the opportunity. I believe we replaced six bushings in all plus six shoulder-bolt pins of varying lengths. The motor problem was all mechanical in that the cooling fan hub, originally pressed on the armature shaft, had loosened and was free-wheeling. This could have led to more serious problems if postponed such as compromising the shaft itself and wobbling enough to ruin the fan blades. The fix was to bore and sleeve the fan hub, the actual clearance when disassembled was only 0.001. As mentioned earlier this particular motor went through complete overhaul in 1999 and as far as I know there are no available spares. Some cosmetic repairs include replacement of a tired corrugated mud guard and replacement of some rusted sheet metal skin covering the bottom of the floor. Another honorable mention in cosmetics was the removal of a great amount of caked-on road dirt and grease from the air compressor. Mike Buchta took care of this plus wore a lot home with him. The compressor may run a tad cooler, now. The stats on the job are 97 days out-of-service and 183 volunteer hours expended. The work was complete for Fair Time and the car served honorably.

Moving on to a project begun in February this year we had the opportunity to complete the brake hanger re-work on West Penn 832. We had completed reinstating the parallelogram linkage on one truck and deferred further work to allow the Restoration team maximum time with the car before the June 1 date with destiny. In an unfortunate turn of events #2 traction motor failed late that month and the repairs to the brake links were accomplished while the car was in the maintenance bay. As all needed materials were on hand the retro-fit went straight forward. Our Operations Department took care of the tow job from the Galbreath shop to the Display Building during Fair Week.

In mid July we had center door car 66 in for

scheduled maintenance. We replaced two brake shoes and discovered a leaking door engine and were able to remove the unit, clean and install new cups, test and return the bulky unit to inside the car before close of business the same day. We had special assistance from Art Rizzino who sees things quite differently than most and is quite proficient with pneumatic device repairs. We installed the engine the following work day. A deferred item attended to was to paint the roof boards. They had peeled paint and were developing cracks so I used rot-stabilizer, primer and paint to stave off further deterioration. Very long and clear boards were used on car roof walk boards in the day and are probably unobtainable today. So better maintenance is the better way to go and the car was prepared for County Fair service. Early in that game a folding step-sliding door mechanism got out of sync and was attended to in the car house. Apparently one or more of the clasp-end rod ends had slid on the intermediate shaft that ties the door motor action. In mid September we did another scheduled maintenance on 66 in anticipation for Santa Trolley. A deferred item accomplished this time was to replace four pivot bolts in the large brake shoe holders with modified bolts hollowed out with a grease passage. This detail was incorporated with the more recent A truck rebuild after encountering problems with a frozen bushing and bolt on the tear-down of B truck, rebuilt in 2002. The team replaced all three in one session. One had been replaced earlier but that was the only spare on hand at the time. Lastly we attempted to correct a leaky roof that was discovered during a tropical storm. It appeared some paint had peeled or had been scraped from the canvas and some caulking had opened up over a deflector board.

Line Car M210 visited the shop late in July to have a light switch replaced and controllers serviced. We went over the trucks and tightened up the foot rest bars at the operator's stations.

PCC 2711 experienced another road failure on August 10, taking it out of the Fair lineup. Bob Jordan did the tow job for us. We found a cushioning or soft-start resistor burned opened and another damaged plus burned tips on the R2 unit switch that should shunt the heavy motor current around the (burned) resistors very shortly after power is applied. Noting that these ailments would not prevent the line switch from picking up we checked out other suspects, namely the dead man contacts and the drum controller in the back-up console. I suspect the problem was found in some poor contacts in a

door interlock. We substituted the bad ones with other pre-used ones, then had the originals renewed and reinstalled them.

Cincinnati 2227: We investigated reports of the car unintentionally having emergency brake applications. As air systems go, 2227 is fairly primitive, having a manual lapping air brake valve with two pipes and a whistle, the latter being added when we acquired the car. There is also a low-reservoir valve which normally shuts off air flow to all devices except brakes when the air pressure is really low, around 30-40 psi. As for 2227 this valve created an artificial emergency pipe air supply to a primitive H type emergency valve. Tech data provided through Rod Fishburn revealed that this combination was an early method to provide a measure of safety without investing in total revision of valving and piping. Moreover this set up could facilitate emergency stop valves at the rear platform or elsewhere. We cleaned things up somewhat and installed a temporary air hose and all tested swell. While in the shop 2227 also had controller service and a brake adjustment.

In no particular order but replaced in a timely (read immediate) manner were trolley ropes on. Trolley ropes were replaced on several cars (1758, N832, 4145 and 4398), only 4145 needed immediate replacement.

During County Fair we try to keep the maximum number of cars available and this year started with 92%. This year we placed dump car 3618 on track 21 in the center position, to avoid parking an operable serviceable car there. While inside I wanted to complete a long deferred revision with one of the brake linkages similar to what we had done with one end several years back. That particular set up lacked a degree of freedom resulting in a 1 thick lever being bent. The end we're working had an agricultural looking but functional clevis but soon both trucks will be identical. However more maintenance was required when we went to reinstall a trolley pole we had straightened. The retaining nut that held the rotating top half of the pole base plus the stud from the main shaft were worn to the point only the cotter pin was doing the retaining. So we removed the base and found additional issues with the upper casting, namely a cracked inner liner and what we couldn't repair in house was outsourced. The machining is complete and parts on hand thanks to machinist Dan Dewald from West View.

PCC 1711 was serviced after the Arden Valley trackage was closed. One item I wanted to do and did was to replace the pole base, as our rebuild campaign had succeeded with two rebuilt units and the base had not been off 1711 in recorded history. Very



Bernie Orient with rebuilt pole base parts for Boston Elevated dump car 3618.

Scott Becker photo

happy to say this particular base was the best found to date. The only repairs needed were to bore out the turret to accept an available grease seal and to rebush and re-pin the arm that holds the trolley pole. The arm pin repair was required so far on every form 11 base we worked on. A maintenance guideline from one railway company suggests tear-downs at 60 day intervals which is a highly unlikely scenario at museums.

In early September Tropical Storm Gordon prompted a flood warning in our area. Having not quite completed a flood cleanup from a localized June deluge providing nine feet of water through my former business, I took this probably more seriously than necessary. Shop and Track departments spent roughly 32 hours preparing the shop for a possible 6 of flood water over the floor. We also evacuated 3 operable cars to higher ground as well as the forklift and lawn tractor. Although PTM experienced quite heavy rainfall the shop building took no water. The picnic tables in Elec-

tric Park were moved early Sunday and would have otherwise washed away. Two of the cars that rode out the storm outdoors had water in some journal boxes. We kept the equipment that we had raised elevated through the next storm, Florence, before returning to normal.

As we close out this quarter we're rebuilding the W175A reverser removed from M283 last year to have a complete spare, moving further with the Louie Car Brake Shoe holders, completing the fifth PCC pole base and making plans for the brief winter down time. A minor repair to car 4145 turned not so minor with replacement of a wooden block that supports the upper end of the door handle linkage and is still in progress. We've made some preparatory moves to have the second M283 arch bar truck, now for M551, ferried to the west site shop for repairs.

Those who helped this quarter include Fred Cooley, Wayne Wicks, Eric Weinbrenner, Bob Powischill, Mike Buchta, Kate Imler, Ken Ringer, Brett Freithaler, Quinn Blanch, Hunter Dawso. 

Around the Museum

By Bruce Wells

This summer was a busy time for the Museum, its great volunteers and staff! This page shows September fun as we hosted our first *Dinosaur Train* event.

This summer also saw construction of the new access road to the East Site detailed in four of the photos. Larry Lovejoy and Bill Piper were the key PTM players who saw this work through to completion.

In the shop restoration shop continued on PTC (Philadelphia Transportation) 8042, while at the TDB Art Ellis continued evaluating restoration of Mon-West Penn 250. On the other side of the TDB Ned Apalakian, Tim Sheffield and Ned's friend Ron continued to preparing Shaker Heights 94 for painting.

Our final photos show our latest acquisition, a broad gauge Kershaw ballast regulator acquired from Port Authority and materials obtained for the use in rebuilding of Fairgrounds siding and Trolley Street. 



Katie Imler with Buddy the Dinosaur at the Dinosaur Train event held in September. Scott Becker photo



Carnegie Museum of Natural History staff hold replica Dinosaur bone Scott Becker photo



Game area during Dinosaur Train event.

Scott Becker photo



Cast & Baker's heavy equipment moving dirt for new access road.



Bruce Wells photos



Clearing roadway right-of-way connects to N. Main Street.



Larry Lovejoy supervises access road paving on 9-15-18.

Scott Becker photo



Contractor Keith Bray paints platform flooring for PTC 8042.

Scott Becker photo



The platform work progresses on 8042.

Scott Becker photo.



Larry Lovejoy with new spool of trolley wire purchased for the project at Fairgrounds and Trolley Street. Scott Becker photo.



Ned Apalakian works on Shaker 94 on September 15, 2018.

Scott Becker photo



Our new to us Ballast Regulator M4 from Port Authority of Allegheny County is unloaded on Track 11 by Frontier Rail Services.
Bruce Wells photo



September 12 the second batch of US&S signal bases were poured by Kevin Zebley, Laura Wells and the operations crew.
Bruce Wells photo



A Tribute to our Beloved Catscot...Frank

By Don Bailey



John Polyak photo

As many of you know, Frank Sprague, official cat of the Pennsylvania Trolley Museum passed away on May 11, 2018. Frank had been living at the museum for about 10 years after being dropped off by persons unknown. He adopted us and became our mascot/catscot.

There was never a person that Frank did not like and his talents included greeter, mouser, paper weight, chair warmer, and shop companion. He had the amazing ability to lift the spirits of the sad and with a simple purr brighten our days.

As the ghost writer of Frank's Facebook page, I had occasion to hear many stories of Frank's friendliness. On one occasion, two women showed up outside the gift shop before the museum was open. I was walking by and asked them what they wanted to do during their visit. They informed me that they had traveled from a small town in western Ohio to

visit Frank. One of the women was the post mistress of the town and had taken the day off to visit Frank after being friends with him on Facebook. I immediately took them inside where I found Frank "resting" on Scott Becker's desk. I introduced Frank to his friends and left them to enjoy their visit.

I personally witnessed him helping out during Scout Days where he would rest regally on the table and lend his kingly personality to whatever was going on. Once he was perched on the table, he seldom moved around or attracted attention.

When I would be at the museum for extended visits, like during County Fair, I always took care of his morning breakfast followed by his usual morning walk about. We always spent a few quiet moments together in the morning. Everyone who had been around Frank has their own collection of personal stories.

Sadly, Frank had been slowing down over a period of time and despite regular medical attention, reached a critical stage involving emergency care. In severe pain and found to have a massive tumor on his abdomen; the heart wrenching decision was made to allow him to cross the rainbow bridge to wait for us on the other side.

A special memorial was placed in Frank's favorite spot where he sat by the hour watching visitors come and go along the walkway leading to the Richfol platform. Please take a moment to think about Frank and all your special pets past and present as we remember this special feline ambassador who impacted so many lives here at the museum and through his Facebook page. His passing will leave an empty space in all of our hearts. 