



THE Trolley QUARTERLY

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Number: one
2020



You are looking the old Phoenix Courthouse
as the trolley stops to let off a passenger
CIRCA - 1890S

There is rest and healing in the contemplation of antiquities.

Mark Twain -
"Life on the Mississippi"



Fix up, Spruce up Campaign

Associated with the Grand Avenue Festival, the Trolley Museum undertook a short but strong effort to clean up and spruce up the exterior and interior of the museum in time for the big event. Jim McPherson headed up the exterior effort, with a helpful assist from board members and Boy Scout Troop 426. Michelle Reid of Museum Pros made a big impact on the interior with a total revamp of the exhibit space.



MUSEUM/PROS

Awarded Arizona Humanities Council Grant for Trolley Riders History Video

The Museum has received a grant from the Humanities Council to capture oral/video histories from those pioneers in our community who have memories of riding on the original Phoenix Trolley system "back in the day" prior to 1948. Gail Fleming and Matt Jewett have been driving this history capturing project.

az HUMANITIES
EXPLORE. SHARE. EXPERIENCE.



First Friday At The Phoenix Trolley Museum!

It's a PAR-TEE! This is a really fun time with herds of guests, and tours of the Trolley Museum artifacts and maps. We also enjoy outdoor music (thanks to Chris and Jimmy!) and trolley videos up on the outside wall (thank you, Victor!), a gift shop display, and our "resident" artist, Charlie! Y'all come!

We are open from 5-9 p.m. on First Friday, as part of the Grand Avenue Art Walk. This event happens on the FIRST FRIDAY of each month, from October thru May. We will be closed for May 1, this year. We are planning to be open on June 5, if the evening weather is lovely. Stay tuned! So...closed May, open June. Come and enjoy the fun, and frolic with friends!



Only those who will
risk going too far
can possibly know
how far you can go.

T.S. Eliot



1893
When Motorneer C. L. Longstreth turned the electricity on, a great cheer went up from the pleased and excited hundreds... for this marks an epoch in Arizona history

From this time on there is no power on earth that will check the rapid progress of Arizona's capital

This is a short passage describing the impact of electric trolleys being introduced in Phoenix on September 28, 1893

No expense is spared to make the road a success and one of the finest and most complete little electric roads on the coast....

Phoenix is ever on the forward march and no sooner does she secure one great improvement than she seeks to get another

When the railroad was completed, the electric lights came to brighten things a little, and then the march of civilization was more brisk

The telephone exchange, one of the best on the coast, and a magnificent sewer system that will rival those of larger cities last but not least, the electric street railway

No wonder they say this is the most prosperous city on the coast. No wonder people are coming here by the hundreds, filling every house in this beautiful city?

“ Within two weeks the mule service on the Phoenix street railway will have been exchanged for electric. Two cars have already been shipped from

Los Angeles, two more are in the shops almost finished, and still two more are in an advanced state of completion.

There will be six cars on the line and it is intended to traverse the line in seven minutes, so that the service [headway] when complete will be less than five minutes. The time in which the company has under the extension of the franchise to make the change will expire on October 1.”

We begin with the Arizona Republican, 12 September 1893, page 1:



These two Trolleys are the style of the first electric streetcars used in Phoenix

by William Lindley

The Story of Phoenix's Power and Electric Streetcars

With this announcement, the Phoenix Street Railway entered the Electric Age.

Phoenix itself had been graced with electric lights since at least 1890, when the Phoenix Power and Light Company's plant opened. (*Arizona Republican*, 21 April 1890, p.4)

The Power and Light works were at the northwest corner of First Avenue and Buchanan, according to Sanborn's 1893 Fire map; the Street Railway power-house was behind (east) of the Water Works on the southeast corner of Dennis (now Polk) and 9th Streets in what is now Phoenix's Verde Park. At this time there was no connection, electrically or corporately, between the Light Company and the Street Railway. The Railway, however, did own and operate the city's Water Works.

In January 1894, the Phoenix Light and Fuel company was bankrupt and operated under receivership for a time. Numerous articles and advertisements in the newspaper assured Phoenicians that they would continue to receive electricity, in the face of much skepticism by the public. December of 1894 saw the final sale of the Light and Power Company's properties and operation to the newly-organized Phoenix Light and Fuel Company.

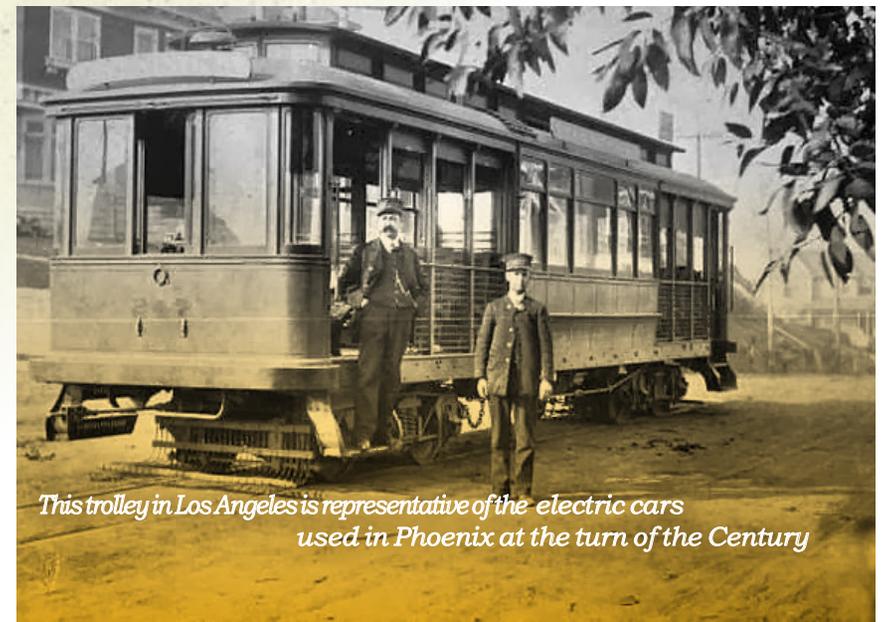
At the Street Railway Water Works and Power Plant property, Sanborn's 1901 map shows three dynamos (which convert the mechanical power to electric) and two steam engines, a 250 Horsepower and an 80 HP. These engines were fed from oil from a tank on the northeast side of the

powerhouse. A smokestack just to the north of the 250HP engine remained at that time from the original wood-burning steam engines.

Our Territorial Capitol, the historic structure which still stands at 17th Avenue and Washington, opened in 1901 but was nearly complete in August 1900. On the 8th of August, the Republican's front-page article describes the turnover from the builders to the Capitol Commission. At that time, the Otis Elevator machinery was nearly operational, and was powered by 500-Volt motors fed by electricity by the Street Railway. Lighting for the interior and exterior, however, was to be a separate contract that was eventually awarded to the Light and Fuel company for their standard 100-Volt Alternating Current system, not the Street Railway's 500-Volt Direct Current. The Railway continued to provide power for the elevators until about 1910.

In 1902, an August breakdown at the Street Railway powerhouse forced the Railway to purchase power from the Light and Fuel company until repairs could be made. (*Arizona Republican*, 13 August 1902, p.8)

The electric company, meanwhile, was busy upgrading its facilities: "New Power for Phoenix Light & Fuel Company: The Company, having completed the two power houses on the Arizona Canal, is now making preparations to construct a modern steam power plant to supplement the water power during the period of low water in the summer season. From the water power



This trolley in Los Angeles is representative of the electric cars used in Phoenix at the turn of the Century

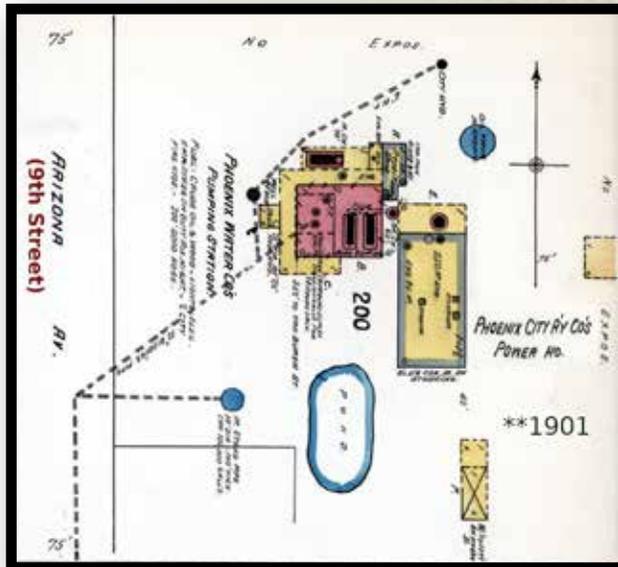
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stations, about one thousand horsepower is available for from eight to ten months of each year, but the balance of the power must be furnished by steam... With the new equipment, Phoenix will be much better supplied with water than many cities of ten times its population..." (Arizona Republican, 26 September 1902, p.5)

Early 1903 saw the major upgrade to the Street Railway plant: "The City Railway company which for several weeks past has been using power from the Phoenix Light and Fuel company, yesterday connected its newly installed power plant which will hereafter run the city railway and the waterworks... The new plant has involved an expenditure of approximately \$20,000..."

"The boiler is a Babcock & Wilson high pressure water tube, tested for 300 pounds of steam and usually [running] at 150, though a minimum of 100 pounds is nearly always ample for the present plant. This boiler will run the new tandem compound Hamilton-Corliss 250-HP engine, made to order for the City Railway and only a few weeks out of the shops... This in turn runs a new 250-HP compound-wound Westinghouse generator that furnishes the 'juice' and which in power more than equals the three generators formerly used. There is also a complete new switchboard in

the power house, and in the cellar below it are found the condenser, feed pump, air pump, circulating pump and hot well, the machinery all being below... There is also a new cooling tower erected over the lake enabling the re-use of the water for the machinery, an arrangement for the sake of economy.

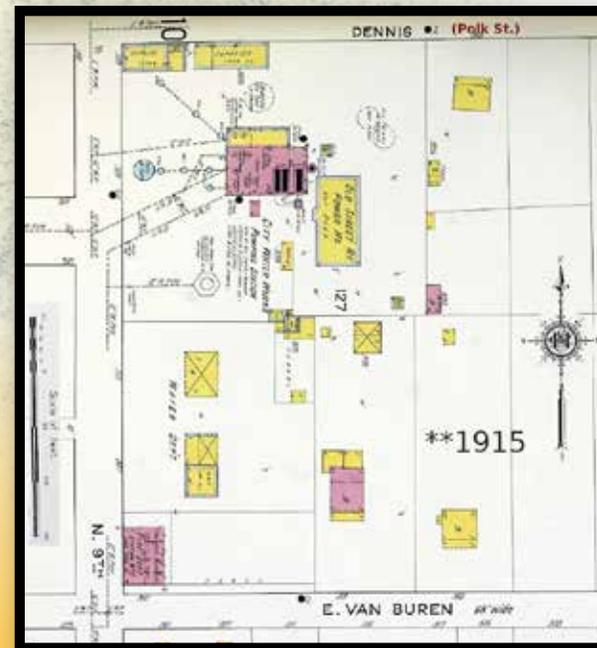


"The new boiler described above will also furnish power for the operation of the waterworks plant which is now equipped with three large pumps, two of which are in use, the other being held in reserve, and a new Deane triplex pump... This pump has a capacity of 2,000,000 gallons per day and will be driven by a 50HP motor. This pump alone has a capacity sufficient to meet the demands of the present water system..."

These are details from Sanborn Fire Insurances maps showing assets located at 9th St and VanBuren in 1901 and 1915

"Speaking of the railway system, yesterday Manager Heap said that during the summer, the Washington Street double track will be relaid with heavier rails and new wire... the rolling stock will also be given a thorough overhauling." (Arizona Republican, 1 April 1903, p.6)

Phoenix Light and Fuel itself bowed out by July of 1906, when the Pacific Gas and Electric Company purchased its assets (Arizona Republican, 10 July 1906, p.2). PG&E withstood a call to place the electric plant under City control in 1910, running half-page advertisements headlined "Do You Deny Any Person Or Corporation A Fair Profit?" This perhaps echoes today's (2019) headlines seeking to hold PG&E responsible for wildfires in their home state of California.



The Phoenix Water Company and the Water Works were to be purchased by Phoenix from Sherman for \$150,000 late in 1906 (Arizona Republican, 18 October, p.1), not entirely to the satisfaction of all citizens who felt the price was too high. The sale concluded on 29 June 1907 (Arizona Republican, 30 June, p.5) after which it was discovered that the mains pipes, machinery, and wells were played-out and all quickly abandoned. This failed to endear Mr. Sherman and his allies to many in the city government, and along with later disputes about street paving may have been factors in Sherman's motion to abandon the Railway entirely after two more decades in 1925.

The Arizona Republican of 4 April 1909 shows Pacific Gas & Electric's new Power Plant for the reception of electricity from new Roosevelt Dam.

By 1915 the Street Railway power-house was no longer in use (source: Sanborn Fire Map), having been replaced by purchased electricity; and by 1920 PG&E itself was replaced by the Central Arizona Light and Power Company. It was CAL&P that the City of Phoenix would then contract for the Street Railway's electricity when the Railway fell under City control (after further tribulations, which is another story entirely) in 1925.

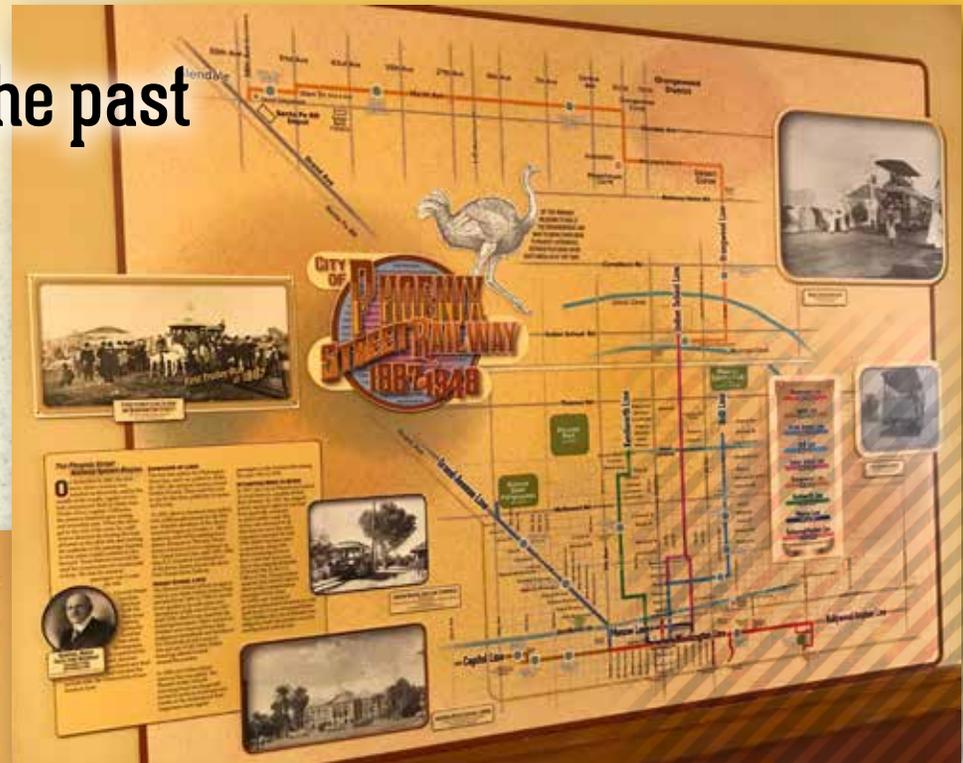
While we live looking forward, life can only be observed when aware of the past

Soren Kierkegaard

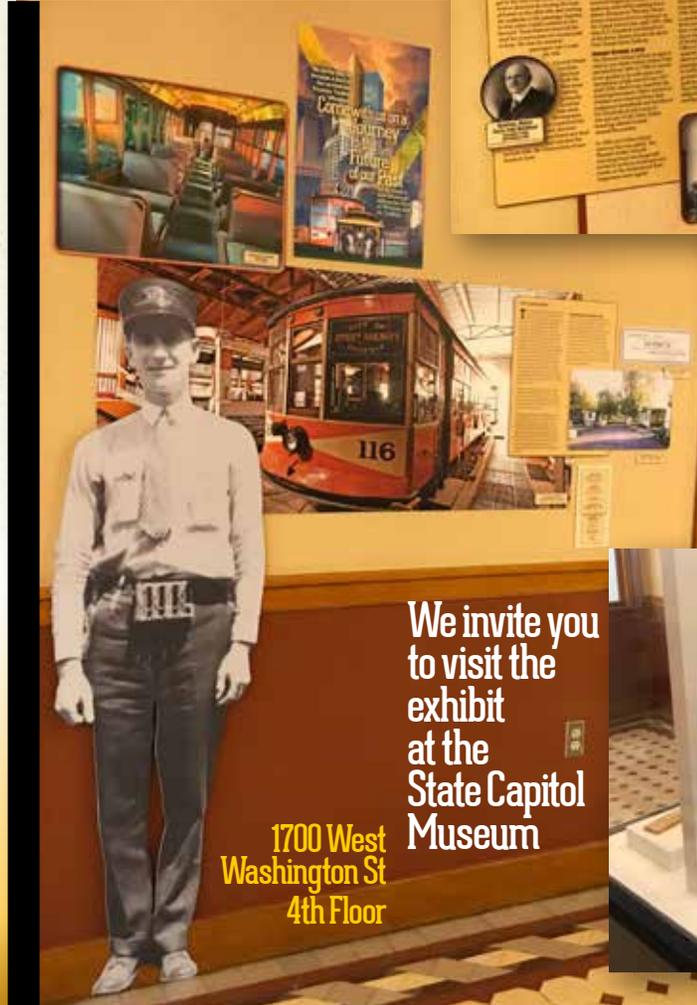
Completed Exhibit with Heard Museum and Arizona State Capitol Museum

Capitalizing on the link between the trolley and the development of the territorial capitol of Arizona, a partnership with the Heard Museum, Arizona State Capitol Museum, and the Phoenix Trolley Museum led to the creation of an exhibit about the trolley at the Arizona State Capitol. The original link between our museum and the Capitol began

when Moses Hazeltine Sherman, the builder of the original 1887 Phoenix system, donated the land that the State Capitol site is on. Now, this project was loooong in the planning and execution stage. The vision of the project began over three years ago. But, as with most things that are dreamt up when you're moving a museum from its 40 year location to Grand Avenue, things have to take a backseat. However, it's well worth the wait.



Above is a poster created to promote the soft opening of the exhibit.



We invite you to visit the exhibit at the State Capitol Museum
1700 West Washington St
4th Floor

Thanks to Heard Museum Mellon Fellow Velma Craig, Stephanie Mahan of the Capitol Museum and our Vice President Mike Swaine, who is a graphic designer all helped make this happen. However, were it not for the occasional nudge of encouragement from our then President Doug Kuple, we might still be in the planning stages.

The exhibit includes the most extensive map of the entire system ever produced

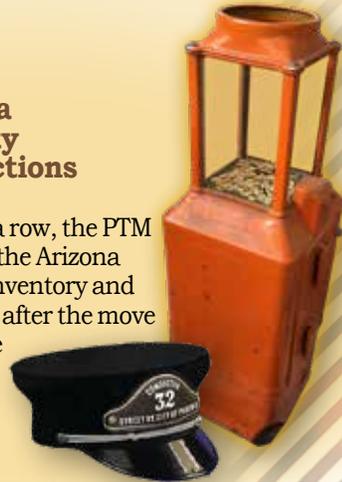


History Museums are for the curious.



Received Arizona Historical Society Grants for Collections Management

For the second year in a row, the PTM received a grant from the Arizona Historical Society to inventory and arrange museum materials after the move from Hance Park, under the direction of Will Keller.



It's spring in Arizona History

and these are some of the things that happens when it starts to warm up

1825 - Charles Poston, "Father of Arizona," was born.

1854 - The Gadsden Purchase was ratified and signed by President Franklin Pierce. It became effective June 30.

1861 - In April the Arizona Territory votes to leave the Union (US Civil War) the next year 9 months later the Confederate Territory of Arizona was formed.

1871 - In April the Camp Grant Massacre of Apaches in Arizona Territory, perpetrated by white & Mexican adventurers; 144 die

1886 - Fire destroyed a block of business buildings in Phoenix. The town had no fire department or water works.

1890 - In April Phoenix modernizes with electric lighting supplied by Phoenix Power and Light Company's plant.

1894 - In May, Lowell Observatory first begins observations of Mars with an 18-inch telescope, leads its builder Percival Lowell to conclude canals are on Mars.

1896 - That April a plague swept the hog farms in the Salt River Valley and 8,000 hogs died in the following three months.

1898 - Gov. Myron H. McCord received official authorization to enlist volunteers for the Rough Riders.

1904 - Edward Tewksbury, the last survivor of the Graham-Tewksbury feud in Pleasany Valley, died.

1909 - The town of Wickenburg, west of Phoenix was incorporated by a vote of 36 to 5

1917 - An agricultural conference meeting at the University of Arizona was started when Dr. A.E. Vinson recommended slaughtering 25,000 wild burros and grinding the meat to make bologna.

1919 - The Arizona Daily Star reported that tests and experiments were to be conducted for the first time concerning the use of airplanes to spot forest fires and transport firefighters.

1920 - A prominent society and club women started a boycott on potatoes to protest the price. Housewives in Phoenix were called and asked to support the boycott and tell five friends to do the same.

1925 - The Phoenix Chamber of Commerce circulated a straw ballot on the proposition that the name of the Salt River Valley be changed to Roosevelt Valley, but the proposal met with strong opposition.

1930 - In that year April Coolidge Dam is dedicated

1933 - Bandits held up the Valley Bank at Globe and escaped with \$34,000.

1947 - Fire destroys the Phoenix Trolley Barn at 13th Street & Washington - All but 6 Streetcars are lost.

1953 - In April KTAR (now KPNX) TV channel 12 in Phoenix, AZ (NBC) begins broadcasting

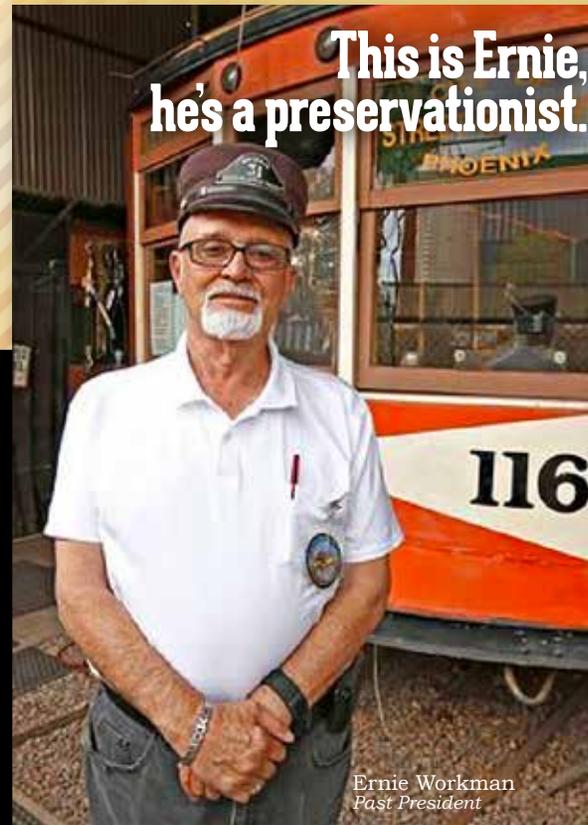
1960 - On April 15th the National Observatory at Kitt Peak was dedicated

1988 - On Tax-Day NFL's St Louis Cardinals officially move to Phoenix

1990 - In June it hit 122°F in Phoenix

1997 - Phoenix lights seen that April night over Phoenix by hundreds of people, and by millions on television. Now a hotly debated controversy.

This is Ernie, he's a preservationist.



Ernie Workman
Past President

So, this is why we call Ernie a preservationist. He and Al's dedication to the preservation of Car #116 is the reason we can be here today, continuing the stories that made Phoenix the 6th largest city in America and dreaming of the resurrection of an amazing new modern museum.

...and do you know the best part?

It can become your dream too!

Yes, you can also become a preservationist, by helping us tell the story of Phoenix and its Trolley's.

For 10 years or so he and his buddy Al spent every single Saturday, rain or shine, at the Hance Park site of the nearly 40 year old Phoenix Trolley Museum. Now this was a humble museum at the time.

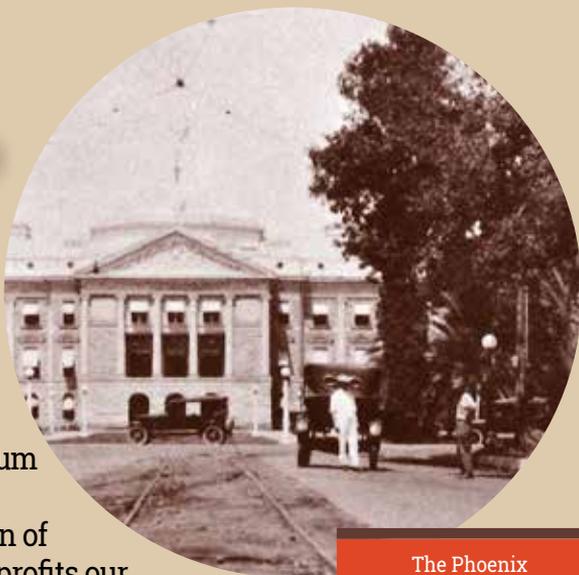
It's better years were in the early 80's with Larry Fleming, the founder. That's when track was laid from the car barn, along the Ellis-Shackelford property to Central Ave. Then Larry took ill and passed away. From that point on Ernie & Al held it together, telling the 61 year old story of the Phoenix Trolley (yes, the story goes back long before Light Rail came along).

It starts back in 1887 with mule power. In 1893 it was electrified, In 1911 a line went way out to Glendale, Az. 1929 had the highest passenger load when 6.6 million men, women and children rode the trolley (that means every person in town might have ridden the trolley 3 time a week). In its later years it faced competition from buses and automobiles and in 1947 it all came to a screeching halt with a barn fire that consumed all but 6 Trolleys. Car 116 is one of them.

A town of little more than 2000 citizens thought they needed a mass transit system.

Please accept our Invitation to become a Corporate Sponsor

Like many non-profit organizations the Phoenix Trolley Museum relies on the generosity of corporate giving for a portion of our costs. Unlike most non-profits our Museum has a direct connection to the growth and livelihood of Phoenix's past. The museum is in the midst of developing a capital campaign to build a brand new museum with new technologies, exhibits and new stories to tell. We would be honored to have your company associated with our modern museum. Please consider becoming a Corporate Member of the Museum and benefit in all the recognition that comes with such membership.



The Phoenix Trolley Museum (a dba of the Arizona Street Railway Museum, Inc.) is a 501(c)(3) nonprofit corporation dedicated to telling the Phoenix Streetcar Story.

Join us in building a place where the past is present.



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JOIN US ON A JOURNEY TO THE FUTURE OF OUR PAST