

The Laurel Line and the Electric Third Rail: The Railway that Tried to Make a Difference

By Caroline Zielinski, Fall 2010

“When finished, it will be the most perfectly constructed railroad in the United States and you and the generations to follow you will have the satisfaction of knowing that you can journey on the safest, quickest, and most comfortable road in Pennsylvania.” – an official of the Transit Contract Company



www.laurellines.org

The Laurel Line was the first railway in the Northeastern Pennsylvania region to focus on passengers first and coal second.

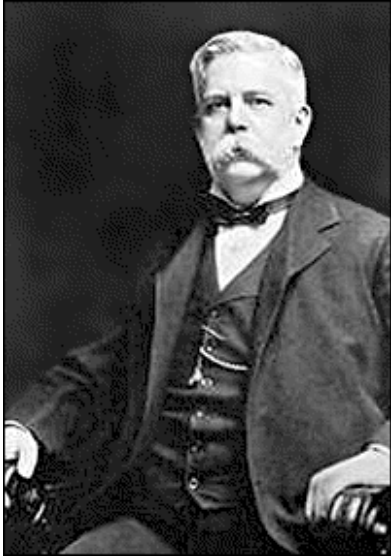
The first half of the twentieth century in Northeastern Pennsylvania could be identified by the loud noises of steam locomotives trekking across the train tracks, traveling back and forth between Wilkes-Barre and Scranton. These steam locomotives moved anthracite coal that was first found in Pittston in 1775. This coal, beginning in 1820, would move out of the coal region and into cities in the Northeastern part of the United States.

Around the time of the turn of the century, coal was the driving force behind almost the entire economy in Northeastern Pennsylvania. The coal industry was thriving, and so was Northeastern Pennsylvania. However, coal took precedence over the residents of the area and the Laurel Line with its electric third rail was going to try and change that.

A piece of coal did not have any difficulty traveling by train from the Wyoming Valley to Scranton and vice versa. However, if you were a resident of either of those areas, it was a long and uncomfortable ride. The people wanted a system of transportation to be available that was inexpensive, efficient and comfortable. The idea of the Laurel Line was born.

The Laurel Line, more formally known as the Lackawanna and Wyoming Valley Railroad, was built in a region that was built on coal. The difference between this railway and preexisting railways was that coal was not going to be the Laurel Line's number one priority. George A. Lee was the man who pushed for the line to be built. He envisioned lucrative profits from a railway that was completely unavailable to the people in the Wilkes-Barre and Scranton areas.

Steam locomotives sprinkled the banks of the Lackawanna and Susquehanna Rivers. They moved coal to its sister lines, which then sent the coal outside of the region. The Laurel Line was designed so that it could be a freight line if necessary, but its focus was the residents, not the coal, of the Wyoming Valley and the Lackawanna area.



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George Westinghouse was an important investor of the Laurel Line.

The Laurel Line had to be durable, but fast and efficient. There was great hope that the Laurel Line would change passenger travel throughout the region. What would be the result if this railroad was the safest, quickest and most comfortable road in Pennsylvania? How was the Laurel Line going to change the way that people traveled? An engineer and later an investor George Westinghouse was hired to design the Laurel Line. He decided that the electric third rail, already invented, would cause the change that the people of this region wanted.

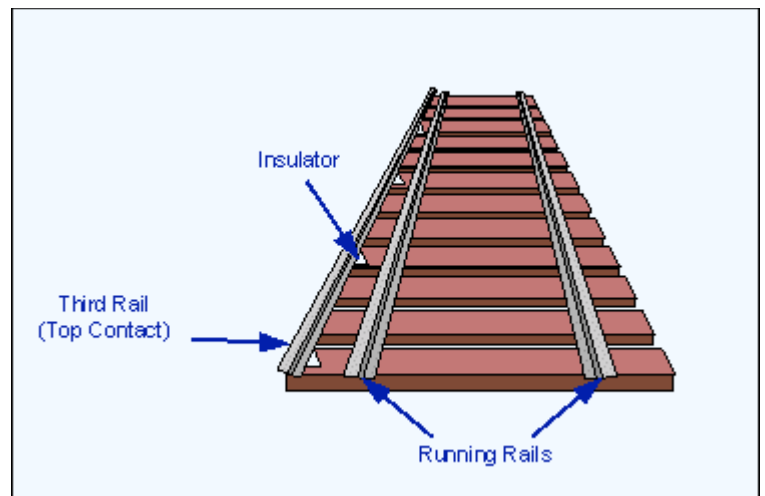
Other railroads in cities such as Philadelphia had used electricity to power a few trains and trolleys. However, the Laurel Line was the first to use the technology of the electric third rail in Pennsylvania and the out-lying regions. The electric third rail was the reason that people could ride comfortably and at a low price between Wilkes-Barre and Scranton.

The electric third rail is a third rail placed next to two preexisting train tracks. The third rail serves as a conductor of electricity to power and move the train. The railroad tracks on which the train's

wheels ride act as a negative conductor of electricity between the power source and the train itself. However, a positive conductor is needed in the system, or the train will not move. The positive conductor in this electrified system is, of course, the third rail. A high amount of voltage runs through the third rail. That power is the reason the third rail was highly preferred. It is also the reason why the third rail is so dangerous. A brush with the third rail could lead to immediate electrocution and death.

Despite its danger, George Westinghouse chose the third rail to be the means of power for the Laurel Line, and convinced the other investors in the railway that it was the best choice. In areas where there was a lot of pedestrian traffic, the third rail was removed, and the older and less efficient way of transmitting power was installed. Wires that hung over the trains, like telephone wires, were connected to a long pole that protruded from the train. With this system, there would be less chance of electrocution in the highly congested cities. After the train left the congested city, the electric third rail was again employed. The overhanging wires could not produce the large force needed to push the trains quickly and efficiently which is exactly what the builders and designers of this train wanted.

On Monday, May 18, 1903, the Laurel Line was ready for its formal opening. The company was still having issues gaining entrance into Wilkes-Barre because of the competition with a steam



railroad line, but the line to Pittston was ready. As always, good press is important so 50 newspaper writers were given the first ride on the new line. The reporters were very impressed with the speed and comfort of the Laurel Line. It only took 24 minutes to ride 12 miles, something that was unheard of. When the stations opened, the crowds were amazing. Someone reported that ticket sales were halted because the trains couldn't hold any more passengers.

As days went on, ridership increased and construction continued. Finally, on December 14, 1903 the line to Wilkes-Barre was finished. The Laurel Line was complete. Residents of Scranton and Wilkes-Barre and cities in between could ride on a line strictly made for passengers. They had finally become the number one priority over coal, but not without criticism of the electric mode of transportation. In an extremely small anonymous 1904 *Wilkes-Barre Times* newspaper article, the author has doubts about the electric mode of transportation, and believes that steam will always be more powerful than electricity. Will electricity overpower steam, or will steam stand the test of time?

Money is always an issue in any business and the electric train business was no different. Westinghouse, a major investor in the Laurel Line, was unhappy with the profit that was being made. From a different perspective, people were spending a lot of money, just not enough to cover his expenses. The line was thriving, always busy and definitely making people happy. However, Westinghouse was unhappy and he was looking for another company to buy the Laurel Line. He knew that if someone else would buy it, they would incur the major cost, he would regain his money, and he would be able to wash his hands of this endeavor.

After many attempts to sell the Laurel Line to another company, Westinghouse was still a major investor who hadn't made his money back yet. The Laurel Line was a huge success in the eyes of the residents of the area and the people looking at it without any monetary investment in the railway. However, the trains, the machinery that ran the trains and the tracks needed maintenance and updates, which cost money.



www.ectma.org/gallery.html

A car from the Laurel Line sits on the tracks that once were used frequently by residents of the Wilkes-Barre and Scranton areas.

The Laurel Line had been called “the finest electric line in the United States.” A small railroad from Wilkes-Barre to Scranton was the finest electric line in the United States. For as much as George Westinghouse was unhappy in the investment that he made, the people of Wilkes-Barre and Scranton were excited about something. The line connected the “twin anthracite capitals” of the United States, and for once thought about the passengers and not the anthracite coal itself. It was high-speed, electric, and something that was never done before.

Unfortunately, all good things come to an end. Many people were skeptical about interurban electric lines, and for a good reason. They were dangerous and had taken many lives, they did not run well in severe winter weather, especially like the weather in Northeastern Pennsylvania, and the upkeep had proven to be more expensive than the profits. In the 1950s, most of the electric interurban railways were closed, the Laurel Line included. On December 31, 1952, the Laurel Line ran for the last time. Workers, investors, and friends of these people were the last people to take a nostalgic ride on a railway that tried to drown out the sounds of the steam locomotives but ended up riding on them once again.

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