The Chester Valley Trail: From Rail to Trail

Tim Lander

Opened to the public in 2010, the Chester Valley Trail (CVT) has quickly become one of our area's most popular destinations, with over 350,000 visitors in 2015. Not just for experienced cyclists sporting colorful spandex outfits, the trail is frequented by people of all ages, physical ability, and choices of garb. From young children whose bikes still sport training wheels, to retirees taking a casual afternoon stroll, the CVT has developed a broad range of enthusiasts, many of whom have little knowledge of the trail's origin as a semi-rural freight and passenger railroad, and certainly very few with any recollection of the days when cars had to "stop, look and listen" before they crossed the Chester Valley tracks.

Trail Planning

The story of the Chester Valley Trail begins in 1991, when Chester and Montgomery Counties first considered the conversion of the defunct rail line into a bike trail. These "rail-to-trail" conversions had been gaining steam for the past several decades, as more and more track fell into disuse across America. While the logic behind transforming these corridors into trails seems straightforward—they are generally fairly level, about the right width, and usually incorporate bridges across roads, streams, and other obstacles—the actual process of creating a trail from a railroad line is both lengthy and expensive.

When a railroad line becomes unprofitable and the tracks are abandoned, the owners don't simply walk away; they sell the property to any interested buyer, hoping to recoup some of their losses. In the case of the Chester Valley Railroad, a number of different purchasers acquired varying segments of the former line over the years prior to the start of trail construction. Some needed the space to expand adjacent business operations, others had visions of new development. Chester County ("the County") had to locate funding sources for each parcel they wanted to secure, and also had to perform multiple engineering studies to satisfy the funding agencies and other stakeholders, including PennDOT, whose roads the trail would cross.

Eventually progress would be made, but between 1991 and initial trail construction in 2009, much paperwork needed to be done behind the scenes. That did not preclude some more visible accomplishments, however. In 2000, a "demonstrator" trail, about a mile-and-a-half in length, was built in Exton near the current site of Exton Park. Surfaced with gravel, it teased trail advocates for years into thinking that something bigger was on its way.



Rails and ties are removed as part of the abandonment process. Photo courtesy of Chester County Department of Facilities and Parks.



The demonstrator trail in Exton. Photo courtesy of Steve Warren Photography.

Something bigger was indeed in the works for the trail, but miles away from Exton, and greater in cost than length. PennDOT widened the Schuylkill Expressway in King of Prussia, necessitating the replacement of bridges for the Chester Valley Railroad and the adjacent Norfolk Southern. And so a new trail bridge was erected across the Expressway, along with a short stretch of trail at either end. By 2004, the Chester Valley Trail consisted of two disconnected pieces, with a 10-mile gap in the middle.

While planning to close that gap continued, the County did not remain idle in the field. The former railroad passed over numerous streams, with stone culverts built to permit passage of the creeks below the tracks. Having seen little maintenance over the years, all of these culverts required repairs, and staff from the County bridge crew and park maintenance team were pressed into action to do the work. They did an outstanding job, at a great savings to taxpayers when compared to the use of outside contractors. It seems a shame that their handiwork goes unnoticed by the thousands of trail users who now pass over the culverts each year.

Phase I - East Whiteland

The first significant trail construction began in East Whiteland Township, where a four-mile stretch of right-of-way was acquired by the County. Running from Exton Park eastward to the Target parking lot at Uptown Worthington in Malvern, this segment remains one of the most heavily traveled sections of the trail. Work got underway shortly after funding was finalized in September, 2009, and the



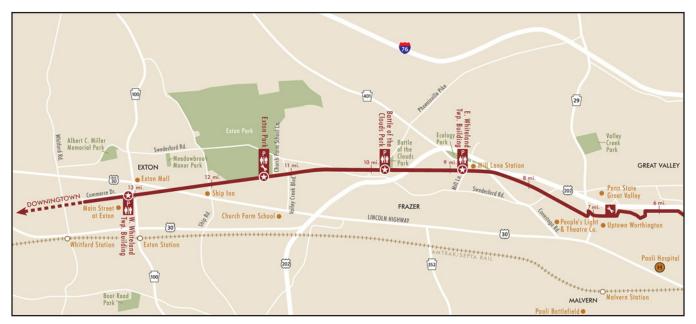
The new Norfolk Southern railroad bridge (left upper) and CVT bridge (center) across the Schuylkill Expressway (I-76) in King of Prussia.

Photo courtesy of Microsoft Bing Maps.



A member of the county bridge maintenance staff inspects newly repaired Culvert #11, west of West Valley Road.

Photo courtesy of Chester County Department of Facilities and Parks.



This map shows Phase I of the CVT in East Whiteland Township, from Exton Park eastward to Uptown Worthington.

Note the locations of parking and restrooms.

Map created by the Chester County Planning Commission.

full project cost of over \$4 million was covered entirely by the American Recovery and Reinvestment Act (ARRA). At the time, "shovel-ready" projects took precedence in awarding ARRA funds in order to get people back to work as quickly as possible. In case you're wondering, the price tag of about a million dollars per mile is fairly consistent for paved bike trails in the U.S., especially when you factor in the cost of new bridges.

While most of the construction work was fairly ordinary in nature—bulldozers and other heavy equipment clearing and leveling the former rail bed—significant attention was focused on the erection of a new bridge across Church Road, just west of the East Whiteland township building and near the Chester Valley Golf Club. The County chose a Pratt Truss design for all new trail bridges, both to carry the weight of heavy maintenance and emergency vehicles once the trail opened, and also to reflect the railroad era. That type of structure was common throughout the eastern railway network, although the Chester Valley Railroad typically used stone arch bridges, not trusses, since the roads they spanned were fairly narrow at the time the railroad was established. The old stone railroad bridge spanning North Valley Road was only one lane wide, for example, so it was removed in the name of progress to accommodate suburban traffic flows.

Unfortunately, the planning for the Church Road Bridge did not adequately consider the limestone geology under the bridge footings, and sinkholes developed in the trail at the eastern edge of the bridge. Copious amounts of concrete were poured in response, and the bridge footings on subsequent sections of the trail were redesigned to avoid a repeat of such complications.



The new truss bridge over Church Road in East Whiteland, erected in May, 2010. Photo courtesy of Chester County Department of Facilities and Parks



County Commissioners Farrell, Aichele, and Cozzone cut the ribbon to officially open Phase I on September 21, 2010.

Photo courtesy of Chester County

A grand opening ceremony was held at the East Whiteland trailhead on September 21, 2010, as County Commissioners Terence Farrell, Carol Aichele, and Kathy Cozzone arrived via bicycle to cut the ribbon. It should be noted that local cyclists and runners had already been using the trail for weeks. Once paving started, it was a perpetual challenge to keep the public off the trail, in spite of the construction company's best efforts to create roadblocks with plastic fencing

and other temporary measures. As the ceremonial speeches were underway, a number of people cycled past the assembled dignitaries, oblivious to the not-quite-open status of the trail.

Even after Phase I opened, construction continued on the trail where it passed under Route 202. PennDOT kicked off a long-planned project to replace the bridges carrying the highway over the former railroad. In 2013, they installed a massive box culvert—more like a tunnel—to allow the trail

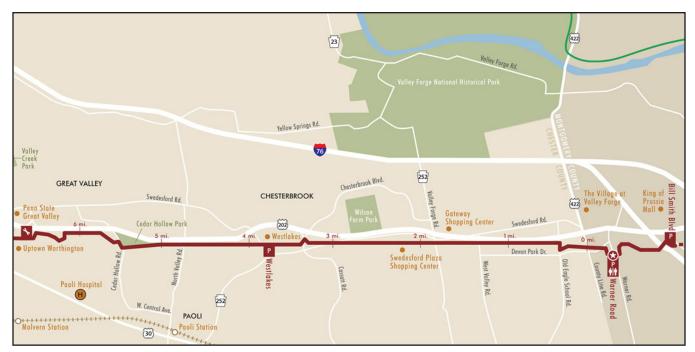
to pass under the road while the bridges were removed and replaced with earthen fill. The project is expected to wrap up in 2016, when PennDOT will finally repave the trail through the underpass.



The new culvert under Route 202 in October 2013. *Photo by Tim Lander*



Announcement of the Phase I opening ceremony. *Image courtesy of Chester County*



This map shows Phase II of the CVT in Tredyffrin Township, from Uptown Worthington eastward to King of Prussia. Map created by the Chester County Planning Commission.

Phase II – Tredyffrin

The next stretch of trail to be built is also the longest, running for approximately seven miles through the heart of Tredyffrin Township. It connects the Uptown Worthington site on Matthews Road with the one-mile portion of trail that includes the bridge over the Expressway in King of Prussia. Even though Phase II crossed the county line into Upper Merion Township, Montgomery County, the project was performed under the auspices of Chester County.

Work began in April 2012, again consisting primarily of clearing brush and leveling the trail in preparation for paving. In Malvern, the original railroad right-of-way had been incorporated into the campus of mutual fund behemoth Vanguard Group. The County and Vanguard arranged for an alternate route via an easement adjacent to Matthews Road, utilizing the abandoned Cedar Hollow Road bridge in the process. Phase II included two new bridges, one over North Valley Road in Paoli, and a much longer one over Valley Forge Road in Devon.

Slightly further to the east, the trail passes under the Contention Lane bridge, a curious one-lane wooden structure that seems better suited to the 19th century, but adds a little local color nonetheless. Near the county line, the railroad originally crossed Warner Road at grade, while the trail utilizes a new underpass excavated beneath the road near the former Trenton Cutoff of the Pennsylvania Railroad.



This is what the trail looked like in Tredyffrin prior to the start of construction. This section is between North Valley and Swedesford Roads. *Courtesy of Steve Warren Photography*



A Pratt truss bridge being lowered into place over North Valley Road. Work was performed over a weekend in August 2013. *Photo by Tim Lander*.

At 150 feet, the Valley Forge Road Bridge is the longest of the three truss bridges installed for Phases I and II.

Courtesy of Steve Warren Photography.



The stone arch bridge that formerly carried Cedar Hollow Road across Little Valley Creek has been repurposed as part of the CVT. *Photo by Tim Lander.*



The Contention Lane Bridge arches over a not-quite-completed trail in March 2013.

*Courtesy of Steve Warren Photography.



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Phase II opened for use in January of 2014, though the official ceremony was delayed until spring when the weather was more favorable. The event was held on May 5 at the Westlakes Corporate Center, where the owners of the business park, Keystone Property Group, have graciously allowed one of their underutilized parking lots to be designated as a trailhead. This provides abundant parking in a locale convenient to the majority of Tredyffrin residents.





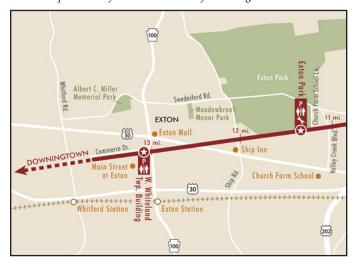
Box culvert under Warner Road. Photo by Tim Lander.

Ribbon cutting ceremony for Phase II, at Westlakes trailhead. *Photo courtesy of Chester County.*

Phases III & IVa - Exton

The last section of trail to be completed to date is Phase III, running from the Exton Park trailhead west across Ship Road, Lancaster Pike, and Route 100, to Commerce Drive and the Main Street at Exton shopping complex. This section opened in September 2014. Engineering work and preliminary clearing is underway for Phase IVa, which will continue the trail another mile west across a planned bridge over Whitford Road to the Oaklands Corporate Center. Here, the original Chester Valley Railroad right-of-way comes to an abrupt end due to the circa-1995 Route 30 Bypass and a quarry operation that expanded across the right-of-way after the railroad was abandoned. Phase IVa should be complete in 2017.

This map shows Phases III & IVa of the CVT in Exton. *Map created by the Chester County Planning Commission.*





ABOVE: Legend has it that Exton received its name from the "X" created where the Chester Valley Railroad crossed Lancaster Pike at an angle. *Photo courtesy of David C. Augsburger.* RIGHT: The trail crossing in Exton as it looks in 2015. There is no more "X" in Exton. *Photo by Tim Lander.*



To Downingtown and Beyond

Before we return to the eastern end of the trail and the next phase of construction, a brief look at ongoing plans to the west is worthwhile. With the railroad right-of-way obliterated, the Chester County Planning Commission is studying other options for extending the Chester Valley Trail from Exton to Downingtown, making connections to the existing Struble Trail (heading north towards Marsh Creek) and the East Branch Brandywine Trail (towards West Chester). The alternatives being considered run alongside existing roads, through commercial

properties, and under various bridges and culverts – essentially anywhere it is feasible to go from an engineering standpoint. Also under consideration is an abandoned length of former Pennsylvania Railroad freight line, currently in the hands of Norfolk Southern. This latter route has appeal since it mostly avoids road crossings and would limit the number of property owners to be negotiated with, but it includes a major truss bridge across the active Amtrak lines that would present trail construction and maintenance challenges. A recommended route will be determined in 2016; trail construction remains years away.

Not content to see the CVT terminate in Downingtown, a separate initiative is reviewing transportation needs between Downingtown, Coatesville and further out the Route 30 corridor. A distant hope is to connect with the Enola Low-Grade Trail, a former PRR line that has been converted to trail use between Atglen in western Chester County and Quarryville in Lancaster County.



The abandoned Norfolk Southern Bridge over the active Amtrak lines at SEPTA's Whitford Station. *Image courtesy of Microsoft Bing Maps.*

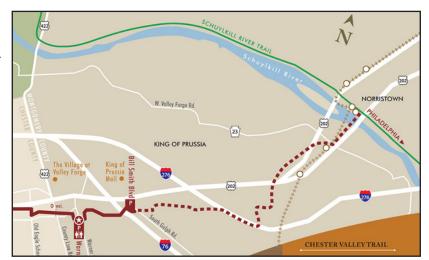


"At Whitford, where the double-track Philadelphia & Thorndale extension of the Trenton Cutoff crossed over the four-track Main Line at a shallow angle, hopper cars rumble overhead on the massive truss bridge while the Chicago-New York Admiral roars toward its station stop at Paoli behind a GG1." Photo by David G. Knox. From HEART OF THE PENNSYLVANIA RAILROAD: The Main Line, Philadelphia to Pittsburgh by Robert S. McGonical, 1996

Montgomery County Extension

The most anticipated section of trail is the four-mile stage that will run through King of Prussia and Bridgeport, across the Schuylkill River to Norristown. There, it will connect to the Schuylkill River Trail (SRT), enabling cyclists to ride from Exton, Malvern, and Paoli to Center City Philadelphia. Those looking for a less urban destination will be able to follow the SRT in the other direction and arrive in Phoenixville or Collegeville.

With construction planned to commence in 2017, the Montco segment will traverse South Gulph Road, pass by the relocated King of Prussia Inn, cross a new bridge over Henderson Road, then follow Saulin



A map showing the planned route of the trail through King of Prussia and Bridgeport. *Map created by the Chester County Planning Commission*.

Boulevard to DeKalb Pike (Route 202). A signalized grade crossing at DeKalb Pike will carry the CVT via abandoned rail bed into the Borough of Bridgeport, where the trail will be routed over the Schuylkill River on the DeKalb Street Bridge, meeting up with the SRT at the Norristown Transportation Center.

Regional Trail Network

Once the connections are made to Norristown and Downingtown, the Chester Valley Trail will achieve the decadesold vision of a 21-mile multi-use trail for the benefit of thousands of local residents in two counties. Yet the vision for trails in the greater Philadelphia area is much, much broader. The Circuit Coalition, a collaborative effort among several local organizations, envisions a network of over 750 miles of trails throughout the region, with the CVT serving as one of the main trunk lines from which other trails would branch. You can learn more about this initiative online at ConnectTheCircuit.org.

The Patriots Path, one of the potential branch routes, is a trail concept that would use the Chester Valley Trail to connect with local sites of historic interest, including Malvern's Paoli Battlefield monument and Valley Forge National Historical Park. The Park's Joseph Plumb Martin Trail will be connected to the Schuylkill River Trail in 2016 once the new Sullivan's Bridge across the river is completed, replacing a rickety footpath alongside Route 422. That opens the potential for a loop trail consisting of the CVT, SRT, and Patriots Path at some future date, with the Park's trail network in the center of it all.

Interpretative Signage

Given the prominent role of the Chester Valley during the American Revolution, it is fitting that Chester County has incorporated a series of interpretative signs along the CVT, enlightening passersby to historic events in the vicinity of the trail, as well as highlighting the general history of the valley. From its days as a predominantly agricultural region, to the industrial era fueled by the exploitation of the significant limestone deposits, and the accompanying growth of transportation networks through the wide, level valley, the CVT signs furnish snapshots of the local history for which Chester County is famous.

Experience the Trail

The Chester Valley Trail has matured rapidly and is now the most heavily-used facility in the County park system. The trail is maintained by the Chester County Department of Facilities and Parks, under regional superintendent Owen Prusack, and is patrolled by County Park Rangers. Local police forces patrol the trail as well, and Tredyffrin has additionally established a Trail Watch program staffed by civilian volunteers under the supervision of Officer Rhonda Carroll. The trail is plowed after snowfalls, which disappoints cross-country skiers but delights the many walkers, runners, and bikers who have made the trail part of their weekly—sometimes daily—routine. There is also a hardy band of cyclists who commute from their homes to the many offices that line the CVT corridor.

If you are not one of the thousands who have already enjoyed the trail, why not make plans for a short walk or bike ride to get acquainted with all that the CVT has to offer? Much of the route is through scenic woods and fields, yet never strays far from civilization. The centrally located Pub at the Malvern Wegmans offers a nice place to relax and refuel, and there are benches along the way if you need a break. You may well find yourself among the many local residents who make the trail a second home.

Tim Lander is president of the Friends of the Chester Valley Trail, a non-profit 501(c)(3) organization founded in 2011 to assist Chester County with communication and fundraising in support of the trail. He is a former editor of the *History Quarterly* and currently serves as treasurer and director of the Tredyffrin Easttown Historical Society.