



**Rhode Island
Association of
Railroad Passengers**

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Installing High Platforms at Westerly Station

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EXECUTIVE SUMMARY

In November 2023, the Northeast Corridor Commission released its Connect NEC 2037 (C37) & FY24-28 NEC Capital Investment Plan. Among other new additions to the Project Information Appendix is the “**Westerly Station SOGR Platform Replacement**” project, whose purpose is to study the feasibility of installing 48” (high) platforms at this historic railroad station which has served as the western gateway into Rhode Island for rail passengers since its construction in 1913.¹

The project schedule (January 2024—September 2026) coincides with Amtrak’s New Haven to Providence Capacity Planning Study, which will develop and evaluate alternatives to grow rail capacity and improve rail performance between those two nodes of the Northeast Corridor.² It also advances the recently-completed Eastern Connecticut Corridor Rail & Transit Feasibility Study (ECRTS), which identified the construction of high platforms as a prerequisite to extending the CTrail Shore Line East commuter rail service to Westerly Station and called for a more detailed review of the topic.³ For its part, the Westerly Town Council unanimously adopted a Resolution in support of this much-needed infrastructure upgrade project in December 2023, just days after the release of the ECRTS.⁴

Westerly Station currently features 8” (low) platforms. On the Northeast Corridor, low platforms present accessibility challenges for riders and trigger extended dwell times at stations, which adversely impacts the quality and reliability of rail service systemwide. An investment in high platforms would enable level

boarding at Westerly Station, providing immediate operational and accessibility improvements for the existing intercity rail service and allowing the station to accommodate future commuter rail service.

The Rhode Island Association of Railroad Passengers has prepared the following report to summarize the project’s purpose and need, to offer several potential high platform configurations for further review, and to provide data and narratives which will help advance the project to future phases.

The following findings are discussed in this report:

- 1) **An investment in high platforms at Westerly Station is merited:** recent intercity rail ridership data and underlying demographic indicators, combined with active proposals to establish Westerly as a commuter rail terminus, suggest ample room for ridership growth above and beyond current trends.
- 2) **It is feasible to construct high platforms at Westerly Station,** despite the limitations imposed by existing track geometry, although at least one platform might be constrained in length below Amtrak standards for Northeast Regional stations.
- 3) **High platforms represent a meaningful safety enhancement over the existing low platforms,** and this fact will form the cornerstone of a waiver application narrative if a waiver must be sought from the Federal Railroad Administration due to platform length. The resultant operational efficiency and community benefits also warrant supplementary discussion.

¹ CONNECT NEC 2037 (C37) & FY24-28 NEC Capital Investment Plan (2023) p.66

² Ibid, p.62

³ Eastern Connecticut Corridor Rail and Transit Feasibility Study (ECRTS) Appendix H: Preliminary Feasibility Assessment (2023) p.24

⁴ Resolution 23/24-39, adopted by the Westerly Town Council on December 4, 2023. See attached.

1.1 Operational Benefits of High Platforms

Minimizing dwell times at stations is key to assuring schedule reliability and operational efficiency – both of which are necessary if Amtrak is to meet growing regional demand for more frequent intercity rail service along the nation’s busiest rail line, the Northeast Corridor.

One of the most impactful strategies for reducing dwell times is to upgrade low-platform stations with high platforms, which enables level boarding. Level boarding expedites passenger flow by providing step-free access between the train and the platform (as stairs are cumbersome to navigate for riders with mobility impairments or luggage). High-platform stations not only move equivalent passenger volumes more efficiently than their low-platform peers, but also absorb ridership increases more efficiently. Framed another way, an equivalent increase in ridership at a low-platform station disproportionately lengthens dwell times and increases the risk of unscheduled delays impacting on-time performance.

This is a particularly important consideration between New Haven and Providence, where the Northeast Corridor’s two electrified mainline tracks host rail services with different speed profiles (Northeast Regional, Acela, CTail Shore Line East) and offer limited opportunities for overtakes. When a low-platform station is located directly on the mainline tracks, precluding timed overtakes, the risk of delays cascading from one service to another on the same corridor is elevated.

For these reasons, as well as for improving accessibility and safety, all but four of the 28 station stops that Amtrak’s *Northeast Regional* intercity rail service makes along the Northeast Corridor’s electrified, Boston-to-Washington mainline have been upgraded with at least partial-length high platforms.



Top: High platform at the Charles A. Gallagher Transit Terminal in Lowell, demonstrating the ease of boarding and alighting when the platform is level with the floor of the train. Photo courtesy of the Lowell Sun.

Bottom: Northeast Regional train at Westerly Station. Note the height difference between the floor of the train and the surface of the low platform. Photo courtesy of the Westerly Sun.

1.2 Intercity Rail at Westerly Station

Of the four exclusively low-platform stations that remain – Westerly, RI; Mystic, CT; Newark, DE; and Aberdeen, MD – Westerly has enjoyed the highest annual ridership figures as well as the most consistent year-over-year ridership growth for the past decade.



Data courtesy of Rail Passengers Association

Last year, in 2023, ridership at Westerly Station surpassed 50,000 boardings/alightings for the first time in the Amtrak era. This figure not only constitutes a single-year ridership record, but is also nearly on par with the station’s anticipated (pre-pandemic) growth trajectory.

The increased prevalence of remote- and hybrid-work arrangements since the pandemic has strengthened the station’s long-term prospects for intercity rail ridership growth above and beyond pre-pandemic assumptions. The New York metro area has seen the largest outmigration of remote workers in the nation, and Westerly closely matches the profile of communities to which these workers have tended to relocate: it is an affordable, small urban center with strong quality-of-life

amenities and a high proportion of seasonal homes, which reflects the smaller community’s status as a popular vacation spot among residents of the larger metro area.⁵

Westerly’s shoreline villages, such as Watch Hill, originated 150 years ago as summer resorts for industrialists from New York and other wealthy cities of that era. Down to the present day, these villages contain the largest concentrations of summer residences in the Norwich-New London-Westerly area. Approximately one-quarter of the town’s seasonal housing stock was built during the 2010s,⁶ and New Yorkers flocked to these summer homes in such volumes at the start of the pandemic that then-Gov. Gina Raimondo ordered the National Guard to meet train passengers alighting at Westerly Station to inform them of quarantine restrictions.⁷



National Guard at Westerly Station. Photo courtesy of David Collins, *The Day*.

Although the precise number of formerly-seasonal residents who decided to permanently relocate is unknown, their presence is likely reflected in Westerly Station’s strong post-pandemic ridership recovery. Westerly’s convenient location between New York and

⁵ Emily Badger, Robert Gebeloff, and Josh Katz, “The Places Most Affected by Remote Workers’ Moves around the Country,” [The New York Times](#), June 17, 2023.

⁶ Eastern Connecticut Corridor Rail and Transit Feasibility Study (ECRTS) Appendix B: Transit Oriented Development (TOD) Corridor Scan (2023) p.25

⁷ Vincent Barone, “Rhode Island sending cops, National Guard to find New Yorkers seeking coronavirus refuge,” [The New York Post](#), March 28, 2020.

Boston (its top two city pairs, respectively)⁸ continues to make it an attractive place to relocate.

Although ridership levels at Westerly have never been higher, service levels are limited: only half of the daily Northeast Regional trips between New York and Boston include station stops at Westerly, while the other half pass through without stopping. Westerly’s low-platform peers similarly receive only partial Northeast Regional service.

Westerly’s situation contrasts sharply with that of Old Saybrook Station, which features partial-length high platforms and is served by all but one Northeast Regional trip through the corridor. Ridership levels at Old Saybrook Station are roughly 33% higher than those at Westerly Station (67,000 vs. 50,000 in 2023) – even as Old Saybrook’s population is less than half that of Westerly.⁹ The positive correlation between service frequency and ridership is evident.

With equivalent service frequency, Westerly could be expected to surpass Old Saybrook’s annual ridership numbers, given its larger size and strong growth prospects. Yet the station’s low platforms represent an infrastructure impediment to providing more frequent service. Amtrak must balance growing demand at Westerly with growing demand across the Northeast Corridor, and as long as the station features low platforms, Amtrak cannot satisfy demand for more service at Westerly without increasing the risk of dwell time-related delays adversely impacting service reliability for other users.

By raising Westerly Station’s platforms, Amtrak can reduce and regularize dwell times – both as compared to current conditions and inclusive of ridership growth – enabling increased service frequency at Westerly as well as increased service reliability systemwide.



⁸ See attached Rail Passengers Association statistics sheet (data current through 2022). For 2023 ridership data, see <https://www.greatamericanstations.com/stations/westerly-ri-wly/>.

⁹ <https://www.greatamericanstations.com/stations/old-saybrook-ct-osb/>.

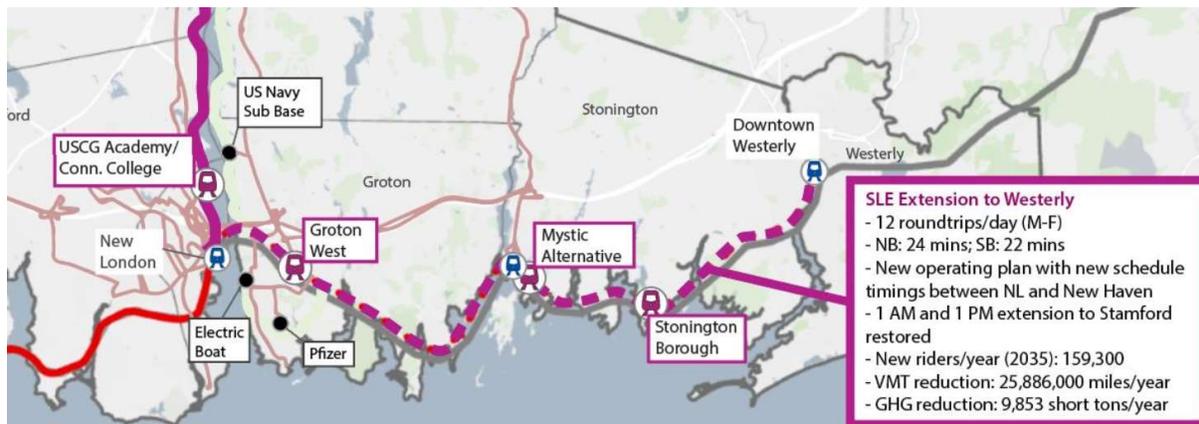
1.3 Commuter Rail at Westerly Station

Although the Westerly Station SOGR Platform Replacement Project has been justified purely as an intercity rail project,¹⁰ the case for installing high platforms is further strengthened by the proposed extension of commuter rail service to the station.

The Eastern Connecticut Corridor Rail & Transit Feasibility Study, published in December 2023, is the most detailed (and second-most recent) of at least 18 plans and studies completed during the last 25 years which have anticipated the extension of commuter rail to Westerly.¹¹ Westerly Station has long been considered a logical terminus for two separate commuter rail services – CTrail Shore Line East and a future Rhode Island intrastate line – given its strong fundamentals, its convenient proximity to the state border, and its adjacent rail yard which could be repurposed as a joint-use layover facility.

While the study did not offer station-specific ridership projections, its analysis of contemporary demographic, economic, and travel data revealed multiple indicators which suggest Westerly would be a well-patronized commuter rail station, particularly by Shore Line East standards. These are summarized and discussed below:

- [Transit Ridership Propensity](#). The urban core of Westerly ranked alongside those of New London and Groton as containing the highest population and employment densities, as well as the highest proportions of cost-burdened renters, in the Study Area.
- [Capacity to Support New, Station-Adjacent Economic Activity](#). The portion of Census Tract 508.01 that lies south of Wilcox Park has one of the highest income densities in the Study Area. More broadly, Westerly posts the highest median home values of any municipality in the Study Area.



Graphic courtesy of CTDOT. Dashed purple line indicates proposed extension of Shore Line East to Westerly, RI via the Northeast Corridor. Solid red line shows the existing eastern terminus; solid purple line represents proposed new passenger rail service between New London and Norwich, CT, also studied through the ECRTS.

¹⁰ See description in Northeast Corridor Commission FY24-28 Capital Investment Plan [web dashboard](#).

¹¹ A list of studies is attached. Full packet containing relevant excerpts of listed studies is available upon request.



Excerpt of Figure 12 (“Density to Support Transit Ridership and Sustain TOD”), ECRTS Appendix H: Preliminary Feasibility Analysis, p.19. Largely obscured by a marker indicating the location of Westerly Station, Census Tract 508.01, which contains the station, appears in dark blue, signifying its status alongside the urban cores of New London and Groton as hosting sufficiently high population and job density levels to support transit service.

- [Trip Generation and Commuting Patterns](#). Westerly is one of the three largest overall trip generators in the Study Area (behind only the Mohegan Sun and Foxwoods casinos) and displays the second-smallest weekday/weekend trip differential, indicating steady travel demand throughout the week. When focusing purely on work-specific trips, Westerly “exports” about twice as many trips to other parts of the Study Area as it “imports” from them. This is largely a reflection of the scale of major employers in Groton and New London.
- [Growth of Major Employers](#). General Dynamics Electric Boat, the single-largest employer in the Groton—New London labor market, has begun hiring at a record pace, aiming to onboard nearly 20,000 new workers during the next decade. Electric Boat relies upon the Westerly Education Center (located directly adjacent to Westerly Station) as an employee training facility.¹²

High platforms will minimize dwell times and improve accessibility for commuter rail passengers, just as they will for intercity rail passengers. Yet the ECRTS identified another, even more fundamental reason as to why high platforms are a prerequisite to bringing in commuter rail: Shore Line East’s rolling stock (Kawasaki M8s) are not equipped with stairs and cannot be boarded from low platform height.

To serve the latent demand for commuter rail in Westerly, high platforms must be installed. The Westerly Station SOGR Platform Replacement project will constitute a direct response to the ECRTS’ call for analyzing the feasibility of this infrastructure upgrade, but given that the project is only just beginning its full project lifecycle, the following section of this report is intended to support its advancement by summarizing the relevant engineering challenges and operational implications and offering potential design solutions for further review.

¹² “Electric Boat to add another 5000 jobs this year,” [The Day](#), February 22, 2024.

2.1 Engineering Challenges

The essential barrier to an in situ raising of Westerly Station's existing (low) platforms is that they are located along a segment of track which features a 2-degree curve and 5.5" of superelevation.¹³



Existing track/platform conditions at Westerly Station

Amtrak's Station Planning and Development Guidelines specify that high platforms should ideally be built along tangent track but permit a maximum curvature of 1 degree 40 minutes and 1" of superelevation if necessary.¹⁴ These standards relate to ADA regulations, which limit the width of horizontal gaps between the train and platform to 3 inches and the height of vertical gaps to 5/8 inch;¹⁵ they represent the sharpest curve and greatest superelevation allowable without creating a gap that exceeds ADA limits and would need to be mitigated by a device such as a bridge plate.¹⁶

A rule of thumb for calculating the size of the gap on a superelevated curve is that each degree of track curvature and every inch of superelevation adds one inch to the gap.¹⁷ Given the existing track geometry at Westerly Station, it is not

possible to construct high platforms in conformance with ADA regulations – the gap would be roughly 7.5 inches. Westerly Station is currently an ADA-compliant low-platform station, so a platform modification that results in a loss of ADA compliance is a non-starter.

Modifying the track geometry at the station poses additional complications. The mainline tracks can neither be straightened nor leveled without introducing a corresponding reduction in track speeds through the station area, which in turn would impose a new timetable penalty on non-stopping trains – most significantly the Acela, which is Amtrak's most profitable service and is marketed as high-speed rail. Any reduction in speed and increase in travel time would undermine this flagship service's appeal and counteract growing Acela demand.

Short of rerouting all Acela trips over a new alignment that bypasses the station – a concept whose political viability is not at all clear, and which would not likely enter into service for another two decades even under the most optimistic scenario – modifying the geometry of the mainline tracks should also be seen as a non-starter.

With these challenges in mind, if Amtrak is to install high platforms at Westerly Station, it must either work *with* the existing mainline track geometry by locating the platforms along the nearest stretch of tangent track, or work *around* the mainline track geometry by locating the platforms along new tangent passing sidings. The following section presents design concepts to illustrate how platforms could be installed under both scenarios.

¹³ Information verbally relayed by former Amtrak employees familiar with MOW conditions at Westerly.

¹⁴ [Amtrak Station Planning and Development Guidelines](#) (2022), p.131.

¹⁵ [FRA ADA Platform Guidance](#) (2022), p.34.

¹⁶ New London Union Station, located along an 8-degree curve, achieves level boarding by use of a bridge plate at a mini-high platform. This is not a desirable new-build solution for Westerly because of its impact on dwell times.

¹⁷ [FRA Study of Methods to Improve or Correct Station Platform Gaps](#) (2010), p. 54.

2.2 Design Concepts

Concept 1

Summary: High-level platforms would be located along the nearest available segment of tangent track. This concept assumes no changes to existing track geometry and minimizes topographic alterations to the maximum extent possible. Both platforms would require waivers for substandard length.

Key considerations: Site constraints, Platform access

Description:

The nearest available segment of tangent track begins at West Street and continues eastward to High Street through a depression historically known as the Dixon Cut. Although the New Haven Railroad built the right-of-way (including the Dixon Cut) wide enough to accommodate four mainline tracks, it only installed tracks in the two southernmost track slots. This configuration persists down to the present: Track 2 passes directly alongside the southern abutments of the (demolished) West Street Bridge and (extant) High Street Bridge, while Track 1 occupies the adjacent slot to the north.

A third track, the lead track into the Westerly rail yard, also passes through the Dixon Cut. It branches off from Track 1 about 250 feet east of the High Street Bridge and runs westward into the yard along the Dixon Cut's northern embankment, effectively occupying the northernmost of the four track slots.

Given these conditions, both platforms would require waivers for substandard length due to the specific characteristics of the built environment. The southbound platform along Track 1 could extend up to 600 feet between

West Street and the switch for the yard lead track; the northbound platform along Track 2 would be limited to 400 feet by the southern abutment of the High Street bridge. Both platforms should be able to attain the standard 12-foot width for side platforms, but the northbound platform would stand close enough to the Dixon Cut's southern embankment that a low retaining wall might be necessary.

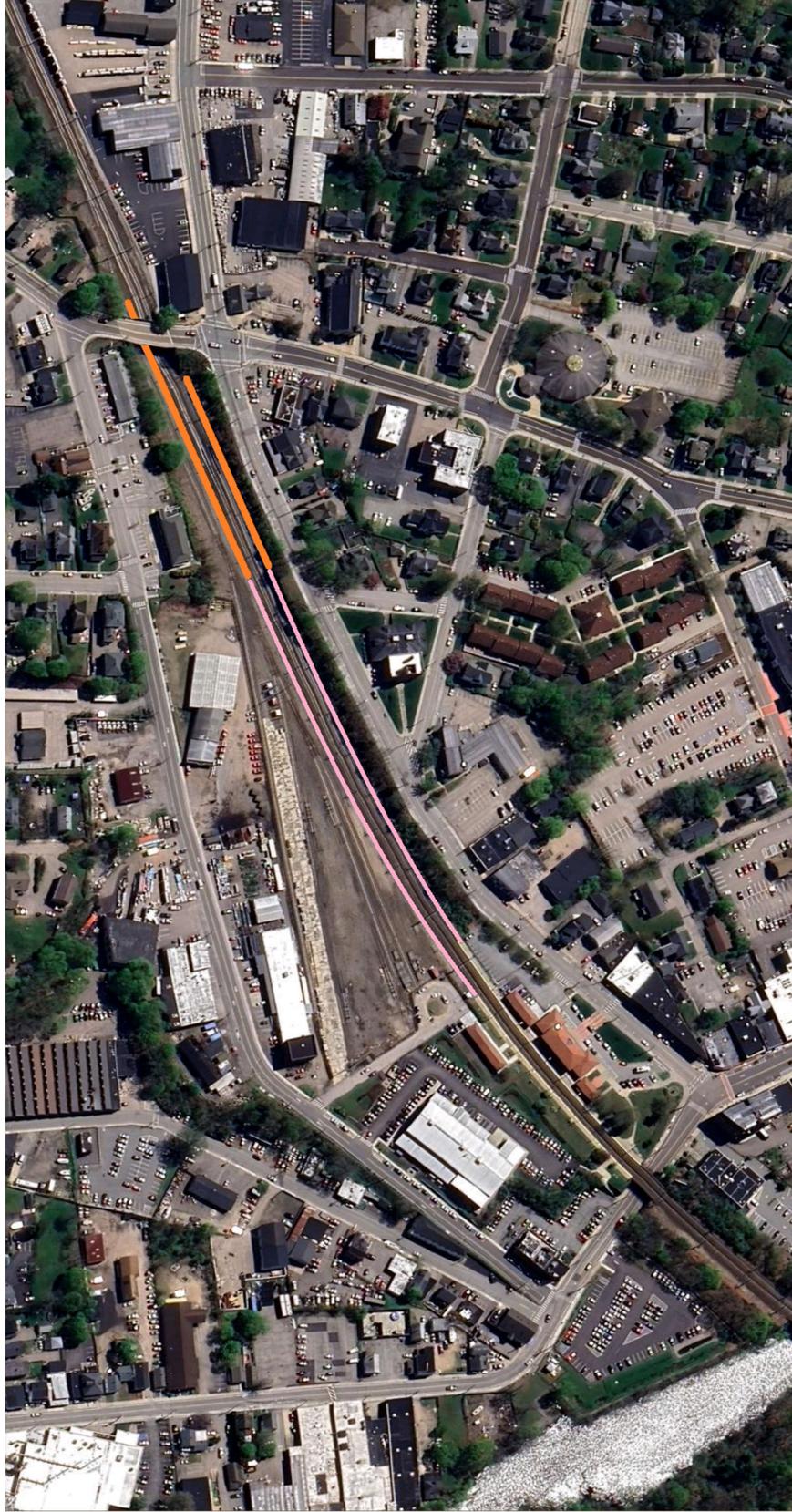
Concrete walkways extending from the existing station facilities to the future platforms would provide accessible paths of travel by inclining as ADA-compliant ramps at their eastern ends to reach the platforms' 48" ATR height. The southern abutment of the West Street Bridge stands close enough to Track 2 that it would obstruct access to the northbound platform; it would therefore have to be demolished (and potentially replaced with a low retaining wall) to make sufficient room for both the walkway and any required setback from the track.¹⁸

Accessible, grade-separated, cross-platform circulation is currently provided by elevators located just east of the station building which tie into a tunnel beneath the tracks. The near end of the high platforms would stand about 950 feet east of the elevators, around a five-minute walk. If this distance exceeds relevant accessibility (ADA) and/or life safety (NFPA) standards, and a waiver from complying with those standards cannot be secured, then an alternative means of cross-platform circulation would have to be built.

The most cost-effective option might be to build ramps tying into the existing sidewalk on the western side of the High Street Bridge, but the ramp leading to the width-constrained northbound platform would probably need to be built into the Dixon Cut's southern embankment, necessitating a taller and costlier retaining wall.

¹⁸ USDOT and FRA, "[Rails with Trails: Best Practices and Lessons Learned](#)" (2020), p. 47

CONCEPT 1



Platforms shown in orange; walkways shown in pink.

Concept 2

Summary: High-level platforms would be located along new local tracks with tangent segments. This concept minimizes the distance between platforms and station facilities. One platform would require a waiver for substandard length.

Key considerations: Cost control, impacts on (re)use of rail yard

Description:

When the New Haven Railroad rebuilt Westerly Station from 1911-13, it designed the station facilities, bridge abutments, and right-of-way to eventually accommodate four tracks and two outer side platforms. This station typology is more commonly seen in high-traffic segments of the Northeast Corridor, such as between New Haven and New York, where segregating express and local service patterns onto dedicated tracks maximizes the corridor's capacity.

In Westerly's case, this station typology would allow high platforms to be sited closer to the station facilities than would otherwise be possible along the existing track geometry – the outer (local) tracks could diverge from the curvature of the inner (express) tracks as needed to create proximate tangent segments. This design would also enable timed overtakes in both directions, a valuable capacity enhancement in largely two-track territory for a station which could serve as a terminus for two commuter rail lines.

If Westerly Station were expanded into a four-track station, the two southernmost track slots currently occupied by the northbound (Track 2) and southbound (Track 1) tracks would be redesignated as the northbound local (Track 4) and northbound express (Track 2) tracks, respectively. Two additional tracks would be laid in the remaining, unoccupied track slots to serve

as the southbound express (Track 1) and southbound local (Track 3) tracks.

The new Track 1 would be built to match the superelevation and curvature of the existing Track 1/future Track 2, thus ensuring the preservation of the existing 90mph maximum speed for non-stopping trains.

The existing Track 2/future Track 4 would be straightened and leveled between the station elevator and the southern abutment of the West Street Bridge to create enough tangent track for a 700-foot-long high platform serving northbound trains. A short segment of retaining wall might be necessary at the northbound platform's closest pass to Railroad Avenue (just west of its intersection with Dixon Street), but otherwise the embankment is set back generously from the tracks. Importantly, because this concept does not require demolition of the West Street Bridge's southern abutment, it would be possible to reuse the abutments to support a new pedestrian span over the tracks. Such a bridge could potentially provide a secondary means of accessible, grade-separated, cross-platform circulation if warranted.

By continuing straight into the rail yard instead of curving alongside the express tracks, the future Track 3 could support a 1,050-foot-long high platform serving southbound trains. Although this platform would be located between Tracks 3 and 1 to ensure it would be accessible to the elevator and stairs, due to right-of-way limitations, it would be built and function as a side platform, with a standard, 12-foot width and a fence along its Track 1 side. Beyond the platform's western end, Track 3 would take a sharp (perhaps 10-degree) curve behind the station's westbound shelter building and run alongside the edge of the Westerly Education Center's parking lot (requiring the acquisition and relocation of two small, triangular

stormwater retention basins) before rejoining the other three tracks just west of Canal Street.

Tying the new four-track configuration into both ends of the existing two-track corridor requires careful design, as the current configuration descends from the New Haven Railroad's decision to lay tracks in the two southernmost slots rather than in the two center slots.



Existing tracks shown in red, proposed tracks in blue. Map courtesy of MapXpress / Stonington GIS.

At the project area's southern end, just north of the railroad bridge over West Broad Street, the track curve's spiral needs to be "delayed" (pushed northwards) about 200-300 feet. This would allow Tracks 1 and 2 to line up with the two center (express) slots of the four-track portion of the corridor, and it would also ensure adequate room along tangent track to install switches for Tracks 3 and 4 to merge

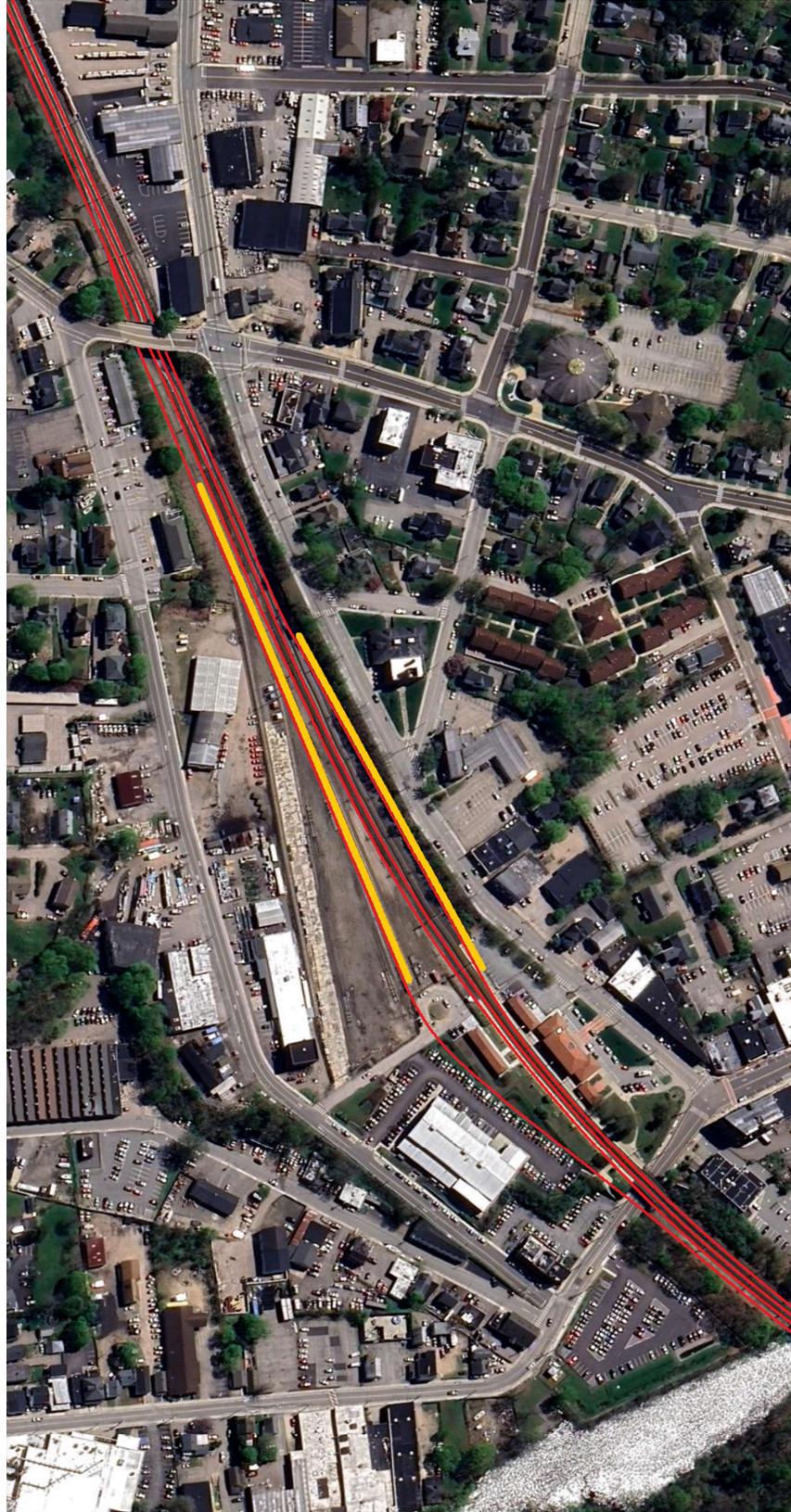
from/branch off into their respective outer track slots. New bridge spans for the future Tracks 3 and 1 would be installed in the vacant slots in the existing Pawcatuck River and Canal Street railroad bridge abutments, which the New Haven Railroad built in anticipation of its unrealized four-track expansion.

At the project area's northern end, the right-of-way tapers down to a three-track width east of the historic Westerly signal tower. Tracks 1 and 2 currently occupy the southern and middle slots, while the northern slot is vacant. These slots would be redesignated for Tracks 4, 2, and 1, respectively. To reconcile the mismatch in positioning of Tracks 1 and 2, the curve located in the vicinity of Guarino Avenue would be eased from 4 degrees to 2 degrees. This should bring the added benefit of eliminating the curve's short, 85 mph speed restriction, thereby standardizing speeds between MP 136.4 and MP 145.1 to a constant 90 mph.

Given the tapering right-of-way width, the switches for Tracks 3 and 4 would be offset. Track 3 would branch off from Track 1 at the High Street Bridge, where the right-of-way begins to support four tracks. The switch for the rail yard's lead track would be relocated to diverge from Track 3 at the western end of the Dixon Cut, where the right-of-way is wide enough for six tracks. Track 4 would merge back into Track 2 about 1,000 feet east of the High Street Bridge, roughly in line with Gavitt Avenue, to account for the track realignment and curve widening discussed in the preceding paragraph.

It would be prudent to consider how the alignment of proposed Track 2 might impact potential reuse opportunities for the rail yard (i.e. whether enough space would remain to establish a commuter rail layover facility) as well as station access from the north (parking spaces and drop-off loop from Friendship Street), as well as how these impacts could be mitigated.

CONCEPT 2



Platforms shown in yellow; tracks shown in red.

3.1 Platform Boarding Narrative

The two concepts discussed in the preceding section illustrate how one categorical decision – whether to allow changes to track geometry – might impact platform configuration. While variations of both concepts are possible, the challenging environment in which Westerly Station is located may ultimately preclude the installation of full-length high platforms.

If further review confirms that full-length level boarding cannot be achieved for one or more platforms, then Amtrak, as the “responsible party” for Westerly Station’s platforms under the Americans with Disabilities Act, must submit a Platform Boarding Narrative to the FRA which addresses how it intends to meet the relevant performance standard underlying the USDOT’s Level Boarding Rule: “individuals with disabilities, including individuals who use wheelchairs, must have access to all accessible cars in each train that serves the station.”¹⁹

FRA guidelines regarding the structure and content of these narratives assume that the rail operator will be proposing an alternative to level boarding, such as the use of bridge plates or carborne lifts; this assumption is not relevant to Westerly’s case. Instead, a narrative for Westerly Station might be better organized around conventional FRA waiver petition guidelines.

3.2 FRA Waiver Justifications

The FRA is authorized to grant waivers upon finding that doing so would be “in the public interest and consistent with railroad safety.”²⁰ Because the FRA’s regulations exist to ensure safety, successful waiver applications must demonstrate that “existing levels of safety will be maintained or improved” if the waiver were to be granted. While the primary focus of this standard is the physical well-being of railroad employees and passengers, secondary considerations for stakeholders’ well-being can broaden to include the increased efficiency of rail operations and the waiver’s impact on the community through which the railroad operates.²¹

With this in mind, a successful Platform Boarding Narrative for Westerly Station will 1) distinguish between the safety and operational efficiency benefits of high platforms; 2) contrast the significant safety benefits of upgrading from low to high platforms with the marginal safety difference between partial-length and full-length high platforms; and 3) argue that, given current conditions at Westerly Station, high platforms technically only need to be long enough to berth three cars to satisfy both the FRA’s standard of maintaining or improving safety as well as the intent of the Level Boarding Rule.

¹⁹ See [49 CFR Part 37.42\(a\)](#) and Amtrak’s Station Planning and Development Guidelines.

²⁰ [“Guidance on Submitting Requests for Waivers, Block Signal Applications, and Other Approval Requests to FRA”](#) (2022), p.1

²¹ *Ibid*, p.2.

3.2.1 SAFETY

To effectively communicate the safety benefits which high platforms could bring to Westerly, the Narrative will need to explain how boarding occurs at the existing low platforms and why this arrangement is suboptimal from a safety standpoint.

Under current conditions, only three cars are made available to passengers during stops at Westerly Station. Conductors flip down one set of stairs per car; the stairs themselves are relatively narrow and steep, and because the tracks are superelevated through the station, the treads of the stairs are noticeably pitched. Passengers must take particular care when boarding/alighting from northbound trains, as the superelevation tilts the stairs “downwards” toward the platform, away from the interiors of the cars.



An Amtrak conductor assists passengers boarding a northbound Northeast Regional train at Westerly Station by holding their luggage. Photo courtesy of The Westerly Sun, 1/23/18.

These factors make boarding difficult for passengers who are mobility-impaired or are carrying heavy luggage, and to compensate, they navigate the stairs more slowly, which in turn lengthens dwell times and harms operational efficiency as discussed earlier in this report. These conditions rarely translate into injuries, but exceptions unfortunately occur from time to time.

Perhaps the most notable recent example is the January 2022 death of an Amtrak conductor who fell from an open door as a southbound train pulled into the station; in the immediate aftermath of the incident, a former Amtrak conductor-turned-safety consultant who was familiar with Westerly Station speculated that the conductor might have fallen while trying to deploy the stairs for boarding at the low platforms.²²

While a safety-centric argument should form the core of the Narrative, it need not be the only element: a stronger Narrative would also address how allowing the construction of partial-length high platforms would benefit railroads’ operational efficiency as well as the host community’s well-being.

²² Amanda Pitts, “Death of Amtrak conductor in Westerly was preventable, expert says,” WPRI.com, January 18, 2022; and Railroad Investigation Report: RIR-23-03, [National Transportation Safety Board](https://www.ntsb.gov/investigation-reports/rir-23-03/). Although the NTSB ultimately found that the conductor fell from the train in the Dixon Cut near the High Street Bridge, it noted that door opening on moving trains was an accepted practice at the time. Discussion on railroad-oriented forums, such as Railroad.net, indicates that the practice would have been considered useful for “spotting” trains stopping at stations like Westerly.

3.2.2 OPERATIONAL EFFICIENCY

Westerly's case can be argued (and will be judged) on its own merits, but this point is perhaps most easily illustrated by highlighting Old Saybrook Station as precedent for Amtrak determining that partial-length high platforms are adequate for a smaller, historic station which must contend with challenging track geometry. Among the most important reasons why Old Saybrook Station provides an unusually relevant case study for the Westerly Station upgrades discussed in this report:

Platform length. The platforms themselves are only 240 feet long, sufficient to provide level boarding to three Northeast Regional cars.²³

Mix of services. The station enjoys both intercity (Northeast Regional) and commuter (Shore Line East) rail service. On some Shore Line East trips, Old Saybrook serves as the line's eastern terminus.

Platform configuration. There are three platform tracks (a side platform serving Track 2 and an island platform serving Tracks 1 and 3). Track 3 provides an opportunity for Acelas headed southbound on Track 1 to overtake southbound Northeast Regional and/or Shore Line East trains.

Built context. The island platform's location inside of a wye precludes the construction of a high platform on Track 3 that can satisfy Amtrak's minimum length of 850 feet for Northeast Regionals.

Old Saybrook's high platforms and up-and-over structure are slightly offset from the historic passenger station building, which itself opens directly onto on the former (low) platform along Track 1.

Operations. Despite similarities in platform length and municipal population size, on the basis of service frequency, Old Saybrook Station is more like New Haven Union Station, which features full-length high platforms and serves a community ten times larger, than it is like Westerly Station: nearly all Northeast Regional trains stop at Old Saybrook.

The key conclusion to draw from this comparison is that the operational advantage of full-length high platforms becomes apparent with high volumes of passengers. At smaller stations like Old Saybrook (or Westerly), passenger volumes are "modest" enough that partial-length high platforms can sufficiently minimize dwell times.



Old Saybrook Station efficiently boards hundreds of Amtrak and Shore Line East passengers every day with substandard-length high platforms, offering a useful case study for Westerly Station. Photo courtesy of user Pi.1415926535, Wikimedia.org.

²³ 240 feet was sufficient to provide full-length level boarding for the three-car Shore Line East trainsets that CTDOT ran during that era. In the two decades since, CTDOT has begun running four-car trainsets and is studying an eventual transition to six-car trainsets. Accordingly, the ECRTS noted that CTDOT has increased the minimum required platform length for new Shore Line East stations to 500 feet.

3.2.3 COMMUNITY BENEFITS

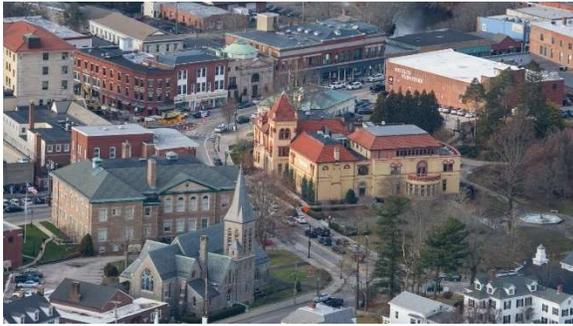


Photo courtesy of SeeWesterly.com

Increased rail service would bring myriad social and economic benefits to the Westerly community, just as it would to any community. But in the context of a waiver application, the significance might be best conveyed by reviewing why the station's existing Downtown location is unequivocally better-positioned to satisfy the community's demand for both intercity and commuter rail service – and to deliver the resulting benefits of both types of service more efficiently – than any potential alternative site which could provide enough tangent track to install full-length high platforms.

Equity Considerations. Census Tract 508.01, which contains Westerly Station, has been identified as an “Equity Focus Community” by the USDOT’s Equity Transportation Calculator and as “Underserved and Overburdened” by the Climate and Economic Justice Screening Tool. The CEJST informs federal investment priorities per the White House’s Justice40 Initiative. Because the disadvantaged population living in this census tract cannot be relocated in the same way that a train station could be, upgrading Westerly Station in-place advances equitable outcomes where they are needed most and makes the project more competitive for federal funding purposes.

Some of the relevant equity indicators for this census tract include:²⁴

Transportation

- 12.2% of households have zero vehicles (73rd percentile)
- 74th percentile for transportation cost burden
- 44% of commuters in Block Group 4 (which abuts/contains Westerly Station) have commute times of more than 30 minutes
- 89th percentile for transportation insecurity

Socioeconomic

- 8% of the labor force is unemployed (92nd percentile)
- 18.9% belong to a minority racial/ethnic group (52nd percentile)
- 15.2% have a disability (69th percentile)
- 29.5% live at or below 200% of the federal poverty line (66th percentile)
- 65th percentile for number of people in low-income households.

Environmental

- 54th percentile for proximity to high-volume roads
- 85th percentile for homes built before 1960



Census Tract 508.01 contains Westerly Station and is an “Equity Focus Community.” Map courtesy of CensusReporter.org

²⁴ Data aggregated by the [Rhode Island Social Equity Data Platform](#).

[Recent Investments in Existing Station Infrastructure.](#) In 2022, Amtrak completed more than \$9 million worth of accessibility improvements at Westerly Station, which included two new elevators that tie into the existing pedestrian tunnel to ensure step-free, grade-separated circulation between both platforms.²⁵



Photos courtesy of Amtrak Media Center

RIDOT, as the station building’s owner, has also invested several million dollars during the past three decades to restore and maintain the historic structure for the benefit of rail passengers – and plans to undertake further renovations in the next 1-2 years.

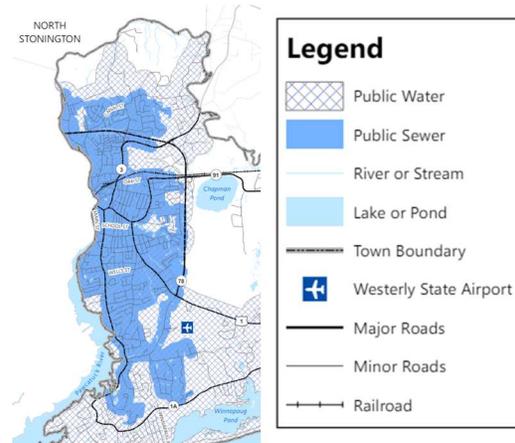
New stations along the Northeast Corridor tend to be of purely functional design (i.e. no indoor waiting space), yet still cost northwards of \$50 million to build. Recent examples include the MBTA’s Pawtucket-Central Falls Station (\$62 million, opened in 2023) and South Attleboro Station (upgrades estimated at \$80 million in 2024).

[Station-Area Development Potential.](#) Westerly’s Comprehensive Community Plan calls for implementing regulatory changes which would facilitate new and infill development around the train station in Downtown.

The water, sewer, and sidewalk infrastructure which would support denser development are already in-place along all roadways within a one-mile radius of Westerly Station.

More than 25 acres of vacant and underutilized land lie within a quarter mile of Westerly Station. About 80% of this land is located along Canal St, Industrial Dr, and Friendship St to the north of the tracks, an area which the New Haven Railroad leveled for industrial development concurrently with building the existing station.

Thoughtful, well-designed redevelopment north of the tracks can bridge the physical and socioeconomic divides between the Downtown and North End neighborhoods. Compelling, smaller-scale infill development opportunities abound on the remaining 20% of underutilized parcels south of the tracks.



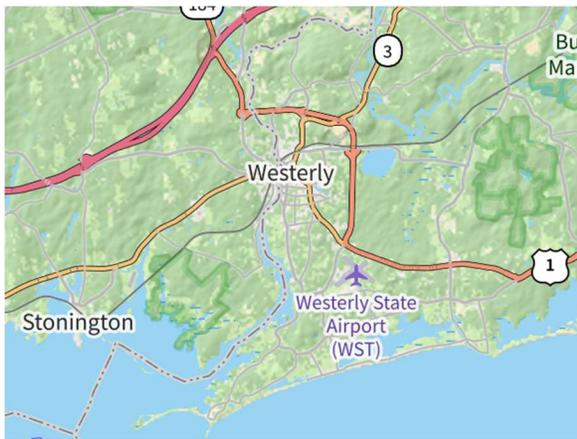
Excerpted from Westerly 2020 Comprehensive Plan, Figure INF-M2, “Sewer and Water Infrastructure”

²⁵ “Amtrak and RIDOT Partner to Improve Accessibility at Westerly Station,” [Amtrak Media Center](#), July 7, 2022.

[Station Access and Site Versatility](#). In its existing Downtown location, Westerly Station is readily accessible to pedestrians/cyclists as well as motorists, maximizing its ability to efficiently serve both intercity and commuter rail riders.

More than 11,000 people reside within a one-mile radius of the station, which includes the adjacent village of Pawcatuck, CT, and a variety of key trip generators – from major employers like Washington Trust, to cultural institutions like the United Theater, to workforce training facilities like the Westerly Education Center – can be found within a 5-minute walk.

The station also stands near the confluence of three important regional roadways – US Route 1, CT Route 2, and RI Route 3 – which provide convenient access for motorists whose trips originate in surrounding communities.



Map courtesy of OpenStreetMap.org

To the extent that a viable alternative station site could be identified within Westerly, it would almost certainly be designed as a park-and-ride facility, as Downtown is the only walkable setting along the Northeast Corridor within the town. The loss of proximity to trip generators would depress ridership and replicate a one-dimensional model which has not proved successful at other park-and-ride stations served by Shore Line East.

[Historical relevance](#). Previous iterations of Westerly Station have occupied the same site as the extant station since 1837. Until about 1940, the station was the primary force influencing the community’s development physical, economic, and social development; insofar as the built environment largely predates the Second World War, it can be said that Downtown and the surrounding neighborhoods are designed to accommodate rail service.

The station facilities themselves handled 24 stopping trains per day in their heyday; the only notable change which would impact the station’s functionality since then is the increased prevalence of driving as a means of accessing the station.

The existing Westerly Station building has become one of the community’s most recognizable and beloved structures not only because of its distinctive and elegant architecture, but also because it encapsulates a wealth of social history which spans across generations and social classes. Directing investment in this facility would have the added benefit of enabling more riders to engage with a well-preserved element of their shared history.



Photo courtesy of Westerly Public Library, Local History & Special Collections

3.3 PARKING

Aside from challenging track geometry, the only “disadvantage” of the Downtown location is the relatively limited number of on-site parking spaces (42, of which 4 are handicapped-accessible). Yet several points must be observed in the context of parking:

- 1) As evidenced by its steadily-growing ridership levels, Westerly Station’s functionality as an intercity rail station has not been impaired by a lack of plentiful on-site parking. This is a practical example of how the station’s integration in a walkable, historic, urban setting enhances its versatility: riders whose trips originate locally can find free, non-time-restricted parking spaces in multiple locations Downtown within a convenient five-minute walk when the on-site spaces are filled.
- 2) CTDOT advises that a minimum of 200 parking spaces must be provided either on-site *or within a quarter-mile* of any new Shore Line East station.²⁶ Because this standard allows for off-site parking within a quarter-mile radius to count toward the total, the built environment technically already furnishes enough parking spaces to satisfy CTDOT parking standards: there are 42 spaces on railroad property, 54 spaces along Railroad Avenue, and 118 spaces in the public lot on Canal Street, for a total of 206 spaces. The quarter-mile radius also touches the edge of the Dixon Square parking garage, whose ground floor offers an additional 60 parking spaces for public use (although overnight parking is not allowed).

- 3) Recognizing that only the on-site parking spaces are explicitly designated solely for rail passengers’ use, while off-site spaces are shared-use, one of the recommendations contained within the recently-completed Town of Westerly Housing Needs Assessment and Market Study is to conduct a Downtown parking study.²⁷ This study will determine how much off-street parking is necessary to meet the needs of existing trip generators, higher future volumes of rail passengers (particularly once commuter rail service comes to Westerly), and potential transit-oriented development. It will also explore the merits of constructing a new parking garage to meet projected demand and to facilitate infill development on smaller surface lots in Downtown.



²⁶ Eastern Connecticut Corridor Rail and Transit Feasibility Study (ECRTS) Appendix K: Station Memo (2023), p.5.

²⁷ “Town of Westerly, RI Housing Needs Assessment and Market Study” (2024), [Camoin Associates](#), p. 46.

CONCLUSION

Assuming the Westerly Station SOGR Platform Replacement project confirms the feasibility of installing high platforms at the station, additional funding will be required to advance to subsequent phases in the project's lifecycle, which could include environmental reviews (NEPA) in addition to the necessary engineering/design work, and eventually construction.

Because Westerly Station does not yet have commuter rail service, it would not be eligible for grant programs funded through the Federal Transit Administration. Instead, project advancement would be funded through intercity passenger rail grant programs, which are generally under the umbrella of the FRA. Some of these programs include:

- Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program
- Federal State Partnership for Intercity Passenger Rail (FSP) Grant Program
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant
- Multimodal Projects Discretionary Grant

Although federal funding for rail projects has never been so plentiful, funding is nonetheless finite, which means the Westerly Station upgrade project will have to compete with many other deserving projects nationwide. The most competitive proposals not only align clearly with the purpose of a given grant program, but are also backed by a combination of objective data and political support (often due to synergies with other initiatives).

As this report has demonstrated, the Westerly Station upgrade project can stand on its merits. Its benefits would accrue not only to a single small town in southern Rhode Island, but also to the overall system into which it is integrated – the Northeast Corridor. An investment in high platforms in Westerly Station helps Amtrak meet its target of doubling ridership by 2040²⁸: it increases ridership locally (by facilitating more frequent station stops at Westerly) and systemwide (by contributing to increased service reliability, which makes Amtrak a more attractive option for intercity travel).

Installing high platforms at Westerly will pave the way for Rhode Island and Connecticut to close the only gap in commuter rail service between Boston and New York. Both states have political incentives to advance the work of the ECRTS and extend Shore Line East to Westerly as soon as possible: Connecticut needs to grow ridership beyond the anemic levels which currently exist, and Rhode Island needs to deliver on its Carbon Reduction Goals as contained in the Act on Climate legislation.²⁹ The key to unlocking Shore Line East's ridership potential is to capitalize on Electric Boat's unprecedented hiring growth, which will increase travel as well as housing demand in the region. This requires extending the line eastward to Westerly Station, to capitalize on the station's proximity to EB's training facility and to redevelopment opportunity sites.

Offering the residents of Census Tract 508.01 – who face disproportionate levels of poverty and unemployment, but fortunately live within easy walking distance of a job training center – the option of an efficient, affordable, zero-emissions means of daily commuting between home and work will respond to RI Gov. Dan McKee's goal to raise per capita incomes statewide by \$20,000³⁰

²⁸ "Ambitious 2024 Initiatives Propel Amtrak Ridership Growth," [Amtrak Media Center](#), January 31, 2024.

²⁹ <https://climatechange.ri.gov/act-climate>.

³⁰ Shaun Towne, "McKee's State of the State goal: Raise RI income by \$20,000," [WPRI.com](#), January 18, 2024.

and foster socioeconomic advancement in an environmentally-sustainable manner.

The existing Westerly Station facilities were built between 1911 and 1913 to alleviate a critical chokepoint between Boston and New York. Passenger and freight volumes in Westerly were significant enough in that era to trigger delays that impacted the entire Shore Line – and to warrant the investment necessary to redesign the facilities to accommodate more traffic. More than a century later, Westerly Station again poses a risk of triggering delays which could impact service reliability, but this time because of its low platforms.

Two of the four exclusively low-platform Northeast Regional stations that remain between Boston and Washington – Newark and Aberdeen – are slated for high platform upgrades,³¹ leaving Westerly as one of only two remaining low-platform stations on the Northeast Corridor’s mainline. If Amtrak determines it is infeasible to install high platforms at the existing Mystic Station, due to its sharper curvature and less accommodating right-of-way, then the funds invested in upgrading Westerly Station could finally eliminate low-platform boarding on the Northeast Regional service.

For more than 50 years, RIARP has advocated for the improvement of passenger rail service within Rhode Island, throughout New England, and nationally. RIARP is pleased to add its voice to the growing chorus of support for the Westerly Station SOGR Platform Replacement Project and urges Amtrak and RIDOT to ensure this project’s inclusion in the Federal Railroad Administration’s Northeast Corridor Project Inventory and Rhode Island’s State Transportation Improvement Program as soon as possible.



³¹ CONNECT NEC 2037 (C37) & FY24-28 NEC Capital Investment Plan (2023) pp. 164 and 192.

RESOLUTION CONFIRMING TOWN COUNCIL SUPPORT FOR
COMMUTER RAIL AND INFRASTRUCTURE IMPROVEMENTS
AT THE WESTERLY TRAIN STATION

WHEREAS, the Town Council is aware that CTDOT is completing the 2023 Eastern CT Corridor Rail and Transit Feasibility Study (ECRTS), which found that it is feasible to extend the Shore Line East commuter rail service to Westerly, given several necessary infrastructure upgrades are made at Westerly Station; and

WHEREAS, these infrastructure upgrades, including high-level platforms, will improve efficiency, safety, and accessibility for rail passengers and employees; are a prerequisite for future commuter rail service; and will benefit existing AMTRAK intercity service at Westerly Station; and

WHEREAS, the Town of Westerly's 2020-2040 Comprehensive Community Plan advises to "Collaborate with RIDOT, RIPTA, Amtrak, and other relevant agencies to augment the use and tole of Westerly Station within Downtown and the surrounding region," among other rail-related Policies and Action Items; and

WHEREAS, connecting workers to established and growing employment centers in the area via rail service is an important step to reducing roadway traffic congestion, decreasing greenhouse gas emissions, and providing affordable transportation options to residents; now therefore, be it

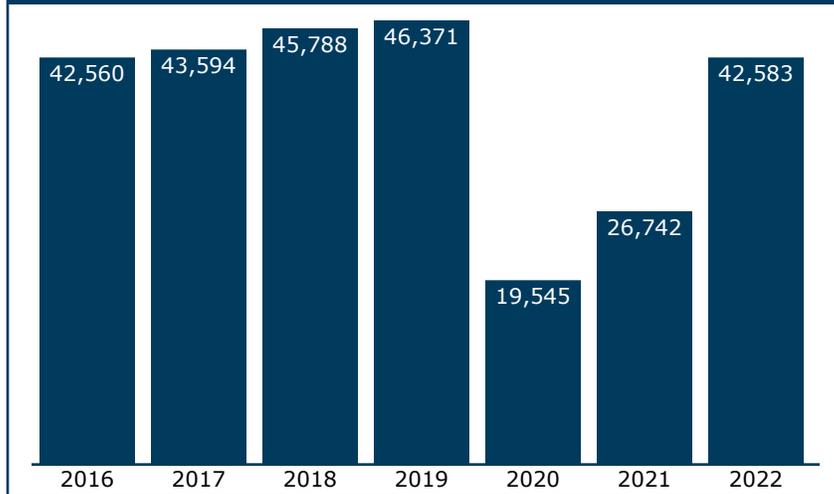
RESOLVED: That the Westerly Town Council hereby encourages and supports the efforts of AMTRAK and RIDOT to study and pursue necessary infrastructure improvements, including high-level platforms, at the Westerly Train Station.

BE IT FURTHER RESOLVED: that the Town Clerk shall send copies of this adopted resolution to US Senator Jack Reed, US Senator Sheldon Whitehouse, US Representative Seth Magaziner, RI State Senator Victoria Gu, RI State Representative Sam Azzinaro, RI State Representative Brian Kennedy, RI State Representative Tina Spears, RIDOT Director Peter Alviti, and Amtrak Executive Vice-President Strategy and Planning Dennis Newman.

ADOPTED: December 4, 2023

Passengers using this station, 2016-2022

(arrivals and departures)



Quick recap, 2022 (arrivals and departures)

	Coach/ Business	First/ Sleeper	Total
Passengers	42,583		42,583
Average trip	131 miles	n/a	131 miles

Top city pairs by ridership, 2022

1. New York, NY	144 mi
2. Boston, MA	87 mi
3. Back Bay, MA	86 mi
4. Providence, RI	44 mi
5. New Haven, CT	70 mi
6. Philadelphia, PA	235 mi
7. Washington, DC	370 mi
8. New Rochelle, NY	125 mi
9. Route 128, MA	76 mi
10. Newark, NJ	154 mi

Top city pairs by revenue, 2022

1. New York, NY	144 mi
2. Boston, MA	87 mi
3. Philadelphia, PA	235 mi
4. Washington, DC	370 mi
5. Back Bay, MA	86 mi
6. New Haven, CT	70 mi
7. Providence, RI	44 mi
8. New Rochelle, NY	125 mi
9. Newark, NJ	154 mi
10. Wilmington, DE	260 mi

Amtrak Station

14 Railroad Ave
Westerly, RI 02891-1869

Population served by this station

Within 25 miles: 425,182

Within 50 miles: 2,616,719

2nd congressional district

Seth Magaziner (D)

(202) 225-2735 - magaziner.house.gov

Current Amtrak presence

Northeast Corridor: 42,217

Northeast Regional: Multiple trains daily

State Supported: 366

VA Service/Newport News: Multiple trains daily

VA Service/Norfolk: Multiple trains daily

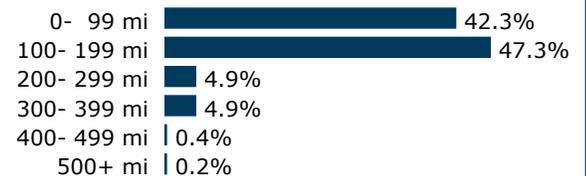
VA Service/Richmond: Multiple trains daily

VA Service/Roanoke: Multiple trains daily

Direct service (no change of train) to 41 cities

Trips by length, 2022

Legend ■ Coach/business ■ First/sleeper



LIST OF PLANS AND STUDIES ANTICIPATING COMMUTER RAIL AT WESTERLY STATION, 2000-PRESENT

1. [Town of Westerly, RI Housing Needs Assessment and Market Study](#)
Camoin Associates
May 2024
2. [Eastern Connecticut Corridor Rail & Transit Feasibility Study](#)
Connecticut Department of Transportation
November 2023
3. [Southeastern Connecticut Metropolitan Transportation Plan](#)
Southeastern Connecticut Council of Governments
March 2023
4. [Connecticut State Rail Plan \(2022-2026\)](#)
Connecticut Department of Transportation
November 2022
5. [Town of Westerly, Rhode Island Comprehensive Community Plan \(2020-2040\)](#)
Town of Westerly
January 2021
6. [Evaluating the Potential for Transit-Oriented Development in Rhode Island](#)
Roger Williams University / Grow Smart RI / HousingWorks RI
February 2019
7. [Regional Plan of Conservation and Development](#)
Southeastern Connecticut Council of Governments
November 2017
8. [Feasibility Study for Intercity Rail Service to T.F. Green Airport](#)
Amtrak / Rhode Island Department of Transportation
April 2017
9. [Groton Plan of Conservation and Development](#)
Town of Groton
October 2016
10. [Town of Stonington 2015 Plan of Conservation and Development](#)
Town of Stonington
June 2015
11. [Let's Go CT – Connecticut's Bold Vision for a Transportation Future](#)
Connecticut Department of Transportation / Office of Governor Dannel Malloy
February 2015

- 12. [Rhode Island State Rail Plan 2014](#)**
Rhode Island Department of Administration (Division of Statewide Planning)
March 2014
- 13. [Transportation 2035 \(State Guide Plan Element 611\)](#)**
Rhode Island Department of Administration (Division of Statewide Planning)
December 2012
- 14. [Northeast Corridor Infrastructure Master Plan](#)**
NEC Master Plan Working Group
May 2010
- 15. [KeepSpace Communities Initiative – Westerly Landing and Westerly Depot](#)**
Rhode Island Housing
November 2007
- 16. [Washington County Transit-Oriented Development Planning Strategy](#)**
Washington County Regional Planning Council
September 2005
- 17. [South County Commuter Rail Environmental Assessment](#)**
Rhode Island Department of Transportation / Federal Transit Administration
February 2003
- 18. [South County Commuter Rail Service Operations Plan](#)**
Rhode Island Department of Transportation
July 2001

Relevant sections of all studies listed above are available upon request.

RHODE ISLAND ASSOCIATION OF RAILROAD PASSENGERS

www.riarp.org | P.O. Box 8645, Warwick, RI 02888-0645

