BACK ON TRACK

Initiatives to Restore Rail Service to **U.S. Towns and Cities**

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2004-2020

Back on Track Summary of Findings

Back on Track evaluates the extent and purpose of initiatives since 2004 that have restored rail service to communities across the U.S. mainland that previously lacked active rail lines. Using a variety of analytical tools, it identifies and categorizes initiatives to reactivate out-of-service routes, rebuild abandoned corridors, and create entirely new routes that reconnect municipalities to the rail system. The analysis shows that:

90 municipalities (e.g., towns and cities) with populations of 500

or more that had been without rail service for two years or more had rail service restored between 2004 and 2020. These municipalities have a cumulative population of 1.9 million.

24 municipalities, totaling 0.9 million people, are expected to regain service by 2030 as a result of projects that are approved and progressing through the planning process.

20 municipalities having populations of 20,000+ had their rail service restored, four of which have populations greater than 100,000. More than three-quarters of these municipalities regained service through initiatives involving passenger service, with the vast majority involving light-rail or commuter rail lines.

Efforts to restore rail service to communities can be divided into 73 separate initiatives, roughly 80% of which involved some form of public-sector financial support.

A broad interpretation of these results show that abandoned rail corridors are often instrumental towards efforts to restore service, even when several decades have passed since abandonment. Service restorations to municipalities in metropolitan Denver, Los Angeles, and Seattle illustrate how such routes can be used to restore service in growing suburbs and satellite cities many years after the last train has left town.

The authors welcome feedback and suggested edits to this working paper. Please check back for subsequent versions with edits and enhancement. We anticipate a final version being released in November 2020.



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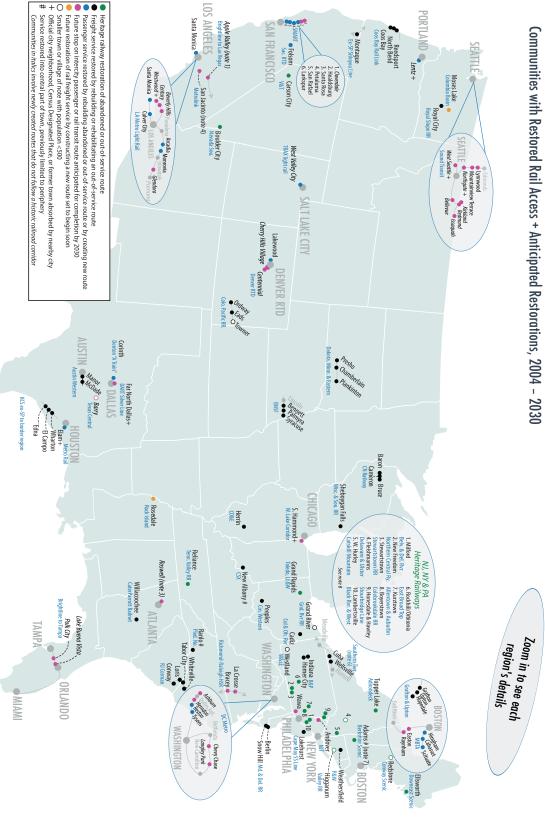
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Communities with Restored Rail Access + Anticipated Restorations, 2004 - 2030

PORTLAND Lentz+

Reedsport North Bend Coos Bay Coos Bay Rail Link

Montague Ex-SP Siskiyo



LOS ANGELES

Apple Valley (note 1)
Brightline to Las Vegas

SAN FRANCISCO

Folsom
 Carson City
 Sac. RTD V&T

1. Cloverdale 2. Healdsburg 3. Santa Rosa 4. Petaluma 5. San Rafael 6. Larkspur

Santa Monica

San Jacinto (note 4) Metrolink

Boulder City
 Nevada Sou.

I. Introduction

Over the past half-century, hundreds of U.S. municipalities have lost all forms of rail service as a result of rail line abandonment and the removal of railroad routes from active service. In many municipalities, former railroad routes have been converted into recreational trails, utility corridors, and roads. Many of these disused routes, by law, reverted to descendants of those who had owned the property when the rail line was constructed.

As the needs of municipalities has evolved, so has interest in new transit lines, heritage railways, and industrial corridors. In some municipalities, rail service has been reinstated to promote industrial development while in others it has served to improve job access, relieve traffic congestion, or foster mobility in ways unrelated to private motor vehicles. Although a wide body of scholarly literature exists on rail-line abandonment, relatively little research explores the status and purpose of initiatives to restore rail service to places that have lost it and the extent to which abandoned routes can facilitate these efforts.

This study seeks to help fill this gap by evaluating the extent of and rationale for initiatives since 2004 that have brought rail service back to towns and cities across the U.S. mainland that have previously lacked service for a period of two years or more. Using a variety of methods, it identifies and categorizes initiatives to

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reactivate out-of-service routes, rebuild abandoned corridors, and create entirely new routes to connect municipalities to the national rail system. A separate analysis identifies places in which rail service is expected to resume by 2030 through initiatives that are at least partially funded and well along in the planning cycle. Such analysis provides insights on the degree to which private and public actors have successfully expanded the reach of the rail system.

The focus on *municipalities* rather than *regions, zip codes, census tracks* or other geographic units is due to the tendency for many policies that depend on having rail service to originate locally. Such policies include governmental efforts to promote commercial, industrial development, and transit-oriented development, including residential placemaking that depend on high-quality transit service. Similarly, heritage tourism can be abetted by the presence of historic rail lines. A municipality that has rail service, consequently, has a more expansive "choice set" with respect to such policy endeavors than places that do not. Of course, having rail service also carries with it costs (and risks) for local governments, such as managing safety and noise as well as dealing with potential air and ground-quality issues. Although the present study does not consider the benefits or costs of restoring rail service, much can be learned by evaluating the *principal purpose* of initiatives to better understand the factors that have provided impetus for rail restoration efforts.

The analytic portions of this paper are divided into three sections: Section II offers background perspective on abandoned corridors and reviews relevant research. Sections III summarizes the methods

Sidebar: How Abandonment Has Reduced Municipal Rail Access

Abandoned rail lines have been part of the American landscape for more than a century [1, 2, 3]. The expansion of railroads, however, greatly outpaced the number of lines abandoned well into the twentieth century. Between 1880 and 1916, the size of the railroad system surged from 92,147 to 254,251 route-miles [4].

After reaching this high-water mark, the number of miles abandoned consistently exceeded new mileage constructed. Railroads suffered from improvements to automobiles and trucks, the ever-rising desires of shippers for greater speed and more flexibility than railroads could provide, and the devastating effects of the Great Depression. The industry underwent a series of mergers that helped carriers reduce the redundancy in their routes and streamline operations. Despite such retrenchment, most towns with more than a few hundred residents relied heavily on rail service for many more years. In some locales, the rulings of the Interstate Commerce Commission (ICC) gave railroads little choice but to continue service over routes that were no longer profitable.



A former Penn Central E8 locomotive at the head of Amtrak passenger train shows its age traveling westbound at the Rome, NY on April 1, 1975. Photo Credit: 4/1/75 AMT E8A 276 by OH Falcon 72 licensed by CC BY-NC-ND 2.0

Concerns about rail-line abandonment escalated after World War II and grew sharply in the late 1960s. By the early 1970s, an abandonment crisis loomed in the East and Midwest regions as the Penn Central and other bankrupt roads hemorrhaged red ink [5]. As heavy industry scaled back and trucking companies captured an everlarger share of the freight market, the outlook for rail service to many towns appeared increasingly grim.

The financial health of railroad companies prompted Congress to take action in the form of the Regional Railroad Reorganization (3-R) Act in 1973, which greatly elevated the federal government's role in railroad infrastructure management. In the process, the 3-R Act gave the ICC impetus to quietly relax its abandonment standards. Plans also moved forward to create

the federally owned Consolidated Rail System (Conrail) from the holdings of Penn Central and other bankrupt railroads. Many states simultaneously developed far-reaching programs to prevent the loss of rail service to communities, often taking advantage of the funding and legal mechanisms established by the 3-R Act and the subsequent Railroad Revitalization and Regulatory Reform (4-R) Act, passed in 1976 [5, 6].

The 4-R Act established a new protocol to govern the ICC abandonment process. With multitudes of railroad structures needing replacement and private investment capital almost nonexistent, however, an unprecedented number of small towns found themselves at risk of losing rail service. Service to hundreds rested on government financial support, such as that provided by the federal Local Rail Service Assistance Program [6]. Despite an infusion of state and federal money, the number of locales without rail access continued to climb.

Awareness of the potential benefits of preserving former railroad rights-of-way concurrently increased. State governments and regional transportation authorities, eager to keep their options open, acquired many routes to allow for the possible resumption of service. Efforts to expand commuter- and light-rail systems created interest in reclaiming little-used or abandoned routes to relieve pressure on the highway system and to meet regional environmental goals. In the process, a push to restore service to many communities gathered momentum.

Exactly how many municipalities have lost service has not been precisely estimated. A study by Allen shows that dozens of U.S. municipalities having 2,000 or more residents had lost all service by the early 1970s (7). Schwieterman estimated that 725 communities with 3,000 residents had lost service by 1996, some of which had populations greater than 50,000 [8].

used to identify and categorize municipalities that have had service restored. Section IV offers conclusions, lessons learned, and suggestions for further study. A table of municipalities with populations and other descriptive information can be found in the appendix.

An extensive professional and academic literature explores the process in which routes that have been abandoned or removed from service are brought back into service. Simpson reviews more than a dozen communities that were successful in having service restored between the mid-1990s and 2004 [9]. This National Cooperative Highway Research Program study and others works explore the potential for having a mix of land uses on same corridor, including having recreational trails or utility lines alongside active rail lines [11, 12]. Other studies explore the potential for short-line railroads to revitalize routes that are either out of service or only lightly used [13, 14]. A separate but significant body of scholarship similarly explores the legal aspects of rail-line abandonment, which can be riddled with complexity due to differing stipulations placed on rights-of-way when rail lines were originally constructed [1, 15].

III. Methods to Identify Places where Rail Service has been Restored

The analysis presented below draws upon data collected by the authors encompassing communities on the U.S. mainland having populations of 500 or more (based on 2019 U.S. Census estimates) that regained service from the beginning of 2004 through September 20, 2020. All municipalities in this data set are either incorporated municipalities or Census Designated Places (CDPs) that have features typical of incorporated communities, such as a traditional downtown district or locally based organizations that promote economic development.

To identify communities in which rail service has returned, the author: i) reviewed and conducted searches of key phrases in the published rail plans of 27 states published during the sample period; ii) determined the geographic locations of new rail-transit routes opened since 2004; iii) reviewed the chronologies of 120 heritage railways across the U.S. mainland; and iv) reviewed technical reports, trade journals, and media coverage pertaining to the reopening of routes. Approximately 20 virtual or face-to-face interviews were conducted with officials over the course of the project, while site visits were made to eight municipalities for more intensive interviews. The information gathered from the above sources was corroborated using the multi-volume *Comprehensive Railroad Atlas of American Railroads*, which shows the alignment of active and abandoned railroad routes [16].

Only municipalities that lacked active rail lines within their incorporated boundaries for a period of two or more years before service resumed are included, with special circumstances noted in the appendix. (Municipal boundaries were determined using Google Maps and official zoning maps published by local governments). The definition of a rail service encompasses conventional steam and diesel railroads, electric interurban railways, tourist railroads, commuter railroads, and light and heavy-rail lines, but excludes cog- and incline railways and municipal streetcar lines. Only rail lines that link a municipality to another population center beyond the city's limits (or census-designated boundaries in the case of CDP's) are considered. For example, if railroad extends only a mile or two from a town and terminates in a rural area without reaching another community, it is excluded.

Each rail-restoration initiative ("project") is given a number and name. Many initiatives result in the restoration of service to several municipalities. For a project to be included, verification was required from two independent sources. This often involved press coverage and confirmation by a local or

Figure 1: Examples: Communities with Restored Access through Passenger Initiatives



Santa Rafael, CA. 2017. Out-of-service ex-Northwestern Pacific/Southern Pacific route rehabilitated for Sonoma-Marin Area Rail Transit (SMART) commuter. Photo Credit: Sonomo-Marin Rail by Don Barrett licensed by CC BY-NC-ND 2.0



Santa Monica, CA. 2016. Abandoned ex-Pacific Electric/Southern Pacific "Santa Monica Air Line" route rebuilt for Los Angeles Metro "Expo Line" light rail line. Photo Credit Metro. LA. Transportation Auth.

For a complete list of communities by state, please refer to Table 4 on page 19



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Lakewood, CO. 2013. Abandoned Denver & Intermountain Ry. (interurban line) corridor rebuilt for new Denver RTD W Line light rail. Photo Credit: Serpentine Light Rail by Jeffrey Beall licensed by CC BY-SA



Cohasset, MA. 2017. Abandoned ex-Boston & Maine Greenbush line rebuilt for MBTA commuter rail, shown here at Weymouth Landing station Photo Credit: East Braintree-Weymouth Landing by Pottewa at English Wikipedia Public domain



Corinth, TX. 2011. Abandoned ex-Missouri-Kansas-Texas Railroad route rebuilt for Denton County "A Train" commuter-rail service. Photo Credit <u>DART Light</u> <u>Rail Train-Dallas. TX by Tony Webster</u> licensed by <u>CC By</u> regional planner (or topical expert), short-line railway, or development authority.

For each municipality in which service has resumed, the analysis considered:



#1. The year (or approximate year) when rail service ended and when service resumed (or is expected to resume). When different dates were identified for when service ended and when a route was formally abandoned, the abandonment date was generally used. The start of service was defined as the launch of "revenue service," i.e., service supported by fare-paying passengers or freight customers. Some dates are approximations due to difficulties encountered in finding the information.



#2. The municipality's population in 2010 and its estimated population in 2019.



#3. The name of the carrier that restored service and the historic railroad operator of the route (which is generally the route's operator in the mid-1960s).



#4. The principal purpose of the rail-restoration initiative in three categories: i.) freight, ii.) passenger, or iii.) heritage railway. In the few instances in which there was more than one purpose (such as reopening a route for joint freight and heritage railway operations), the primarily initial use at the time of the line's reopening was recorded.



#5. Whether the restored service involves: i) reusing an abandoned or out-ofservice route; or ii) a route not previously used by a railroad. Another indicator denotes whether new track was laid to support the initiative.



#6. Whether governmental financial or in-kind assistance (including allowances to operate trains over a government owned route) was instrumental to the restoration.



#7. The type of ownership of the route involved which could fall into three categories by: i) a state government; ii) metropolitan government (such as a regional transit authority); iii) a local or private entity, such as government, nonprofit organization, or railroad company.

Credit: Images courtesy of Noun.com. See page 27 for full credits

Special circumstances, such as instances in which the municipality had a different name at the time when rail service ended, are also noted. Much of this information is summarized in Appendix B, which provides details for all 73 initiatives.

Municipalities in which rail lines run along its boundary (such as a boundary separating it from a neighboring town) are considered as *having* rail service. Municipalities that did not exist (e.g., had not yet been legally incorporated) when the last rail corridor lying within their present-day boundaries was abandoned are counted as places that have lost railroad service.

Finally, the data set also encompasses municipalities that are expected to regain service by 2030. Only initiatives that are in the final stage of planning, are under construction, or have been approved with at least funding are included. (Special circumstances, such as upcoming referendums, are noted in Appendix B). Identifying municipalities in this category was subject to greater ambiguity than the other

aspects of the data set due to sometimes overly optimistic nature of project timelines and the obvious fact that circumstances (with COVID-19 being a good example) can change.

IV. Findings

The analysis revealed that 96 municipalities with populations of at least 500 people had service restored from 2004 to 2020, 85 of which had populations of more than 1,000 and 33 had populations of more than 10,000 (Table 1). Initiatives to restore *freight service* accounted for service restoration in 50 municipalities, compared to 26 for passenger service and 20 for heritage railways. These municipalities were beneficiaries of 73 distinct restoration initiatives, with each initiative restoring service to an average of 1.6 municipalities with 500 or more people.

The 96 municipalities have a cumulative population of 1.79 million people, with approximately three quarters of this population living in communities with restored passenger service (1.34 million) (Table 1). The populations served by initiatives focused on freight and heritage railways service are much lower, totaling 324,606 and 129,533 respectively. Another 941,712 residents live in the 24 municipalities in which rail service is expected to resume by 2030. Nearly all of the communities involve initiatives that focus on passenger service. Cumulatively, 2.70 million people live in communities with populations of 500 or more regaining service through completed and planned initiatives.

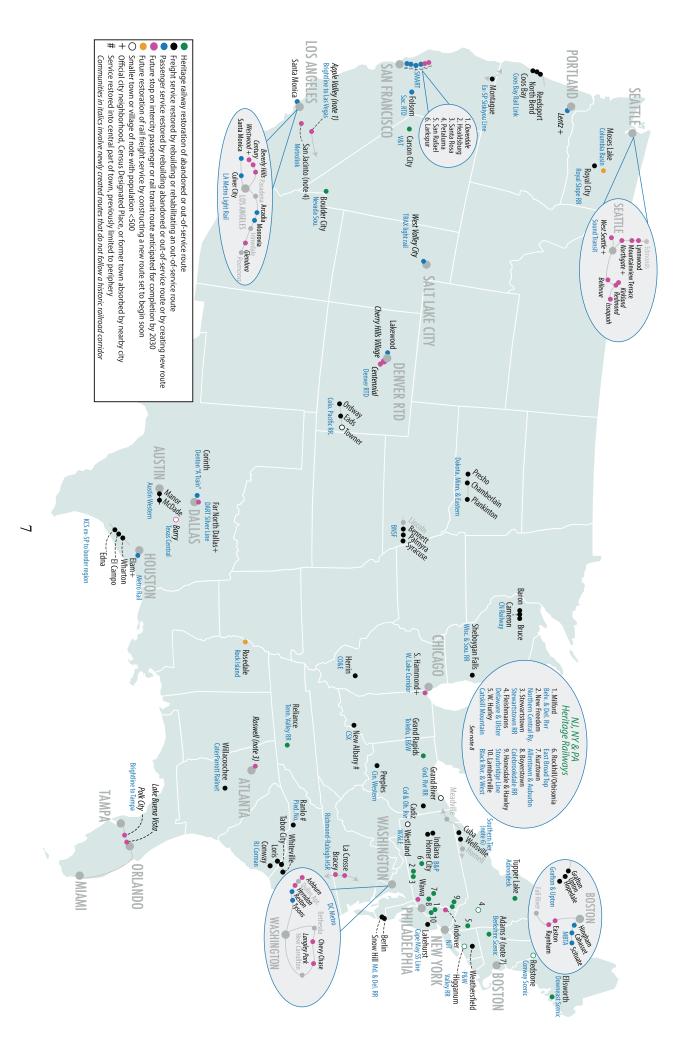
Table 1: Number of Municipalities with Restored Rail Service, 2004 – 2020

Type of Initiative	# of Municipalities	Mean Population	Cumulative Population	% Using Existing Right of Way	% State owned r.o.w.	% Metro agency owned	% Losing Population
			Сотр	leted Iniatives	;		
Freight	50	6,492.1	324,606	90.0%	12.0%	10.0%	40.0%
Passenger	26	51,376.0	1,335,776	76.9%	0.0%	100.0%	3.8%
Heritage Ry.	20	6,476.7	129,533	100.0%	20.0%	0.0%	50.0%
Total - Existing	96	18,644.9	1,789,915	88.5%	10.4%	47.9%	32.3%
			Planned or	under-constru	uction		
Freight	2	24,086.0	2,019.0	100%	27.3%	68.2%	0.0%
Passenger	22	42,713.7	939,701.7	54.5%	0.0%	0.0%	22.7%
Total - Planned	24	39,238.4	941,721	54.2%	25.0%	62.5%	20.8%
Grand Total	120	22,456.6	2,694,798	82%	13.3%	38.3%	30.0%

The pace of restorations rose gradually over the period evaluated, with 12 regaining service during the 2004–07 span, 21 from 2008-11, 21 from 2012–15, and 32 from 2016-20 (the latter period spans five years while the others span four). The temporal patterns differ sharply with respect to the project's purpose, with the preponderance of heritage-railway restorations, for example, occurring since 2016. More details regarding the timing of restoration projects are provided below.

The following sections describe notable aspects of passenger, freight, and heritage railroad initiatives.

Figure 2. Communities with Restored Rail Access + Anticipated Restorations, 2004 – 2030



Passenger Initiatives

Each of the 26 municipalities regaining service through passenger initiatives involve newly built transit routes designed primarily to move people within a metropolitan region. Considering that these initiatives are generally motivated by a desire to improve the options available to commuters, help mitigate highway congestion, and support regional environmental goals, it is perhaps not surprising that municipalities in this category tend to have appreciable populations and are experiencing rapid population growth. Cumulatively, their cumulative populations rose 6.0% between 2010 and 2019. Only 3.8% of these municipalities lost population over this period. By contrast, about half of municipalities in the freight and heritage-railroad categories lost population over this span.

All ten of the largest municipalities (and 11 of the largest 15) that regained some form of rail service did so through passenger initiatives (Table 2). The largest, Santa Rosa, CA, had an estimated 2019 population of 176,753. This growing northern California city, along with San Rafael (58,440), Petaluma (60,520), and Novato (55,516), are on the Sonoma-Marin Area Rail Transit (SMART) commuter rail line, which began regular operation in 2017. SMART's 45-mile route, formerly part of the

Table 2: 25 Largest Cities with Restored Rail Service, 2004 – 2020

				Population	
Rank	City	Туре	Project Name	2019	Reuse Historic Route?
1	Santa Rosa, CA	Passenger	SMART Commuter Rail	176,753	у
2	Lakewood, CO	Passenger	State of Colo.	157,935	у
3	West Valley City, U	Passenger	Salt Lake City TRAX	135,248	n
4	Centennial, CO	Passenger	State of Colo.	110,937	n
5	Santa Monica, CA	Passenger	LA Metro - E Line	90,401	у
6	Folsom, CA	Passenger	Sacramento RT light rail	81,328	у
7	Petaluma, CA	Passenger	SMART Commuter Rail	60,520	у
8	Reston, VA	Passenger	Washington Metro Silver Line	60,335	n
9	San Rafael, CA	Passenger	SMART Commuter Rail	58,440	у
10	Arcadia, CA	Passenger	LA Metro Gold Line + Foothill Ext	57,939	у
11	Carson City, NV	Heritage	V&T Ry. rebuild	55,916	у
12	Novata, CA	Passenger	SMART Commuter Rail	55,516	у
13	Rhonert , CA	Passenger	SMART Commuter Rail	43,291	у
14	Culver City, CA	Passenger	LA Metro - E Line	39,185	у
15	Monrovia, CA	Passenger	LA Metro Gold Line + Foothill Ext	36,331	у
16	Windsor, CA	Freight	Northwestern Pacific R.R.	27,291	у
17	Wethersfield, CT	Freight	Providence & Worchester R.R.	26,267	у
18	Conway, SC	Freight	RJ Corman Railroad	25,956	у
19	Herndon, VA	Passenger	Washington Metro Silver Line	24,601	n
20	Tysons (CDP), VA	Passenger	Washington Metro Silver Line	23,749	n
21	Corinth, TX	Passenger	Denton "A Train" Commuter Rail	22,099	у
22	Scituate, MA	Passenger	MBTA Greenbush Line	18,924	У
23	Grafton, MA	Freight	Grafton & Upton	18,883	у
24	Coos Bay, OR	Freight	Coos Bay Rail Link	16,361	У
25	Boulder City, NV	Heritage	Nevada Southern	16,207	у

Northwestern Pacific Railroad, is designed for passenger transfers at Larkspur, the line's southern terminus, which is linked by ferry to San Francisco. This corridor's trains serve six municipalities with populations greater than 10,000 that had previously lost all rail service, the most of any initiative. (Freight service resumed in several of the above places prior to the start of passenger service but they are assigned to passenger category for reasons discussed in Appendix B).

Lakewood, CO (156,978), the second largest municipality with restored rail access is, like nearby Centennial, CO (110,931), on the relatively new Regional Transportation District (RTD) light-rail line. Lakewood's line follows an abandoned right-of-way that was acquired by RTD around the time freight operations ceased, whereas most of the Centennial routes were not previously used by a railroad [J]. West Valley City, UT, ranking third in population (135,238), regained service through the construction of a Salt Lake City-area TRAX light-rail line. This suburb (which did not formally exist when its rail line was abandoned), is the most populous municipality on the mainland to have regained service on a route not involving a historic railroad corridor. Santa Monica (110,831), Arcadia (57,939) and Culver City (37,185) are the largest cities to have regained service in metropolitan Los Angeles.

Reston (60,355) and Herndon, VA (24,601), which are both along Washington Metro's Silver Line, are the most populous municipalities on the eastern half of the mainland to have regained service through passenger initiatives. The Silver Line, a heavy-rail route to Dulles International Airport and beyond, is categorized in the data set as being complete, although the opening of the latter stations has been delayed due to software issues, flawed rail ties, and other concerns. Scituate, MA (18,574) and Hingham, MA (23,923) are among the places that regained service with the construction of a Massachusetts Bay Transportation Authority's Greenbush commuter-rail line.

Several characteristics of places regaining rail service through passenger initiatives warrant emphasis:

- About three-quarters (77%) of municipalities regaining passenger service involved initiatives
 that reused historic rail corridors, while the remainder (23%) did not involve rights-of-way
 previously used by railroads.
- A preponderance (62%) of municipalities involved the reconstruction of entirely new track and supporting track bed, whereas 38% largely used existing track and track bed (albeit typically after major capital upgrades were made). The SMART project accounted for many communities in the former category, and even in its case, large-scale investments were needed to modernize the track, signals, and track bed.
- No municipalities in this category regained service by an initiative that required eliminating a
 recreation trail ("rail-trail") built on a former railroad route. Several municipalities, including
 Corinth, TX (served by a Denton County Transportation Authority commuter rail line) and
 Larkspur (on SMART), however, involve "rails-with-trails" developments that required trails to
 be partially realigned to support reconstruction.

Only one initiative that restored active rail service involved the construction of a heavy-rail
(metro) line. That initiative, an extension of the Washington Metro, has restored access to
Herndon and Reston, VA and several other communities. All other municipalities on newly built
metro lines already had some form of rail service and in many instances those of Class I freight
railroads have tracks running parallel to the metro line.

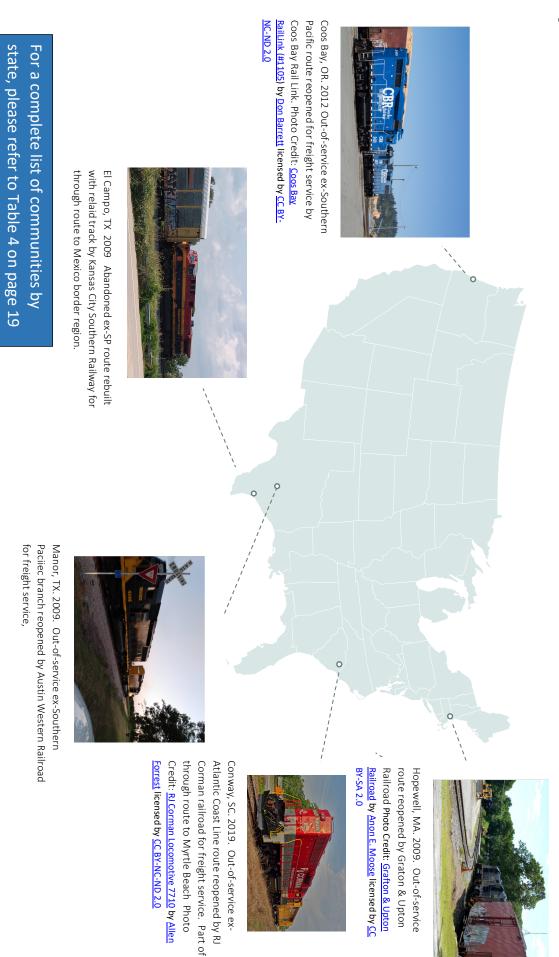
Freight Initiatives

The 50 municipalities that regained service through freight initiatives tend to be relatively small. Only 10 have populations greater than 10,000 and none have more than 30,000. For many of these places, rail service is regarded as important to stimulate economic development. Many such places have declining economies. Two in five (40%) lost population from 2010 to 2019. None of the freight initiatives restoring service to communities with population of 500 or more involved completely or partially reclaiming for rail service a right-of-way that had become a rail-trail.

Windsor, CA (27,291), the largest municipality to have rail service restored through a freight initiative, regained service with the resumption of operations on the Northwestern Pacific Railroad.ⁱⁱ Three historically industrialized communities in Massachusetts, all within 70 miles from downtown Boston, Grafton, MA (18,883), Upton (8,065) and Hopedale (5,591), regained service through the reopening of the Grafton & Upton Railroad, which restarted service in 2009 after having been dormant for more than 20 years. The carrier, partnering with local development agencies, was successful in making repairs and cultivating enough business to support the resumption of service. In Connecticut, Wethersfield (26,267) regained service in 2019 through another initiative led by a short-line railroad that involved repairing and reopening a former New Haven Railroad route for "through train" service, although it presently lacks an active shipper. This route is owned by the state government, which provided financial support. Lakehurst, NJ (2,708) and Willacoochee, GA (1,354) similarly had service restored through creative partnerships with short-line railroads, the latter being notable for having a municipality that acquired, but later sold its only railroad line.

Conway, SC (25,956), Tabor City, NC (4,122) and Whitesville, NC (5,340), along an ex-Seaboard Coast Line route, and Coos Bay, OR (16,361), along an ex-Southern Pacific branch, had similar experiences, regaining service through initiatives involving small or mid-size railroads abetted by governmental financial support. Peeples, OH (1,701), along the ex-Norfolk & Western "Peavine" route to Cincinnati, and Pennsylvania's Indiana (13,167) and Homer City (1.603), both along the same ex-Baltimore & Ohio branch, also had service restored through such partnerships. Communities along a Canadian National branch in Wisconsin, including Bruce (3,322) Baron (705), had service restored to support fracking activity.

Figure 3: Examples: Communities with Restored Access through Freight InitiatiVeS



Several general findings about communities in this category stand out:

- At least 15 different state governments provided financial support to initiatives that brought freight service back to municipalities that previously lacked any form of rail service. Routes owned by the state governments in Colorado, Connecticut, and South Dakota proved instrumental to restoring service to seven municipalities.
- Few municipalities have had service restored through initiatives spurred primarily by a desire to support agriculture. Only two initiatives were identified in Great Plains states, and only one of these--the reopening of the former Milwaukee Road east-west mainline through South Dakota-was heavily oriented toward agriculture. The reopening of this line, which is operated by Dakota Western and owned by the state government (which recently announced its intention to divest its ownership in this and other rail lines), restored service to Chamberlain, SD (3,450) and other rural communities. The other, a BNSF route in eastern Nebraska through Syracuse, NE (1,981), was reopened in 2020 to support the delivery of coal to a public utility. Several other initiatives in other parts of the country, such as the restoration of service to Ordaway, CO (1,054), were motivated at least partially by agricultural concerns.
- Out of the 50 total municipalities that regained service through freight initiatives, none involved the developing entirely new corridors, although five required laying new track. Sheboygan Falls, WI (7,748), had its former Chicago & North Western Railway branch completely rebuilt with the state government's financial support, while the other three were along the Kansas City Southern Railway route described below. All the others primarily used existing track. A four-mile stretch of track was re-laid for freight service to a shipper in Westland, PA (see Appendix), but this town's population is below the 500 threshold used for purposes of this analysis.
- Four initiatives were motivated primarily by a desire to support "through" freight movements rather than the desire to serve the local communities on the route. The ex-Erie Railroad "Southern Tier" segment between Hornell and Meadville, NY was reopened in 2003-2004 by Norfolk Southern, restoring service to Wellsville, NY. The out-of-service ex-Southern Pacific Siskayou Route between southern Oregon and northern California was reopened by Central Oregon & Pacific Railroad in 2015 restored service to Montague, CA. The third is the aforementioned Connecticut route, which, like the previous two, was facilitated by public financial support. The fourth, the KCS route in Texas mentioned above, is described in the next paragraph and was entirely privately funded.
- Kansas City Southern's investment to rebuild a former Southern Pacific route in southeastern Texas stands for being entirely privately financed as well as involving a route that had been bereft of tracks for many years. KSC re-laid 60 miles of track on a route that had been stripped of its tracks for more than a decade, creating a "through" route to the U.S./Mexico border region, which opened in 2009. This project restored service to Wharton (8,654), El Campo (11,539), Edna (5,874) and several other Texas communities.

Heritage-Railway Initiatives

Nineteen municipalities without active rail lines had routes return to service through initiatives led by heritage railways, with all but two involving tracks left in place after the cessation of freight service. These initiatives have notable differences to those in the freight and passenger categories. For one, repairs to the track and other components of right-of-way often involved a mix of paid and volunteer labor without clear project-completion deadlines. Work is often done when volunteers



Representatives ride Union Pacific 844, an EMD GP-30 built in 1965 over the new bridge over Interstate 11 built to reconnect the Boulder City, NV's Nevada Southern Railroad Museum with Las Vegas. Photo credit: Frank Carroll, Nevada Southern Railroad Museum

have spare time available and often entails clearing away vegetation, trees, and brush, and making repairs to tracks and bridges to allow relatively low-speed train operations, typically in the 10 - 20 mph range. Damage to the track has often been exacerbated by erosion. Heavy equipment, such as tiereplacing devises, is often used to help perform the most difficult tasks.

Many municipalities in this category had activity resume on routes that are

owned by municipal governments, nonprofit organizations, or short-line railroad companies. Such local ownership provides an important advantage by increasing the ability for the primary decision makers to stay attuned of the needs, politic dynamics, and resources of communities along the corridor. In several instances, heritage railways leased their routes from local development authorities, which see them as instrumental to cultivating tourism and, in some cases, industrial development in the distant future. (Several initiatives have the goal of eventually restarting freight service). Around half (54.5%) of municipalities in this category lost population between 2010 and 2019, making stimulating economic development a priority.

Carson City, NV (55,916) is the largest municipality in this category and differs from most other places in this category by having a rapidly growing population. Rail operations to the state capital resumed in 2011 over a ten-mile segment rebuilt for the Virginia & Truckee Railroad. The heritage railroad's route primarily uses a right-of-way that had been abandoned in 1939 and its reconstruction was facilitated by financial support from the State of Nevada, the Nevada State Railroad Museum, and other entities. The line forges a link to another rebuilt line emanating southwest from Virginia City, NV, creating a continuous route to this historic Comstock mining center. Boulder City, NV (16,207), located in the southern part of the state, is second largest city in

this category, although its initiative did not involve relaying a substantial amount of new track. Its ex-Union Pacific route once again is available for trips to Henderson and Las Vegas, NV and is expected to be used relatively soon for passenger excursions (see photo caption). Adams, MA (8,010) is the only other community in which railroad activity resumed through a heritage-railway initiative that involved significant new-track construction. Approximately one mile, re-laid with financial support from the Massachusetts state government, allows excursions operated by Berkshire Scenic Railroad to reach its downtown.

Ellsworth, ME (8,048) ranks as another of the largest communities to regain service through a heritage-railroad initiative. It is home to the Downeast Scenic Railroad, which began using a four-mile segment of the former Maine Central's Calais Branch, a line owned by the Maine's state government, in 2011. The operators hope to soon eopen additional portions of the line.



Figure 3: Heritage Restorations to Communities in Northeast Cluster Municipalities

This map shows the cluster of communities in the Northeastern in which rail activity has resumed through the efforts of heritage railways from 2004 onward.

A dense cluster of municipalities with reactivated heritage railroad lines can be found in New Jersey, New York, and Pennsylvania (Figure 3). Each of these communities are relatively small, with all having populations of less than 9,000. This cluster includes West Hurley (Catskill Mountain Railroad), Boyerstown, PA (Colebrookdale Railroad), New Freedom, PA (Northern Central), Kurtztown, PA (Allentown & Auburn Railroad), Tupper Lake, NY (Adirondack Scenic), Milford, NJ

(Belvidere & Delaware River Railroad) and Stewartstown, PA (Stewartstown Railroad). Black River & Western Railroad is expected to commence excursions to Lambertville, NJ around 2023, while Rockhill Furnace and Orisionia, PA (combined population of 743) are expected to see regularly scheduled excursion trains again as a result of the recent reopening of the East Broad Top, the only narrow-gauge route in the data set, in 2021.

The clustering of projects in rural parts of the Northeast may stem from the relative paucity of development pressure in these areas to reclaim land occupied by out-of-service routes for other purposes. It may also reflect the rolling and wooded topography, and historic edifices along the corridors involved, which adds to the appeal of passenger excursions. Moreover, the close proximity of these heritage railways to large metropolitan regions create a large potential market. The analysis also suggests that government agencies in this area may be more generous in providing grants and technical assistance than in other regions. It remains to be seen, however, whether all or most of these initiatives will prove sustainable.

More analysis is needed to understand the factors that have led to the sharp rise in initiatives completed between 2013 and 2020, a period which accounts for two thirds of the municipalities involved.

Initiatives Planned or Under Construction

Twenty-four municipalities were identified as being poised for the resumption of service through freight or passenger initiatives by 2030, the vast majority of which are in the passenger category (Table 3). The impetus for most of these initiatives is the rapidly growing populations of the municipalities involved. These municipalities are larger (with average population of 42,713) and are growing faster (with an 8.6% median growth rate from 2010 to 2019) than those in other categories.

Washington State's Bellevue (148,164) is the largest municipality poised to regain service. Like neighboring Redmond (94,763), Issaquah (39,509), and Kirkland (93,010), this Seattle suburb is along an expanded light-rail system being built for Sound Transit. Another Sound Transit route to Lynnwood, WA (39,141) and Mountainlake Terrace, WA (21,338) involves reclaiming rail corridor abandoned more than 80 years ago. In Southern California, the municipality of Glendora, CA (51,544), along an L.A. Metro light-rail route under construction, and San Jacinto, CA (49,215), the endpoint of a proposed Metrolink commuter service from Los Angeles, also are notable for their size.

Roswell, GA (94,763), the terminus of a proposed Metropolitan Atlanta Rapid Transit Authority metro line, is the largest municipality in the eastern half of the country poised to regain rail service. Massachusetts' Easton (27,216) and Rayham (14,470) are expected to regain service with the construction of a new MBTA commuter rail line to New Bedford. In Maryland, Chevy Chase (9,611) and Langley Park (19,278), will regain service upon the opening of Washington Metro's Purple Line heavy-rail route now under construction. WaWa-Chester, PA (3,242), is anticipated to regain service through an extension of the Southeastern Pennsylvania Transportation Authority's Ewelyn commuter-rail route.

Table 3: Largest Cities Anticipated to Regain Service by 2020

	Population			Reuse Historic
Rank City	2019	Туре	Project Name	Route
1 Bellevue, Wa	148,164	Psgr	Sound Transit East Link	n
2 Roswell, GA	94,763	Psgr	MARTA Roswell Extension	n
3 Kirkland, WA	93,010	Psgr	Sound Transit Issaquah Link	n
4 Apple Valley, CA	73,453	Psgr	Brightline - XpressWest	n
5 Redmond, WA	71,929	Psgr	Sound Transit East Link	n
6 Glendora, CA	51,544	Psgr	LA Metro Gold Line + Foothill Ext.	У
7 Ashburn, VA	50,290	Psgr	Washington Metro Silver Line	n
8 San Jacinto, CA	49,215	Psgr	Metrolink Commuter Rail	У
9 Issaquah, VA	39,509	Psgr	Sound Transit Issaquah Link	n
10 Lynnwood, CA	39,141	Psgr	Sound Transit Lynnwood Link	Υ
11 Beverly Hills, CA	33,792	Psgr	LA Metro Purple Line	n
12 Easton, MA	27,216	Psgr	MBTA South Coast Line	У
13 Moses Lake, WA	24,086	Freight	Moses Lake RR Reconstruction	У
14 Mountlake Terrace, WA	21,338	Psgr	Sound Transit Lynnwood Link	Υ
15 Langley Park, MD	19,278	Psgr	Washington Metro Purple Line	n
16 Raynham, MA	14,470	Psgr	MBTA South Coast Line	У
17 Thonotossa, FL	13,966	Psgr	Brightline/Virgin Rail Florida	n
18 Chevy Chase, MD	9,611	Psgr	Washington Metro Purple Line	У
19 La Crosse-South Hill, PA	4,925	Psgr	Richmond-Raleigh psgr. rail	У
20 WaWa-Chester Hghts, PA	3,242	Psgr	SEPTA Ewelyn Line Extension	У
21 Polk City, FL	2,724	Psgr	Brightline/Virgin Rail Florida	n
22 Bracey, NC	1,101	Psgr	Richmond-Raleigh psgr. rail	У

Two municipalities, Moses Lake, WA (24,086) and Rosedale, MS (1,588), have either dedicated funding or are the focus of ongoing track repairs to allow for the future resumption of *freight* service. Moses Bay's initiative involves rebuilding portions of an ex-Milwaukee Road and several spurs to support the needs of the Port of Moses Lake. Rosedale's initiative involves a short-line working to reopen a long-dormant ex-Illinois Central segment. Colorado's long out-of-service Tennessee Pass route, owned by Union Pacific and running via Leadville and Salida, is being considered for reopening by an outside party but more approvals are needed for inclusion in this study.

Several properties of municipalities in this category stand out:

- More than two thirds (70%) involve rights-of-way owned (or to be owned) by regional or metropolitan entities, and most of the rest are owned by state governments.
- Municipalities poised to regain passenger service are predominately in the coastal regions. No
 municipalities are located in the country's midsection, although new transit routes in those
 regions will restore service to several neighborhoods of cities that had lost their service.
- Brightline, the rail-service arm of Fortress Investment Group in the process of building a Miami-Orlando, FL high-speed passenger route, has proposed extending this route to Tampa, which would traverse (or skirt) three municipalities that have lost rail service. Florida's Polk City (2,724) and Thonotossa, FL (13,014) flank Brightline's planned Orlando Tampa extension. If an

agreement with the Florida state government about the right-of-way can be reached, work could commence once the Orlando route is complete. The route would also likely pass through Lake Buena Vista, which has a population too small (27) for inclusion in the analysis but is notable for being home to Walt Disney World.

Brightline's proposed route linking metropolitan Los Angeles to Las Vegas, NV, which could be complete as early as 2023, would bring an active railroad back to Apple Valley, CA (73,453). Both routes, however, have significant obstacles to project completion that have to be overcome. (See Appendix B). By contrast, the Texas Central Railway's proposed Dallas – Houston route would not traverse any sizable communities that have lost (or never had) rail service. (See notes on Apple Valley and Barry, TX in Appendix B).

An abandoned Seaboard Air Line right-of-way purchased by the State of Virginia to support high-speed service between Raleigh, NC and Richmond, although primarily rural in character, would bring an active railroad back to Bracey, NC (1,101) and LaCrosse/South Hill, VA, which have a combined population of 4,925. This formerly double-track route, despite having been largely abandoned in 1986, was still owned by CSX and remains largely free of obstruction. It remains to be seen whether Bracey or other communities along this route, which is anticipated to shave Amtrak travel times by up to an hour, become station stops.

V. Conclusions

The analysis shows that 96 municipalities having populations greater than 500 had rail service restored between 2004 and 2020—places that have a cumulative population of 1.8 million. Another 24 municipalities, having 0.94 million people, are anticipated to regain service by 2030 through projects that are well underway in the planning process. Although evaluating rail service as a simple "yes-versus-no" dichotomy is a highly simplified approach, it suggests that initiatives to restore service touch many different aspects of the American transportation system. It shows that policy makers and organizational leaders have overcome political obstacles and budget constraints to put rail service back onto the agendas of communities nationwide.

Several other findings should be reiterated;

#1. Governmental programs have been critical to the reactivation of rail lines. Among the 96 municipalities that regained service or are poised to regain service, 61% involve rights-of-way owned by regional and state agencies. Many of the other remaining examples were made possible with support from local nonprofits, development agencies, and municipal governments.

#2. Initiatives to restore passenger and freight service have divergent qualities. Freight projects tend to involve relatively small communities, most of which have flat or declining population, while passenger projects tend to involve larger municipalities experiencing growth. Heritagerailway initiatives tend to involve even smaller communities than those on freight projects, many of which are clustered in the Northeast, and routes owned by local entities.

#3. Abandoned railroad corridors are resilient and can support efforts to restore service, even when many years have passed since abandonment. The efforts to restore service to municipalities in metropolitan Denver, Los Angeles, and Seattle illustrate how such routes can be used to restore service to growing suburbs and satellite cities many years after the last train has left town.

#4. The simultaneous use of corridors for recreation trails and rail lines has shown promise a way of facilitating rail projects without eliminating a public amenity. The co-alignment of recreation trails alongside rebuilt rail lines allowed for trains and outdoor recreationalists to jointly utilize routes, often with fencing to minimize the risk of conflicts. More research on this practice is nonetheless needed, as it was not explored extensively in the present study.

Finally, it important to acknowledge that, although rail-restoration efforts deserve policymaker attention, their overall impact on American transportation should not be overstated. There are more than 4,000 municipalities in the United States with populations greater than 3,000, and previous analysis suggests that roughly 725 had lost service by 1996. Just 39 of this group of 725 were found in this study to have had service restored since 2004. This suggests that, at most, roughly 4% regained access. This estimate does not factor in the many (perhaps hundreds) of communities that have lost rail service since 1996, suggesting service restorations are relatively rare. Even so, the resumption of rail service to municipalities is a phenomenon poised to continue, providing new options for municipalities seeking a wider range of transportation options.

VI. Appendix A. Table 4: List of Initiatives Restoring Service or Anticipated to Restore Service to Communities, 2004 - 2030

Neighborhood and census designed places in italics; see explanatory notes on page 24

State	Project	City/Census Designated Place	Population (2019)	Туре	Approx. Year Service Ended	Approx. Year Service Returned/Returns	Description
CA	1	Apple Valley	73,453	Planned	1941	2023	Planned station and maintenance facility for Brightline's metro. LA - Las Vegas HSR route; no former rail r-o-w involved. Land annexation complete in Apple Valley. See Appendix B
CA	2	Beverly Hills Century City (n) Westwood (n)	33,792 2,235 55,285	Planned	1987	2023 2027 2017	New Los Angeles Metro Purple Line ("Subway to Sea Route") route under construction. No former rail r-o-w used
CA	3	Arcadia Glendora Monrovia	57,939 51,544 36,331	Psgr Planned Psgr	1990 2010 1995	2017 2021 2017	Abandoned ex-Santa Fe "Pasadena Line" route for LA Metro Gold Line + Foothill Extension. Glendora portion under construction
CA	4	Cloverdale Cotati+ Healdsburg Larkspur Novata Penngrove Petaluma Rhonert Park San Rafael Santa Rosa	8,656 7,410 11,845 12,254 55,516 2,961 60,520 43,291 58,440 176,753	Psgr	1998	2017	Out-of-service ex-Northwestern Pacific/Southern Pacific (SP) route rehabilitated for Sonoma-Marin Area Rail Transit (SMART) commuter rail line. Abandoned r-o-w rebuilt from San Rafael – Larkspur. Note: freight service restarted in some communities in 2011 (see CA 9). See also Appendix B.
CA	5	Culver City Santa Monica	39,185 90,401	Psgr	1986	2012	Abandoned ex-Pacific Electric/SP "Santa Monica Air Line" route rebuilt for Los Angeles Metro "Expo Line" light rail line
CA	6	Folsom	81,328	Psgr	1987	2005	Abandoned ex-SP route rebuilt for Sacramento Regional Transit District light rail line. Out-of- service portion of same route extending east from Folsom reopened for Placerville & Sac. Valley heritage railway
CA	7	San Jacinto	49,215	Planned	2010	2023	Abandoned ex-SP route to be used for commuter rail extension, running via Perris, CA for Los Angeles Metro commuter rail. See Appendix B
CA	8	Montague	1398	Freight	2008	2015	Out-of-service ex-SP route reopened by Central Ore. & Pacific for Calif Oregon through service
CA	9	Black Point-Green Point Fulton Windsor	1,346 508 27,291	Freight	2001	2011	Out-of-service ex-SP route reopened for freight service by Northwestern Pacific Railroad. Part of same system used in CA 4 project.
СО	2	Centennial Cherry Hills Village	110,937 6,647	Psgr	1940	2006	New Denver RTD C Line light rail route. Primarily follows different alignment than abandoned Colo. & Southern R.R. line to these communities
СО	1	Lakewood	157,935	Psgr	1989	2013	Abandoned Denver & Intermountain Ry. (interurban line) corridor rebuilt for new Denver RTD W Line light rail
СО	3	Eads Ordway Towner	602 1,054 22*	Freight	2012 2010	2018	Out-of-service ex-Missouri Pacific Ry route restored by Colorado Kansas & Pacific R.R

State	Project	City/Census Designated Place	Population (2019)	Туре	Approx. Year Service Ended	Approx. Year Service Returned/Returns	Description
СТ	1	Wethersfield	26,267	Freight	2009	2019	Out-of-service ex-New Haven route restored by Providence & Worcester R.R. as through route (no local customers)
СТ	2	Higganum	1,486	Heritage			Out-of-service ex-New Haven route repened for extension of Valley Railroad
FL	1	Lake Buena Vista Polk City Thonotossa, FL+	27* 2,724 13,014	Planned	1950 1989 1950	2030*	Possible station stop on Brightline's proposed Orlando-Tampa HSR route using I-4 median
GA	1	Roswell	94,763	Planned	1921	2028	Planned endpoint on MARTA heavy-rail extension from Dinwiddy. No former rail r-o-w involved; awaits voter referendum. See Appendix B
GA	2	Willacoochee	1,354	Freight	2013	2018	Out-of-service ex-Georgia & Florida RR route reopened by CaterParrott Railnet.
IL	1	Herrin	12,687	Freight	2011	2014	Out-of-service ex-Illinois Central branch reopened by Crab Orchard & Egyptian Ry.
IN	1	New Albany#	36,604	Freight	2015	2020	Out-of-service ex-Monon spur through center of town (5 miles) reopened by CSX for freight. Service previously limited to town's periphery
IN	1	South Hammond (n)	23,165	Planned	1990	2024	Planned rebuilding of abandoned ex-Monon Route for South Shore Line's West Lake Extension commuter rail
MA	1	Hingham* Cohasset Scituate	23,923 8,548 18,924	Psgr	1979	2007	Abandoned ex-Boston & Maine Greenbush line rebuilt for MBTA commuter rail
MA	2	Easton Raynham	27,216 14,470	Planned	1958	2023	Planned reconstruction of abandoned ex-New Haven RR route for MBTA's South Coast commuter rail line from Boston to New Bedford and Fall River
МА	3	Grafton Hopedale Upton	18,883 5,951 8,065	Freight	1998	2009	Out-of-service route reopened by Graton & Upton RR
MA	4	Adams#	8,010	Heritage	2005	2015	Abandoned ex-Bangor & Aroostock RR route rebuilt into downtown Adams, MA for Berkshire Scenic Ry. Rail service previously limited to town's periphery. See Appendix B
MD	1	Berlin Snow Hill	4,818 2,038	Freight	2000 2010s	2019	Out-of-service ex-Penna. RR route reopened by Maryland & Delaware Railroad.
MD	2	Chevy Chase Langley Park	9,611 19,278	Psgr Planned	1985 1935e	2022	Planned Washington Metro light rail Purple Line now under construction; reuses former B&O r-o- w through Chevy Chase. See Appendix B
ME	2	Ellsworth	8,048	Heritage	1980	2010	Out-of-service ex-Maine Central route repened by Downeast Scenic Railway for heritage operations
MS	1	Rosedale	1,588	Planned		2022	Out-of-service ex-Illinois Central route being reopened to Port of Rosedale by short-line Chi., Rock Island & Pacific RR

State	Project	City/Census Designated Place	Population (2019)	Туре	Approx. Year Service Ended	Approx. Year Service Returned/Returns	Description
NC	1	Ranlo# McAdenville	3,668 673*	Freight	1991	2001	Out-of-service ex-Piedmont Northern Ry. (P&N) line restored by Patriot Rail, later passed to P&N RR
NC	2				See .	SC 1	
NE	1	Bennett Palymyra Syracuse	954 596 1981	Freight	2003	2020	Out-of-service ex-Burlington Route branch reopened by BNSF for coal shipments to utility in Nebraska City
NH	1	Redstone	*	Heritage	TBD	2019	Out-of-service former Maine Central route reopened for extension of Conway Scenic Railway
NJ	1	Andover	563	Planned	1979	2025	Abandoned Lackawanna Cutoff route rebuilt by New Jersey Transit commuter rail extension; further extensions being explored
NJ	2	Lakehurst	2,708	Freight	2009	2018	Out-of-service former Central Railroad of NJ reopened for freight service by Cape May Seashore Lines
NJ	3	Lambertville	3,801	Heritage	1998	2021	Out-of-service ex-Penna. RR route reopened by Black River & Western; extension to downtown Lambertville expected by 2021-22
NJ	4	Milford	1,181	Heritage	2004	2016	Out-of-service ex-Penna. route reopened by Belvidere & Delaware River. Presently operates mostly speeder equipment to community.
NV	1	Boulder City	16,207	Heritage	1985	2018	Out-of-service ex-Union Pacific route reopened for Nevada Sou. Ry. via new bridge. Operations previously limited to Boulder City area.
NV	2	Carson City	55,916	Heritage	1950	2009	Abandoned Virginia & Truckee Ry. rebuilt for Virginia & Truckee RR heritage railway linking Carson City to Virginia City
NY	1	Cuba Wellsville	3,085 7,089	Freight	1998	2003	Out-of-service ex Erie RR "Southern Tier" reopened from Hornell, NY to Meadville, PA as Norfolk Southern through route. See Appendix B
NY	2	Cold Brook West Hurley	320 1,871	Heritage	1976	2014	Out-of-service ex-New York Central route reopened by Catskill Scenic Railroad
NY	4	Fleishmanns	317	Heritage	1976	2011	Out-of-service ex-New York Central route reopened by Delaware & Ulster reopened for heritage operations; not connected to national rail system
ОН	1	Cadiz	3161	Freight	1980	2004	Abandoned ex-Penna. RR route rebuilt for Columbus & Ohio RR.
ОН	2	Grand River	401	Freight	2002	2015	Out-of-service ex-B&O route (3 miles) reopened for freight service by Grand River RR. See Appendix B

State	Project	City/Census Designated Place	Population (2019)	Туре	Approx. Year Service Ended	Approx. Year Service Returned/Returns	Description
ОН	3	Peeples	1707	Freight	2014	2016	Out-of-service ex-Norfolk & Western "Peavine" reopened by Cincinnati and Eastern Ry.
ОН	4	Grand Rapids	1004	Heritage	2009	2014	Out-of-service ex-Nickel Plate route reopened by Toledo, Lake Erie & Western for heritage operation Bridge repairs underway
		Coos Bay	16,361				Out-of-service ex-SP route reopened for
OR	1	North Bend	9,768	Freight	2007	2012	freight service by Coos Bay Rail Link
		Reedsport	4,124				
PA	1	Homer City	1,603	Freight	1993	2005	Out-of-service ex-B&O route reopened by
		Indiana	13,167				Buffalo & Pittsburg RR for freight service.
PA	2	Orbisonia-Rockhill	773	Heritage	2012	2020	Out-of-service East Broad Top Railroad narrow gauge route reopened. Rockhill Trolley Museum has operated its local 1.5-mile loop continuously.
PA	3	Boyerstown	4,076	Heritage	2008	2014	Out-of-service ex-Reading RR route reopened by Colebrookdale RT for heritage operations; Efforts made restore freight service.
		Hawley	1,062				Out-of-service ex-Erie R.R. route
PA	4	Honesdale	4,277	Heritage	2011	2015	reopened by Delaware, Lackawanna &
PA	5	Kutztown	5,089	Heritage	2013	2015	Stourbridge for heritage operations Out-of-service ex-Reading RR route reopened by Allentown & Auburn RR. for heritage operations.
PA	6	Stewartstown	2,066	Heritage	2004	2015	Out-of-service reroute reopening by Stewartstown Railroad for heritage operations.
		New Freedom	4,696				Out-of-service ex-Penna. RR. route
PA	7	Glen Rock	2,071	Heritage	2002	2013	reopened by Northern Central RR.for heritage operations.
PA	8	WaWa-Chester Heights	500	Planned	1986	2021	Out-of-service ex-Penna. RR branch rebuilt for an entirely new, 3-mile extension of SEPTA Ewelyn Line commuter rail route from Philadelphia. See Appendix B.
PA	9	Westland	167	Freight			Abandoned ex-Penna. RR branch completely rebuilt (4 miles) to serve West-Mark Energy Partners gas facility. Built as rail-with-trail.

State	Project	City/Census Designated Place	Population (2019)	Туре	Approx. Year Service Ended	Approx. Year Service Returned/Returns	Description
SC	1	Conway Loris Taber City, NC Fair Bluff, NC Chadbourn, NC Whitesville, NC	25,956 2,791 4.122 998 1,724 5,340	Freight	2012	2019	Out-of-service route ex-Atlantic Coast reopened by RJ Corman railroad for freight service. Part of through route to Myrtle Beach.
SD	1	Chamberlain Mount Vernon Plankinton Presho	2,350 436 742 498*	Freight	1990	2012	Out-of-service ex-Milw. Road route reopened by Dakota, Minnesota & Eastern for freight service.
TN	1	Reliance	1,027	Heritage	2001	2004	Out-of-service ex-L&N "Hiwassee Loop" route reopened by Tennessee Valley Railway for heritage operations
TX	1	Corinth	22,099	Psgr	1990	2011	Abandoned ex-Missouri-Kansas-Texas R.R. route rebuilt for completely new Denton County "A Train" commuter rail. A "Rail with Trail" project
TX	2	Edna El Campo Wharton	5,874 11,539 8,654	Freight	1995	2009	Abandoned ex-SP route rebuilt with relaid track by Kansas City Southern Railway for through route to Mexico border region.
TX	3	Manor McDade	13,866 748	Freight	1995	2009	Out-of-service ex-SP branch reopened by Austin Western RR for freight service,
TX	4	Barry	256	HSR	TBD	2030*	Planned route following utility corridor Texas Central Ry.'s proposed Dallas – Houston HSR route, Crosses abandoned ex-Cotton Belt line. See Appendix B
TX	4	Far North Dallas (n)	165,719	Planned	2010	2022	Abandoned ex-Cotton Belt route rebuilt for completely new Dallas Area Rapid Transit Silver Line commuter rail linking DFW Airport to Plano, TX
UT	1	West Valley City	135,248	Psgr	1946	2009	New line rail line built for Salt Lake City TRAX system. Does not use former Salt Lake & Utah RR (an interurban) r-o-w to community.
		Ashburn	50,290	Planned		2021	Extension of Washington Metro Silver Line via Dulles Airport, partially using
VA	1	Herndon Reston Tysons (CDP)	24,601 60,335 23,749	Psgr	1969	2014	Dulles Access Road. Does not use former Wash/ & Old Dominion RR r-o-w through these communities
VA	2	La Crosse-South Hill Bracey	4,925 1,101	Planned	1986	2030*	Abandoned ex-Seaboard Air Line route purchased by Commonwealth of Virginia for planned Richmond, VA - Raleigh, NC HSR service

State	Project	City/Census Designated Place	Population (2019)	Туре	Approx. Year Service Ended	Approx. Year Service Returned/Returns	Description	
		Bellevue	148,164				Planned Sound Transit light-rail East Link	
WA	1	Redmond	71,929	Planned	2007	2023	route, primarily having r-o-w not formerly used by a railroad	
		Issaquah	39,509				New New Sound Transit light-rail Kirkland-	
WA	2	Kirkland	93,010	Planned	1998	2020	Issaquah Linkplanned, primarily using r-o- w in expressway median not formerly used by a railroad	
		Lynnwood	39,141		1939	2024	Abandoned ex- Pacific Northwest Traction	
WA	3	Mountlake Terrace	21,338	Planned		2024	Co. rebuilt for Planned Sound Transit light-rail Lynnwood Link Extension now	
		Northgate (n)	4,283			2021	under construction.	
WA	4	Moses Lake	24,086	Planned	2000	2028	New freight route to Port of Moses Lake for Northern Columbia Basin R.R. planned, having multiple segments, some involving former Milw. Road r-o-w	
WA	5	Royal City	2,230	Freight	1994	2016	Out-of-service ex-Milw. Road branch opened by Royal Slope RR	
WI	1	Sheboygan Falls	7,748	Freight	2005	2015	Abandoned ex-Chicago & North Western route rebuilt for Wisconsin & Southern RR. Relaid track.	
		Bruce	3322				Out of comics or Coo Line route (40)	
WI	2	Cameron	1788	Freight	TBD	2013	Out-of-service ex-Soo Line route (40 miles) restored by Canadian National	
.,,	_	Baron	705	. 10.8110	100	2013	primarily to move fracking sand	
		Rice Lake	8504					
WI	3	Tony*	102	Freight	TBD	2012	Out-of-service ex-Soo Line route restored by Canadian National for logging facility	

^{*} Below 500 population threshold. Not included in this study's enumerations and calculations but included on table for being a notable initiative

Notes: dates in which service stopped and started differs between published sources in some instances. The years provided in some cases are approximations, based on media reports and other secondary sources.

[#] Rail service previously limited to community's periphery but expanded to central part of city. Not included in this study's enumerations and calculations

n Official city neighborhood; not a distinct municipality. Not included in study's enumerations and calculations. Census designated places shown in *italics*

Appendix B: Special Circumstances in Communities

- #1. Apple Valley, CA. This city lost its rail service with the abandonment of the Golden State Portland Cement Railway, an industrial railroad that ceased operation in 1928. The community received its present name approximately the same time this railroad was scrapped in 1941. Many years later, the Apple Valley annexed land that included the Southwest Portland Cement Railroad. This railroad, however, does not pass through the developed portions of Apple Valley and is not a common carrier. In 2020, Apple Valley approved a large-scale land annexation to the north, encompassing Interstate 15, to support a maintenance facility and station for Brightline XpressWest. Brightline XpressWest is a higher-speed passenger rail line from the Los Angeles metropolitan area to Las Vegas. Victorville, CA, a notable railroad center on the Union Pacific Railroad, shares of boundary with Apple Valley.).
- **#2.** Roswell, GA. This northern suburb of Atlanta was last served by the Roswell Railroad in 1921. The construction of a MARTA rail-transit line from Atlanta is poised for construction but depends on the results of a referendum scheduled for early 2021.
- #3. San Jacinto, CA. A referendum will be held by Orange County on transportation improvements that will involve reconstruction along the former route of the Southern Pacific's San Jacinto Branch for Metrolink commuter rail service to Los Angeles by way to Perris, CA.
- #4. Southern Tier from Hornell, PA to Meadville, PA. This route was partially taken out of service by Conrail in 1991 when through service ended. Local freight operations by Conrail and Norfolk Southern continued over parts of the line. The local service was replaced by the Western New York and Pennsylvania Railroad, a short-line operator, in 2001. Larger communities along this segment continued to be served, although lengthy segments remained out of service. After the line's rehabilitation, the short line expanded local service over other portions of the route in 2002. Norfolk Southern resumed through operations in 2004, which allowed for the restoration of service to Cuba Falls and Wellsville, NY.
- #5. Langley Park, MD. This census designated place is a future stop on the Washington Metro Purple Line, a project of the Maryland Department of Transportation. This community is included as having previously had rail service due to the historic presence of a streetcar line that reached within ¼ mile of the planned station site in Tacoma Park, MD.
- #6. Sonoma-Marin Area Rail Transit (SMART) communities. All communities on the Sonoma-Marin Area Rail Transit (SMART) commuter rail line, a service launched in 2017, except Larkspur and San Rafael, CA, had their freight service restored as early as 2011. The municipalities, however, are assigned to the passenger category since funding for the SMART initiative was approved in 2008, paving the way for the both freight and passenger restoration efforts.
- **#7.** Barry, TX. The proposed alignment for the Texas Central Railway takes it along the periphery of Barry, a small community of 256 was formerly served by St. Louis-San Francisco Ry. (Frisco Lines). There are no plans for a stop at this location. No larger communities along the route not already served by a rail line were identified.
- #8. Adams, MA. There was continuous freight service to an industrial park near Adam's northern periphery, but it lacked service into the main (historic) part of the community until the one-mile segment was re-laid in 2015.
- **#9. Grand Rapids, OH.** An ex-Nickel Plate/Norfolk & Western route to Grand Rapids was brought back into service by the Toledo, Lake Erie & Western Railroad around 2011 after several years of inactivity. The heritage railroad presently operates speeder-pulled trains over a portion of the line and is in the process of replacing a washout that will allow these trains to continue to Waterville, OH. Crosstie replacement on its bridge of the Maumee River will be necessary, however, before conventional trains can operate over that span and portions of the rest of the track.
- **#10. Wawa-Chester Heights, PA**. These communities were agglomerated due to the location of the station, which is located in both Wawa (an incorporated community estimated to have 500 people, and Chester Heights, a borough of Pennsylvania. The construction of the Wawa station is well underway.

VII. References

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VIII. Photo credits

Cover:

Santa Monica light rail (Metropolitan Los Angeles Transportation Authority) Budd Rail Diesel Car at Redstone (Richard Slattery) Crew working (Black River & Western Railroad Historic Trust)

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ⁱ Empowered to oversee the abandonment process through the Transportation Act of 1920, the ICC initially adopted a somewhat permissive stance toward rail line abandonment [1, 5]. Over time, however, the agency became more assertive in abandonment denial petitions until, ultimately, it came to be seen as a significant barrier to the elimination of unprofitable routes, especially when shippers lacked access to other rail lines.

ii The much larger Santa Rosa, CA, regained freight service prior to regaining passenger service. This community, however, is classified as having regained service through a passenger initiative for reasons discussed.