

Chapter 6 | Transit

Introduction

Transit provides mobility to thousands of residents who cannot, or choose not to drive. In addition to enhanced mobility, bus and/or rail transit also provides a regional air quality benefit by reducing the number of cars on the road, particularly during congested travel periods and on hot summer days. The region's transit services provide access to major regional employers, shopping areas, health care services, social services, and universities. Chapter 6 examines existing transit, rail, and air services as well as future initiatives. This chapter also identifies several roadway recommendations that will likely benefit the transit system.

The Impact of COVID-19 and CARES Act on Transit

During the COVID-19 pandemic, transit ridership fell across the country. Fares and other ridership-related funds are some of the largest sources of revenue for transit agencies. Due to other underlying economic conditions, transit agencies like the Kanawha Valley Regional Transportation Authority (KVRTA) struggled to maintain service operations. With a shortage of vehicle operators, service could no longer operate at full capacity.

The Coronavirus Aid, Relief, and Economic Security (CARES) Act is a \$2.2 trillion stimulus bill that was passed on March 27, 2020. The CARES Act is a relief bill aimed to support state and local economic recovery. The Federal Transit Administration is responsible for the allocation of \$25 billion to urbanized and rural areas. The funding is provided at a 100-percent federal share with no local matches required. The funds can be used to support operating, capital, or other expenses to respond to lost revenue generation from COVID-19.



The Kanawha Valley Regional Transportation Authority boasts multiple hybrid buses

The Kanawha Valley Regional Transportation Authority System

The KVRTA system serves Kanawha County and portions of Fayette and Putnam counties. The service area is approximately 913 square miles, serving a population of approximately 188,332 people. An estimated 88% of Kanawha County's residents live within three-quarters of a mile from a KVRTA route.

KVRTA operates a network of 20 fixed-routes oriented around the commercial center of Charleston. With the exceptions of four holidays, KVRTA provides service seven days a week. The earliest routes begin at 4:25 a.m. with service continuing until 12:55 a.m. the next day. Complimentary paratransit service, known as Kanawha Alternative Transit—or KAT—operates during the same days and hours.

A single KVRTA ride costs a passenger \$1.50, while daily passes are available for \$2.50. The fares for the paratransit service are twice the rate of the fixed-route system. KVRTA offers discount passes and reduced senior fares for all routes. Tickets can be purchased at the KVRTA main office or the KRT Transit Mall Information Center.

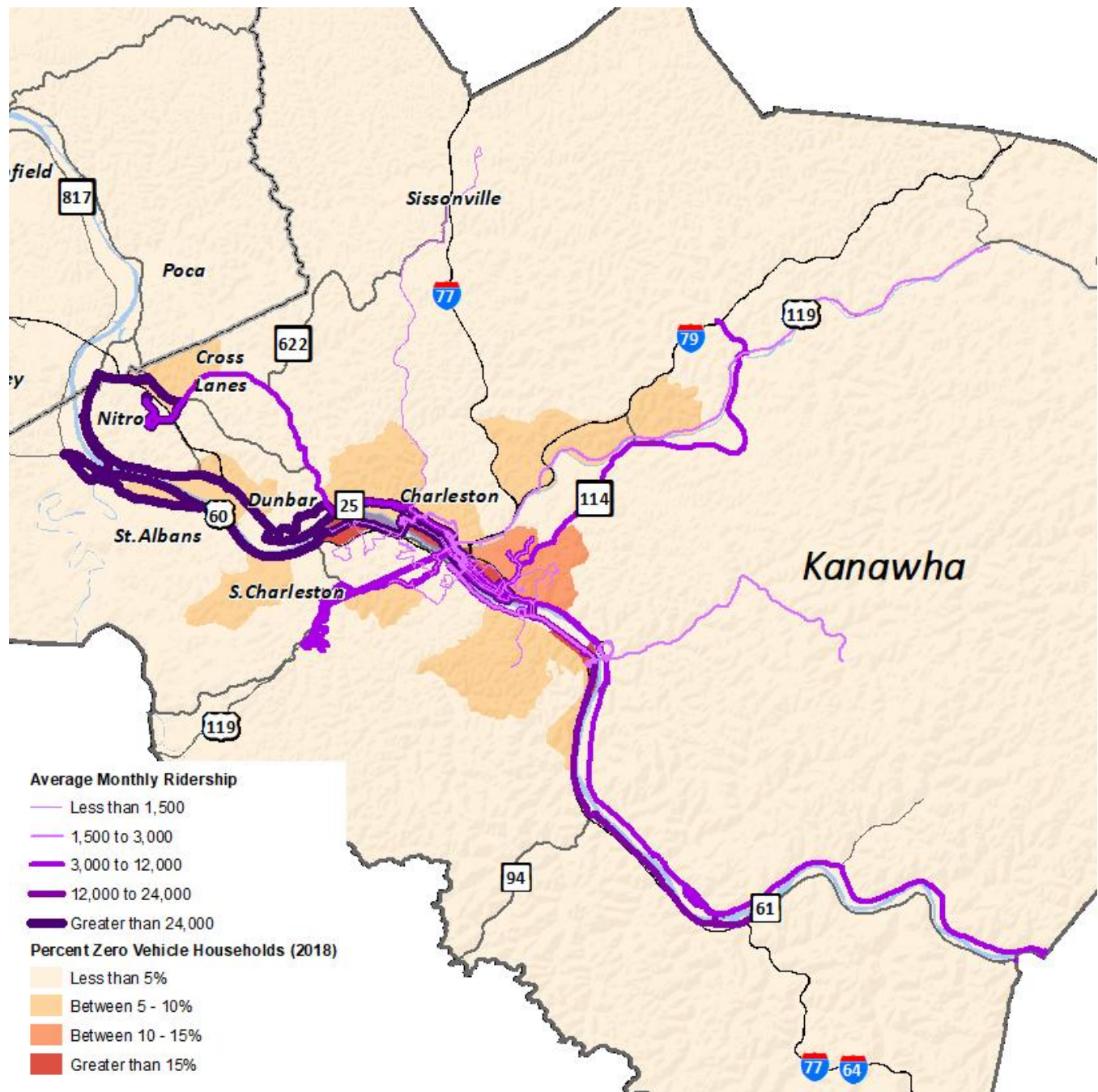
The KVRTA operates a fleet of 49 vehicles for fixed-route service. The fleet consists of 30- and 35-foot-long transit coaches and minibuses. KVRTA also has 13 cutaway vans for the KAT complimentary paratransit service.

KVRTA's operations, maintenance, and administrative headquarters are located on 4th Avenue in Charleston. The downtown transfer center, KRT City Centre Station, is currently under renovation. When complete the new transit centre will house a ticket office, conference room, and office space for dispatchers. Additional ticket vending machines will be installed in front of the new building and upgraded passenger shelters will be installed along Laidley Street. The bus travel lanes and sidewalks will also be widened during the remodel and digital passenger informational displays will be installed. The new KRT City Centre Station will be a component of the multiuse, multimodal space that includes commercial and entertainment venues, hotels, and government offices.



Rendering of KRT City Centre Station Renovation

Figure 6-1: Average Monthly Ridership



KVRTA System Analysis

To adapt to the challenging fiscal climate, KVRTA conducted a system analysis to evaluate potential service expansion and reduction. The study included an analysis of demographics and passenger surveys, evaluated the existing route structure, forecasted future service levels, and proposed future funding strategies. The goals of the study included modernizing the transit system to better connect the customers with their communities and develop opportunities for increased communication and partnership.

Service modifications included the removal of three routes: Woodward Drive, Montgomery/Eskdale, and Garrison Avenue/Hillsdale. Two new routes were added, South Side and the Charleston Loop, and an express route was also added to the Southridge route.

Another outcome of the system analysis was KRT Live. KRT Live is a mobile app developed for KVRTA passengers to view fare and schedule information and locate their bus in real time. The mobile app highlights a commitment to providing multimodal service throughout the Kanawha Valley.

Table 6-1: Average Monthly Ridership by Route 2019 & 2020

ROUTE NUMBER	ROUTE NAME	2019 AVERAGE MONTHLY RIDERSHIP	2020 AVERAGE MONTHLY RIDERSHIP
1	St. Albans/W. Charleston	38,655	26,481
2	Cabin Creek/Kanawha City	21,485	14,659
3	Nitro/Institute	25,820	16,749
5	Tyler Mtn./Cross lanes	7,031	4,113
6	Elkview	7,031	4,113
7	Campbells Creek	1,574	922
8	Sissonville	1,471	988
10	Northgate/Hillcrest	755	507
11	Wertz Avenue	588	474
13	Beech Avenue	1,861	1,222
14	City Park	1,300	593
15	South Hills	860	789
16	South Park	1,414	1,104
17	Southside	3,303	2,224
18	Fort Hill/Montrose	1,089	656
19	Trolley/Charleston Loop	1,190	941
20	Virginia Street	1,207	829
21	Southridge	5,743	4,313
22	Montgomery/Quincy	11,094	7,865
23	Clendenin	2,990	2,026

Transit Expenditures and Revenues

The two primary funding sources for KVRTA's gap between costs and farebox revenue are:

- Special levy money
- The Federal Transit Authority (FTA) Section 5307 Operating Assistance

The levy amount, determined by local property taxes, requires approval by Kanawha County voters every four years (60.0% approval is required). FTA apportions Section 5307 funds on a formula basis. KVRTA also uses a portion of its Section 5307 funds for capital expenses. Historically, KVRTA has also received capital assistance from the FTA Section 5339 (Bus Discretionary Fund). KVRTA does not directly receive operating assistance from the State.

Transit Throughout the Region

As previously mentioned, KVRTA routes extend into small portions of Putnam and Fayette counties. Transit throughout Putnam County has been studied in the past. The study revealed insufficient interest and funding. The IT Bus began January 5, 2009 and intended to improve commuter traffic between Charleston and Huntington, WV. Passengers could ride from Huntington to Charleston in the morning or evening for \$3. The service was originally funded through federal and state grants; however, the funding was quickly exhausted in 2012. In order to generate revenue, the fare was increased by \$1 and the operating costs were split between KVRTA, the State of WV, and TTA (Tri-State Transit Authority in Huntington). After the fare increase and a decline in gas prices, ridership dropped from 1,500 riders a month to 500 and the service ended on August 28, 2015.

In partnership with the WVDOT, Baron's Bus provides service between Charleston and Morgantown along Interstate 79. The service runs once daily seven days a week and twice daily on Sundays, Mondays, Thursdays, Fridays and Saturdays. The bus picks up and drops off at multiple locations in Charleston and Morgantown, and also stops in Clendenin, Flatwoods, Weston, Clarksburg and Fairmont. Cost is dependent on distance and ranges from \$3 to \$15. I ride 79 connects KVRTA, Greyhound Bus Service and Mountain Line Transit.

Recommendations

The potential transit benefits were considered when prioritizing highway improvement projects and developing recommendations. A detailed route analysis was completed recently and was not studied as part of this plan. The following projects listed in Table 6-2 provide roadway improvement recommendations along current KVRTA routes. The study team anticipates that these projects will improve transit operations on routes that use these roadways.

Table 6-2: Roadway Improvements Along KVRTA Routes

PROJECT ID	ROADWAY	DESCRIPTION
KC-1	3 rd Street Underpass	Widen and upgrade the underpass
KC-4	US 119 (Corridor G)	Add a third lane to US 119 NB
KC-5	US 119 (Corridor G)	Add third lane in both directions (north and southbound); add Cantley Flyover to US 119 southbound
KC-6	US 119 (Corridor G)	Add third lane in both directions; upgrade frontage road between Emerald Road and Paula Road
KC-8A	US 60 (Dupont Avenue)	Widen to four-lanes divided (Section A of US 60 Upgrade Study)
KC-8C	US 60 (Dupont Avenue)	Add center turn lane from Sycamore Road to Britt Hollow (approximately 1.2 miles); add right turn lane at recycling center
KC-8D	US 60 (Dupont Avenue)	Add center turn lane west through London for approximately one mile in length
KC-9	WV 114 (Greenbrier Street)	Widen to three-lanes with a two-way left-turn lane
SH-1	MacCorkle Avenue	Restripe; provide multimodal accommodations; underground utilities; improve intersections
RSA-1	Patrick Street	Add turn lane at intersection of 4 th Avenue and Patrick Street
RSA-3	US 60 (Dupont Avenue)	Add an eastbound right at William Street; add right-in-right-out (RIRO) at William Street; add turnaround lane for U-turns
RSA-4	I-64 Eastbound Off Ramp	Widen off-ramp to provide a drop decision lane

Planning Process

KVRTA faces the challenge of needing to do more with less. There is insufficient funding to cover KVRTA's capital and operational costs. Under MAP-21 legislation, Section 5339 (Bus and Bus Facilities Program) replaced Section 5309 (Bus Discretionary Fund). The WV Division of Public Transit will administer Section 5339 and distribute funding to all eight of the small-urban areas throughout the state.

Additionally, transit funding has changed due to shifting urbanized area boundaries. Specifically, Teays Valley is now part of the Huntington, WV urbanized area. Transit funding may shift again after the Census 2020 population numbers are released, as well as what may be available as a part of the Infrastructure Investment and Jobs Act.

The project team considered potential transit benefits when prioritizing highway improvement projects and developing recommendations. This prioritization occurred with the understanding that a detailed market study and system analysis was recently completed. There are several roadway projects that will impact transit routes; completion of these projects should improve the operation of KVRTA routes.

Transit Asset Management Planning

Transit Asset Management is a requirement for all transit providers receiving federal funds due to requirements from MAP-21 and the FAST Act. Transit Asset Management (TAM) is a business model that uses the condition of assets to guide the optimal prioritization of funding at transit properties to keep our transit networks in a State of Good Repair. The West Virginia Division of Public Transit is coordinating with the transit providers throughout West Virginia to develop a TAM Plan, asset management performance targets, and safety performance targets. KVRTA is coordinating with RIC to develop and annually report the following performance targets:

- Percentage of non-revenue service vehicles that have met or exceeded their Useful Life Benchmark (ULB)
- Percentage of revenue vehicles, within a particular asset class, that have met or exceeded their ULB
- Percentage of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model scale
- Fatalities per total vehicle revenue miles by bus and demand response service
- Injuries per total vehicle revenue miles by bus and demand response service
- Safety Events per total vehicle revenue miles by bus and demand response service
- System Reliability, measured as revenue miles operated divided by the number of major mechanical failures by bus and demand response service

Passenger Rail

Two long-distance Amtrak lines currently serve West Virginia. The *Capitol Limited*, operating between Washington, D.C. and Chicago, IL, stops in Harpers Ferry, WV and Martinsburg, WV. Meanwhile, the *Cardinal* route, providing service from Chicago, IL to New York, NY, stops in Charleston, Huntington, and other West Virginia communities. The Cardinal route offers three trips per week. Table 6-2 shows the passenger volumes on the Cardinal increased and decreased over the past three years. The ridership data is not yet available for 2020.

Table 6-3: West Virginia Passenger Rail Ridership

YEAR	RIDERSHIP
FY 2017	50,596
FY 2018	54,493
FY 2019	51,568



Charleston, WV Amtrak Station

Additionally, the West Virginia State Rail Plan outlines recommendations for intercity passenger rail service throughout the state, as outlined below.

Immediate Intercity Passenger Rail Recommendations

- Create regional routes and state partnerships with Virginia, Pennsylvania, and Ohio to support upgrading *Cardinal* passenger Rail service.
- Re-examine the Cardinal Passenger Train Enhancement Fund and consistently fund.
- Increase multimodal options and improve transportation accessibility and station access in Huntington, WV.
- Construct sidewalks and improve station accessibility and station access in Martinsburg, WV.
- Develop a more robust awareness campaign for passenger (commuter and intercity) rail service in the state, including availability of up-to-date timetables at stations and an online presence.
- Improve universal accessibility / ADA compliance at passenger, commuter, and tourist rail stations.
- Ensure bike racks are available on Amtrak intercity rail corridors and advertise this feature locally.

Near-Term Intercity Passenger Rail Recommendations

- Continue to collaborate with freight railroads and Amtrak to mitigate delays.
- Continue involvement in the Cardinal working group.
- Upgrading of *Cardinal* service- Establish funding and operational strategy; Establish state partnerships and collaboration for regional routes, i.e. WV/VA, WV/PA, WV/OH.
- Evaluate coordination of connecting bus and train schedules.
- Utilize the Amtrak Station Host Program to post volunteers at stations.
- Identify Charleston station needs including dedicated parking spaces and better connections to local transit, conduct needs assessment for multimodal terminal.
- Conduct assessment of potential Huntington Multimodal Terminal, to include transit and rail co-location.

Passenger Air

Yeager Airport in Kanawha County serves four commercial airlines (American Airlines, United, Delta, and Spirit) and provides direct flights to Charlotte, Chicago, Washington DC, Atlanta, Philadelphia, Fort Lauderdale, Myrtle Beach, and Orlando. In 2019, there were 223,000 passenger boardings (enplanements) at the airport which was a 4.2% increase from 2018. Unfortunately, during 2020 there was a 60% decrease in passenger arrivals and departures.

Currently, Yeager Airport is developing a master plan to expand the existing runway and plan for future travel demands. The number of annual passengers in 2017 was 425,000, this number is expected to grow to 575,000 and 626,000 over the next ten and twenty years, respectively. The public comment period is still underway; next steps include continued coordination with WVDOT-Aeronautics and an Environmental Assessment.



Yeager Airport in Charleston, WV