

Memorandum

To: Town of Mineral Planning Commission
From: Curtis Scarpignato, Regional Planner
Date: February 14th, 2024
Reference: Memo – Existing Conditions

MEMO: Mineral Existing Conditions

Introduction

As part of comprehensive planning, localities are required by Virginia code to assess the existing conditions of their community. From 15.2-2223 of the Virginia code: “In the preparation of a comprehensive plan, the commission shall make careful and comprehensive surveys and studies of the existing conditions and trends of growth, and of the probable future requirements of its territory and inhabitants.” This document provides an outline of the present conditions in Mineral across multiple dimensions, such as finances, transportation, and land use.

Historical, Cultural, and Recreational Amenities

The Town of Mineral holds several key historical, cultural, and recreational amenities. Several locations in and around Mineral are contained within the National Register of Historic Places, such as the Harris-Poindexter House and Store, Cuckoo, Prospect Hill, and the Mineral Historic District. Citizens also have access to many resources, including Whitlock Family Park, Mineral Farmer’s Market, the Old Town Jail, the Old Town Cemetery, the Old Town Hall, Walton Park, Mineral Town Park/Luck Field, and the historic Mineral C&O Train Depot.



Mineral C&O Railroad Depot

Water and Sewer

The Town of Mineral owns and operates its own well system; however, the town also purchases water from Louisa County to supplement the Town's well supply as needed. In 2019, the Town disconnected its 2nd well leaving it with its current single well. Water from the well is treated with chlorine. Some properties are also served by private wells and septic systems.

As of its most recent budget, Mineral had allocated \$75,000 of its \$613,000 operating budget to water and sewer facilities repair and maintenance.

In 2002, the Town of Mineral entered into a 40-year agreement with the Louisa County Water Authority, which can be extended upon agreement between both parties. Water is provided to Mineral near the intersections of Routes 22 and 522 at the Western edge of the Town's limits. The Water Authority operates and maintains its own metering equipment at the point of delivery. The rate is \$2.24 per 1000 gallons as set by the Louisa County Water and Sewer Rate Commission. Wholesale connection fees are also set by the commission and developers within the Town are responsible for paying for such connection fees. In the event of an extended shortage of water supply, the Town's consumers will have reduced supply at the same ratio as the supply to all of the Authority's consumers.

One limitation on growth in Mineral is the water/sewer infrastructure. The current infrastructure is insufficient to accommodate intensive growth. In particular, the piping infrastructure that brings in water to Mineral and the pipes that move sewage out to treatment plants are of limited diameter: 10 inches and 8 inches, respectively. Louisa County could work to upgrade the water pipes, but the Town would need to upgrade its sewer system in the event of substantial growth in the area.

Finances

The Town of Mineral has an overall annual budget of \$1,131,979. Of that, \$613,460 is allocated to operations, including items such as electric services, insurance, debt services, trash service, and maintenance costs. and \$518,519 to personal services, such as salaries and VRS retirement contributions. The Town's FY 2022-2023 budget can be accessed on its website.¹

The Town of Mineral generates revenue through a variety of sources, including taxes and fees. Some key taxes are listed below.

- Real Estate Tax: \$0.20/\$100
- Personal Property Tax: \$0.48/\$100
- Meals Tax: 6%

Other important revenue sources include water/sewer sales (\$282,500) and DMV Select Revenue (\$336,000).

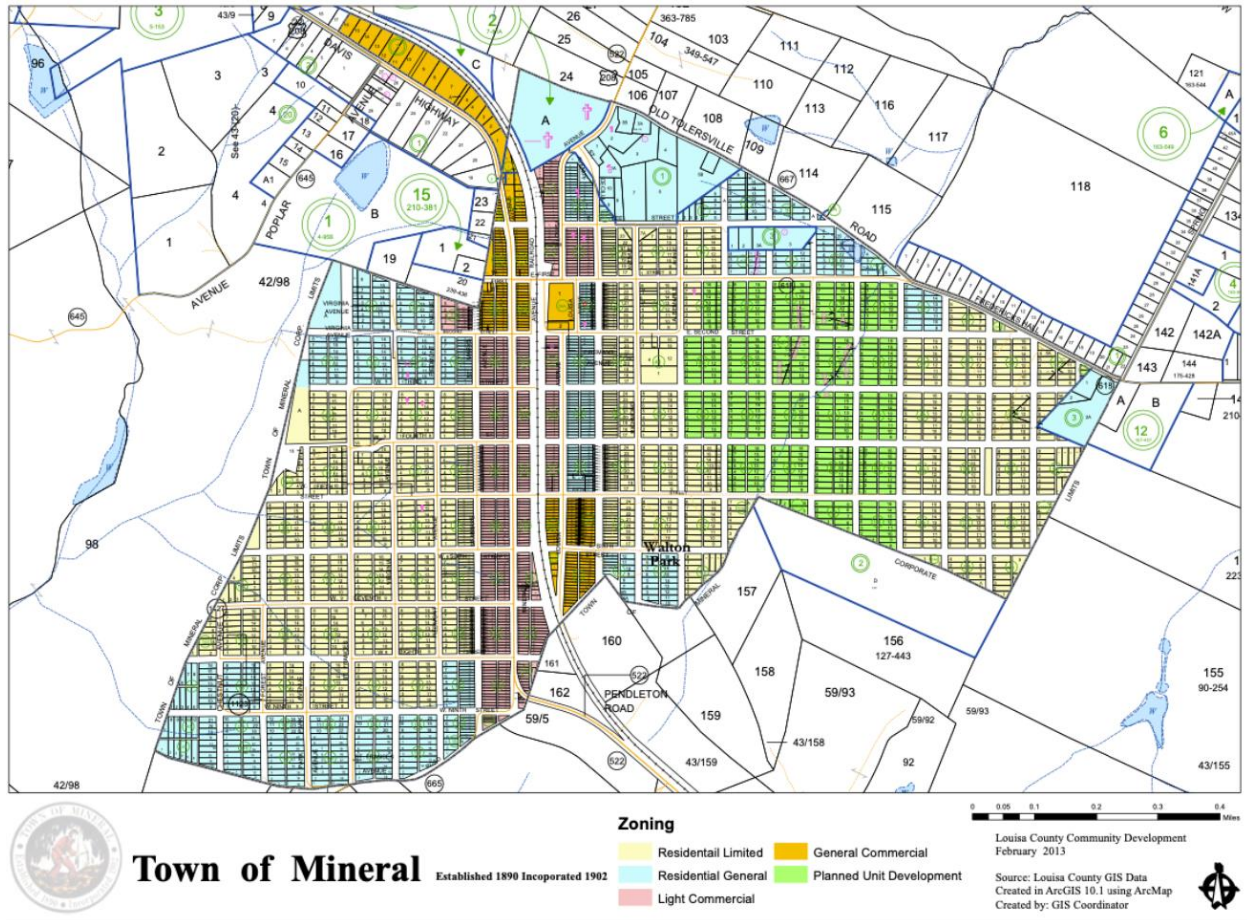
The Town employs several staff on a part-time and full-time basis, including 3 Town Hall staff, 2 maintenance staff, and 6 Mineral DMV Select staff.

Zoning

¹ Town of Mineral Budget FY22-23: <https://www.townofmineral.com/media/616>

The Town of Mineral has designated several zoning districts. They are:

- Residential Limited
- Residential General
- Light Commercial
- General Commercial
- Planned Unit Development



Town of Mineral Zoning Map

A brief description of these zoning districts is provided below from the Town Code. Additional zoning information can be accessed online.²

Residential Limited: “This district is composed of certain quiet, low-density residential areas plus certain open areas where similar residential development appears likely to occur. The regulations for this district are designed to stabilize and protect the essential characteristics of the district, to promote and encourage an enjoyable environment for family life, and to prohibit activities of a commercial nature. To these ends, development is limited to single-unit dwellings providing homes for the residents plus

² Town of Mineral Code: <https://ecode360.com/12069263>

certain other uses, such as schools, parks, churches, and public facilities that serve the residents of the district.”

Residential General: “This district shall be composed of certain quiet, medium-density residential uses plus certain open areas where similar development appears likely to occur. The regulations for this district are designed to stabilize and protect the essential characteristics of the district, to promote and encourage a suitable environment for family life and to prohibit activities of a commercial nature.”

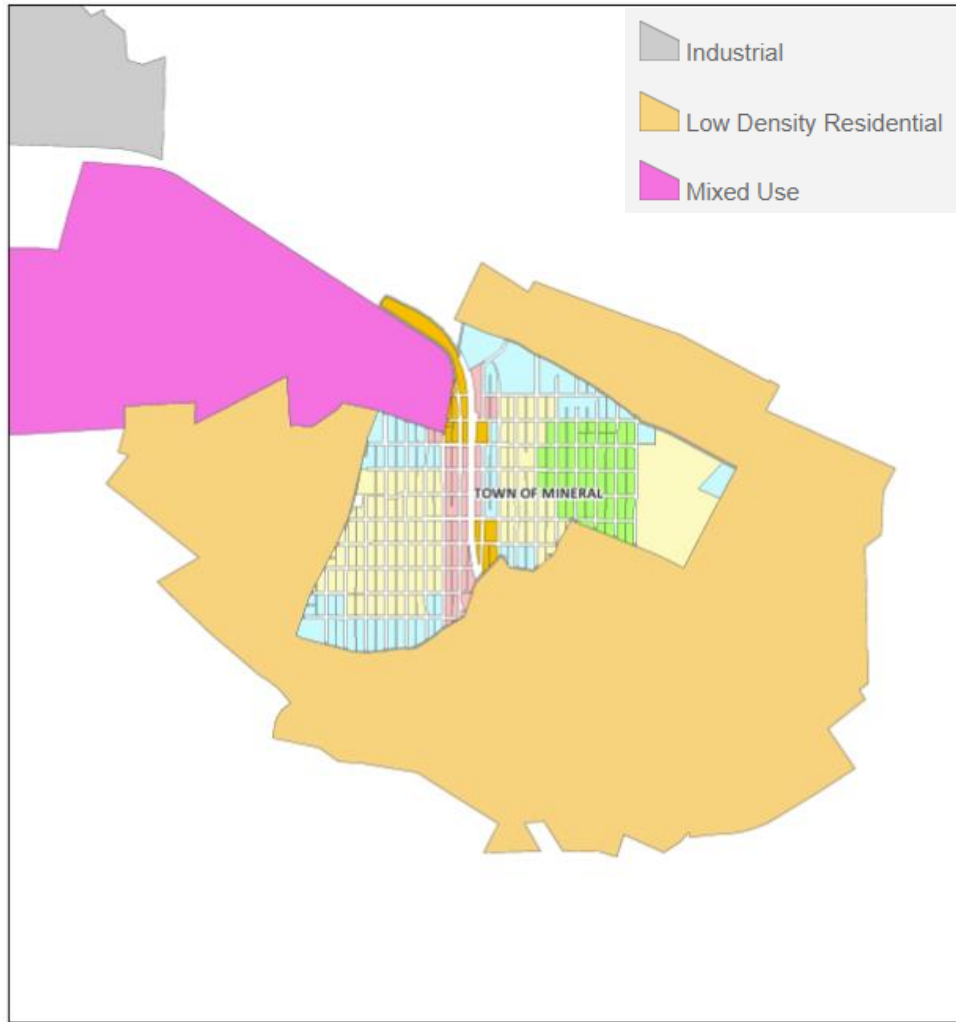
Light Commercial: “The primary purpose of this district is to establish and protect a limited business district that will serve the surrounding residential districts. Traffic and parking congestion shall be held to a minimum to protect and preserve property values in the surrounding residential districts, and, insofar as possible, all neighborhood business development shall take place in a limited business district.”

General Commercial: “This district shall include that portion of the community intended for the conduct of general business to which the public requires direct and frequent access.”

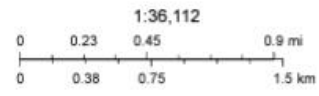
Planned Unit Development: “Planned unit development districts are intended to provide for variety and flexibility in design necessary to implement the varied goals of the Town. Through a planned unit development district approach, the provisions of this article are intended to accomplish the purposes of zoning and other applicable regulations to the same extent as regulations of conventional districts.

It is intended that planned unit development districts be established along major corridors and in growth areas. Applicants' planned unit development master plans should demonstrate a unified development with an interconnected system of internal roads, sidewalks, and paths, as well as management of access points along existing roads in order to maximize safety and the efficiency of existing roads. Pavement widths of internal and external roads shall minimize paving requirements while accommodating projected traffic generated from the district. Planned unit developments allow for a higher density of development for a more efficient use of the designated growth areas and for more effective preservation of the open areas of the Town. Other benefits of a planned unit development include less infrastructure costs, more efficient provision of public safety services, less environmental impact and, through the provision of affordable housing, the achievement of significant economic and social integration.”

Although the Town of Mineral has jurisdiction over its own zoning, Louisa County's land use decisions are also relevant considerations for the Town. Louisa County has designated the Town of Mineral and its surrounding area as a growth area, with plans for low density residential development around most of the town and some mixed use beginning just north of the Town extending along Davis Highway up to the Louisa County High School. The following map shows Mineral's zoning map and the future land use designations surrounding Mineral in Louisa County's Comprehensive Plan.



January 31, 2024

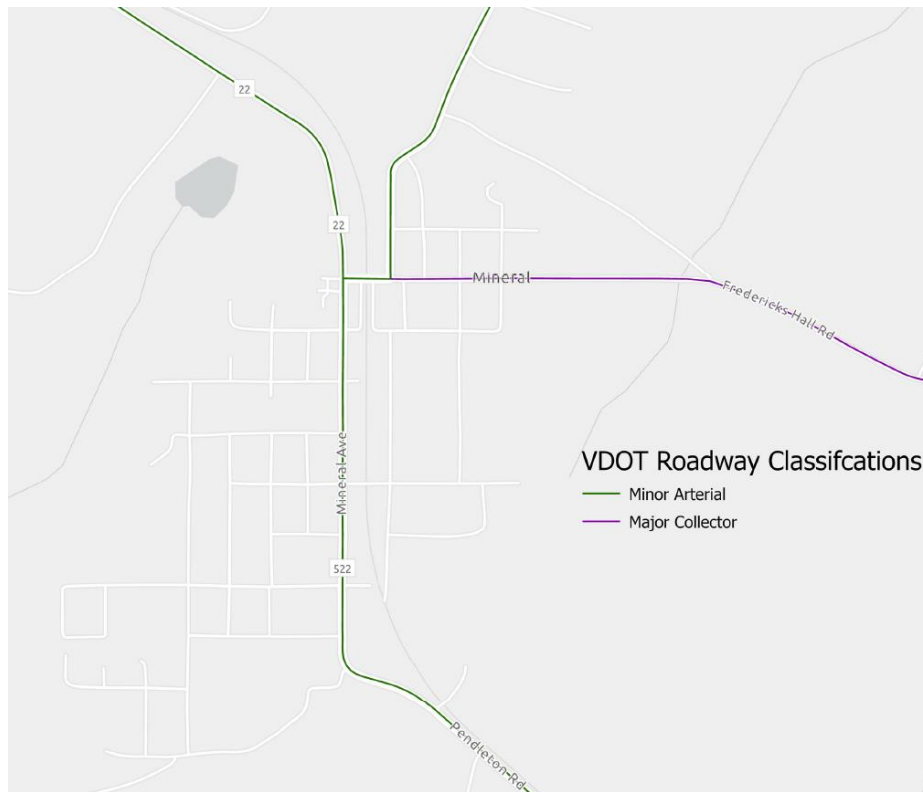


WVU Facilities, Spotsylvania County GIS, VGIN, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Louisa County Future Land Use Designations

Transportation

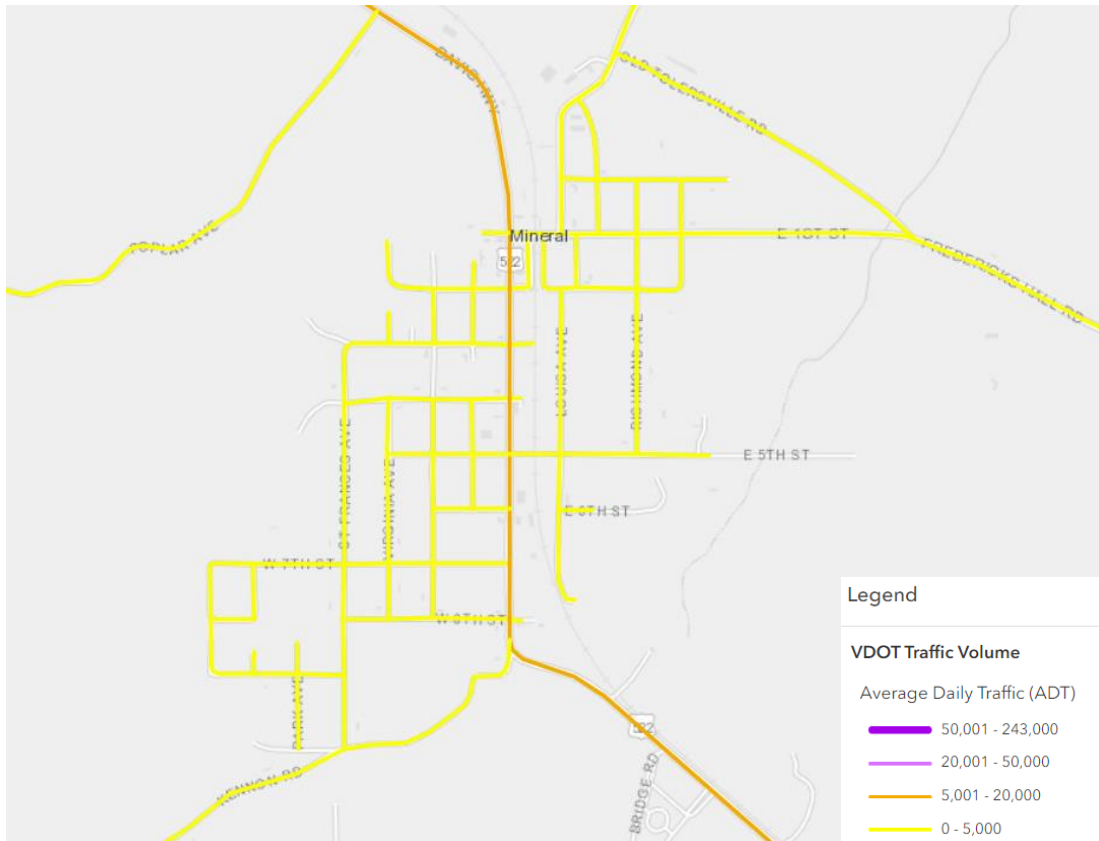
Mineral's main throughfares are Mineral Avenue and Louisa Avenue. Mineral Avenue operates as a minor arterial road with one lane moving in each direction, shoulders, and a left-turn lane in the center. Louisa Avenue operates as a minor arterial road with one lane moving in each direction. The below map displays VDOT's classification of roadways in Mineral.



Virginia Department of Transportation Roadway Classifications (Mineral)

The Average Daily Traffic (ADT) of roadways in Mineral is provided in the following map. This data is collected by VDOT and can be accessed online.³

³ Virginia Traffic Volume Map: <https://www.virginiaroads.org/maps/VDOT::virginia-traffic-volume-map/about>



Traffic Volume Along Roads (Mineral)

Although the ADT appears low on Mineral’s roads, the roadways themselves are relatively narrow and would not support high ADTs in their present condition. Many undeveloped parcels in Mineral lack roadway access and other key infrastructure. Indeed, many parcels in Mineral are located along “paper roads.” These are roads that were planned but never built. New development on many parcels would therefore require investment in new infrastructure.

The Average Annual Daily Traffic (AADT) is predicted by VDOT into 2035. VDOT estimates an increase of 1,000-2,000 vehicles daily on US 522 through the Town of Mineral, bringing traffic to between 6,000 and 8,000 vehicles daily. The pavement conditions on Route 522 have been ranked poorly and very poorly both North and South of Mineral, while Route 22 is rated excellent. There is also an operational intersection deficiency in Mineral on Route 522.

A Travel Demand Management (TDM) program, RideShare, is available to the residents of Mineral. The program aims to reduce trips by single occupancy vehicles and to provide more affordable transportation options compared to driving alone. TDM measures include carpooling and vanpooling programs, expanded peak hour public transit, commuter buses, park and ride lots, as well as better coordination between modes to facilitate intermodal transfers. The TJPDC coordinates the RideShare program, whose services include car and vanpool matching, referrals to transit providers, conducting park and ride lot inventories, marketing and developing park and ride lots, operating the Guaranteed Ride Home Program, and promoting bicycle and pedestrian transportation.

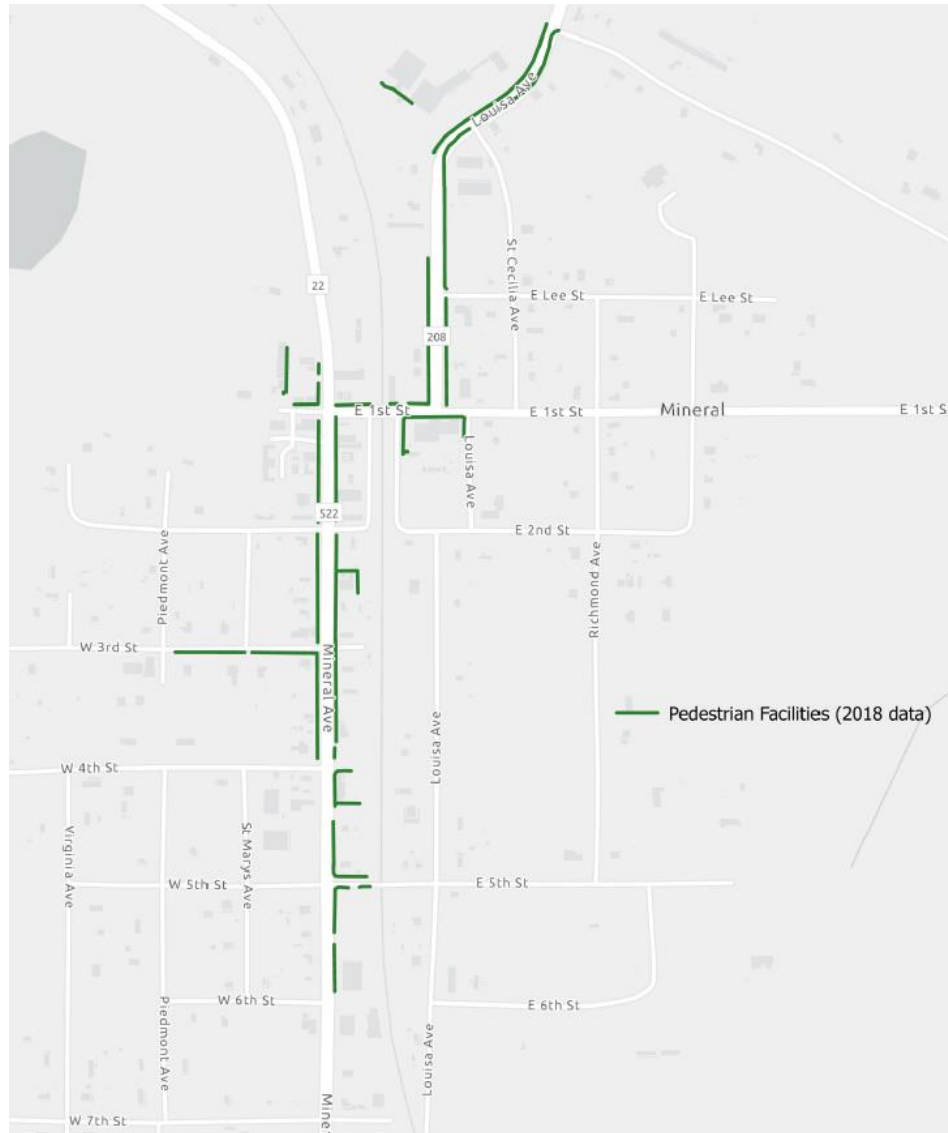
The Louisa County Industrial Airpark is located between the Towns of Louisa and Mineral. The Louisa County Airport is a public-use airport and hosts several events throughout the year featuring airplane rides and introductory flight lessons, but it does not typically drive significant traffic.

VTRANS prioritizes transportation projects and allocates funding for major transportation infrastructure improvements across Virginia. Priority needs identified by the state include Corridors of Statewide Significance (CoSS), Safety, Urban Development Areas (UDAs), and Regional Networks. Currently, there are no mid-term planning needs within the Town of Mineral that qualify the town for SMART SCALE applications.

There are no Corridors of Statewide Significance in the town, the town is not part of a Metropolitan Planning Organization (regional network), and it is not designated as an Urban Development Area (UDA). Therefore, Mineral can currently only qualify for SMART SCALE funding through a VTRANS Safety need. Mineral can be designated by Louisa County as a UDA if interested, which would open up additional state funding potential. The GAP-Technical Assistance Program available through the state can support multimodal planning within existing or planned UDAs or growth areas.

Bike / Pedestrian Facilities

The Town of Mineral has some limited sidewalk infrastructure, primarily along its main corridors. These facilities are somewhat disconnected though and do not serve all businesses or residences, even along the main thoroughfares. The following map highlights existing sidewalk infrastructure as of 2018 (the most recent data staff located). Continuing to build out its sidewalk network would help Mineral achieve a more walkable, historic downtown style of development.



Pedestrian Facilities (Mineral, 2018)

Louisa County is rich in history and natural landscapes and contains roads that allow recreational bicyclists to view beautiful scenery and varied topography. As such, recreational bicycling on roads in the County is relatively common. Bicycling for transportation is less common, given the low residential, employment, and destination density in most of the County. The Town has no dedicated bicycle facilities presently, however, US Bicycle Route 76 passes through the Town.

Population

The purpose of a Comprehensive Plan is to plan for the future needs of the Town. Population growth projections can help the Town assess what types of services or infrastructure may be needed to proactively plan for the future.

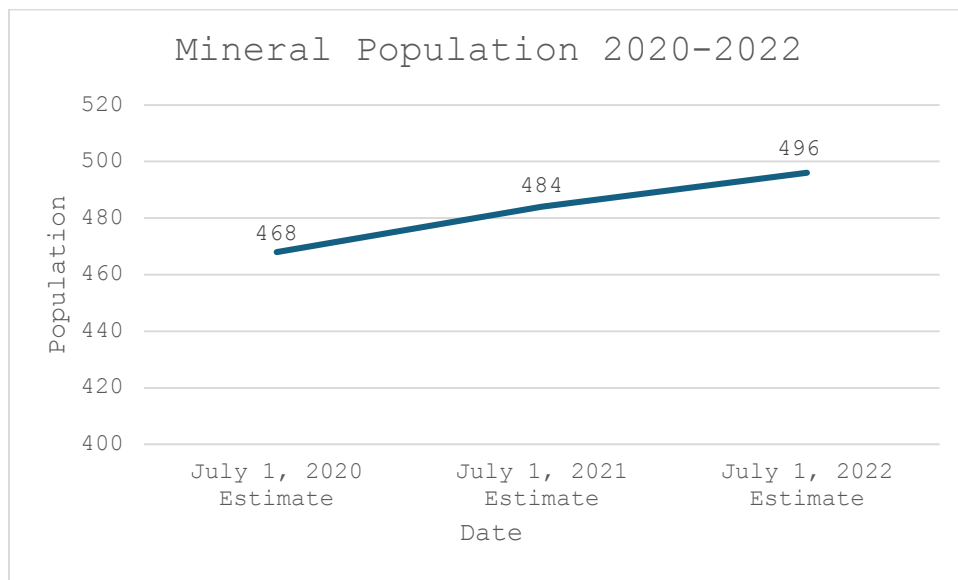
To estimate future population projections, TJPDC staff looked both at historical growth trends and reviewed population estimates from the US Census Bureau and population projections from the Weldon

Cooper Center for Louisa County. These approaches provide a low and high estimate for the future 2050 population of the Town of Mineral.

The below graphs show estimates over time of Louisa County’s population and Mineral’s population produced by the US Census Bureau.

	Louisa County Population	Town of Mineral Population
2010	33,153	467
2020	37,798	468
2021	39,032	484
2022	40,116	496
% Change 2010-2022	21.0%	6.2%

US Census Data, County Population Totals and Components of Change: 2020-2022; City and Town Population Totals: 2020-2022; 2010 US Census



Mineral Population 2020-2022

The University of Virginia Weldon Cooper Center produces population projections for Virginia and its composite counties and cities. Although the Weldon Cooper Center does not provide population projections for most towns, we can consider the population projections for Louisa County, which are displayed below. From 2022 to 2050, the Weldon Cooper Center forecasts that Louisa County will grow from 39,725 to 52,706 – an increase of 32.7%. Note that the below data is from the Weldon Cooper Center estimates, which are different from the US Census estimates presented above.

Year	Louisa County Population
2022	39,725
2030	41,436
2040	46,722
2050	52,706

University of Virginia Weldon Cooper Center for Public Service. (2022). Virginia Population Projections. Retrieved from <https://coopercenter.org/virginia-population-projections>; University of Virginia Weldon Cooper Center for Public Service. (2022). Virginia Population Estimates. Retrieved from <https://coopercenter.org/virginia-population-estimates>

If the Town of Mineral grew at the same rate as Louisa County’s forecast, the Town would grow from 496 in 2022 to 658 in 2050 – an increase of 162. This is likely a high assumption. Historically, Mineral’s growth has lagged that of the County, though the growth rate in Mineral has increased in more recent years. If we assume growth continued at the same pace as from 2010 to 2022 in Mineral, then the population of Mineral would increase to about 571 in 2050.

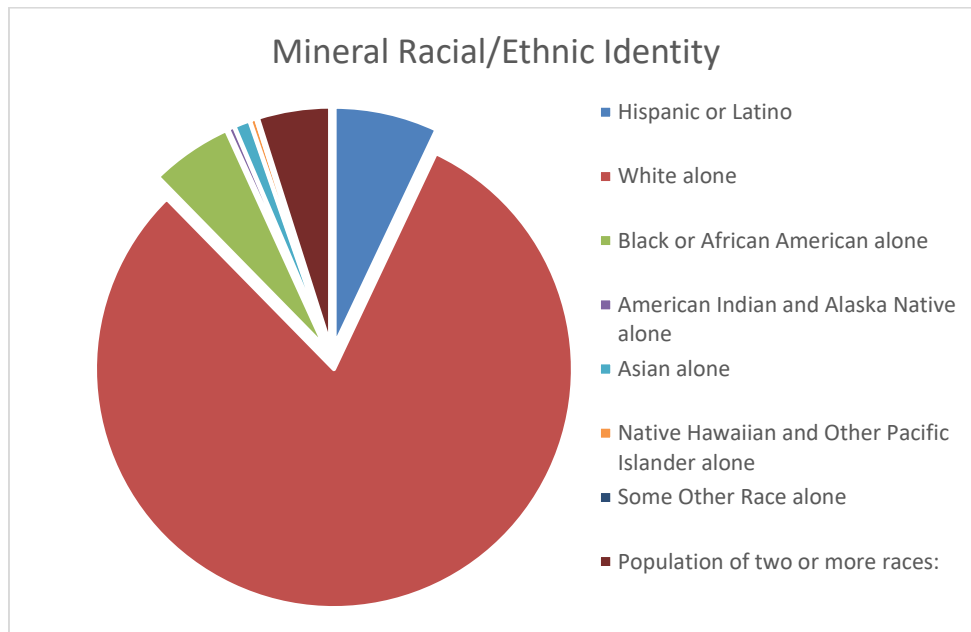
Demographics

The information on Mineral’s demographics as collected by the US Census Bureau is shown below. Due to the low population of Mineral, many of these numbers are subject to high margins of error. Additional information can be accessed at data.census.gov.

Mineral’s population is 80.6% white according to the 2020 US census. The following graphs provide more detailed information on the racial/ethnic breakdown.

Hispanic or Latino	33	7.0%
White alone	379	80.6%
Black or African American alone	26	5.5%
American Indian and Alaska Native alone	2	0.4%
Asian alone	5	1.1%
Native Hawaiian and Other Pacific Islander alone	2	0.4%
Some Other Race alone	0	0.0%
Population of two or more races:	23	4.9%

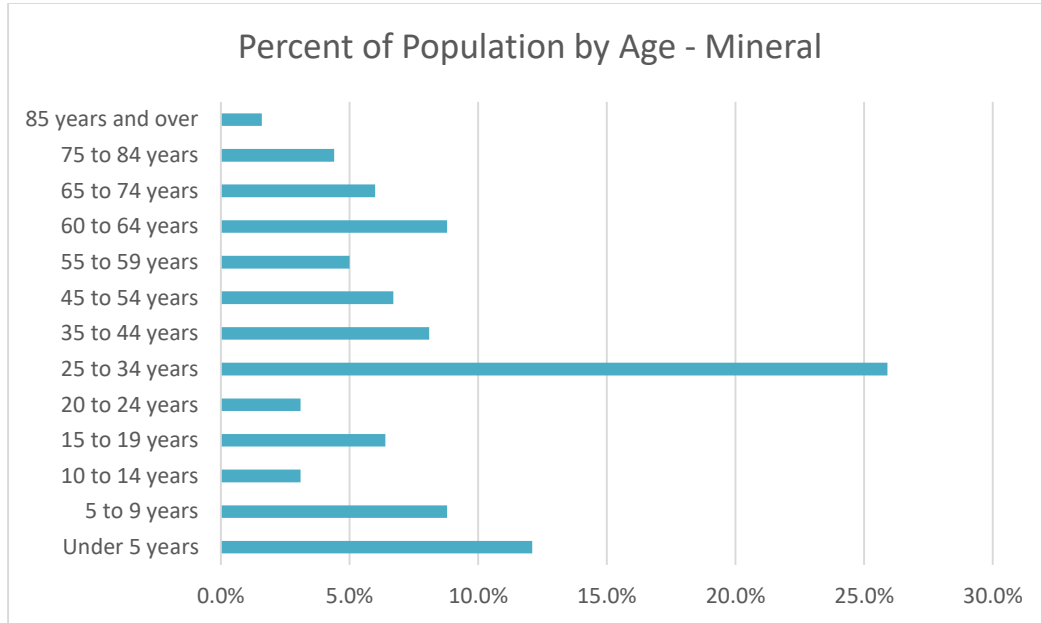
Racial/Ethnic Identity in Mineral



Racial/Ethnic Identity in Mineral

Age Profile

The median age in Mineral is 29.7 according to the 2022 American Community Survey 5-Year Estimates. The below graphs provide additional context. The population of Mineral shows a relatively high number of those age 25 to 34 and those under 9 years old. This likely reflects the presence of many young families residing in Mineral.



Population of Mineral by Age Group

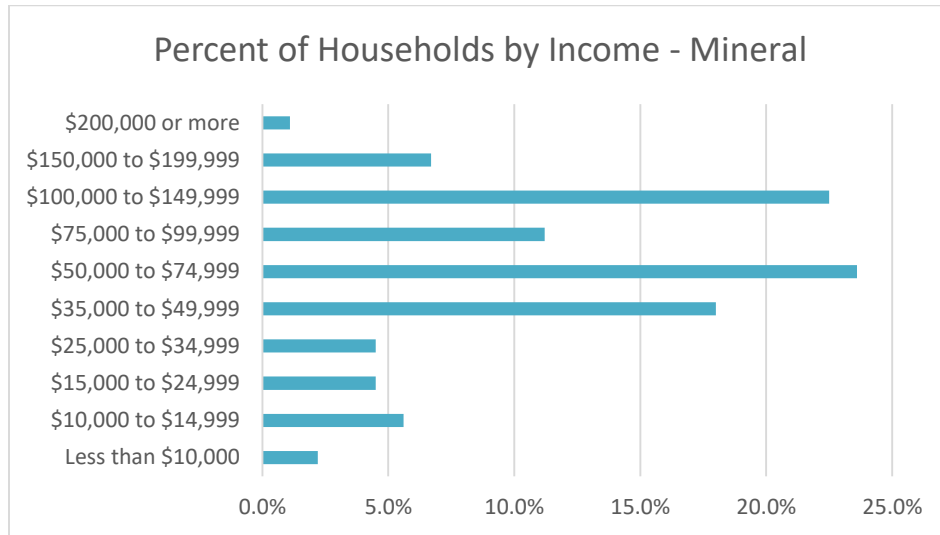
Age	Population	Percent
Under 5 years	74	12.1%
5 to 9 years	54	8.8%
10 to 14 years	19	3.1%
15 to 19 years	39	6.4%
20 to 24 years	19	3.1%
25 to 34 years	159	25.9%
35 to 44 years	50	8.1%
45 to 54 years	41	6.7%
55 to 59 years	31	5.0%
60 to 64 years	54	8.8%
65 to 74 years	37	6.0%
75 to 84 years	27	4.4%
85 years and over	10	1.6%

Mineral Population by Age Group Table

Income and housing

The Town of Mineral has a median household income of \$61,500 and a mean household income of \$78,083. This is somewhat lower than the median and mean income of the US overall: \$74,755 and \$105,555 respectively. Similarly, the median income in Louisa County is \$76,594 and the mean income in Louisa County is \$103,128. Of note, 88.4% of Mineral housing units are owner-occupied versus 11.6%

that are renter-occupied. 88.8% of households are in 1-unit structures (typically, single-family homes). The following highlights some additional data from the 2022 ACS 5-Year Estimates regarding household income in Mineral.



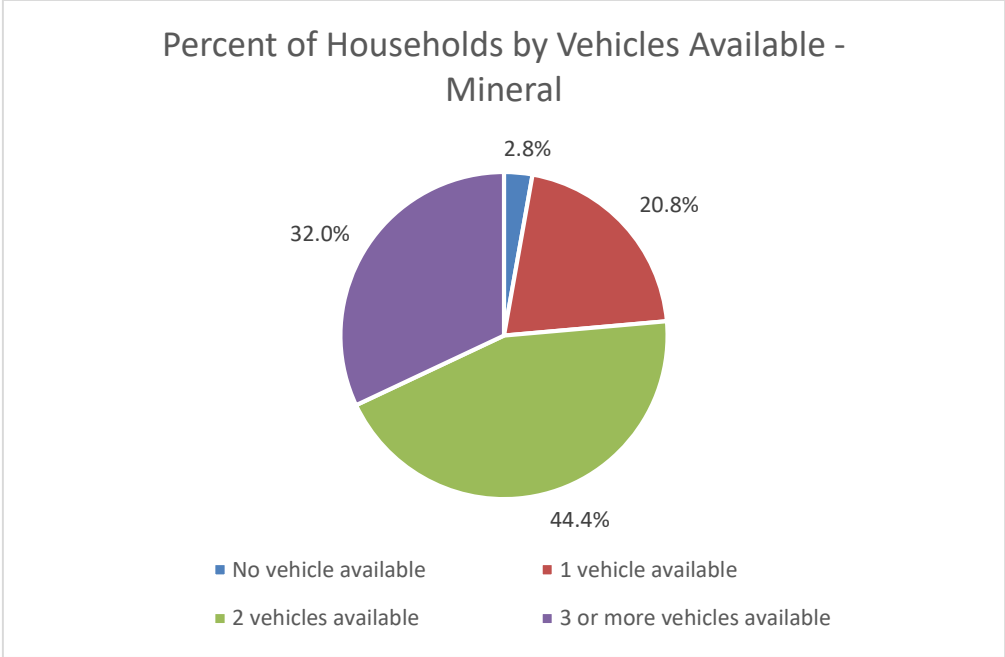
Mineral Households by Income

Household Income	Percent of Households
Less than \$10,000	2.2%
\$10,000 to \$14,999	5.6%
\$15,000 to \$24,999	4.5%
\$25,000 to \$34,999	4.5%
\$35,000 to \$49,999	18.0%
\$50,000 to \$74,999	23.6%
\$75,000 to \$99,999	11.2%
\$100,000 to \$149,999	22.5%
\$150,000 to \$199,999	6.7%
\$200,000 or more	1.1%

Mineral Households by Income

Vehicle Availability

The vast majority of Mineral households have access to at least one vehicle according to 2022 5-Year ACS data, with 32.0% having access to 3 or more vehicles. Detailed breakdowns of the number of vehicles available by household are presented below for additional context.



Mineral Households by Number of Vehicles Available

Vehicles Available	Number of Households	Percent of Households
No vehicle available	5	2.8%
1 vehicle available	37	20.8%
2 vehicles available	79	44.4%
3 or more vehicles available	57	32.0%

Mineral Households by Number of Vehicles Available

Broadband

Currently, an initiative known as the Regional Internet Service Expansion (RISE) Project is working to provide internet access to all underserved homes and businesses in 13 counties within Central Virginia, including Louisa County. The projects are projected to be completed by 2025. Firefly Fiber BroadbandSM is a key partner in this process. Firefly will offer gigabit-speed internet via fiber to currently underserved areas. The project is intended to cover locations that do not have access to minimum qualifying service speeds that Virginia has established: 25 mbps download and 3 mbps upload from a fixed wireless or wired connection.

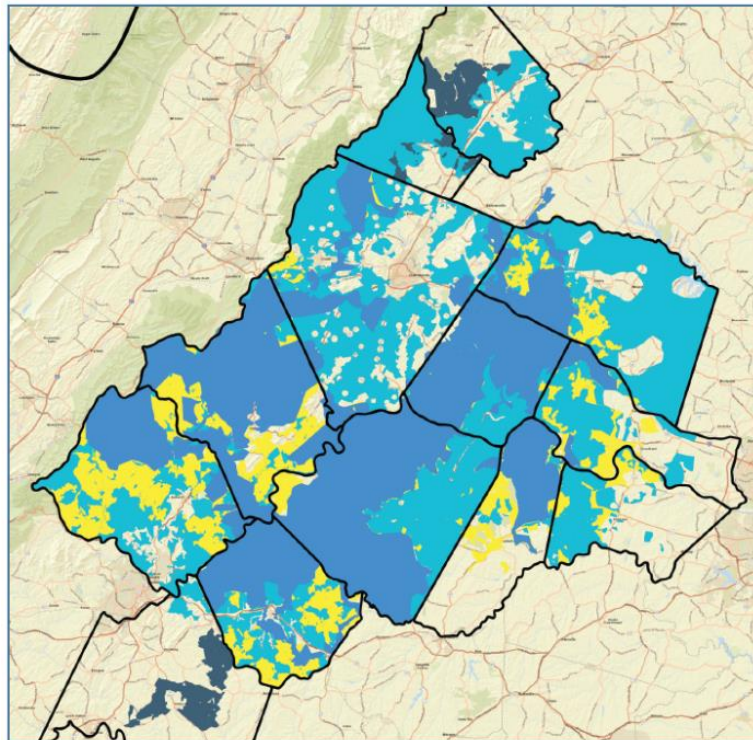
Funding for RISE is provided through the Virginia Telecommunication Initiative (VATI) in addition to local match funding from local governments and utility service providers. Louisa County is providing the highest level of local match funding towards VATI out of all counties due to its extensive need for service.

VATI Local Match	
Locality	Contract Amount
ABBA	\$ 4,368,000.00

Amherst	\$ 3,025,400.00
Appomattox	\$ 1,166,200.00
Buckingham	\$ 1,500,000.00
Campbell	\$ 450,000.00
Cumberland	\$ 386,250.00
Fluvanna	\$ 601,500.00
Goochland	\$ 3,437,500.00
Greene	\$ 2,687,000.00
Louisa	\$ 8,949,000.00
Madison	\$ 2,101,000.00
Nelson	\$ 1,125,000.00
Powhatan	\$ 3,024,000.00
Total	\$ 32,820,850.00

Local Match Contributions by County for VATI

The map below shows the 13 counties involved in the RISE initiative. The areas that have existing Firefly access are highlighted in blue, and those included in the project expansion are highlighted in teal.



Firefly Footprint
 VATI Project Area
 VATI Leverage Area
 VATI Contingent Area

VATI Project Map

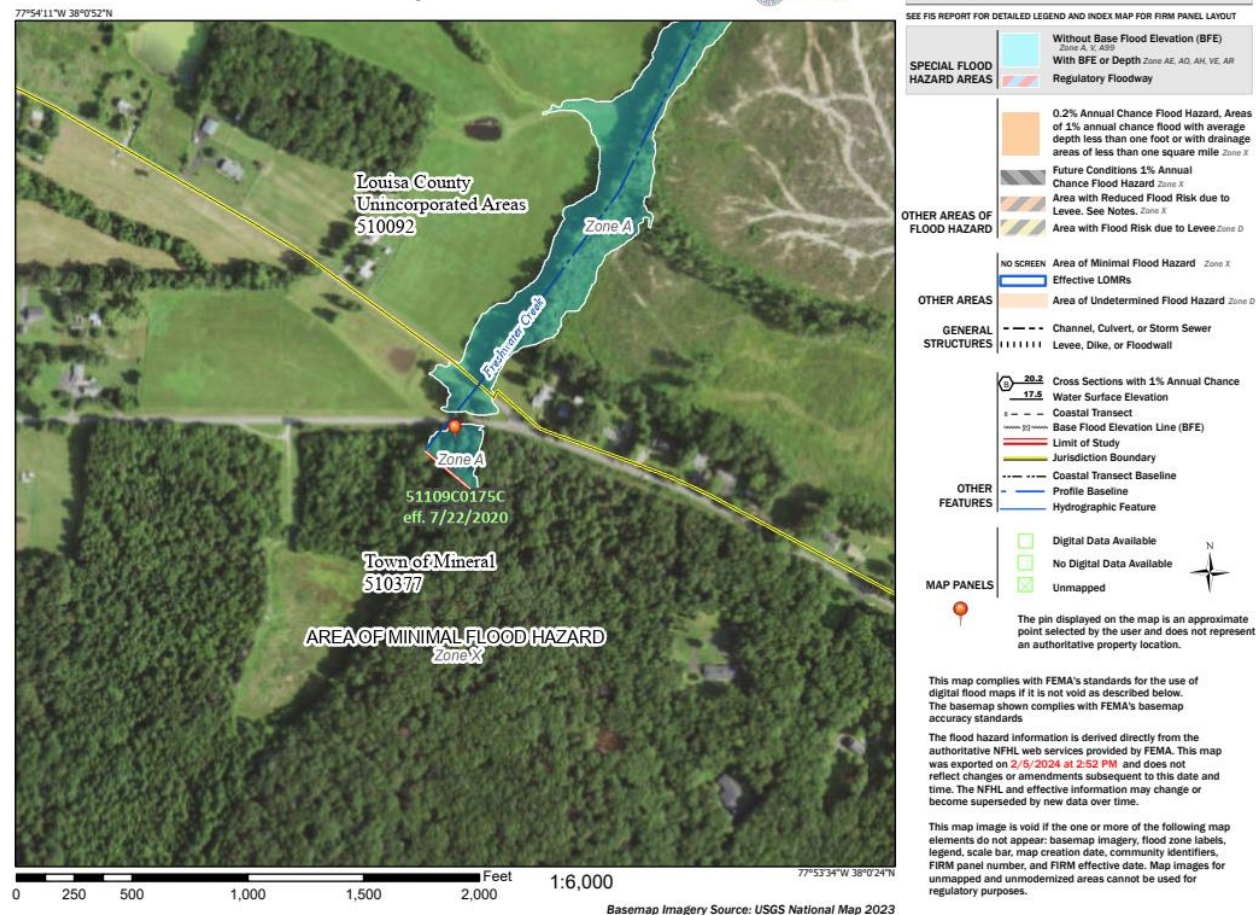
The Town of Mineral is not included in the project area because it already meets minimum service speeds that render it ineligible for VATI. the presence of broadband is likely to impact growth within and around Mineral.

Environmental Conditions

Floodplains

Freshwater Creek in the northeast portion of the Town of Mineral is in Zone A, a special flood hazard area designated by the Federal Emergency Management Agency (FEMA), subject to inundation by the 100-year flood. This area can also be described as having a 1 percent annual probability of flooding in a given year. Typically, landowners in these areas are required to purchase flood insurance, however, Louisa County has elected to not participate in the National Flood Insurance Program (NFIP). This means the County has no access to subsidized flood insurance, limited access to federal disaster assistance programs, and stricter FEMA development regulations.

National Flood Hazard Layer FIRMette



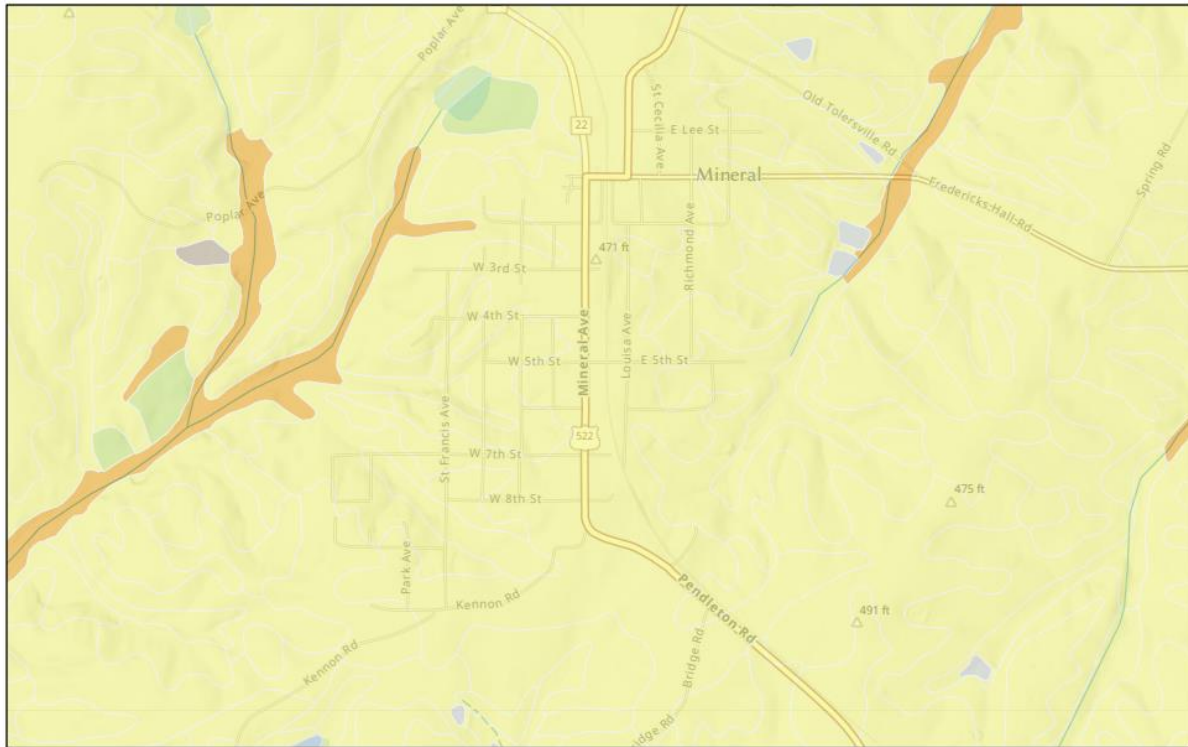
National Flood Hazard View (Mineral Town Line)

Soil Type

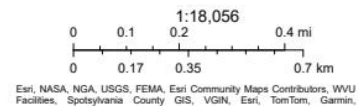
Data from the USDA's Natural Resources Conservation Service's Soil Survey Geographic Map informed the review of soil types within the town of mineral. This data can be utilized by townships for the

purposes of natural resource planning and management. The most common soil type in Mineral is Ultisols, with some Inceptisols surrounding local streams.

Town of Mineral Soil Types



February 5, 2024



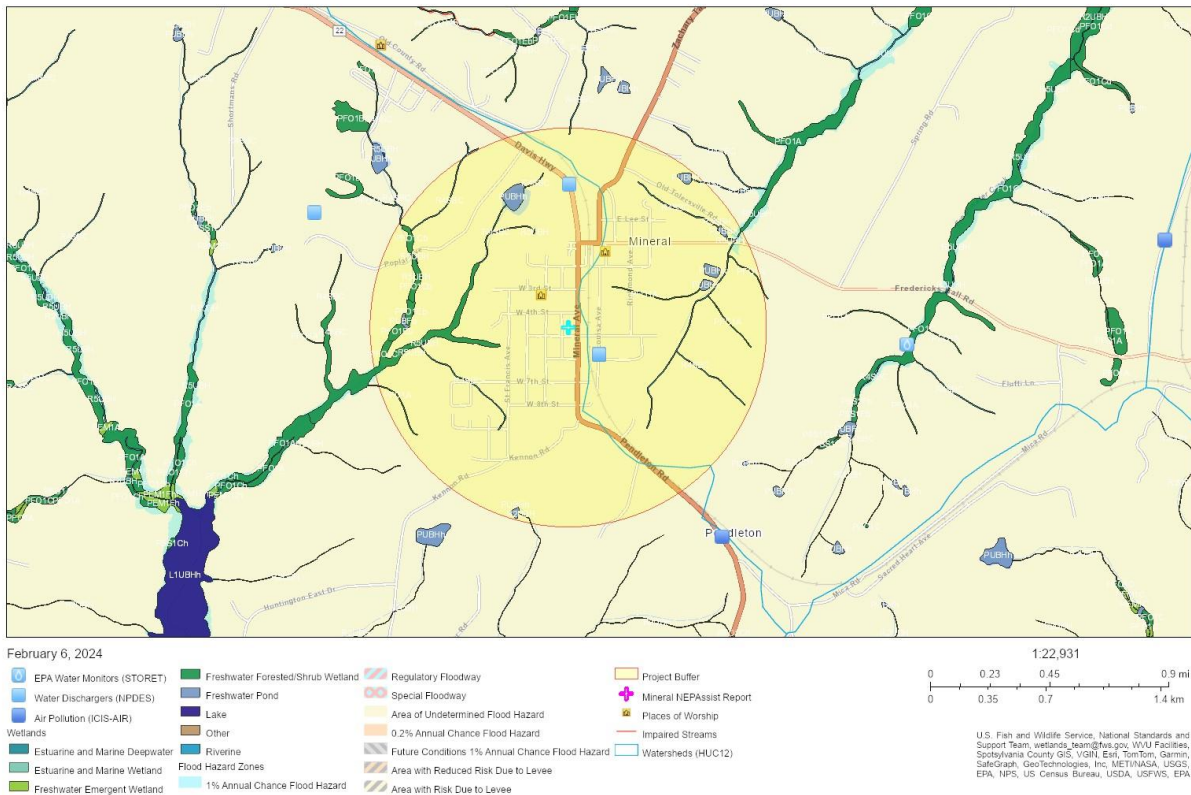
Soil Types in Mineral

Ultisols: (Yellow) These soils are found in humid areas and formed from intense weathering and leaching processes, resulting in a clay enriched subsoil. Ultisols often support productive forests, but leaching has led to low quantities of plant available Calcium, Magnesium, and Potassium, making them poorly suited for continuous agriculture without the use of fertilizer and lime. Effective stormwater management and sustainable practices are crucial to avoid erosion and water quality issues. Low impact development and other erosion control techniques should be integrated into urban development, especially on slopes.

Inceptisols: (Orange) This soil type is typically found on steep slopes and is a relatively young soil, still in the early stages of development. They often show signs of recent disturbances such as erosion or changes in vegetation. Depending on the specific characteristics of the inceptisols, determined through assessment, development may be discouraged due to environmental concerns like erosion or potential impact on sensitive habitats.

Environmental Justice

A3 Landscape



NEPAAssist Characteristics Map (Mineral)

The NEPAAssist Reporting Tool facilitates environmental reviews and project planning in relation to environmental conditions and considerations related to environmental justice. Sources of pollution, noise, and areas of environmental significance are some of the characteristics highlighted by NEPAAssist.

Duke Oil Company on Louisa Avenue is both a permitted water discharger under the National Pollutant Discharge Elimination System (NPDES) and an air pollution emission facility. J and L Success Enterprises Incorporated is another water discharger (NPDES).

The wetlands within the town are freshwater, including freshwater ponds and forested/shrub wetland.

This information can support awareness of local environmental conditions, risks, and help to prioritize preservation efforts. This information can also inform land and water quality planning to better manage stormwater runoff, prevent pollution, and identify impacts on nearby water sources.

The [Climate and Economic Justice Screening Tool](#) (CEJST) is an interactive mapping tool designed to identify communities facing significant environmental, health, and socioeconomic burdens across the United States. It serves to identify disadvantaged communities based on burdens including climate change, energy, health, housing, legacy pollution, transportation, water, wastewater and workforce

development. The government uses it to inform decision making related to federal funding allocation and policy development.

The CEJST empowers communities by providing them with data and information about their environmental and socioeconomic disadvantages. This data can be used to advocate for policy changes, resource allocation, and community-driven solutions to address these challenges.

CEJST data is categorized based on census tract, and Mineral's Tract (51109950202) is not designated as disadvantaged. However, it did identify the area within the 92nd percentile for transportation barriers based on the relative cost and time spent on transportation. It also identified that 16% of people ages 25 or older have less than a high school diploma within this tract.

Water Quality

The Town of Mineral is part of several watersheds. Rainfall over Mineral runs off to either Pamunkey or Contrary Creek, which both flow into the South Anna River. The South Anna River is a tributary to the York River, which then flows to the Chesapeake Bay. Land use practices in Mineral impact the health of each of these waterways.

The US EPA and VA Department of Environmental Quality set designated uses for waterways, such as supporting swimming, fish consumption, or aquatic life. To protect these designated uses, water quality standards are established to define the maximum allowable levels of various pollutants, such as bacteria, nitrogen, phosphorus, and sediment. These pollutants and other pathogens harm aquatic life and can pose health threats to humans and pets. DEQ and other organizations routinely monitor water quality, and based on their analysis, a determination is made about whether the water body supports its designated uses. If the water quality standards are consistently exceeded, the water body is considered impaired for that particular use.

The entire Chesapeake Bay watershed is impaired for [sediment, phosphorus and nitrogen](#). More locally, the Pamunkey River Watershed is impaired due to excess [total suspended solids \(sediment\), phosphorus, nitrogen, and bacteria](#). South Anna River is impaired due to [E. Coli](#). Typical sources of sediment are frequent flooding, debris, and erosion. Phosphorus and nitrogen are used for fertilizers, and runoff into waterways when over-applied. E. coli originates from sewer systems, pet waste, wildlife, and manure. [Best management practices](#) of green infrastructure techniques can be integrated into land cover to improve these conditions.

Land Use and Land Cover

The Town of Mineral has many undeveloped parcels presently. The below graph from the most recent Louisa County Comprehensive plan provides some details on those parcels by land use designation.

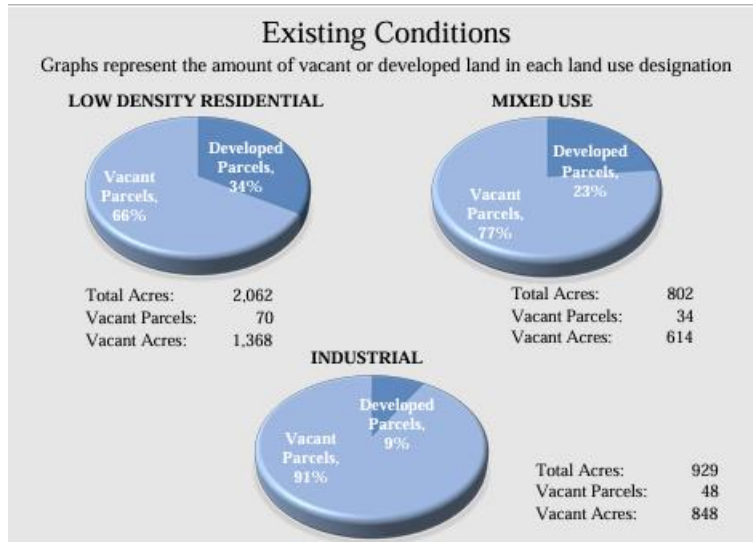


Figure 1. Town of Mineral Land Use Existing Conditions

The US Geological Survey and the Chesapeake Conservancy partnered to produce 1-meter resolution land cover and land use data based on identification and classification of images derived from LIDAR (aerial imagery). Land cover represents the surface characteristics of the land with classes such as impervious cover, tree canopy, herbaceous, and barren. By comparing high resolution datasets from 2013/14 to 2017/18, one can observe where significant change occurred.

Mineral’s trend of change can be seen in the table below. The table shows the land cover classifications in 2014, and what they changed to in 2018. For instance, the first row shows 982 square feet of impervious road changed to herbaceous surface between 2014 and 2018. The town is adding impervious surfaces at 14 times the rate it is adding vegetation and tree canopy.

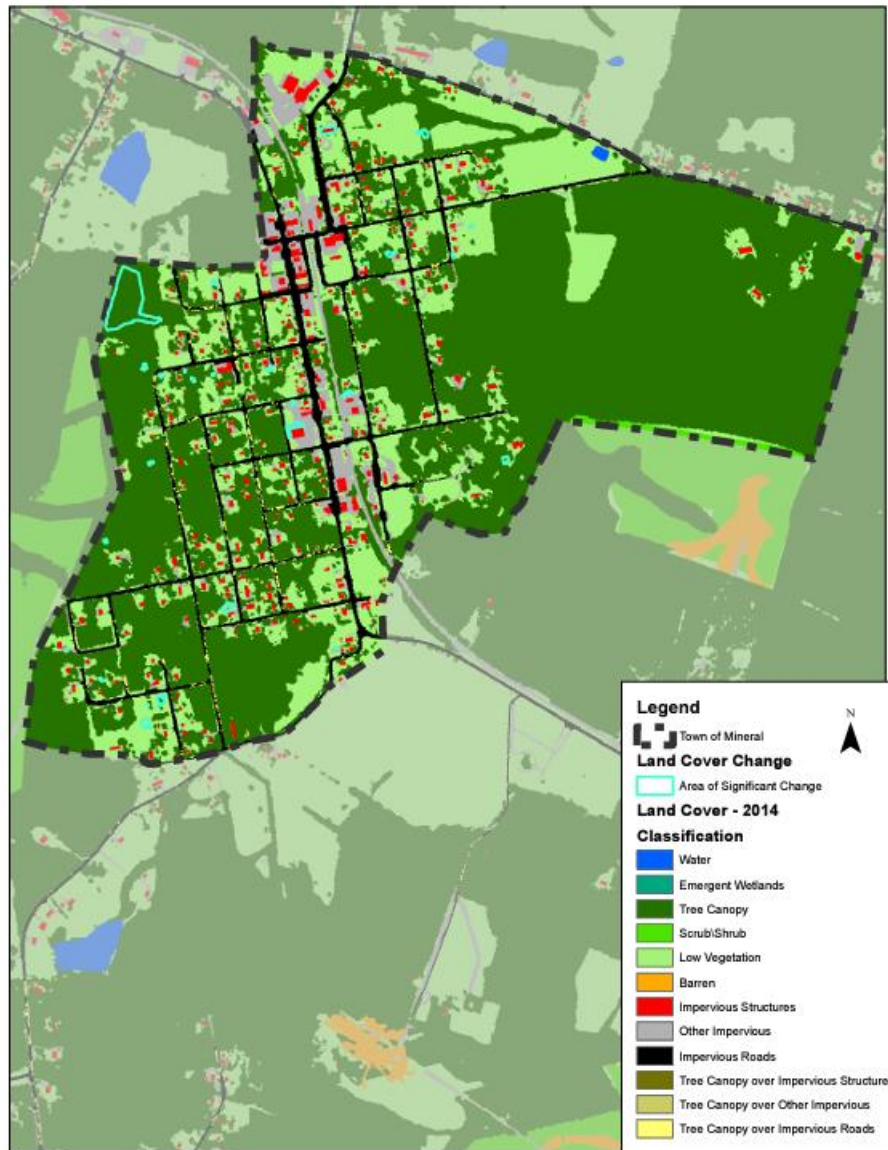
LandCover_2014	LandCover_2018	Square footage
Impervious Roads	Herbaceous	982
Low Vegetation	Herbaceous	21
Other Impervious	Herbaceous	10,337
Low Vegetation	Tree Canopy	163
Other Impervious	Tree Canopy	16
	Total	11,519
Low Vegetation	Structures	4,805
Low Vegetation	Other Impervious	4,413
Tree Canopy	Other Impervious	16,691
Tree Canopy	Herbaceous	131,791
	Total	157,700

Land Cover Change from 2014 to 2018 in Mineral (Sq Ft)

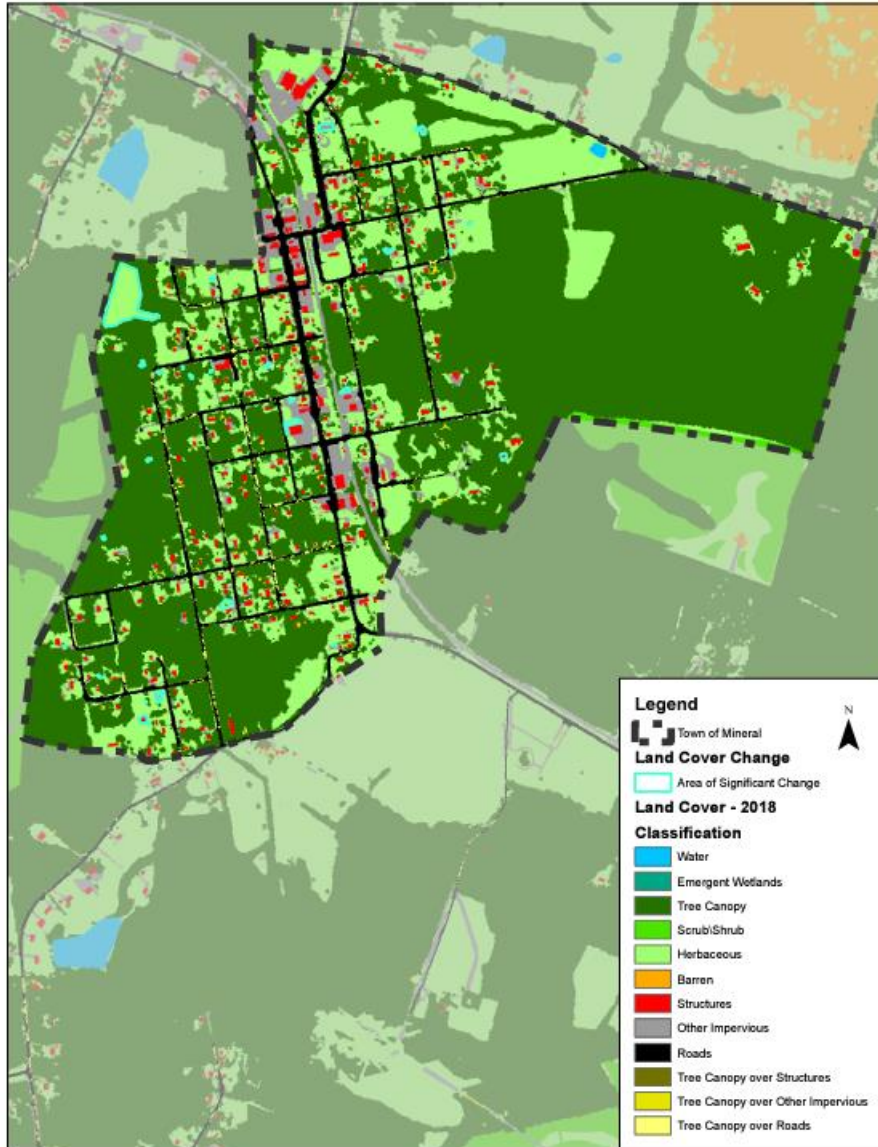
A substantial share of the core downtown along Mineral Avenue is impervious structures or other impervious surfaces. Many of those other impervious surfaces are roadways or parking lots. These

surfaces serve to break up the downtown into a more sprawling complex that creates a less pedestrian-friendly experience. The Town's current minimum parking requirements may be contributing to this situation. Minimum parking requirements are often inconsistent with traditional neighborhood design and can impede pedestrian travel through the downtown.

The below images highlight land cover in the Town of Mineral in 2014 and 2018. Much of the town's land outside its downtown remains undeveloped and covered by vegetation or tree canopy. The most intensive development is located along Mineral Avenue, where much of the land is dedicated to impervious surfaces, such as buildings and parking lots.



Map of Land Cover in Mineral (2014)



Map of Land Cover in Mineral (2018)