



# FINAL TECH MEMO #2: BASELINE INVENTORIES

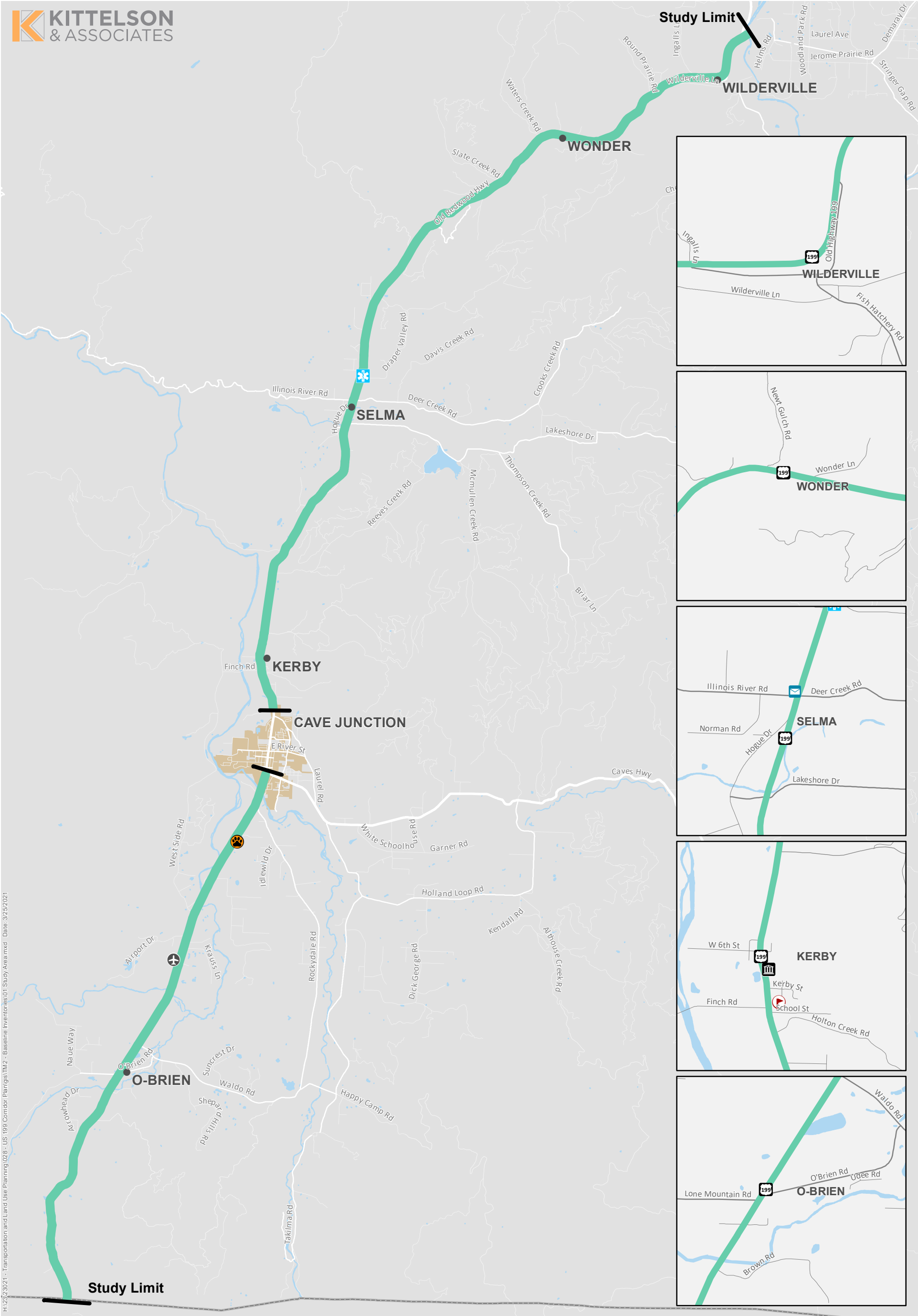
<b>Date:</b>	May 20, 2021	Project #: 23021.028
<b>To:</b>	Rob Brandes, Josephine County Thomas Guevara, Oregon Department of Transportation	
<b>From:</b>	Matt Bell, Ashleigh Ludwig, PE, Miranda Barrus, and Brian L. Ray, PE, Kittelson & Associates, Inc.	
<b>Project:</b>	US 199 Corridor Plan	
<b>Subject:</b>	Final Tech Memo #2: Baseline Inventories	

## Introduction

Kittelson & Associates, Inc. (Kittelson) prepared this memorandum to summarize an inventory of existing land uses and transportation facilities and services for the US 199 Corridor Plan (“project”). The inventory primarily focuses on the project limits of US 199 beginning at the Applegate River and ending at the California border – excluding the segment through Cave Junction – as illustrated in Figure 1; the inventory does include countywide discussion where appropriate. The information provided in this memorandum uses the information completed for the Josephine County Transportation System Plan (TSP) Update, completed in October 2020, and updates it where new data is available. This inventory serves, in part, as the foundation for identifying existing and future needs for the study area and evaluates the following characteristics of the project corridor:

- » Land Use
- » Demographics
- » Environmental Considerations
- » Motor Vehicle Facilities
- » Bicycle and Pedestrian Facilities
- » Public Transportation
- » Bridges and Culverts

The inventory is largely communicated through informational maps and tables and provides supportive text where needed. The inventory will be used in conjunction with the upcoming analysis results to be summarized in Technical Memorandum #3 (Existing and Future Conditions and Needs) to identify corridor needs. The data presented in this memorandum will also be used as a reference when developing solutions to understand location-specific characteristics and constraints.



H:\23\23021 - Transportation and Land Use Planning\028 - US 199 Corridor Planning\TM2 - Baseline Inventories\01 Study Area.mxd Date: 3/25/2021

\*Cave Junction is not included in the study area  
Data Source: Josephine County, Oregon Department of Transportation



## Land Use

Land use is a key factor in understanding the conditions and transportation needs that influence planning in the corridor. The amount of land planned for development, the types of land uses, and how they relate to each other have a direct relationship to the anticipated demands on the corridor. Land use information is as follows:

### Comprehensive Plan Designations

The Josephine County Comprehensive Plan provides a long-term guide for where and how future development will occur. The Comprehensive Plan designations inform which zoning districts can be applied to the land. Table 1 describes the Comprehensive Plan designations within Josephine County.

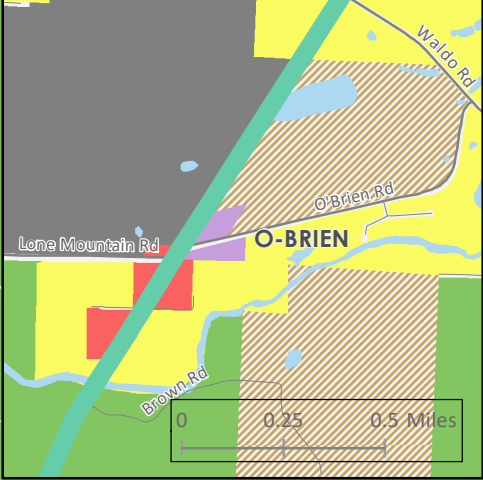
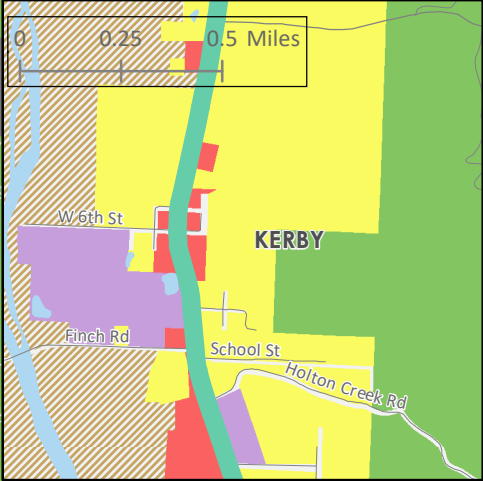
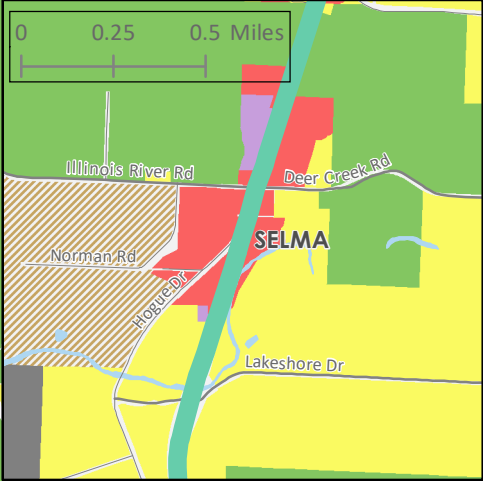
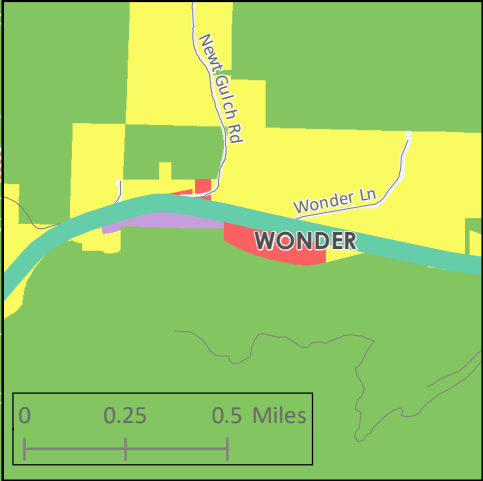
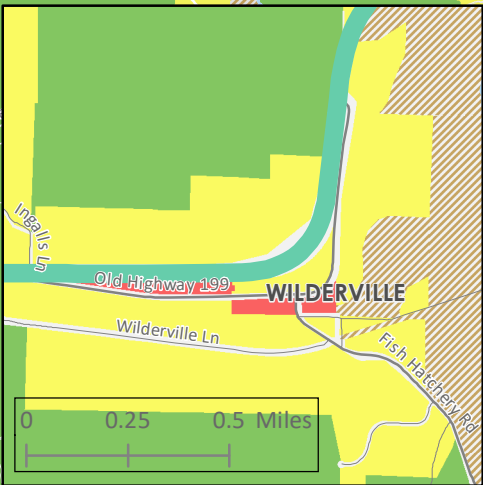
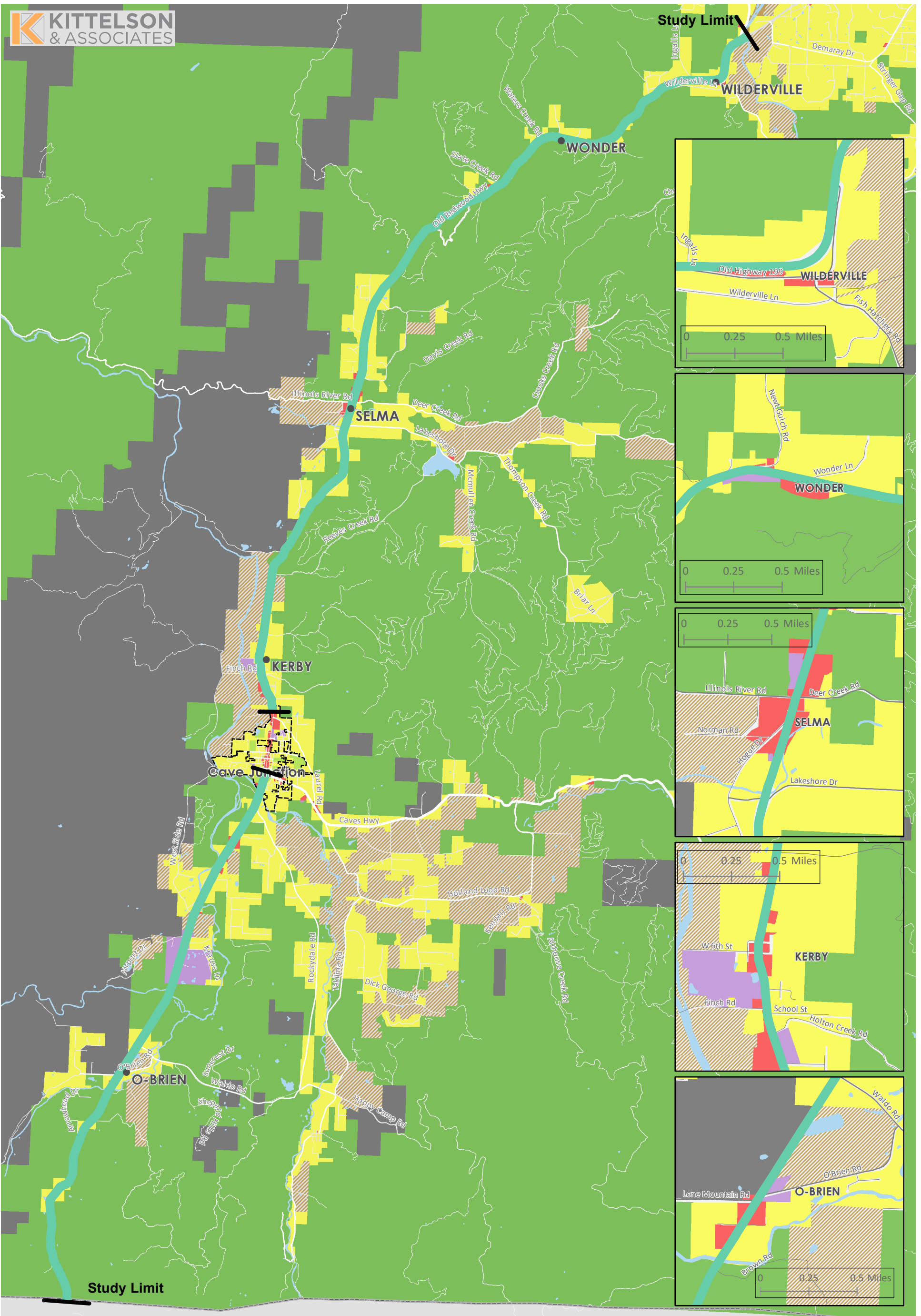
**Table 1: Summary of Comprehensive Plan Land Use Designations**

Comprehensive Plan Designation	Summary
Aggregate Resource (AR) – <i>Figure 2</i>	Source areas for aggregate and rock extraction, generally located in areas prone to flooding.
Agricultural (AG) – <i>Figure 2</i>	Designation for the agricultural lands of the County including large- and small-scale farm operations.
Commercial (C) – <i>Figure 2</i>	Areas designated for rural commercial activities that include a broad list of uses based on historic commercial locations and new locations that are attractive and appropriate for the development of such activities.
Forest (F) – <i>Figure 2</i>	Forest lands include areas available for the full range of forest uses. Because of the economic importance of the timber economy to Josephine County, forest lands as described in Goal 2, Policy 7 are conserved through two forest zones. Either the FC or WR zones are applied to forest areas.
Industrial (I) – <i>Figure 2</i>	Lands designated for Industrial development include a range of uses that recognize resource dependent industrial sites, abandoned or diminished mill sites, and industrial sites that afford effective opportunities for a wide range of general rural industrial activities, such as industrial institutional uses, sales and/or service, repair, assembly and manufacturing, storage and distribution, and support services.
Limited Development (LD) – <i>Figure 2</i>	Limited Development designations provide outdoor recreational activities and are classified as separate from commercial forest lands, agricultural, or rural residential lands.
Public (P) – <i>Figure 2</i>	The Comprehensive Plan designation is specific to Cave Junction. Its purpose is to provide for various local government uses that serve the public, such as municipal water facilities, government offices, and parks.
Residential (R) – <i>Figure 2</i>	This designation is for areas that are committed to or used primarily for residential use or are determined to be non-resource lands. Rural Residential include areas that are committed to non-resource uses or determined to be non-resource in capability; and used primarily for residential development. The rural character of these areas is preserved by appropriate lot

Comprehensive Plan Designation	Summary
	sizes to ensure uses do not exceed the physical capability of the land and services are provided to the extent necessary to maintain a rural lifestyle.
Resort (Res)	This designation is intended to provide for large scale tourist facilities that are self-contained and provide extensive recreational facilities. There is currently no land designated for destination resorts.
Serpentine (S) – <i>Figure 2</i>	Lands that are underlain with Serpentine rock and have very limited resource and development potential.
Urban Exception Areas (UEA)	Urban Exception Areas are lands with acknowledged exceptions to Statewide Planning Goals 3, 4, 11 and 14. There are two types or classes of "urban" exception lands within Josephine County outside of urban growth boundaries: (1) lands that are physically developed or irrevocably committed to urban levels of development (UEA-C); and (2) urban exception areas for which "reasons" justify allowing new urban development on lands located outside of urban growth boundaries and unincorporated community boundaries (UEA-R). There is currently no land designated UEA.

Figure 2 shows the location of Comprehensive Plan land use designations along the corridor and surrounding areas, as well as the unincorporated communities on the corridor segment (inset maps). The corridor primarily serves rural land uses with relatively low development potential. Residential and commercial land is primarily located in the unincorporated communities and in the areas adjacent to Cave Junction. Industrial land is also located near the unincorporated communities and midway between O'Brien and Cave Junction.





- |                              |                          |
|------------------------------|--------------------------|
| US 199 Study Corridor        | Forest (F)               |
| Freeway ROW                  | Industrial (I)           |
| <b>Comp Plan Designation</b> | Limited Development (LD) |
| Aggregate Resource (AR)      | Public (P)               |
| Agriculture (AG)             | Residential (R)          |
| Commercial (C)               | Serpentine (S)           |

**\*Cave Junction is not included in the study area**



Figure 2

## Zoning

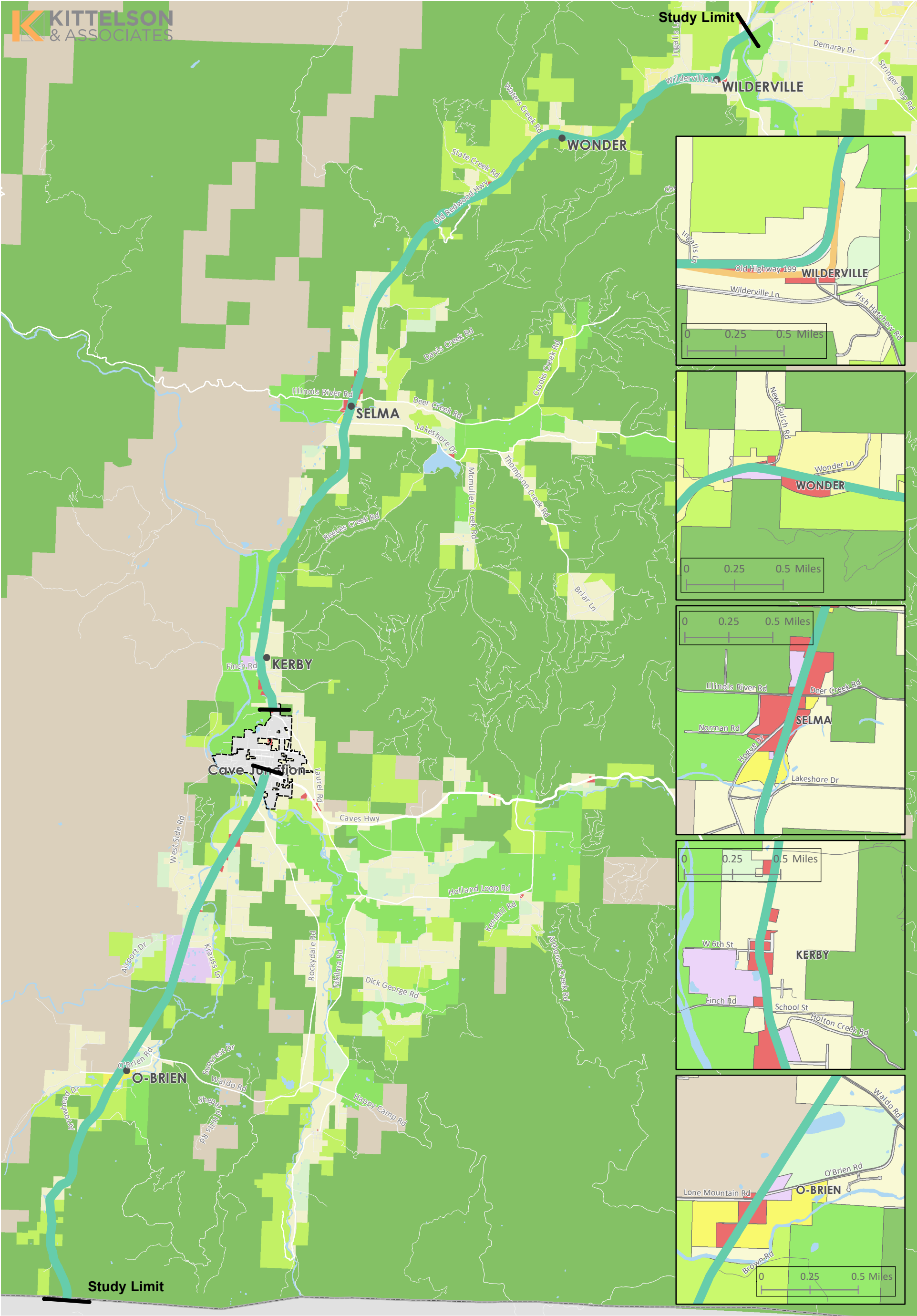
Land use regulations are implemented through the Josephine County Rural Land Development Code (RLDC). Table 2 summarizes the existing zoning in the County and the associated requirements that govern development. This overview indicates the type and intensity of land uses that can be expected within the planning horizon to determine future traffic demand. The County's zoning requirements establish allowed uses and associated development regulations.

**Table 2: Summary of Zoning Designations**

Zoning Designation	Summary
Aggregate Resource (AR)	This zone is dedicated to the use and protection of mineral and aggregate resources. Permitted uses are mainly limited by the proximity of streams and waterways, which may be subject to flooding or prohibition of using certain chemicals on site.
Exclusive Farm (EF) and Farm Resource (FR) Zones ("Farm Zones")	The Farm Zones allow for agricultural and farming uses, public roads, short-term filming, and utilities. Dwellings in conjunction with farm use are permitted but are subject to development standards.
Forest Commercial (FC) & Woodlot Resource (WR) Zones ("Forest Zones")	The Forest Zones are intended to conserve land dedicated for forest uses. Uses related to forestry and agricultural practices are permitted, provided they do not conflict with the resource management of the forests.
Limited Development (LD)	Limited Development designations are aimed to provide outdoor recreational activities, and are classified as separate from commercial forest lands, agricultural, or rural residential lands. Permitted uses include parks, campgrounds, conference grounds, hunting and fishing preserves, and archery, rifle, and pistol target ranges.
Rural Commercial (RC)	Rural Commercial zones allow for small-scale commercial uses for residents and passersby, while retaining the rural nature of the area. Permitted uses are under the following categories: recreation, traveler accommodations (inns, hotels, RV parks and lodges), general commercial use (retail and services), institutional use (education, religious buildings, and utilities), and care providers and dwellings. Single-family or manufactured dwellings are only allowed when already existing on the site.
Rural Industrial (RI)	Rural Industrial zones are intended for small-scale industrial uses that do not require full urban services. This includes institutional uses like airports, transportation terminals, large public or semi-public buildings; industrial retail and services; repair, assembly, and manufacturing; and storage and distribution. Support services, including food services and administrative facilities, are permitted. Minimum lot size is .5 acre.
Rural Residential Zone (RR-1, RR-2.5, RR-5)	Rural Residential zones provide housing on land already committed to residential development or on lands that are excepted from Statewide Planning Goals on agriculture or forest lands. All allowed uses within the three types of Rural Residential zones are the same. The distinguishing feature among the zones is the minimum lot size (1 acre, 2.5 acres, and 5 acres).

Zoning Designation	Summary
Serpentine Zone (S)	The Serpentine Zone provides a management classification to limit the development of land underlain by certain geologic units. Permitted uses include mineral mining and processing facilities, residential care, forestry, and utilities.

Figure 3 shows the existing County zoning districts along the corridor and surrounding areas. The locations of the County's zoning districts implement, and are consistent with, the County's Comprehensive Plan designations.



**Study Corridor**

**Zoning**

- Aggregate Resource (AR)
- Exclusive Farm (EF)
- Forest Commercial (FC)
- Farm Resource (FR)
- Limited Development Zone

- Rural Commercial (RC)
- Rural Industrial (RI)
- Rural Residential - (RR1)
- Rural Residential - (RR2.5)
- Rural Residential - (RR5)
- Serpentine (S)
- Woodlot Resource (WR)

**\*Cave Junction is not included in the study area**

0 3 Miles

**U.S. Route 199, Josephine County, Oregon**

Data Source: Josephine County, Oregon Department of Transportation

Figure 3

**Zoning**



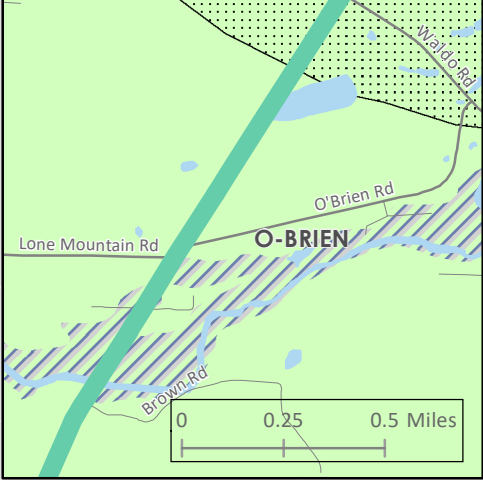
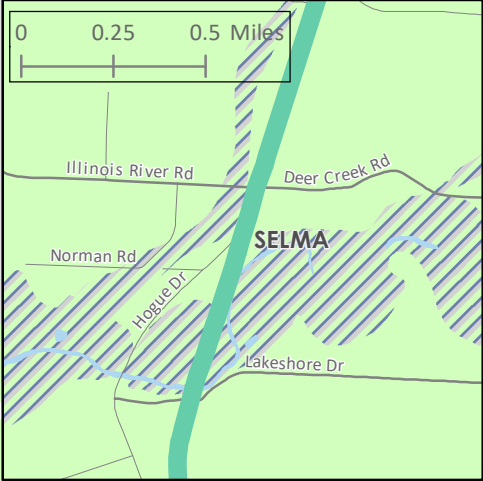
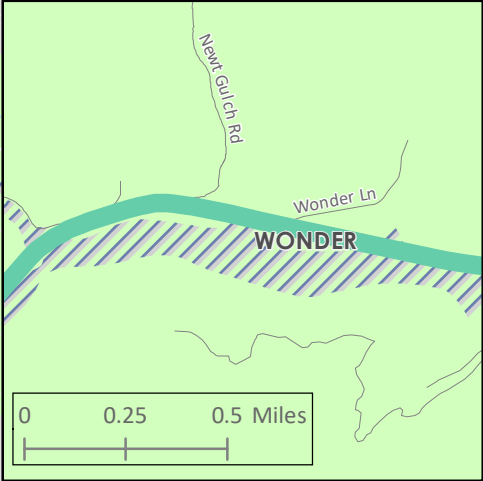
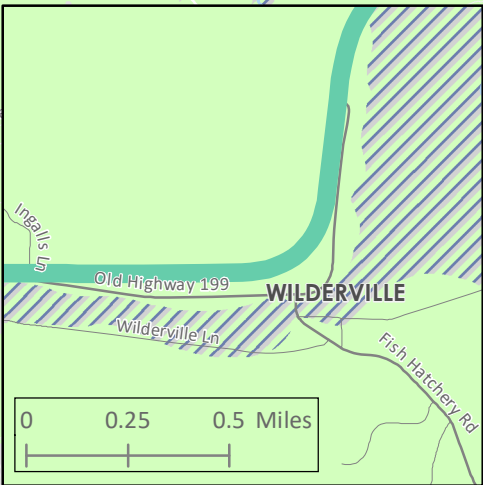
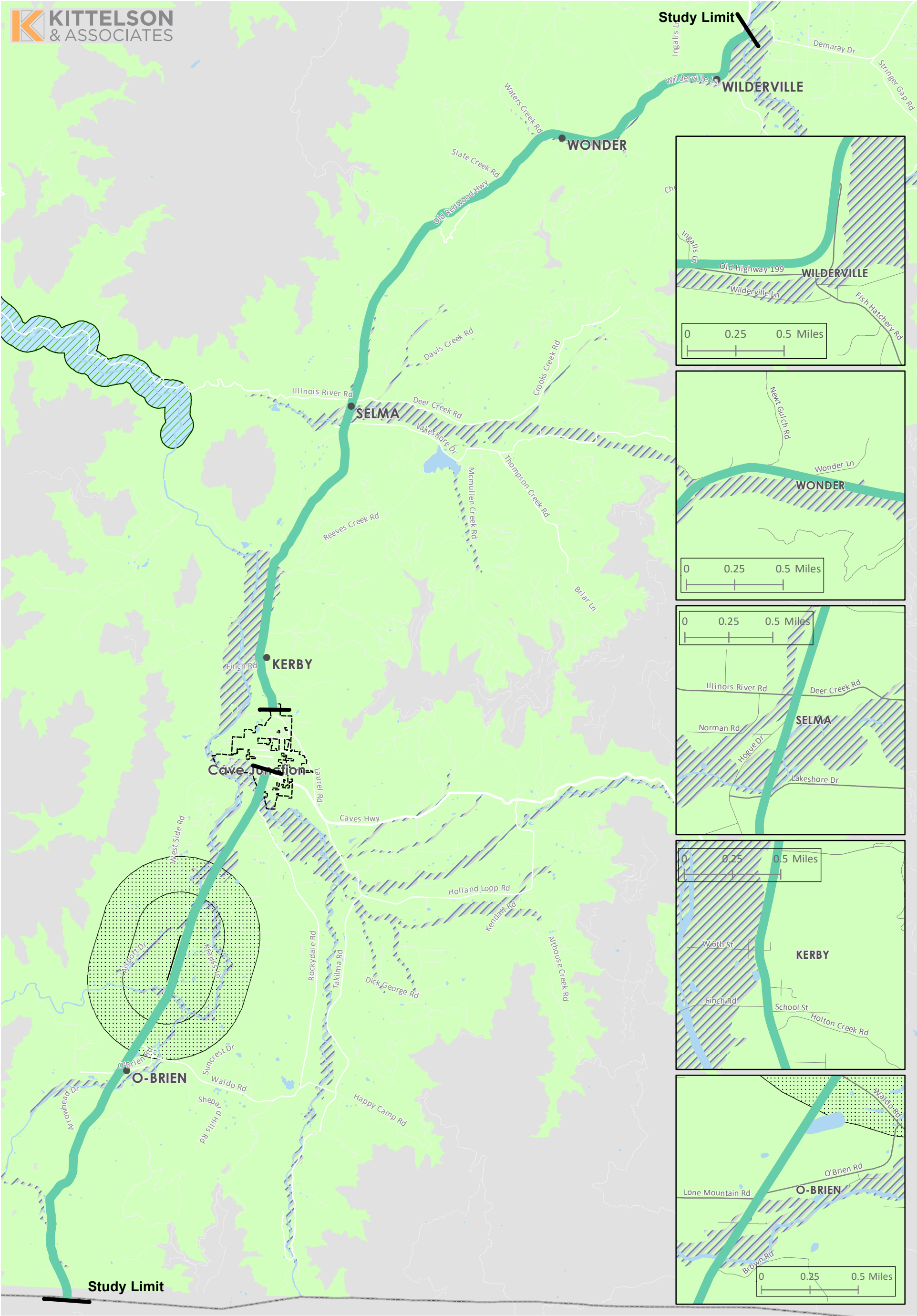
## Zoning Overlays

Josephine County has four overlay districts that can be applied to any portion of an existing zone, shown in Figure 4. Overlays provide regulations and standards in addition to, or modifying, those of the underlying zones and are a response to specific conditions throughout the County. Table 3 summarizes the overlay districts that are present within the unincorporated areas of the County along the US 199 corridor. There is an airport overlay zone located north of O'Brien, which signifies an area where there could be conflicts between airport operations and development (building) impacts.

The other overlay zones surround the natural areas and rivers surrounding the corridor. This includes FEMA flood zones (100- and 500-year floodplain), which pass along the corridor intermittently and are in each unincorporated community. There are no Wild and Scenic River stretches that overlap the corridor. The Deer Overlay runs along the entirety of the US 199 corridor as well as covers each unincorporated community. The presence of this critical deer habitat throughout the corridor has important safety and environmental implications for the study.

**Table 3: Summary of Overlay Districts**

Overlay District	Summary
Wild & Scenic Rivers Overlay	The purpose of this overlay is to ensure that development is compatible with the requirements of the State and Federal Scenic Waterways Program.
Airport Overlay	An airport overlay protects airport operations and is applied near active airfields where aircraft operations occur on a regular basis.
Flood Hazard Overlay	This overlay ensures that development in areas subject to periodic inundations as identified by FEMA is appropriately planned for and impacts are mitigated.
Deer Overlay	The purpose of this overlay is to restrict development so that critical deer winter range habitat is protected.



- US 199 Study Corridor
- Scenic Waterway
- Airport Overlay
- Flood Hazard Overlay
- Deer Habitat Overlay

\*Cave Junction is not included in the study area

0 0.25 0.5 Miles

3 Miles

North Arrow

Figure 4

**Overlay Zones**

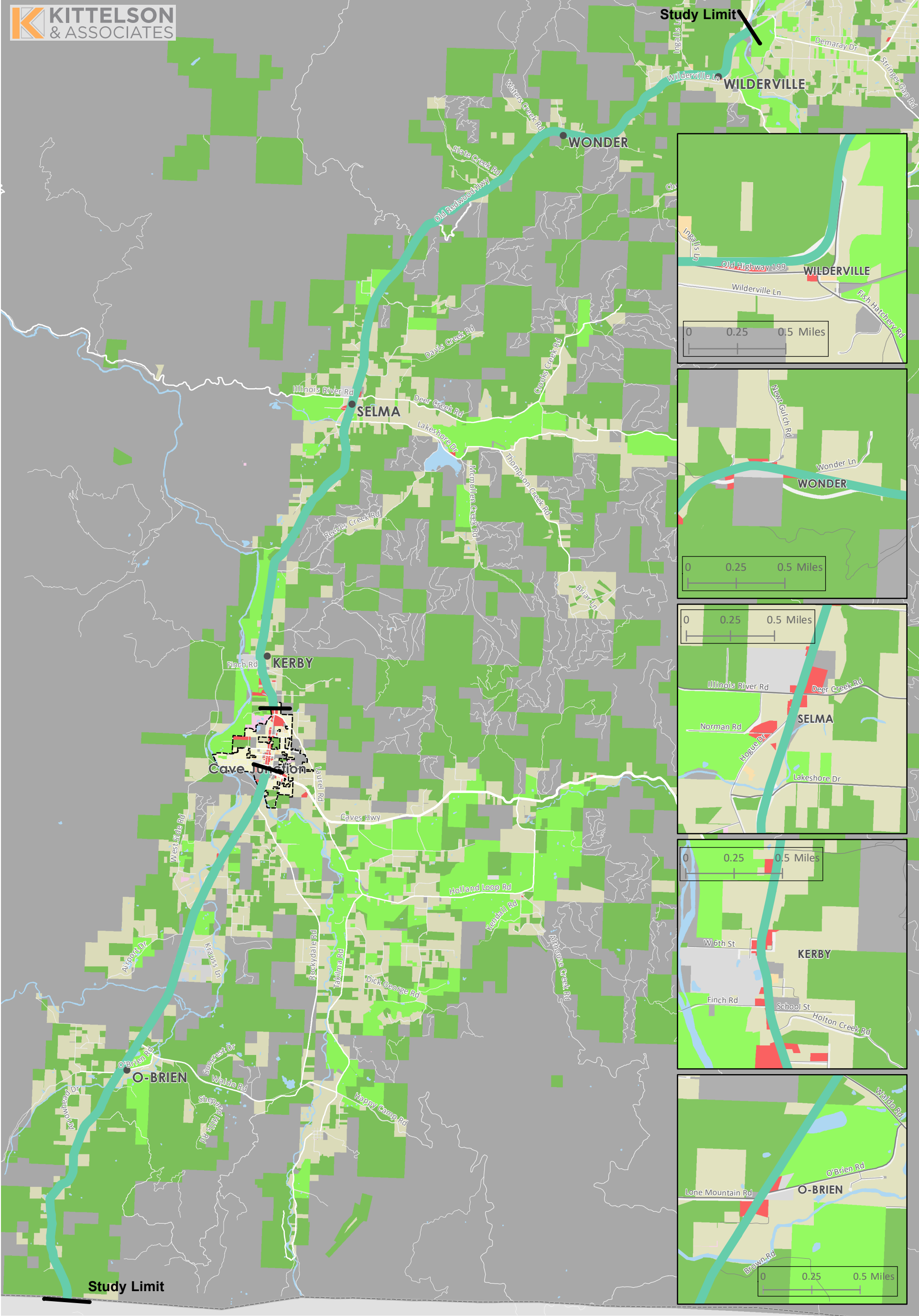
**U.S. Route 199, Josephine County, Oregon**

Data Source: Josephine County, Oregon Department of Transportation

## Existing Land Uses and Vacant and Redevelopable Land

A land use inventory, using Josephine County tax assessor property data, was conducted by Angelo Planning Group in 2018 and is summarized here for this corridor study. This inventory illustrates existing land uses and land with the highest potential to be redeveloped, based on the relative value of the land to its existing structures. The inventories may illustrate locations along the corridor where land use may change and new development may occur in the future. Figure 5 illustrates existing land uses in the vicinity of the corridor, which are generally reflect the Comprehensive Plan designations and current zoning. Figure 6 illustrates the Buildable Land Inventory. Land is assumed to be redevelopable if the land value is twice the value of assessed improvements on the tax lot. Although there is a large amount of vacant or redevelopable land, not much development is anticipated near the corridor due to the zoning that restricts uses on the land and the lack of vacant land near unincorporated communities.





US 199 Study Corridor

**Land Use**

Misc.

Rural

Residential

Multi-family

Commercial

Farm

Forest

Recreational

Industrial

Exempt

\*Cave Junction is not included in the study area

03 Miles

Figure 5

Land Use

U.S. Route199, Josephine County, Oregon

Data Source: Josephine County, Oregon Department of Transportation



## Demographics

This section summarizes the demographics of Josephine County, based on information presented in the County's TSP. Where possible, specific discussion is provided regarding demographics in the areas served by US 199 to understand the populations served by the corridor. Understanding the demographics and transportation needs of these communities will help inform potential plan outcomes as well as public outreach efforts during plan development. This section includes a summary of County-wide statistics of populations by race and ethnicity, age, and households in poverty. Demographics information is provided by the 2012-2016 American Community Survey (ACS) 5-Year Estimate.

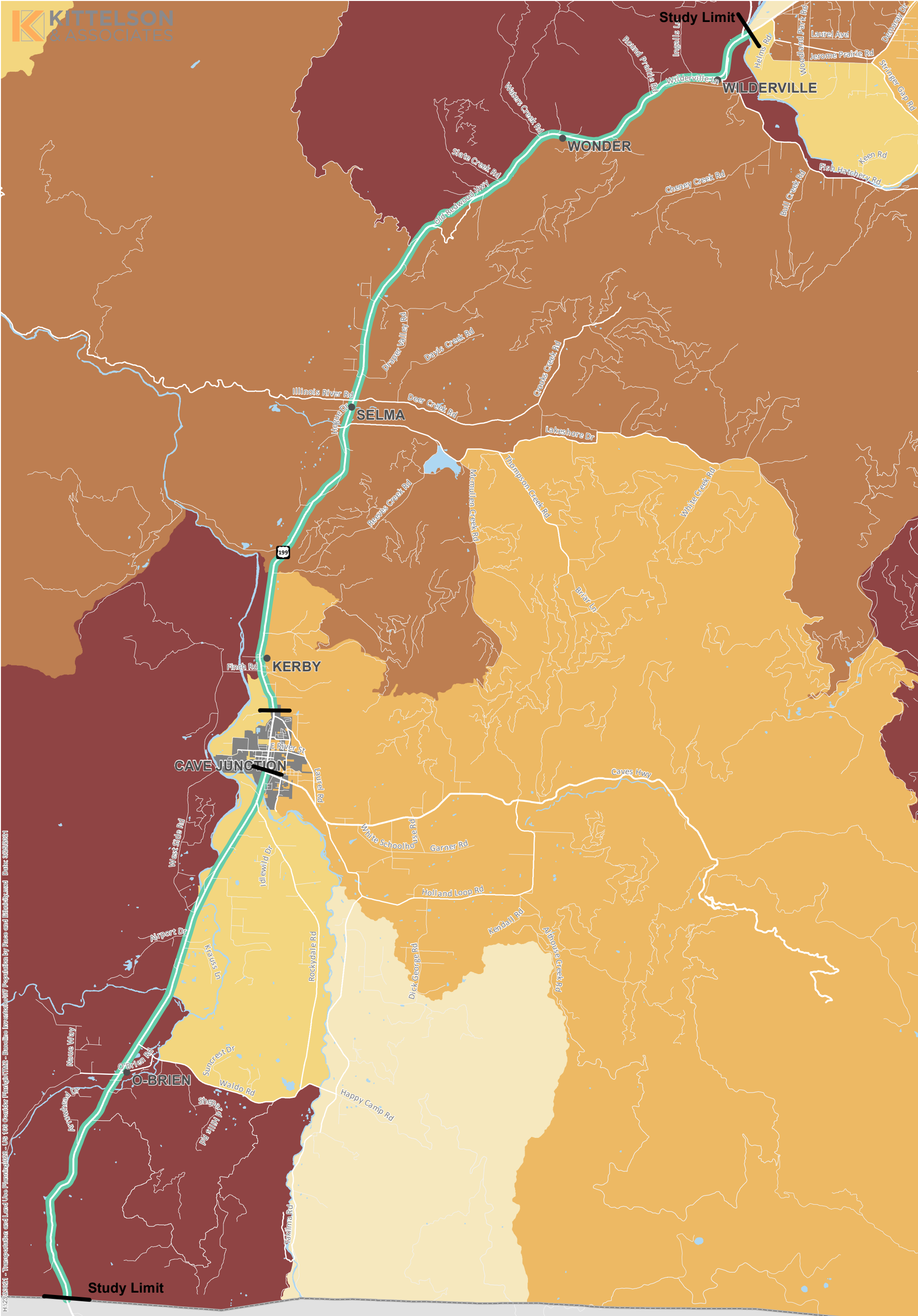
### Minority Populations

Table 4 shows the population in Josephine County by race and ethnicity. Figure 7 illustrates the location of these populations in relation to the corridor. The US 199 corridor serves the highest percentages of minority populations in its southern and northern regions, as well as to the west along its entire extents.

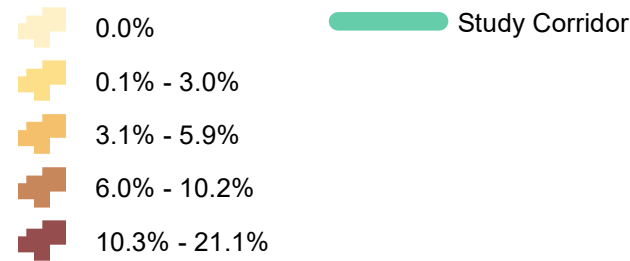
**Table 4: Population by Race and Ethnicity**

Josephine County (2012-2016 ACS, 5-Year Estimate)		
Population Group	Population	Percentage
<b>Total Population</b>	<b>84,063</b>	<b>100.0%</b>
Not Hispanic or Latino	78,213	93.0%
<i>White Alone</i>	73,736	87.7%
<i>Black or African American Alone</i>	297	0.4%
<i>American Indian and Alaska Native Alone</i>	1,022	1.2%
<i>Asian Alone</i>	646	0.8%
<i>Native Hawaiian and Other Pacific Islander Alone</i>	5	0.0%
<i>Some Other Race Alone</i>	30	0.0%
<i>Two or More races</i>	2,477	3.0%
Hispanic or Latino:	5,850	7.0%
<i>White Alone</i>	3,974	4.7%
<i>Black or African American Alone</i>	10	0.0%
<i>American Indian and Alaska Native Alone</i>	178	0.2%
<i>Asian Alone</i>	34	0.0%
<i>Native Hawaiian and Other Pacific Islander Alone</i>	0	0.0%
<i>Some Other Race</i>	1,333	1.6%
<i>Two or More Races</i>	321	0.4%





Percentage of Minority Population by Census Block Group



\*Cave Junction is not included in the study area  
Data Source: Census Table ACS\_16\_5YR\_B02001



Figure 7

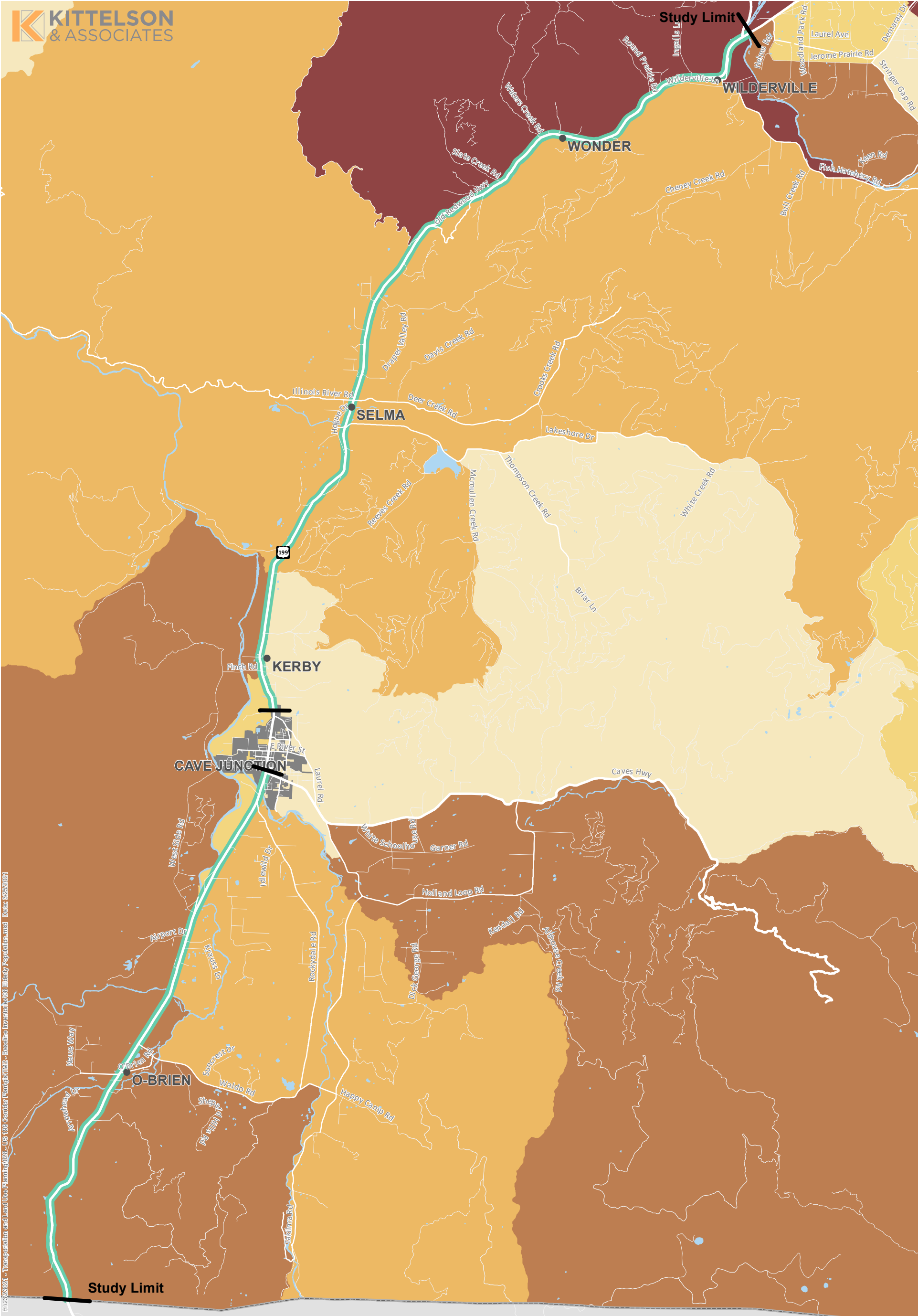
Minority Population  
U.S. Route199, Josephine County, Oregon

## 65 Years Old and Over Populations

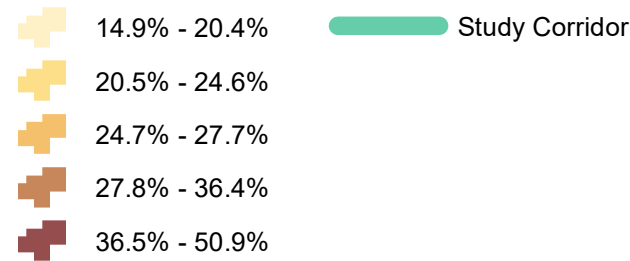
Table 5 summarizes Josephine County's population by age group, and Figure 8 illustrates the location of populations who are age 65 and older within the vicinity of the US 199 corridor. The highest percentage of elderly population is in the area west of US 199 and north of Briggs Valley Road (between Wonder and Selma).

**Table 5: Population by Age**

Josephine County (2012-2016 ACS, 5-Year Estimate)		
Age Group	Population	Percentage
<b>Total Population</b>	<b>84,063</b>	<b>100.0%</b>
Population Under 5 Years	4,095	4.9%
Population 5-14 Years	9,293	11.0%
Population 15-24 Years	9,049	10.8%
Population 25-34 Years	8,049	9.6%
Population 35-44 Years	8,715	10.4%
Population 45-54 Years	10,594	12.6%
Population 55-64 Years	13,569	16.1%
Population 65-74 Years	11,896	14.2%
Population 75-84 Years	6,310	7.5%
Population 85 Years and Over	2,493	3.0%



Percentage of Elderly Population by Census Block Group



\*Cave Junction is not included in the study area  
Data Source: Census Table ACS\_16\_5YR\_B01001



Figure 8

Elderly Population  
U.S. Route199, Josephine County, Oregon

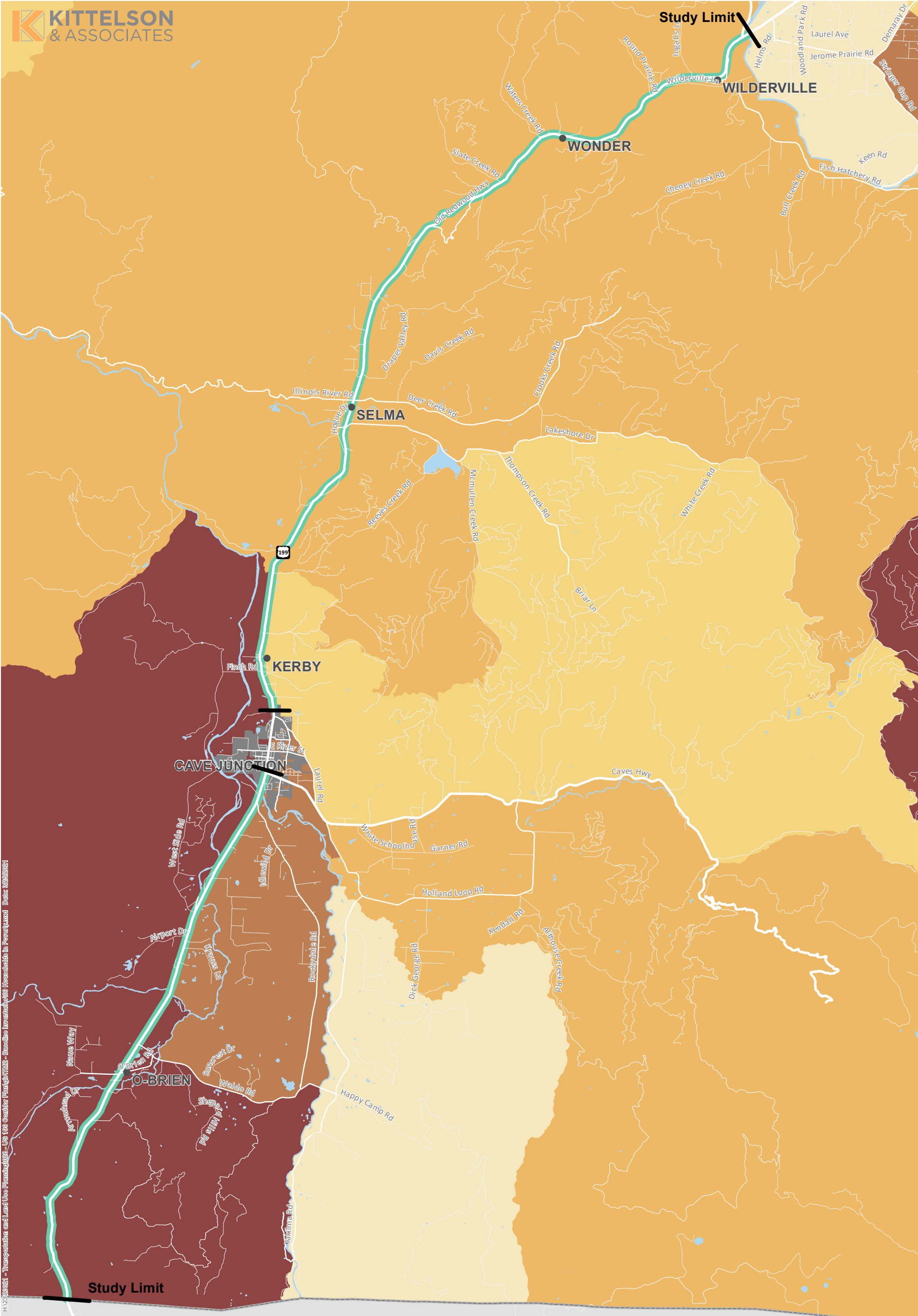
## Low-Income Populations

Table 6 summarizes the Josephine County households in poverty, and Figure 9 illustrates the location of these populations in the vicinity of US 199. The highest percentage of this population resides in the area west of Cave Junction and from O'Brien south.

**Table 6: Households in Poverty**

Josephine County (2012-2016 ACS, 5-Year Estimate)		
Households	Population	Percentage
<b>Total Households</b>	<b>34,778</b>	<b>100.0%</b>
Income in the Past 12 Months Below Poverty Level	6,418	18.5%
Family Households	3,162	9.1%
Nonfamily Households	3,256	9.4%
Income in the Past 12 Months at or Above Poverty Level	28,360	81.5%
Family Households	19,059	54.8%
Nonfamily Households	9,301	26.7%





Percentage of Households Below Poverty by Census Block Group

- 0.0% - 12.2%
  - 12.3% - 15.0%
  - 15.1% - 21.1%
  - 21.2% - 26.9%
  - 27.0% - 48.8%
- Study Corridor

\*Cave Junction is not included in the study area  
Data Source: Census Table ACS\_16\_5YR\_B17017



Figure 9

Households in Poverty  
U.S. Route 199, Josephine County, Oregon

## Environmental Considerations

In support of the “Environmental Sustainability” project goal, the environmental inventory summarizes information related to State planning Goal 5; Congestion Mitigation and Air Quality Improvement (CMAQ); Federal Emergency Management Agency (FEMA); the National Heritage Database; State Historic Preservation Office (SHPO); local historic societies; threatened and endangered species; Section 4(f) of the U.S. Department of Transportation Act; Section 6(f) of the Land and Water Conservation Act; wetland areas; wildlife areas; and tribal lands.

### Goal 5

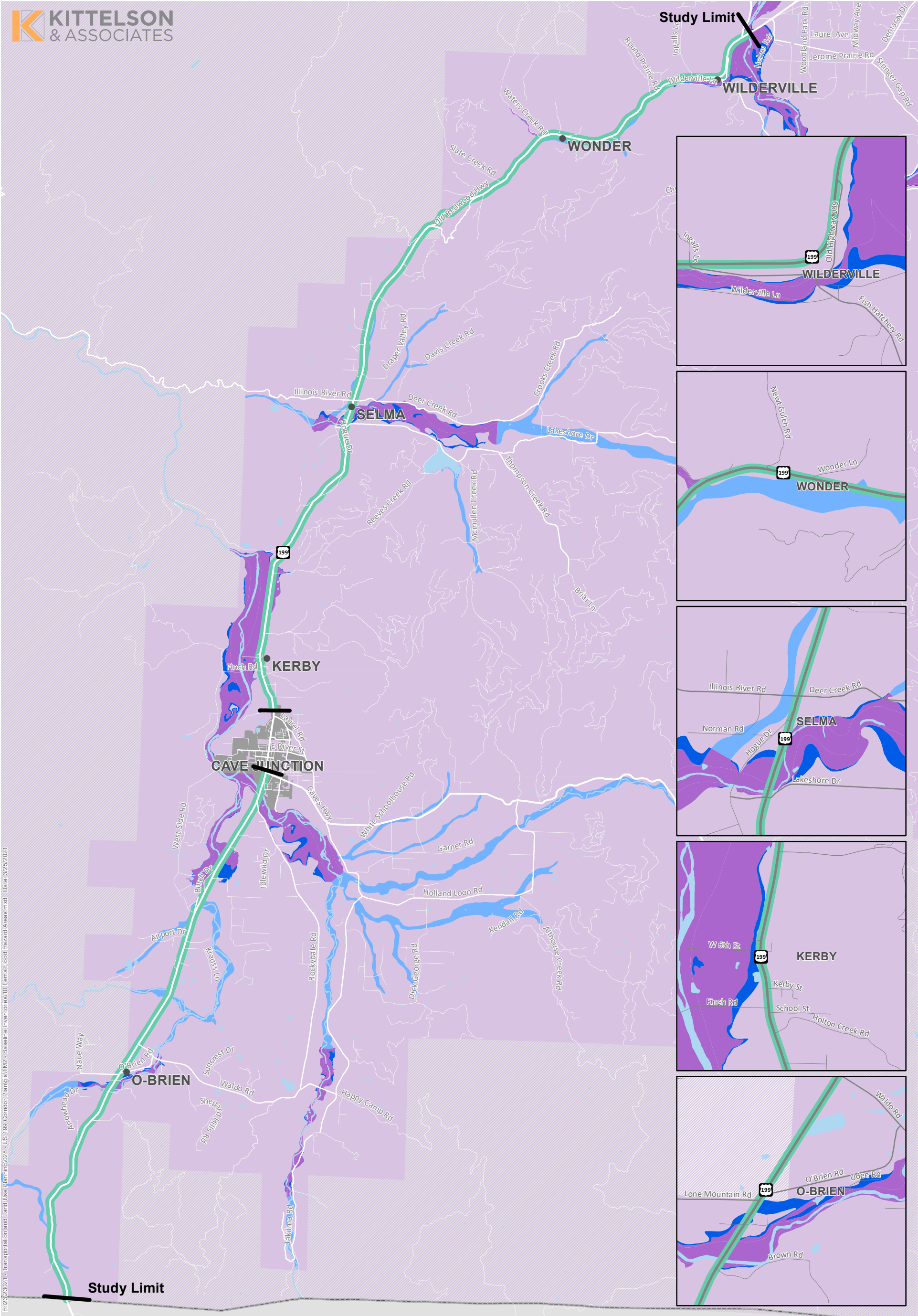
State planning goal 5 requires that projects maintain open spaces, protect scenic and historic areas and natural resources, and promote a healthy and visually attractive environment in harmony with the natural landscape character. Goal 5 identifies twelve resources to which the goal is applied:

- » Open space
- » Mineral and aggregate resources
- » Energy sources
- » Fish and wildlife areas and habitats
- » Ecologically significant natural areas
- » Outstanding scenic views and sites
- » Water resources
- » Wilderness
- » Historic resources
- » Cultural areas
- » Oregon recreation trails
- » Federal wild and scenic waterways and state scenic waterways

The project study area is rich in these resources and as a result, these goal 5 resources should be identified during US 199 corridor planning so that impacts are limited during future design and construction.

### Federal Emergency Management Agency

The Federal Emergency Management Agency (FEMA) asserts jurisdiction over all floodplains and floodways. Figure 10 illustrates the location of FEMA flood hazard areas near the US 199 corridor. Zones A and AE are part of the Special Flood Hazard Area (SFHA). Corridor project recommendations within these areas will require FEMA approval via a floodplain permit application prior to construction. This permit can be coordinated with the local agency planning department. Generally, project recommendations in the SFHA should not cause more than a one foot rise in flood elevation.



## Topography

As a rural highway, US 199 traverses different topographies through primarily forested lands. Figure 11 illustrates that much of US 199 weaves through mountainous areas and reaches flatter grounds in Selma, Kerby, and O'Brien. Due to environmental and cost constraints, the corridor topography has potential to limit the types of transportation projects that require roadway widening, such as for adding new passing lanes.

## National Heritage Database

The Oregon Historic Sites Database identifies one eligible and significant resource in Kerby: the William and Nannie Naucke house adjacent to US 199, which is currently the Kerbyville Museum.

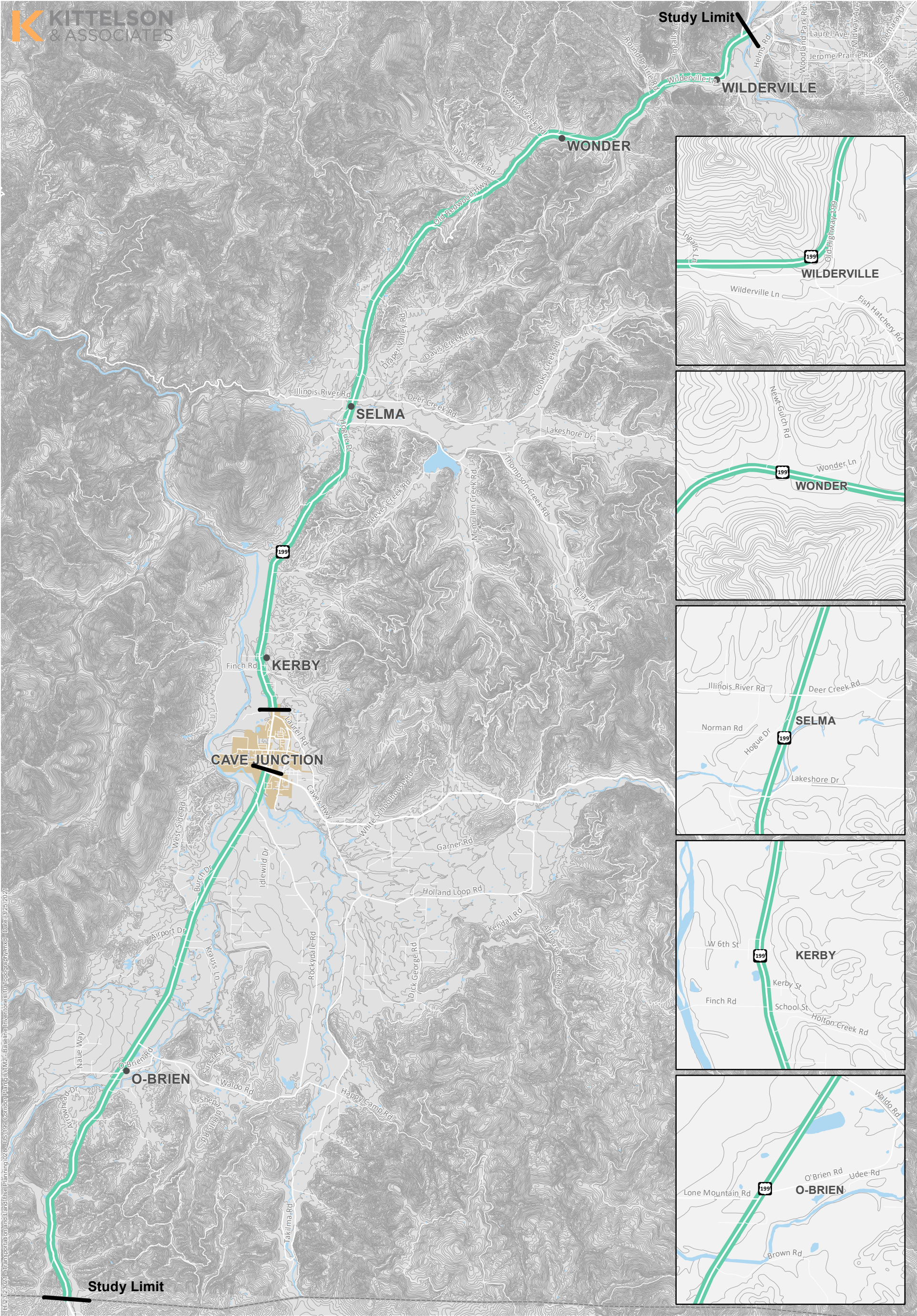
## State Historic Preservation Office

The State Historic Preservation Office (SHPO) shows two historic resources along US 199: the Kerbyville Museum (William and Nannie Naucke house) and the Siskiyou Smokejumper Base Museum. Transportation projects with the potential to impact any resource over 50 years old should be coordinated with SHPO to avoid impacting resources potentially eligible for listing on the national register of historic places. Ditches, walls, culverts, and bridges within the corridor could be eligible for listing. Projects impacting these structures should also be coordinated with SHPO to verify potentially eligible resources are not impacted during project design.

## Threatened and Endangered Species

Numerous plant and animal species currently present in Josephine County are federally listed as either threatened or endangered under the federal endangered species act. Josephine County contains critical habitat as well as state listed species, species of concern, and sensitive species. Transportation projects that potentially impact undisturbed ground, remove trees or shrubs, change drainage patterns, cross waterways, or result in stormwater runoff will require review by appropriate agencies to determine if endangered, threatened, or sensitive species and/or their habitat could be impacted. These agencies include the Oregon Department of Fish and Wildlife, the US Fish and Wildlife Service, National Marine Fisheries Service, and the Oregon Department of Agriculture. Planning and designing corridor projects to avoid impacting endangered, threatened, or sensitive species and their habitat should be a priority.





\*Cave Junction is not included in the study area  
Data Source: Oregon Spatial Data Library

Figure 11

# Topography U.S. Route199, Josephine County, Oregon



## Section 4(f) and 6(f)

Potential corridor planning and design solutions must be developed in compliance with Federal policy. Generally speaking, it is best to avoid impacting Section 4(f) and 6(f) properties.

Section 4(f) of the U.S. Department of Transportation Act prohibits projects from using land from publicly owned parks, recreation areas (including recreational trails), wildlife and waterfowl refuges, or public and private historic properties, unless there is no feasible and prudent alternative. Potential corridor projects impacting 4(f) properties should be avoided or minimized.

Section 6(f) of the Land and Water Conservation Act requires that changes to lands or facilities acquired with Land and Water Conservation Act funds be coordinated with the Department of Interior. During the project planning process, if temporary or permanent right-of-way will be required, the project proponent should search the land and water conservation fund database to determine if lands encumbered with land and water conservation funds will be impacted.

## Wetland Areas

Potential corridor projects should generally first attempt to avoid encroaching upon wetlands. Impacts to wetlands require prior approval from the Oregon Department of State Lands (DSL) and the US Army Corps of Engineers (USACE). In the future when implementing US 199 corridor plan elements, projects requiring impacts to unimproved services should be delineated by a wetland professional to determine if wetlands are present. If they are determined to be present by DSL and the USACE, a Joint Permit Application will be required. DSL and the USACE must review the Joint Permit Application, and wetland mitigation will be required before the agencies approve the permit to impact wetlands.

## Wildlife Areas

Potential corridor planning and design solutions must first account for wildlife areas. Josephine County contains vast expanses of land that is undeveloped and used by a variety of wildlife. As shown in the overlays in Figure 4, the majority of the corridor is located within Deer Habitat Overlay. The corridor plan recommendations will minimize impacts to wildlife movement and habitat.

## Known Hazmat Sites

There are no documented superfund sites in Josephine County.

## Tribal Lands

US 199 corridor planning and design solutions must consider potential effects to tribal lands and Traditional Areas of Interest (not trust or reservation lands) for federally-recognized Tribes including the Confederated Tribes of Grand Ronde, Confederated Tribes of Siletz, Tolowa Di Nee Nation, and the Cow Creek Band of Umpqua Tribe of Indians.

## Motor Vehicle Facilities

The motor vehicle facilities inventory documents the characteristics of roadways within the study area including jurisdiction, roadway designations, roadway characteristics, and freight facilities.

## Jurisdiction

Corridor planning and design solutions must consider the jurisdiction of potentially affected roadways. If potential corridor solutions affect roadways under ownership other than ODOT, coordination is required so facilities are planned, operated, maintained, and improved consistent with the relevant agency's guidelines. The project corridor, as well as Old Redwood Highway in Wilderville, are owned and maintained by the Oregon Department of Transportation (ODOT). Within the study area, the side streets to US 199 are owned and maintained by Josephine County, the United States Forest Service (USFS), and the Bureau of Land Management (BLM). As shown in Figure 12, a majority of the side streets are under County jurisdiction.

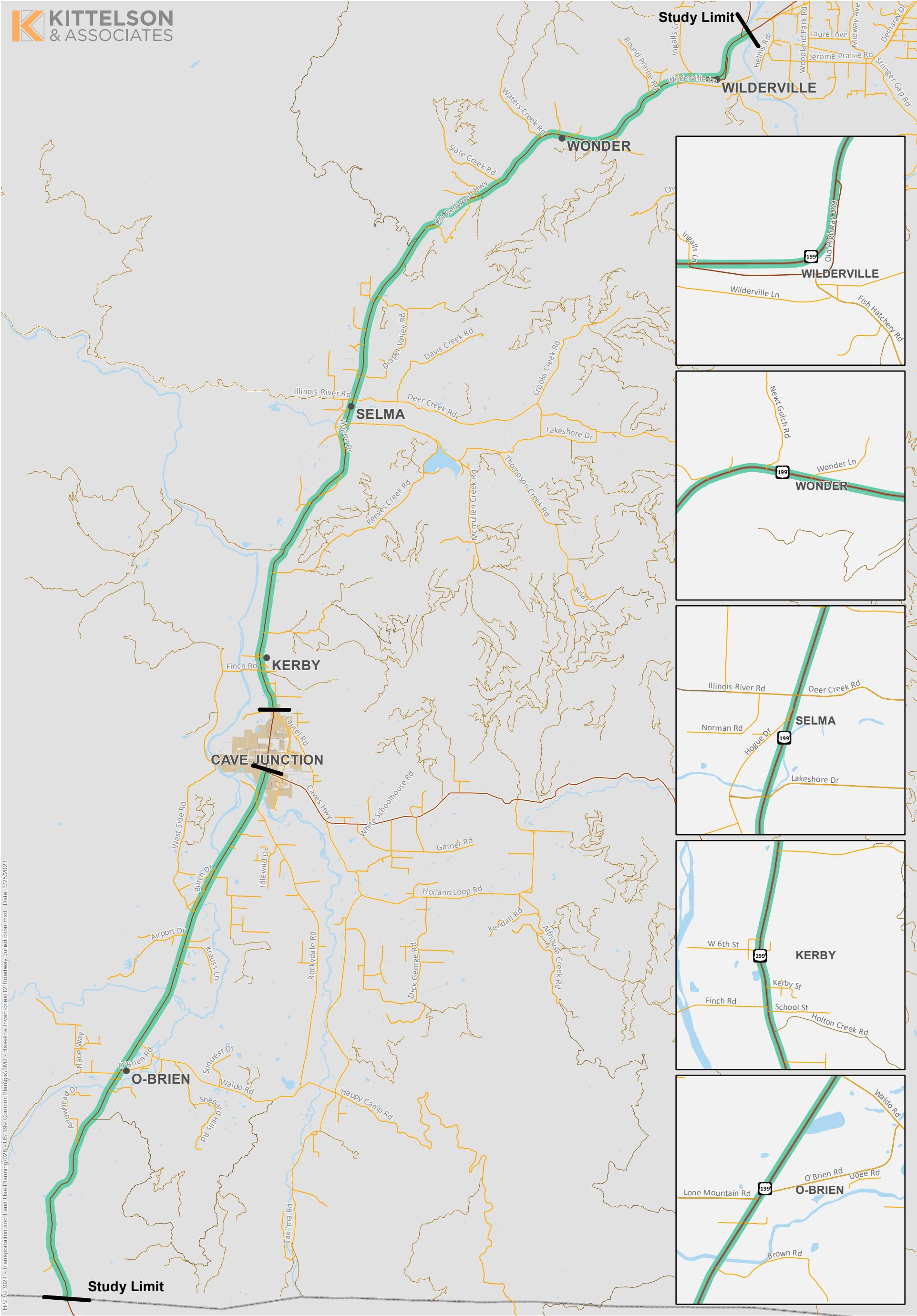
## Roadway Designations

There are several roadway designations within the study at the federal, state, and local level. The following sections describe these designations. The designations serve two primary purposes that influence US 199 corridor planning. One is fundamentally defining the role the roadway plays in the within the connected network. The second is the considering jurisdictional requirements based on their roadway designation. Corridor planning and design solutions must account for roadway designations and jurisdictional requirements.

## Functional Classification

Having several roles within the study area, US 199 has federal, state, and local functional classification designations. Figure 13 illustrates the local functional classification of US 199 and its side streets within the study area as defined in the Josephine County TSP. The following sections summarize the corridor's different functional classifications and ODOT highway classifications that will be considered as in developing potential corridor solutions.





Roadway Jurisdiction Study Corridor

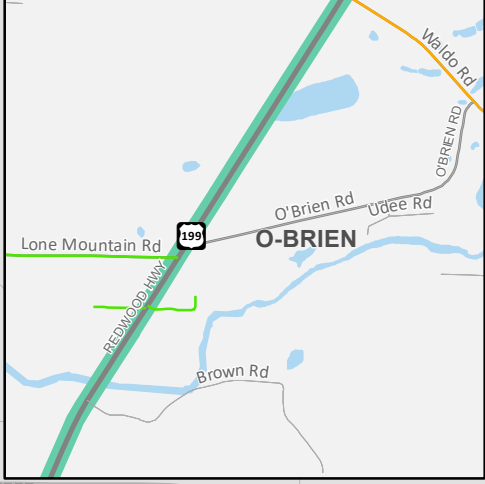
- State
- County
- City
- Major USFS/BLM
- Other USFS/BLM
- Private

\*Cave Junction is not included in the study area  
Data Source: Josephine County



Figure 12

## Roadway Jurisdiction U.S. Route199, Josephine County, Oregon



\*Cave Junction is not included in the study area  
Data Source: Josephine County



Figure 13

## Functional Classification

### U.S. Route 199, Josephine County, Oregon

**Federal Designation**

US 199 has a federal functional classification of Rural Other Principal Arterial. This designation applies to roadways that:

- » Serve corridor movements having trip length and travel density characteristics indicative of substantial statewide or interstate travel;
- » Connect all or nearly all Urbanized Areas and a large majority of Urban clusters with 25,000 and over population; and
- » Provide an integrated network of continuous routes without study connections (dead ends).

**State Designation**

The Oregon Highway Plan (OHP) identifies US 199 as a Statewide Highway. These roadways typically serve inter-urban and inter-regional mobility and provide connections to larger urban areas, ports, and major recreation areas that are not directly served by Interstate Highways. The management objective is to provide safe and efficient, high-speed, continuous-flow operation. While the OHP states that interruptions to flow should be minimal in constrained and urban areas, the project may seek to identify context-based solutions for needs that could be identified within these constrained and urban areas.

**Local Designation**

Josephine County identifies US 199 local functional classification as State Highway. State Highways within the County provide connections to the County's street network for reaching local destinations as well as to other major roadways with regional destinations.

**National Highway System**

The National Highway System (NHS) is a network of strategic highways within the United States that is important to the nation's economy, defense, and mobility. US 199 is part of this strategic network and its NHS classification is Other Principal Arterial, which are highways in rural and urban areas that provide access between an arterial and a major port, airport, public transportation facility, or other intermodal transportation facility.

**Oregon Seismic Lifeline Routes**

Of the three-tier system to establish guidelines for prioritizing seismic retrofits of highways and bridges, US 199 is classified as a Tier 2 Seismic Lifeline Route. Tier 2 routes provide additional connectivity and redundancy to the Tier 1 lifeline system (highest priority). Tier 2 routes allow for direct access to more locations, fewer miles to travel between some locations, increased traffic volume capacity, and alternate routes in high-population regions in the event of outages on the Tier 1 system. There are no routes redundant to US 199 in this area, therefore, US 199 is the primary route in case of a natural disaster or emergency requiring evacuation (e.g., earthquakes, wildfires, or flooding).

## Roadway Characteristics

Kittelson used Geographic Information System (GIS) data obtained from ODOT and Josephine County to inventory roadway characteristics within the study area. The data was supplemented with information obtained from aerial images of the study area obtained from Google Earth/Google Maps and through a virtual site visit. The data include shoulder, lane, and pavement width; passing and turn lanes; pavement type and condition; median type and location; and posted speed limits.

### Shoulder Width

Shoulder type and width data are available for US 199, as illustrated in Figure 14. The corridor shoulders north of Cave Junction are paved (no gravel extensions) and range from two to greater than six feet in width. The wider shoulders are provided through Wilderville and for several miles leading into Selma. The corridor shoulders south of Cave Junction are paved and primarily two to four feet wide and they include two-foot gravel extensions beyond the paved width, except for a section south of O'Brien.

### Lane Width

In the study area, US 199 travel lanes are 12 feet wide.

### Passing Lanes, Turn Lanes, and Medians

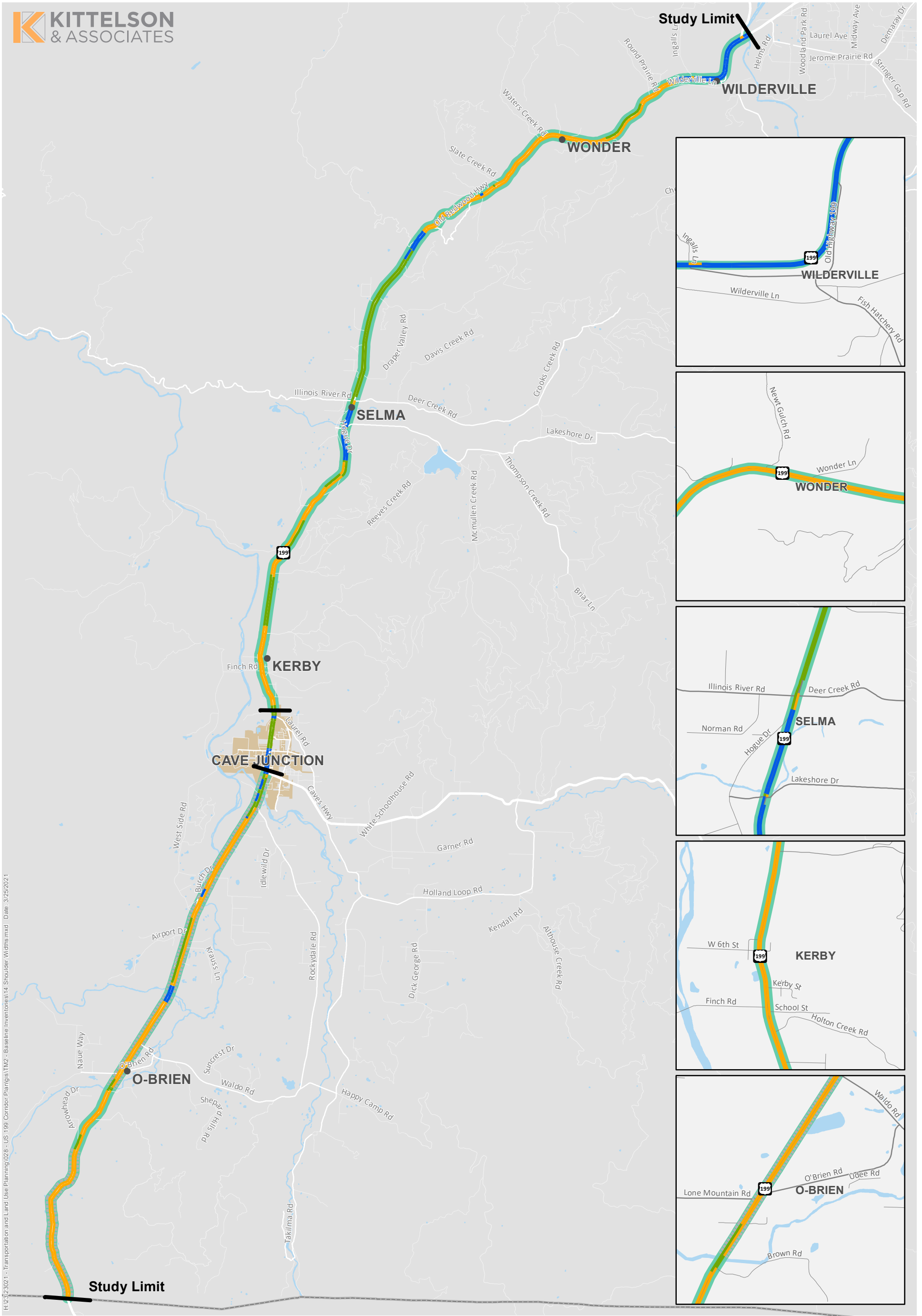
US 199 is primarily a two-lane facility, and therefore, sections of the corridor (not associated with intersections) having more than two lanes are identified as passing lanes. The location of the corridor's passing and turn lanes and medians are summarized in and illustrated in Table 7 and Figure 15. As shown, passing lanes are generally provided between the unincorporated cities in the corridor and turn lanes are limited to select major intersections. Existing medians on US 199 are painted and typically serve as transitions between dedicated turn lanes at intersections. There is a continuous center turn lane through Selma.

**Table 7: Passing and Turn Lanes**

Location and Directions of Passing and Turn Lanes			
Type	Location <sup>1</sup>	Direction	General Area
Passing Lanes	MP 11.15 to 10.59	Eastbound	Wonder
Passing Lanes	MP 14.77 to 16.74	Westbound	Between Wonder and Selma
Passing Lanes	MP 16.90 to 16.43	Eastbound	Between Wonder and Selma
Passing Lanes	MP 20.87 to 21.15	Westbound	Selma
Passing Lanes	MP 24.73 to 25.41	Westbound	Kerby
Passing Lanes	MP 25.54 to 24.91	Eastbound	Kerby
Passing Lanes	MP 33.59 to 34.06	Westbound	Illinois Valley Airport
Passing Lanes	MP 34.21 to 33.63	Eastbound	Illinois Valley Airport
Passing Lanes	MP 37.8 to 38.14	Westbound	Between O'Brien and CA Border
Passing Lanes	MP 38.14 to 37.87	Eastbound	Between O'Brien and CA Border
Left Turn Lane	OR 260	Eastbound	Wilderville
Right Turn Lane	OR 260	Westbound	Wilderville
Left Turn Lane	Old Redwood Hwy	Westbound	Wilderville
Right Turn Lane	Ingalls Lane	Westbound	Wilderville
Right Turn Lane	Round Prairie Rd	Westbound	Wilderville
Left Turn Lane	Deer Creek Rd	Westbound	Selma
Left Turn Lane	Illinois River Rd	Eastbound	Selma
Center Turn Lane	Lakeshore Dr to Deer Creek Rd/Illinois River Rd	Both Directions	Selma
Left Turn Lane	Lakeshore Dr	Westbound	Selma
Right Turn Lane	Lakeshore Dr	Westbound	Selma
Left Turn Lane	Lakeshore Dr	Eastbound	Selma
Right Turn Lane	Lakeshore Dr	Eastbound	Selma
Right Turn Lane	8 Dollar Rd	Westbound	Between Selma and Kerby
Left Turn Lane	8 Dollar Rd	Eastbound	Between Selma and Kerby
Left Turn Lane	Rockydale Rd	Westbound	South of Cave Junction
Left Turn Lane	Rockydale Rd/Frontage	Eastbound	South of Cave Junction

<sup>1</sup>Passing lane MP locations are estimates from ODOT Transgis.





H:\2323021 - Transportation and Land Use Planning\028 - US 199 Corridor Plan\GIS\TM2 - Baseline Inventories\14 Shoulder Widths.mxd Date: 3/25/2021

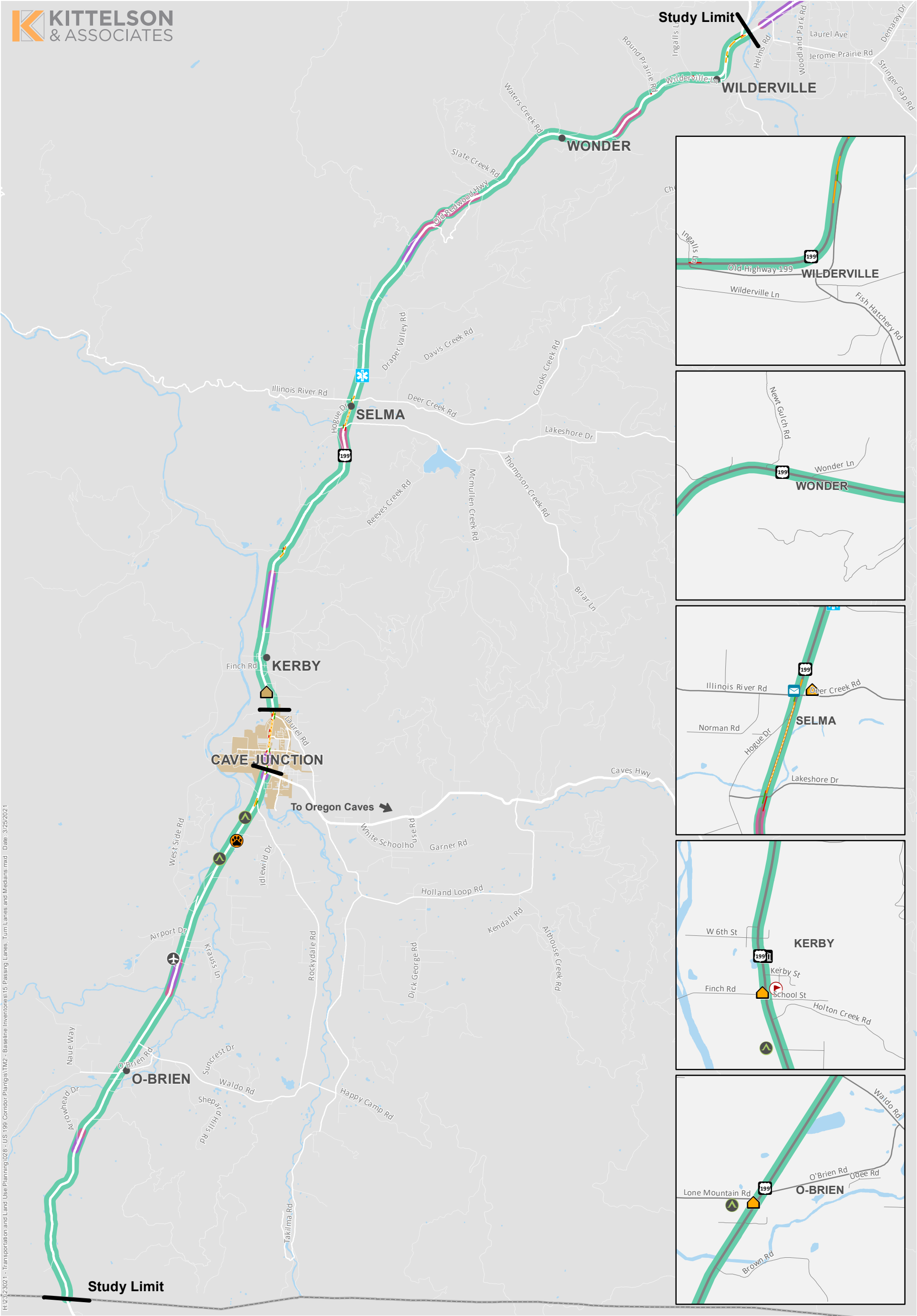
- 2-4 Ft Paved Shoulder
- 5-6 Ft Paved Shoulder
- > 6Ft Paved Shoulder
- 2 Ft Gravel Shoulder Outside Paved Shoulder
- Study Corridor

\*Cave Junction is not included in the study area  
Data Source: Oregon Department of Transportation



Figure 14

## Shoulder Widths U.S. Route 199, Josephine County, Oregon



\*Cave Junction is not included in the study area  
Data Source: ODOT

Figure 15

**Passing Lanes, Turn Lanes, and Medians  
U.S. Route 199, Josephine County, Oregon**



**Pavement Type**

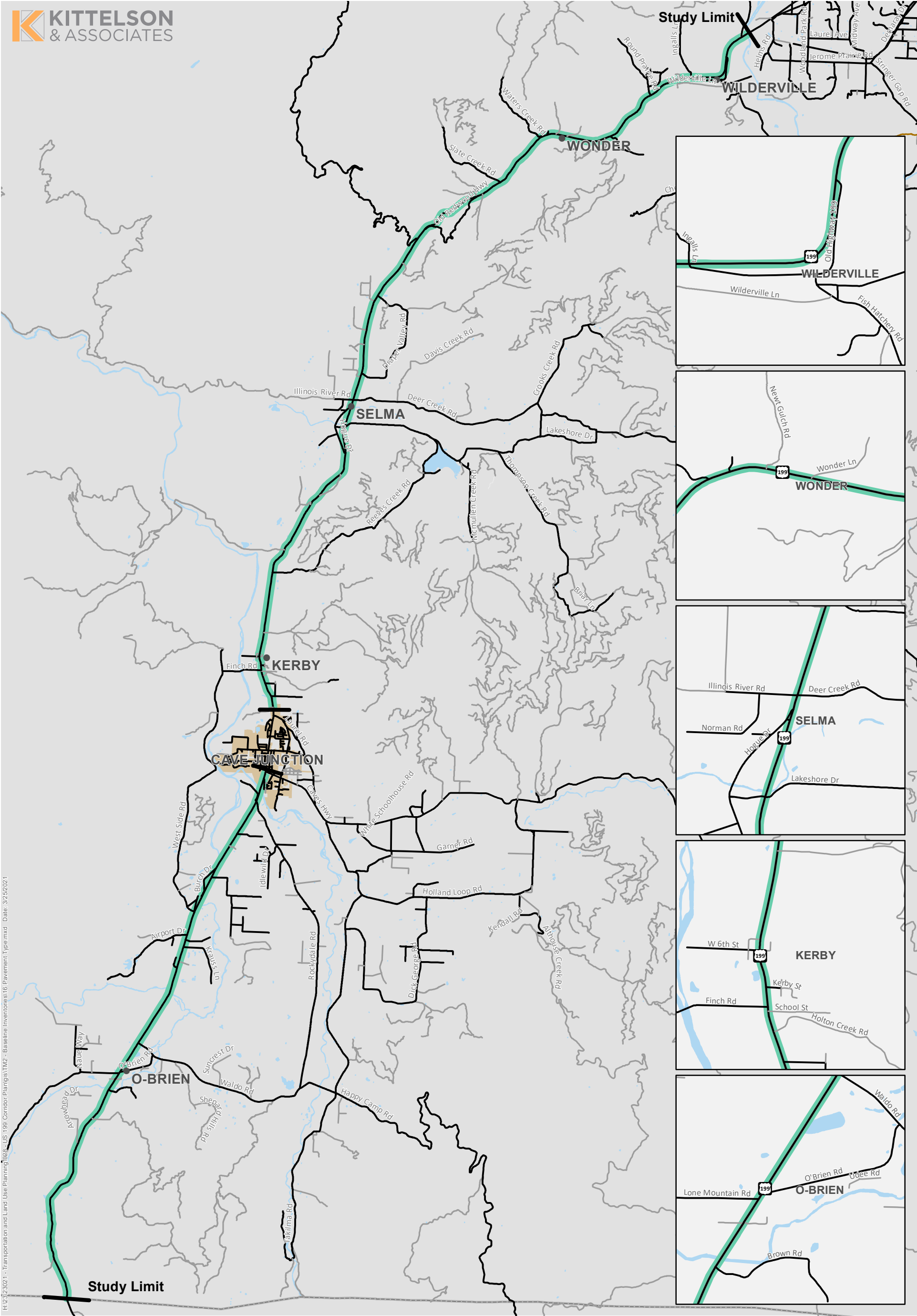
As shown in Figure 16, US 199 is paved asphalt, as are many of its side streets. However, some side streets are gravel.

**Pavement Condition**

Pavement conditions data are available for US 199 and shown in Figure 17, the corridor pavement conditions range from “Good” to “Very Good” within the study area.

**Posted Speed Limits**

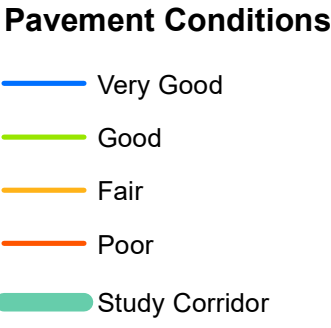
As shown in Figure 18, US 199 is posted at 55 miles per hour (mph) except in speed transition zones around Selma, Kerby, Cave Junction, and O’Brien, which are posted at 40 to 50 mph.



\*Cave Junction is not included in the study area  
Data Source: Josephine County

Figure 16

**Pavement Type**  
**U.S. Route199, Josephine County, Oregon**

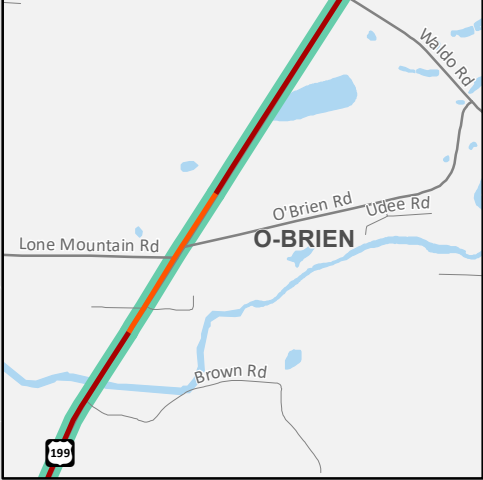
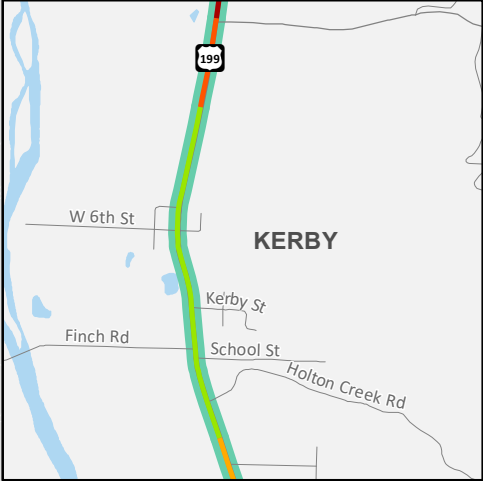
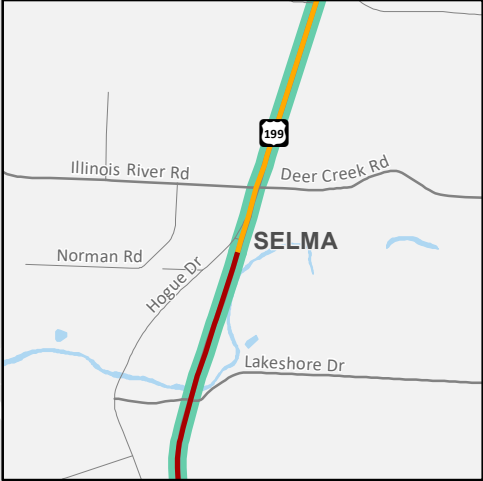
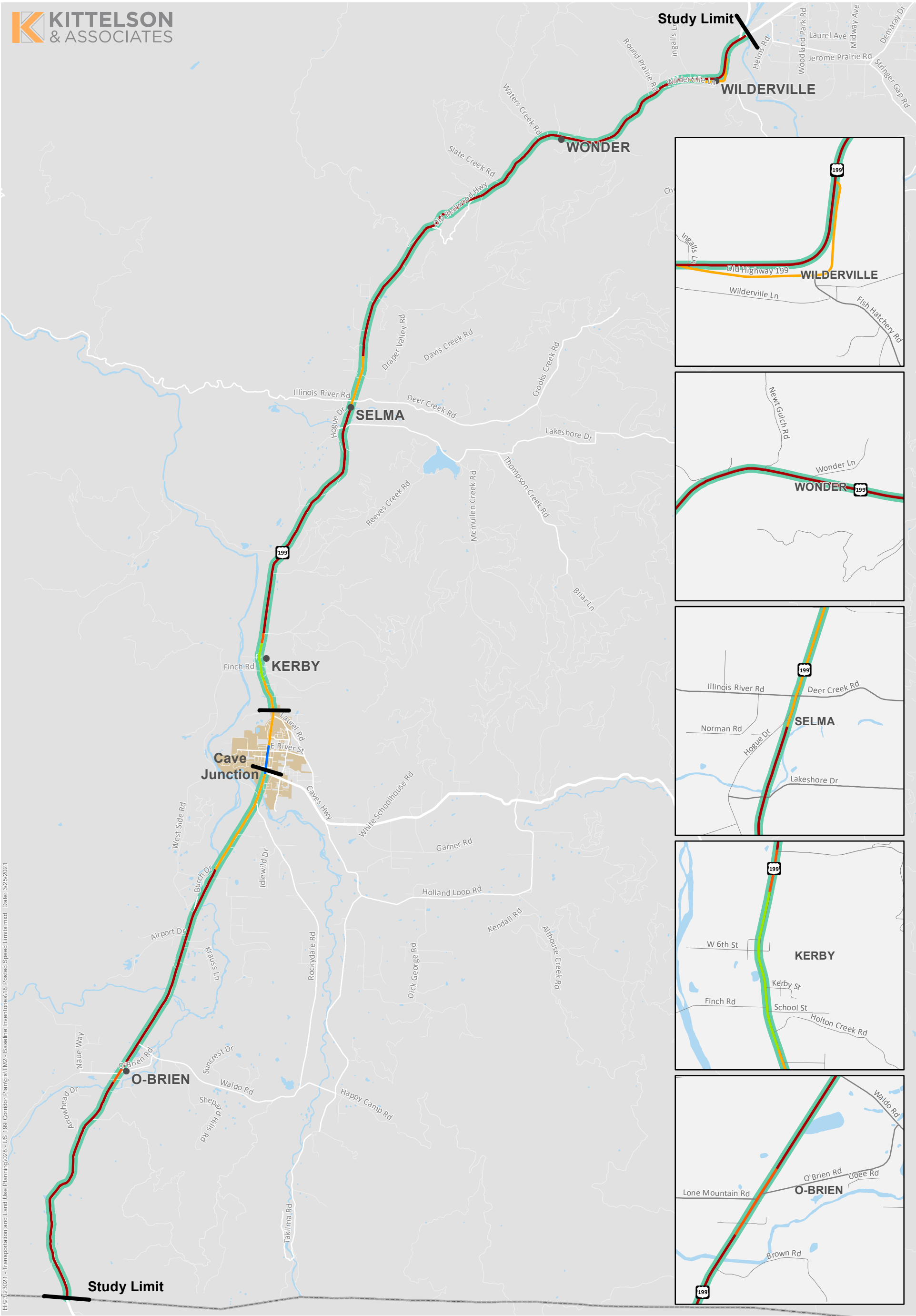


0 3 Miles

A horizontal number line with tick marks at 0 and 3 Miles. An arrow points upwards from the 3 Miles mark.

## Pavement Condition

### U.S. Route199, Josephine County, Oregon



H:\2323021 - Transportation and Land Use Planning\028 - US 199 Corridor Plan\GIS\TM2 - Baseline Inventories\18 Posted Speed Limits.mxd Date: 3/25/2021

- 30 MPH
- 40 MPH
- 45 MPH
- 50 MPH
- 55 MPH
- Study Corridor

\*Cave Junction is not included in the study area  
Data Source: Oregon Department of Transportation



Figure 18

Posted Speed Limits  
U.S. Route199, Josephine County, Oregon



## Freight Facilities

US 199 is an OHP designated freight route that serves the local, state, and national transportation networks. It is a Reduction Review Route and is restricted from transporting certain over-dimension truck loads. US 199 corridor plan solutions must specifically address freight mobility needs.

### Reduction Review Routes

US 199 is a Reduction Review Route. Therefore, projects identified in the corridor plan that may reduce the vertical or horizontal clearance of the highway must be coordinated with ODOT's Mobility Services Team. This is a review of the "hole in the air" capacity, which Oregon State Legislature (ORS 366.215) refers to as the area needed to accommodate legal loads and annual permitted over-dimension loads. ODOT requests that this process begins during this planning study to minimize potential conflicts. An example of a project that may reduce horizontal clearance is a raised median.

### Highway Over-Dimension Load Restrictions and Pinch Points

According to ODOT's Motor Carrier Transportation Division (MCTD) Route Map 5, US 199 is not an approved route for transporting Triples Combinations. All other loads that must be conveyed on US 199 that exceed legal dimensions as specified by ODOT require an over-dimension permit.

Further, the Oregon Freight Plan identifies the following over-dimension load pinch points according to their mileposts (MP) on US 199:

- » MP 7 to 41.69: Wide Load Pinch Point
- » MP 28.85: Vertical Clearance Pinch Point (high-priority pinch point)

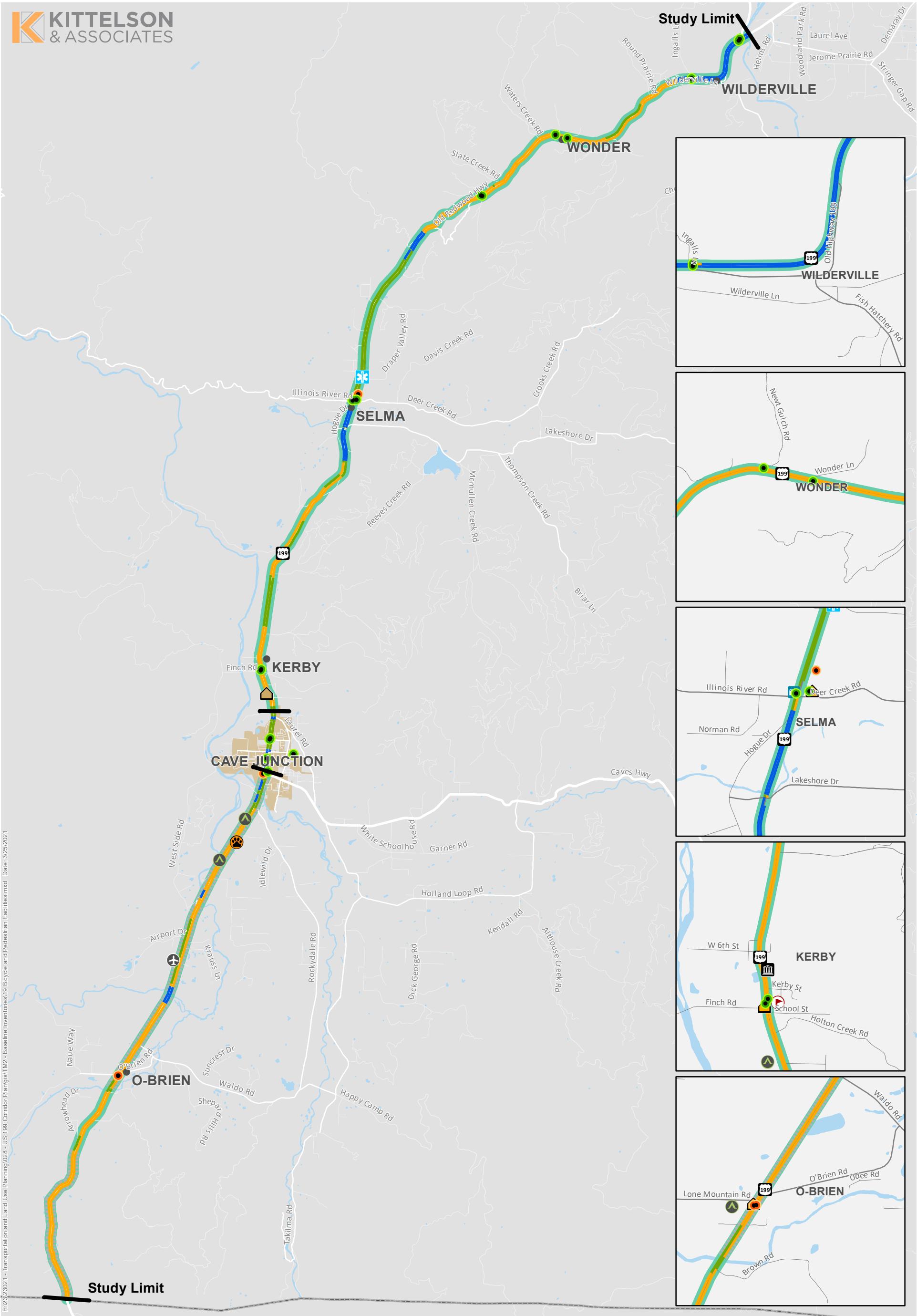
The wide load pinch point indicates that pinch points within the corridor restrict the ability of wide loads to travel through the corridor. While the location of pinch points may be limited, wide loads are not permitted in these areas because of the lack of alternate routes to avoid the pinch points. The vertical clearance pinch point at MP 28.85 is caused by a low traffic signal within Cave Junction, which is outside of the project study limits.

### Freight Highway Bottlenecks

Based on the Oregon Freight Highway Bottleneck Project, there are no freight highway bottlenecks on US 199. A freight highway bottleneck is a part of the transportation system that exhibits disproportionally high costs to the freight industry in terms of delay and unreliability.

## Bicycle and Pedestrian Facilities

As a rural highway, people walking and biking within the corridor are limited to using the roadway's paved shoulders. Figure 19 illustrates that this is true for people walking and biking in Wilderville, Wonder, Selma, Kerby, and O'Brien needing to access destinations along the corridor within these communities without a motor vehicle. The condition of the existing bicycle and pedestrian facilities – or, paved shoulders – is reflected in the previous discussion on pavement condition of the corridor.



- |                             |                       |                |
|-----------------------------|-----------------------|----------------|
| 2-4 Ft Paved Shoulder       | Study Corridor        | Hospital       |
| 5-6 Ft Paved Shoulder       | Airport               | Library        |
| > 6Ft Paved Shoulder        | Campground/RV Park    | Medical Clinic |
| 2 Ft Gravel Shoulder        | Community College     | Motel          |
| Josephine Community Transit | Great Cats World Park | Museum         |
| SouthWest POINT             | Grocer/Market         | Post Office    |

\*Cave Junction is not included in the study area  
Data Source: Oregon Department of Transportation

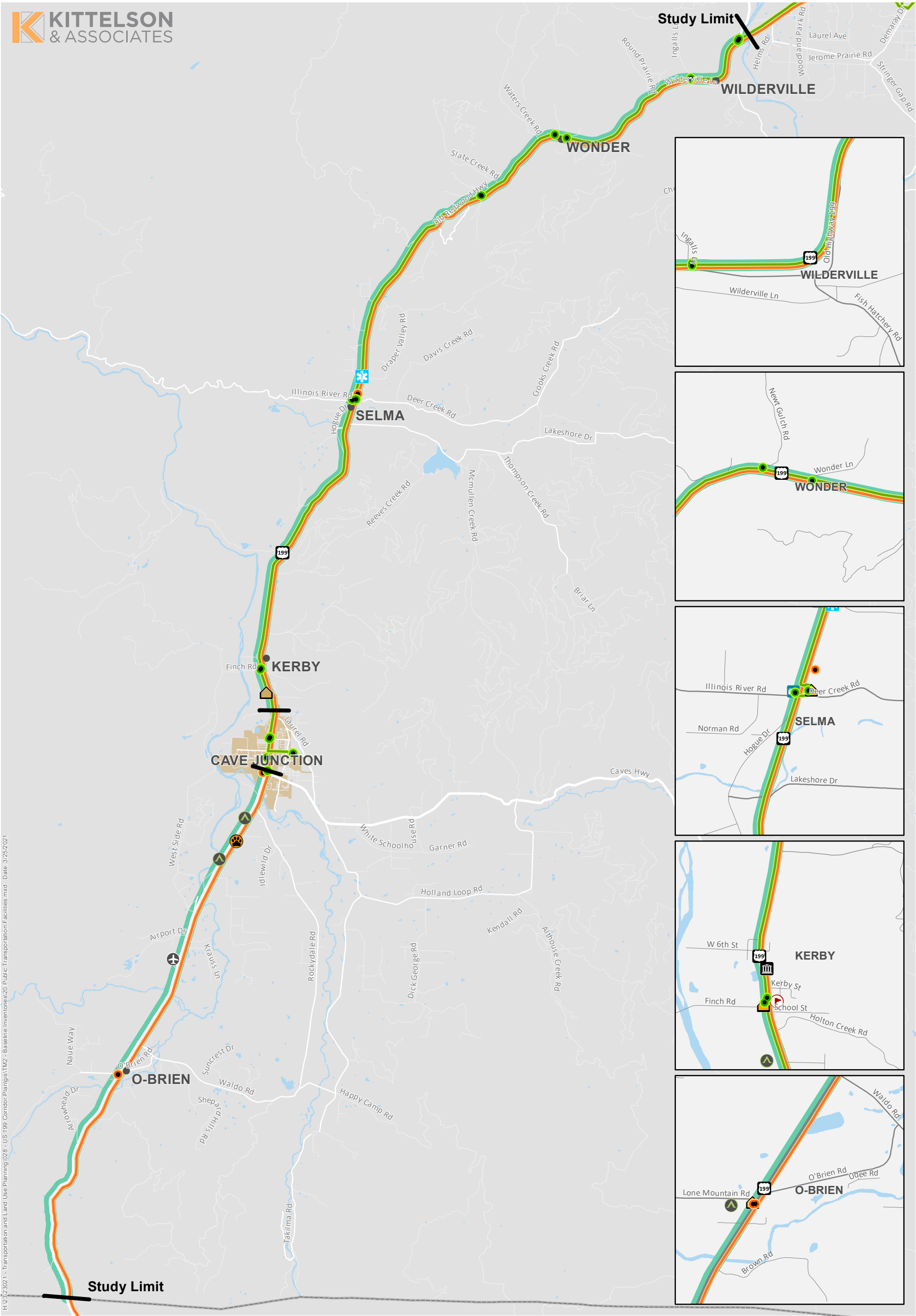


Figure 19

## Bicycle and Pedestrian Facilities U.S. Route 199, Josephine County, Oregon

## Public Transportation

US 199 corridor planning and design solutions must integrate public transportation providers along their routes and meet existing and future transit stop needs. US 199 is served by two public transportation services: Josephine Community Transit (JCT) and Amtrak's Southwest POINT. As shown in Figure 20, JCT provides a direct connection between Cave Junction and Grants Pass – Route 50 – with US 199 transit stops in Wilderville, Wonder, Selma, and Kerby. Route 50 is a commuter route with five daily round-trip runs with two buses operating in the morning, one bus operating mid-day, and two buses operating in the evening. Southwest POINT partners with Amtrak to provide bus service along the entire project corridor, with stops in Selma and O'Brien. This route connects riders between the southern Oregon and northern California coast lines to Klamath Falls, which has the nearest full-service Amtrak station.



\*Cave Junction is not included in the study area  
Data Source: Oregon Department of Transportation

**Public Transportation Facilities  
U.S. Route 199, Josephine County, Oregon**



## Bridges and Culverts

US 199 has 23 bridges and culverts, as illustrated in Figure 21. All are owned and maintained by ODOT and 15 of these are on the National Bridge Inventory System (NBIS). Structures are primarily concrete with one steel girder bridge that crosses the Illinois River (east fork). No bridges or culverts are flagged for weight restrictions, and no bridges or structures are structurally deficient or functionally obsolete.

### Sufficiency Ratings

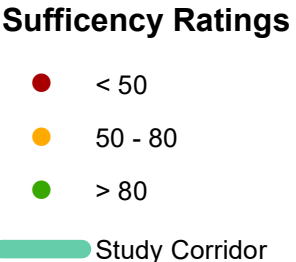
The sufficiency rating is a numeric evaluation of a bridge or culvert's sufficiency to remain in service. Sufficiency ratings range from zero to 100, with zero being entirely insufficient and 100 percent entirely sufficient. The sufficiency rating considers structural adequacy, serviceability, functional obsolescence, importance for public use, eligibility for federal replacement funds, and a few lesser factors. Bridges or culverts receiving low scores are posted to restrict the allowable maximum vehicle weight, rehabilitated, or replaced, depending on the reason for the low score.

A sufficiency rating below 50 implies that the bridge or culvert is in poor condition and may need to be replaced. Bridges or culverts rated between 50 and 80 indicate that they are in fair condition, and that rehabilitation, if cost-effective, will bring them up to current standards. Bridges or culverts with sufficiency ratings above 80 may have specific elements that do not meet current minimum standards, but overall are in good or adequate condition in all areas and are not eligible for federal funding.

Sufficiency ratings of bridges and culverts supporting the corridor are illustrated in Figure 21. Based on the data, one structure has a sufficiency rating above 80, 16 structures have sufficiency ratings between 50 and 80, and six structures have sufficiency ratings below 50. Table 8 summarizes structures with sufficiency ratings below 50, which are all culverts currently.

**Table 8: Sufficiency Ratings**

Sufficiency Ratings (SR) Below 50						
Type	Bridge ID	Carries	Crosses	MP	NBI Bridge	SR
Culvert	01193	US 199	Anderson Creek	17.23	No	41
Culvert	01264	US 199	Round Prairie Creek	9.8	No	41
Culvert	01272	US 199	Butcher Knife Slough	14.59	No	41
Culvert	01197	US 199	Hegan Creek	21.44	No	26
Culvert	01231	US 199	Kerby Ditch	26.62	No	26
Culvert	01232	US 199	Peterson Creek	26.17	No	26



A horizontal number line starting at 0 and ending at 3 Miles. There are three tick marks between 0 and 3, dividing the segment into four equal parts. An arrow points upwards from the 3 Miles mark.

## Bridges and Culverts

### U.S. Route 199, Josephine County, Oregon

## Next Steps

Kittelson and Associates will use the inventory presented in this memorandum to evaluate the current and future system conditions and identify needs for the Corridor Plan.