

# CHAPTER I: SITUATION ANALYSIS AND REGIONAL CONTEXT

## CHAPTER I Situation Analysis and Regional Context

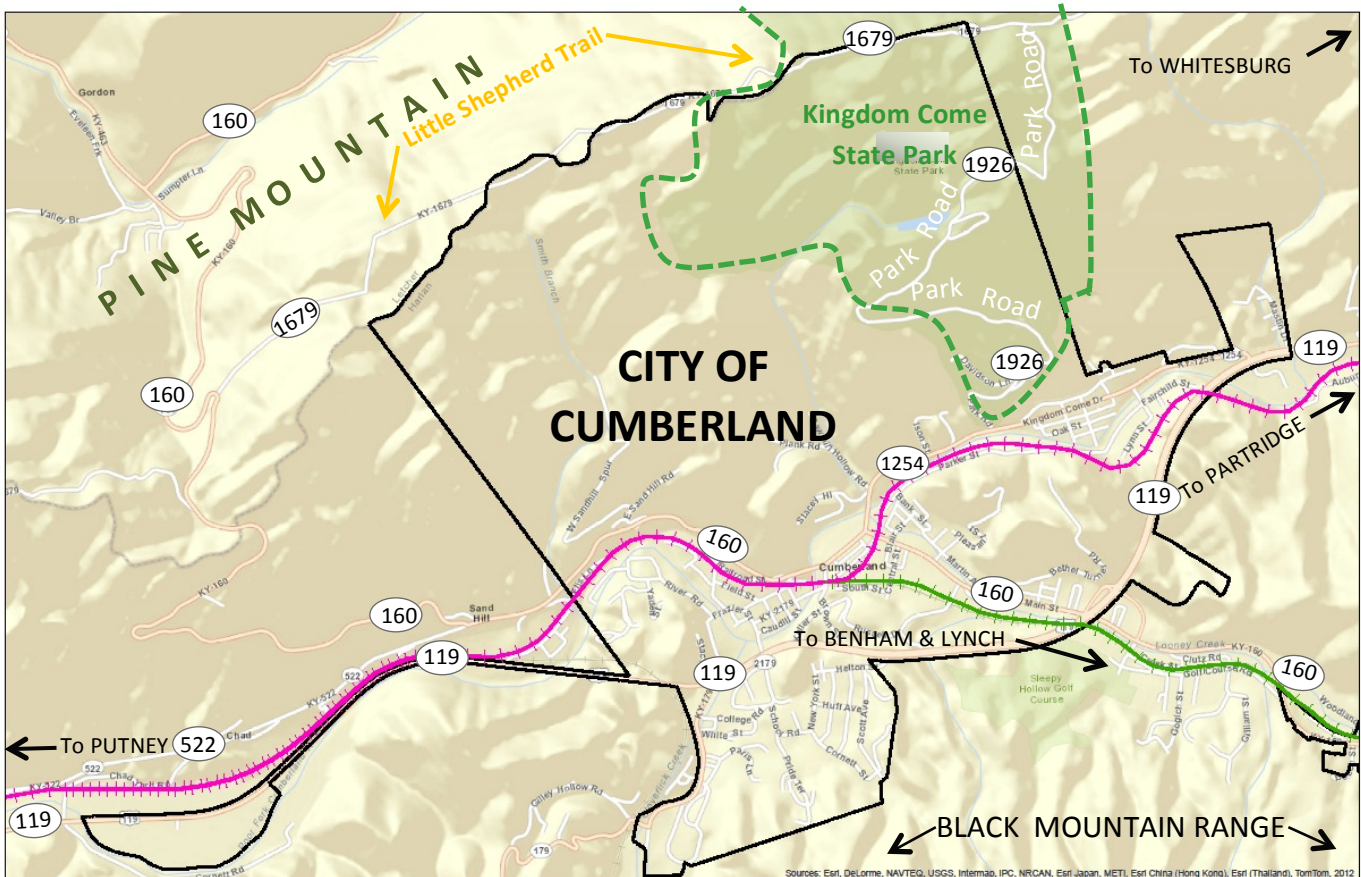
### PRIMARY STUDY AREA

**Kingdom Come State Park** is the highest park in the Kentucky State Park System with an elevation of 2700 feet. This provides some of the most breathtaking views of the surrounding mountains and valleys of anywhere in Kentucky. But this high elevation is not without its challenges. *See Opportunities and Challenges later in this chapter for more on this.* The park has limited amenities but does offer primitive camping, a small fishing lake, putt-putt golf course, picnic areas and numerous trails. *See Chapter VI & VII for more on Kingdom Come State Park trails and amenities.*

**The Tri-Cities Area includes the communities of Cumberland, Benham, & Lynch.**

**Cumberland** is located in southeast Kentucky in the County of Harlan. It has 2,237 residents and is the largest city in the county. It is nestled in the valley between the two largest mountain ranges in Kentucky, Pine Mountain and Black Mountain. It has one hotel, one B&B, six restaurants and a number of stores and businesses. It is also home to Poor Fork Arts & Crafts Guild.

### CORE OF THE STUDY AREA



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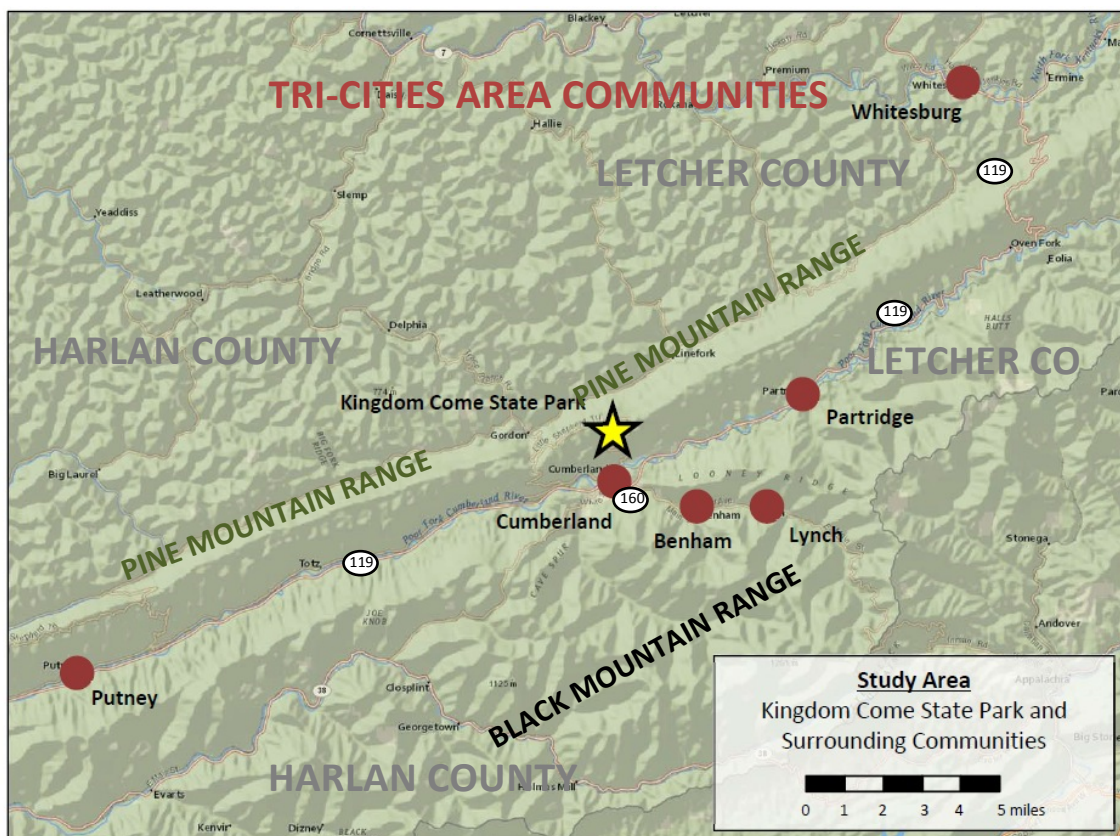
The cities of **Benham** and **Lynch**, both located off KY 160, started as coal towns.

**Benham**, population 500, features the **Kentucky Coal Mining Museum** housed in the old commissary (c. 1920) and the **Benham School House Inn**, an elegant lodging facility in the old Benham School Building that was served as an educational facility from 1926 until 1992.

**Lynch**, population 747, was once the largest coal town in the nation with over **10,000 residents and more than 1,000 company owned structures**. A number of historic structures still remain including **Kentucky's first exhibition mine known as Portal 31**, the **Lynch Depot**, and the **Lamphouse**.

### Other Area Communities:

- **Putney** serves as the western boundary for the study area and includes an **old ranger station that will serve as the Putney Trailhead**.
- **Partridge**, located just east of the Harlan/Letcher county line off of KY 119, is the eastern boundary for the study area. The **Stables at Creekside Glen will serve as the trailhead** and includes riding rings, RV Park, a paylake and cabins.
- **Whitesburg**, the county seat of **Letcher County**, has a population of 2,139 residents and offers a variety of lodging and restaurant offerings and numerous other amenities. The trailhead for the **Pine Mountain State Scenic Trail** is also located in Whitesburg.



*For more about the Tri-Cities Area communities, see Chapter VII.*



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## OPPORTUNITIES AND CHALLENGES

The Kingdom Come Trail Feasibility Study and Conceptual Plan for a hiking/mountain bicycling/equestrian trail connecting Kingdom Come State Park with the communities of Cumberland, Benham and Lynch presented many opportunities and challenges. First and foremost is the **steepness of the grade** of Pine Mountain as one traverses down the mountain to the valley below.

The trail route most recommended by those within the community was to follow the Sawmill Hollow from the lake at Kingdom Come State Park down to the City of Cumberland. But the hollow itself is quite narrow, limiting the opportunity **for creating a series of switchbacks** to reduce the incline as one draws closer to the base. The **number of homes** at the bottom of the mountain where the trail comes out as well as the **concrete/asphalt surface** and **steep grade** of both Spring Avenue and Sawmill Hollow Road make this route undesirable as a horse trail although a hiking trail might be feasible. Plus the total **length of trail one could develop in the limited distance between the top of the mountain to the bottom is not long** enough to entice equestrian riders from outside the area to trailer their horses and bring them to the area to ride which, in turn, limits significantly the economic impact potential of the connector trail.



*Sawmill Hollow Road is a very steep asphalt road which is less than desirable as a horse trail.*

Alternative routes down Pine Mountain were investigated as well as connector routes not just to Cumberland, Benham and Lynch, but also to Partridge, Putney and into Letcher County were explored at the end of this chapter and discussed in more detail in Chapters II and VI.

## TERRAIN/GEOLOGY

Another challenge is the terrain/geology of Pine Mountain which is different than any other ridge line in the Commonwealth. This area is where two tectonic plates have run together and pushed the eastern plate over top of the western plate. Typically, rock strata runs flat or on the horizontal below the surface. Pine Mountain's rock strata runs generally from the southeast to the northwest at about a 45 degree angle upward.



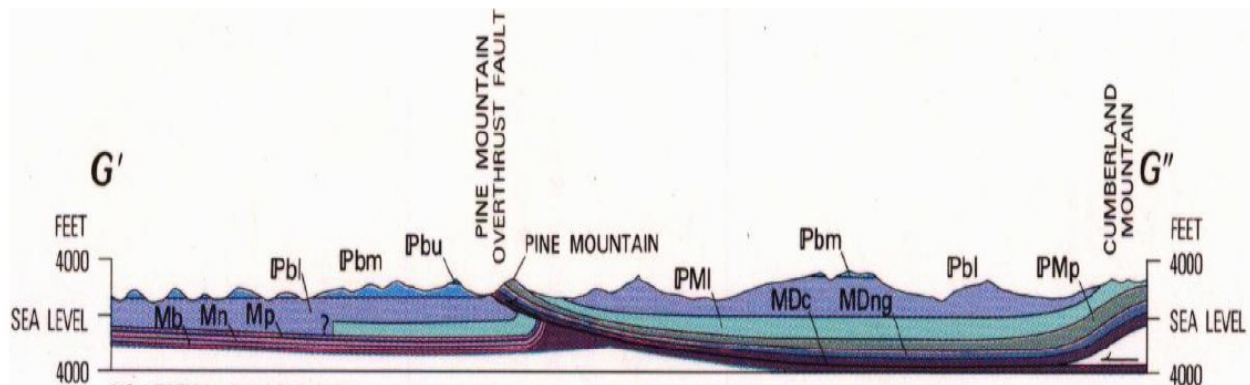
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The result of this diagonal running rock strata is that there is very little and sometimes no surface material on top of the rocks on the southeastern slope with multiple large vertical outcrops that are often more than 50 feet in height facing northwesterly. These large outcrops often run so far that they are not passable.

*The unique geology of Pine Mountain, the steepness in its grade, and the number of homes near the bottom of the mountain provided significant challenges and reduced one's options for connecting Kingdom Come to Cumberland.*

These outcrops and bare flat rocks are more pronounced in Kingdom Come State Park than other sections of Pine Mountain with the top of the mountain having a fairly gentle grade and lots of Mountain Laurel.

### CROSS SECTION OF PINE MOUNTAIN



NW-SE Cross Section through Pine Mountain Fault (see figure above for location) (modified from McDowell et al., 1981)

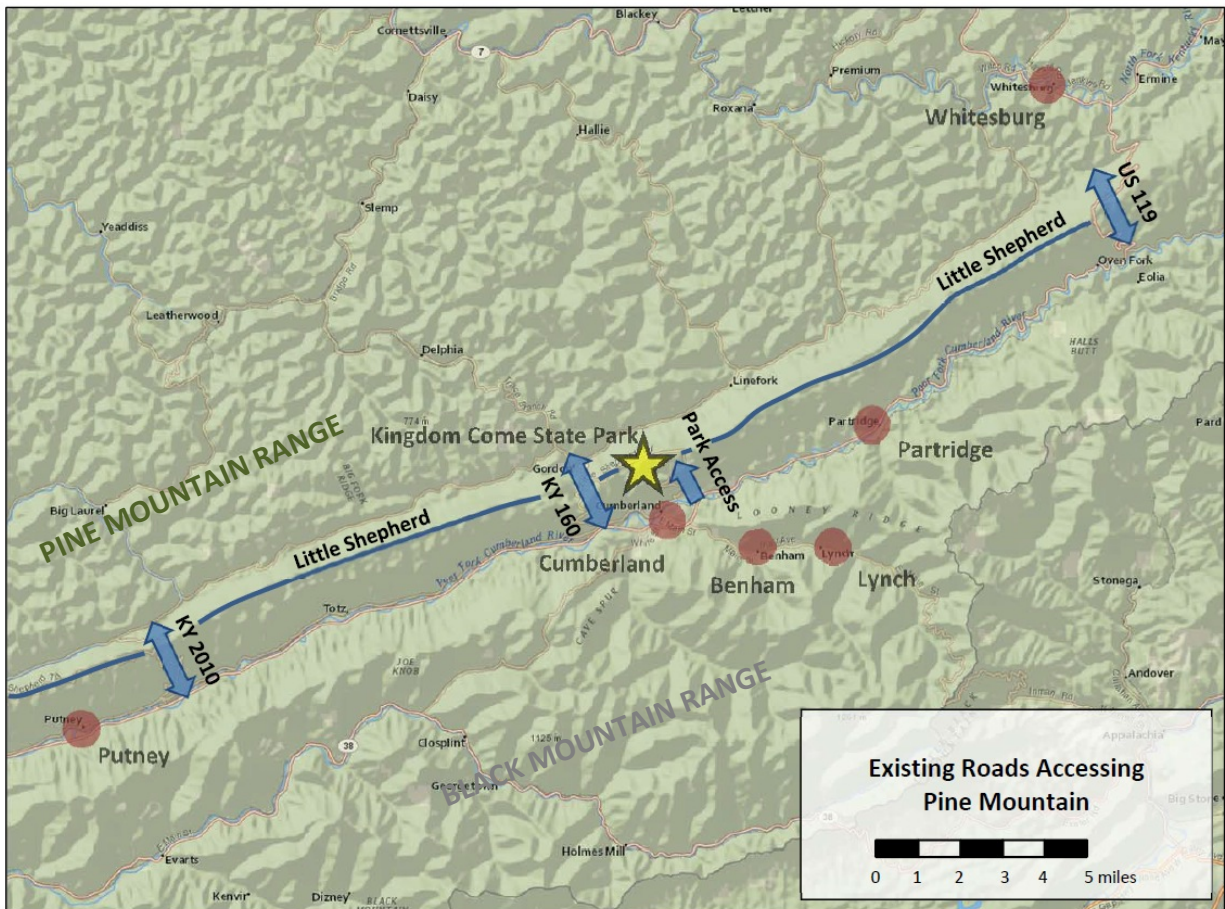
As one draws closer to the bottom of the mountain and the Community of Cumberland, the grade increases significantly as does the number of homes in close proximity to each other further limiting the areas where switchbacks would be feasible and making the slope too steep for a horse and rider to traverse safely. This, in turn, significantly reduces the trail options for accessing the City of Cumberland. *Chapter II discusses the proposed connector trail options in detail.*

### EXISTING ACCESS ROUTES UP PINE MOUNTAIN

As described above, the terrain and geology of Pine Mountain create a formidable obstacle to cross. This is evidenced by the limited number of access routes from bottom to top. **Existing routes crossing the mountain in the region are limited in both number and quality.** In a 63-mile stretch of Pine Mountain extending from Harlan to Elkhorn City, there are only 4 crossings. Within the extended study area **KY 1926 (Park Road)** climbs to the top and only three roadways provide access across the mountain. They are **KY 2010, Hwy 160, and US 119.**

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The following is a brief description of the existing roadways that takes one up to the top of Pine Mountain within the extended study area.



- **KY 2010** is a narrow 2-lane asphalt road access route passing across the mountain at Shell Gap into Letcher County. It begins in Putney leaving KY 119 at an elevation of 1280 feet and winds up the mountain for 4.3 miles, crossing the little shepherd trail at an elevation of 2520 for an average grade of 5.5%.
- **Hwy 160** starts out in Cumberland at an elevation of 1417 and travels up the Mountain for 2 miles crossing the Mountain thru Hurricane Gap at an elevation 2202 for an average grade of 7.3 % this route is paved two lanes with limited to no shoulders and is heavily traveled. Partially due to the Quarry located at the top of the mountain.
- **KY 1926 - Kingdom Come State Park Access Road**

**KY 1926**, also known as **Park Road**, is the primary access into Kingdom Come State Park from Cumberland. KY 1926 departs Kingdom Come Drive at the bottom of the mountain in Cumberland and traverses thru the State Park connecting to the Little Shepard Trail at the top of Pine Mountain. Typical of most roadways on Pine Mountain, Park Road is a narrow, 2-lane asphalt roadway with little or no shoulders, steep and winding. The combined grade and geometry of the existing access road is such that visitors with campers and trailers as well as



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some smaller vehicles at times have difficulty making the climb to the top. David Kennedy, a magistrate for Harlan County lives at the bottom of the mountain. David reports that he has on several occasions offered parking on his property and taken visitors up the mountain to the State Park in his four-wheel drive truck because their vehicles could not make it to the top.

Due to the transportation challenges of the existing access to the Park, in 2006 the Kentucky Department of Transportation (KYTC) began the process for the design and construction of a new access to Kingdom Come State Park. Following studies and preliminary design, a route was selected and design is currently complete for the new route. The project is scheduled for construction in 2015. As illustrated in the map below, the alignment of the new route is much improved and eliminates the compounding effects of grade and switchback curves.



However, due to the significant change in elevation, grades will remain significant. The approximately 4,500 foot new roadway will have an average profile grade over 10% with at least one short section in excess of 15%. It is recommended that the existing park road (KY 1926) remain and be promoted as a scenic challenge route for hikers, bikers, and motorcyclists once the new road is completed.

- **US 119** begins in Pineville KY and follows along the south side of the Pine Mountain Range thru Harlan, Cumberland, then crosses the Mountain into Whitesburg where it ends. US 119 is the primary route across Pine Mountain in this region.

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## EXISTING TRAILS IN THE TRI-CITIES AREA

**Pine Mountain State Scenic Trail** is the most notable. When completed, it will be the longest trail in Kentucky, crossing four counties and spanning 110 miles. A portion of the trail travels along KY 1679 known locally as the **Little Shepherd Trail**, an asphalt and gravel road that travels east to west across the Pine Mountain Range connecting the community of Whitesburg Kentucky to Harlan. A section of the route travels through **Kingdom Come State Park** west and intersects with a connector trail that takes one to the trailhead at Putney.

The **Pioneer Horse Trail** is a seven mile trail that starts at the trailhead at Pine Mountain State Scenic Trail at US 119 at Whitesburg and parallels the Little Shepherd Trail across Pine Mountain and terminates at Scuttlehole Gap, about 7 miles short of reaching Kingdom Come State Park.



*Pioneer Horse Trail parallels the Little Shepherd Trail up Pine Mountain.*

**Two potential rails-to-trails** connect Cumberland to the Stables at Creekside Glen and to the historic coal towns of Benham and Lynch.

*All of these trails and those listed below are discussed in more detail in Chapters II, VI & VII.*

The study area includes **thirty-nine existing non-motorized trails with a total length of 77 miles**. There are also **100 miles of motorized trails for off-road vehicles** and **more than 350 miles of scenic driving tours**. Campgrounds are strategically located at the Putney Creek OHV Trailhead at Black Mountain ATV Park (just off U.S. 119), Portal 31 RV Park in Lynch, the Creekside Glen Trailhead in Partridge, and primitive campsites within Kingdom Come State Park. *See Chapter VI & VII for more on existing trails, trailheads, and campgrounds.*



*Existing two mile Rails-to-Trails in Benham. There is also a one mile Rails-to-Trails in Lynch*



*Existing River Walk in Downtown Cumberland*



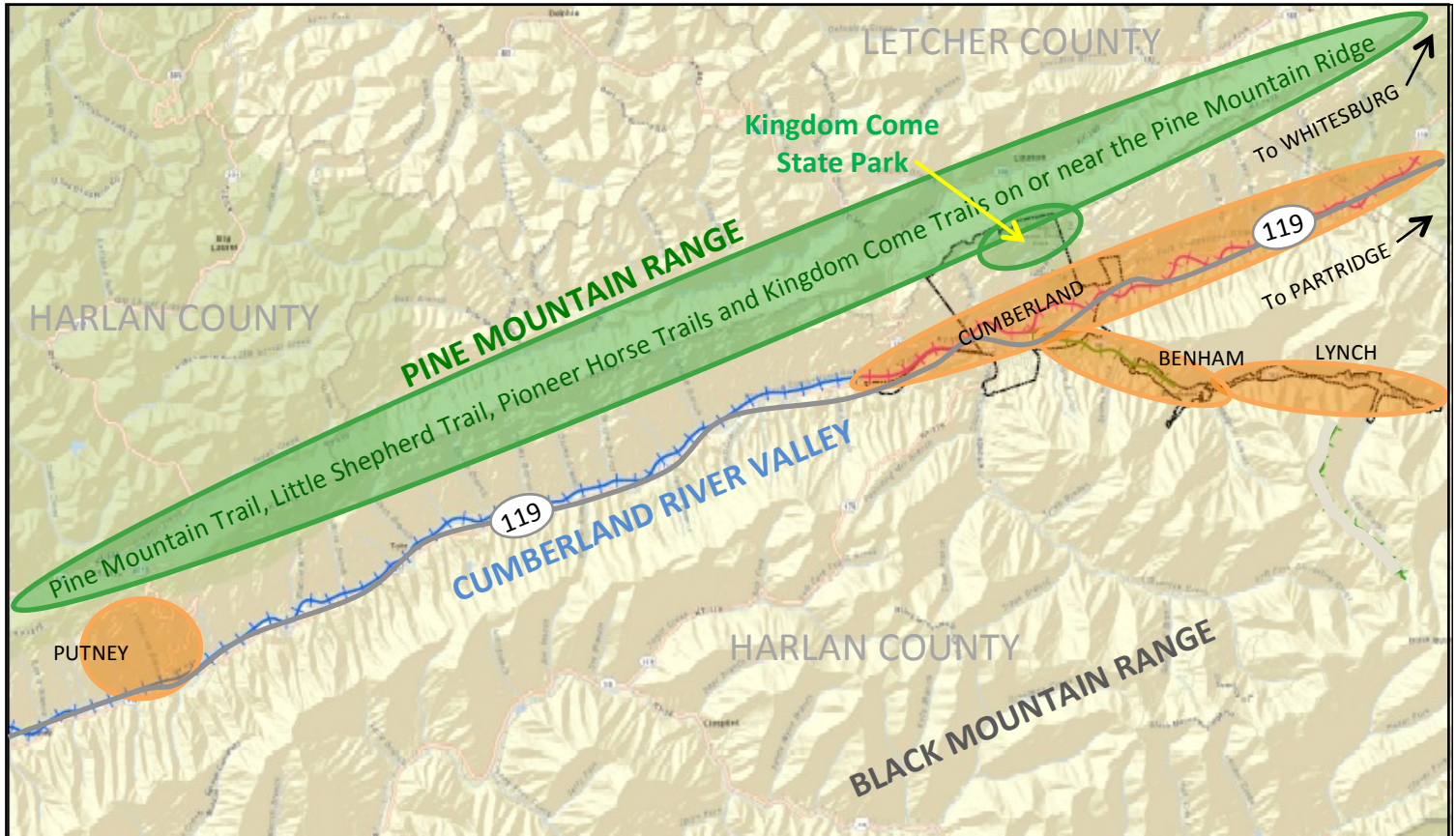
*Nature Haven Trail in Kingdom Come State Park*



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The majority of the existing non-motorized trails are located along and near the **Pine Mountain Ridge** (highlighted in green). These trails include the **Pioneer Horse Trail**, the **Pine Mountain Trail**, the **Little Shepherd Trail**, and **fourteen trails within the Kingdom Come State Park**. The motorized trails are nearly all on **Black Mountain**. The remainder existing and potential trails and trailheads are located in the **Cumberland River Valley** (highlighted in orange) primarily in or near the communities of Benham, Lynch, Cumberland, Partridge and Putney.

### PRIMARY LOCATION OF EXISTING TRAILS IN THE STUDY AREA



As brought out in this chapter, due to the steep grade and rough terrain of Pine Mountain, existing roads and trails connecting the valley floor to the top of the mountain are limited at this time. This is particularly true when attempting to connect the City of Cumberland to Kingdom Come State Park.

Do keep in mind, **developing a connector trail** or multiple trails **from the State Park into the City of Cumberland will create some benefit to the community** but it in itself will not make the area a trail destination nor will it make Cumberland a trail town. **A network of trails is needed** to make this happen. The study area already has numerous trails or potential trails that could be interconnected with the proposed Kingdom Come/Cumberland connector trail(s) **to make the Tri-Cities area a “trail town destination”**. See Chapter VI for more on other trails in the area.