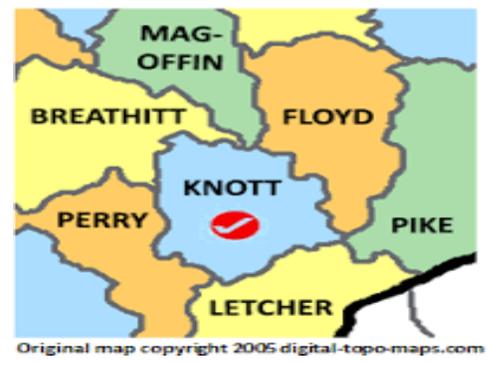




The City of Hindman/Knott County Bicycle/Pedestrian Master Plan



2022



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INTRODUCTION

Bicycle and Pedestrian Master Plans are developed to address health, safety, tourism, and economic issues. The City of Hindman and Knott County, Kentucky plan focuses on the needs of the biking and walking pedestrians in the area. According to Kentucky's Vision for Access to Physical Activity Report, active transportation, such as walking or bicycling, allows residents to get physical activity while performing daily routines, such as commuting to work or school. Walking is one of the most popular forms of physical exercise for adults because it is less strenuous than using weights and does not require a lot of skill. This opportunity is supported by Cooperative Agreement number NU58DP006497, funded by the Centers for Disease Control and Prevention (CDC). Funding is awarded to the Kentucky department for Public Health to Implement the project "Kentucky State Physical Activity & Nutrition Plan."

PURPOSE OF THE PLAN

The purpose of the Master Plan is to identify, design, construct, and rehabilitate needed walkways and identify places to design and build future bikeways that connect neighborhoods, business centers, parks, and schools. It sets forth ideas and strategies for making Knott County an inviting place to bike and walk. The Master Plan is a guide for city, county, and state governments, developers, road builders, citizens, and bicycle and walking enthusiasts when planning and developing future projects in the community.

BENEFITS OF WALKING AND BICYCLING

There are numerous reasons and benefits to promote walking and bicycling in Knott County. Improved health, mobility, with an enhanced economy and quality of life are just to name a few.

Improved Public Health

In 2019, Kentucky was ranked the 43th healthiest state in the nation. Knott County ranks 110th in Health Outcomes and 105th for Health Factors out of 120 Kentucky Counties. It is widely recognized that regular daily physical activity reduces the risk for heart disease, diabetes, and obesity. By increasing the amount of public space for convenient and safe recreation and active transportation, Knott County can increase the overall health of the community.

Improved Mobility

Accommodations for walking and bicycling as an alternative means of exercise and travel may appeal to a broader range of individuals within the community. Adults whom have small children at home will be susceptible to use the walkways as a way to enjoy the beautiful scenery that surrounds this area. Better accommodations will also help those who have to use other means of transportation. Small children and the elderly would greatly benefit from having multi-modal choices (non-motorized transportation options) for daily travel and activity. By planning and providing more connections and greater access to all parts of the community, Knott County can increase the ability to meet transportation needs, and help improve the health of its residents.

Enhanced Economy and Quality of Life

A better walking and biking environment improves the quality of life for the surrounding community. Accommodating and safe walking and biking facilities in the community will create more opportunities for social interactions. A community that is walkable and bike-able for all ages will have positive economic advantages over other communities, such as having higher property values, being more attractive to new businesses, being more inviting for new home buyers, and having more to offer tourists. By planning for future bicycle and pedestrian facilities and accommodations, Knott County can additionally benefit and become an even more thriving community within the region.

VISION AND GOALS OF THE PLAN

The overall goals of the Bicycle and Pedestrian Master Plan is that it will guide the city and county as it moves forward with implementing the plan. A goal summary is provided below:

Bicycle and Pedestrian Network and Support Facilities – Developing a network for safe and easy mobility throughout the city, county, and to the regional network.

Safety, Security, and Equity - Providing safe and useful connections between neighborhoods, business centers, parks, recreation facilities and schools. Modal considerations should be made with all residents, especially those who do not have access to private motorized vehicles in mind.

Transportation and Land Use – The adjacent land within the right-of-way of roadways, near commercial areas, and government owned properties should be considered for all uses. These areas are valuable with potential when providing non-motorized travel accommodations where walking and cycling improvements are most needed.

Education and Awareness – Communication lines should remain open so that all users of the transportation network have improved awareness of the need to share the roadways and trails, and recognize and observe traffic safety laws.

Maintenance and Operations – Maintain biking and walking facilities in good condition and serve the purpose for the intended users.

SOCIOECONOMIC ANALYSIS OF KNOTT COUNTY

The city of Hindman, Kentucky, is in Knott County in southeastern Kentucky. It is located south off of Highway 80. In the 2019 American Community Survey by the US Census Bureau, there were 15,260 residents in Knott County. The county was founded in 1884 and was named after James Proctor Knott. The county has a total area of 352 square miles, in which only 1.3 square miles is water.

Of the county population in 2019, 96.8% of residents are white, 0.5% are African American, 0.2% are Asian, 0.4% are Hispanic and 1.2% are 2 or more races. The total median household income is \$31,198 for residents of Knott County in 2019. The percentage of residents in Knott County below the poverty level is 24.5% in 2019. Also, in 2019, the American Community Survey provided estimates of how workers aged 16 and over to work. Below are those estimates. The ACS also determined that the mean travel time to work traveled for 2019 was 31 minutes.

POLICY FRAMEWORK AND PREVIOUS WORK

It is hopeful that by adopting this Master Plan, momentum can be gained and lead into adoption of favorable communal policies and ordinances, to finally require consideration, planning, and implementation of adequate future bicycle and pedestrian facilities with all new development and major reconstructions.

Method of Transportation	Number	Percentage of Working Population
Drove alone in car, truck, or van	3,503	80.5%
Carpooled in car, truck, or van	407	9.36%
Public transportation	32	0.74%
Walked	186	4.28%
Other (taxi, motorcycle, bike, etc)	90	2.07%
Worked at home	132	3.03%

Source: U.S. Census Bureau, Table B08141 2015-2019 American Community Survey 5-Year Estimates

Kentucky River Area Development District

The Kentucky River Area Development District, which includes the counties of Breathitt, Knott, Lee, Leslie, Letcher, Owsley, Perry and Wolfe, does not have an active Pedestrian/Bicycle Master Plan, but has published their Goals and Objectives. One goal is to “Continue to support and improve multi-modal transportation in the region.” This goal includes one objective which relates to Pedestrian/Bicycle Facilities:

- Support efforts to promote pedestrian and bicyclists’ movements along all highways and the development of recreational trails in the region.

Kentucky Transportation Cabinet Bicycle and Pedestrian Plan

In 2002, Kentucky adopted a Pedestrian and Bicycle Policy, in response to a US Department of Transportation publication promoting the acceptance and/or consideration of bicycle and pedestrian facilities in roadway projects. KYTC will consider bicycle accommodations if the roadway project meets one or more of the following criteria:

- A bicycle facility already exists on the current roadway.
- The recommended roadway cross section is urban (curb and gutter). In urban roadway cross sections (curb and gutter), accommodations to assist bicyclists include a range of measures from signage, bicycle-friendly grates, and wide curb lanes, to bicycle lanes.
- Project limits are adjacent to an existing residential, commercial, office, industrial, institutional, public or semi-public use area or adjacent to an area planned to develop into one of these uses within the next 20 years. Planned development may be determined by a local comprehensive plan or the public-involvement process.
- A state, locally, or regionally adopted bicycle plan has designated bicycle improvements or a bikeway in the area of the specific roadway project or for that classification of roadway.
- A KYTC Small Urban Transportation Study has specific bicycle improvements recommended for the roadway project.
- Bicycle traffic exists along the current roadway: This may be determined by the observation of bicycle traffic or by the public-involvement process.
- Public interest in and demand for bicycle accommodations are determined at the planning and preliminary engineering public-involvement stages.

The Hindman/Knott County Bicycle/Pedestrian Master Plan is intended to strengthen the notion and incorporation of bicycle and pedestrian facilities in KYTC plans. It’s also there to provide guidance for making those considerations in the transportation project development process as early as possible. A copy of this plan will be provided to KYTC Central Office, KYTC Highway District Office 12, and to local officials to ensure that this analysis can be used to help develop projects in the area.

FACTORS THAT INFLUENCE WALKING AND BICYCLING IN HINDMAN

Destinations

The community has places that can be major attractions for people walking and cycling. These include retail stores, churches, playgrounds, schools, parks, medical facilities, and places of employment. It is important to provide safe and obliging options for all modes of transportation, other than just for motorized travel.

Time and Distance

Walking and biking to destinations is easier and more manageable when doing so in the urbanized downtown area than in the rural sections of the county. Research shows that the average walking trip is less than 1 mile and bike trips are less than 5 miles. Trips with a “recreational” or “exercise” emphasis tend to be longer. If walking and biking becomes safer and accommodating people are more likely to do so.

Demographics

Those who are unable to drive due to age, medical or economic reasons, or don’t have a drivers’ license due to traffic violations rely on walking and cycling for transportation. It is important to plan for

the needs of all residents of Knott County. Furthermore, the county should include residents of all abilities.

Environment

Weather and traffic play an all-important role in how often people in the community walk or bike for transportation. Barriers can be created when walking or biking through the county when hot and humid summer conditions and cold and wet winter conditions as well as narrow, curvy roads with fast moving traffic are combined together.

Community Attitudes

A positive perception can play a very important role in how frequently a person will walk or bike for transportation or recreation. If the perception is seen as socially acceptable then the perceptions of the activity will change in a positive manner.

DESIGN STANDARDS AND GUIDELINES

The Kentucky Transportation Cabinet (KYTC) has published Statewide Pedestrian & Bicycle Travel Policy which provides guidance on planning for and accommodating pedestrians and cyclists in our state's transportation system. It is available at <http://transportation.ky.gov/bike-walk/Pages/Laws-and-Policies.aspx>

In conjunction with KYTC District 12, the City of Hindman, and Knott County Road Department, planning activities should always include sidewalks and bicycle facilities (where feasible). Rural area roadways should consider including wide paved shoulder (5 feet or wider) when and where feasible to further accommodate non-motorized transportation.

Pedestrian facilities should always be constructed to be compliant with the Americans with Disabilities Act Accessibility Guidelines (ADAAG) to accommodate all people who live in or visit Hindman. They are available at https://www.ada.gov/2010ADAstandards_index.htm

Paved roadway shoulders should include bicycle gaps within the rumble strips/stripes (10' gaps space every 50') to allow cyclists to exit either the shoulder or the roadway at reasonable interval. Rumbles should not extend continuously onto side roads. Shoulder rumbles that are deemed necessary within the urban boundaries should be the rolled type, as opposed to the more aggressive milled type.

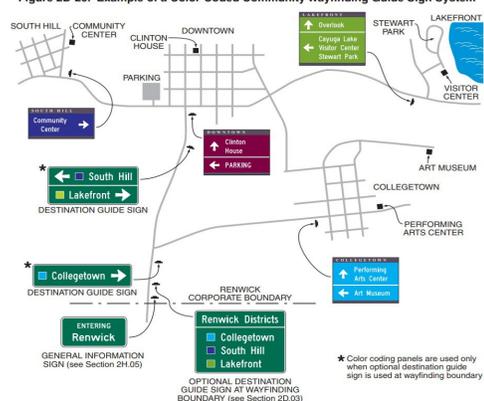
SIGNAGE AND MAPPING

Figure 2D-18. Examples of Community Wayfinding Guide Signs



Source: From MUTCD Manual 2009 Edition with 2012 Revisions

Figure 2D-20. Example of a Color-Coded Community Wayfinding Guide Sign System



Project planners should refer to the Manual of Uniform Traffic Control Devices (MUTCD) and consult with KYTC for all signage associated with roadways, bicycle, and pedestrian facilities before recommending or installing. The MUTCD Manual can be found here: https://mutcd.fhwa.dot.gov/kno_2009r1r2.htm.

It is recommended that a city and county wide bicycle and pedestrian travel and facility map be developed and produced for current and future facilities.

Appropriate bicycling and pedestrian facility wayfinding signage should be considered in conjunction with a citywide navigational map to aid non-motorized travelers with navigation around the city. Appropriate warning signs should be considered and placed in advance of all bicycling and pedestrian facilities when deemed necessary. These signs should be part of the consideration with all new transportation projects.

BICYCLE PARKING

The City of Hindman should seek to encourage and incentivize businesses and organizations that provide secure and accessible bike parking that is convenient for users.

In general, bicycle racks should be in a highly visible area to prevent theft, be unobstructed, nor cause any obstruction to other traffic, and be mounted solidly to the ground or building in such a way that it cannot be easily removed. There should be a minimum clearance of 48" around the bike parking area and 72" should be allowed for a single bike lengthwise unless the rack allows vertical mounting. When feasible and possible bike parking should be covered to protect cyclists and their bikes from the weather.

Please refer to the *Association of Pedestrian and Bicycle Professionals Bicycle Parking Guidelines* for more details at http://www.apbp.org/?page=Bike_Parking

DEFINITIONS

Bicycle Boulevard

Motorists and bicyclists share the roadway, but it is modified to be desirable for bicycle travel via traffic calming and speed reduction techniques, signage and pavement markings, and intersection crossing treatments. Bicycle boulevards typically provide for the through movements of cyclists while discouraging through trips by motorists (except those directly accessing properties along the route). Bicycle boulevards are typically planned and installed on low-volume, low speed shared streets that run parallel to a major vehicular corridor that is less desirable for bicycling.

Bicycle Gap

A recurring short gap in continuous shoulder rumble strips designed to allow for ease of movement of bicyclists from one side of the rumble to the other. A typical pattern is gaps of 10 to 12 feet between groups of the milled-in elements at 40 to 60 feet.

Bike Lane

A portion of the roadway is designated by striping, signage, and pavement markings for the preferential or exclusive use of bicyclists. Bike lanes can increase bicyclist comfort and safety, promote proper riding, discourage sidewalk riding, and increase awareness and visibility of cyclists to motorists. Bike lanes may also be paired with a painted buffer space to create a “**buffered bike lane**” which further separates the bicycle lane from adjacent motor vehicles lanes or parking lanes. Bike lanes may also be physically separated from motor vehicle traffic by grade or a barrier, such as a median, curb, or parking lane. These “**cycle tracks**” can increase the comfort of less skilled bicyclists; however, they are currently classified as ‘experimental’ in the U.S. and require a detailed design/approval process.

Bicycle Rack

Bike racks are basic infrastructure for a bicycle-friendly community. Bicyclists need a secure location to park their bike just as motorists need a place to park their car.

Bicycle Route

“Bike Route” signage is installed along shared roadways to provide wayfinding and to connect facilities and destinations. For instance, a bike route might be signed along a residential street that connect two trails. It may also identify a preferred route to a destination or through an area of town. The signage also provides a visual clue to motorists that they are driving along a bicycle corridor and should use caution.

Bikeway

Any road, path, or way which in some manner is specifically designated as being open to bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes.

Crosswalk

That part of a roadway at an intersection included within the connections of the lateral lines of the sidewalks on opposite sides of the highway measured from the curbs or in the absence of curbs, from the edges of the traversable roadway, and in the absence of a sidewalk on one side of the roadway, the part of the road way included within the extension of the lateral lines of the sidewalk at right angles to the center line: any portion of a roadway at an intersection or elsewhere distinctly indicated as a pedestrian crossing by pavement marking lines on the surface, which might be supplemented by contrasting pavement texture, style, or color.

Crosswalk Lines

White pavement marking lines that identify a crosswalk.

Curb Cut

A solid (usually concrete) ramp graded down from the top surface of a sidewalk to the surface of an adjoining street. It is designed for pedestrian uses and commonly found in urban areas where pedestrian activity is expected.

Multi-Use Path

Shared use paths are designed for multiple users, including pedestrians, wheelchairs, bicyclists, and inline skaters. They are physically separated from motorized vehicular traffic by an open space or barrier. They are either within the roadway right-of-way, or within an independent right-of-way, often along stream corridors or abandoned rail lines.

Paved Shoulder

At least 4 feet of smooth riding surface, exclusive of rumble strips, is provided for use by cyclists and pedestrians and for disabled motor vehicles.

Rumble Strip

A *shoulder rumble strip* is a longitudinal safety feature installed on a paved roadway shoulder near the outside edge of the travel lane. It is made of a series of milled or raised elements intended to alert inattentive drivers (through vibration and sound) that their vehicles have left the travel lane. An *edge line rumble strip* is a special type of shoulder rumble strip placed directly at the edge of the travel lane with the edge line pavement marking placed through the line of rumble strips.

Sharrow

Bicyclists and motorists share the travel lane, but it is marked with Shared Lane Markings (SLM) or Sharrow to help position bicyclists within the shared lane and to encourage safe passing.

Share the Road

Share the Road warning signage may be installed along shared roadways to alert motorists of the presence of bicyclists along high-use bicycle corridors. For instance, signage might be installed along a popular bicycle commuter route through a neighborhood or along a recreational route regularly used by cyclists in a rural area.

Sidewalk

A walkway separated from the roadway with a curb, constructed of a durable, hard and smooth surface, designed for preferential or exclusive use by pedestrians.

EXISTING CONDITIONS AND ANALYSIS

Knott County and the City of Hindman has a strong outdoor recreational community. There are many outdoor walking events, as well as local clubs who actively encourage local residents for participation. Carr Creek Lake State Park, as well as The Gingerbread Festival help Hindman and Knott County with tourism efforts from out-of-town visitors.

From field observations, investigations, and surveys filled out by local residents, very few people commute to work without some sort of motor vehicle. Some non-motorized travel was observed, but it seemed to be concentrated in lower income communities and the downtown area.

EXISTING BICYCLE RESOURCES AND EVENTS

There are no existing citizen groups that are bike enthusiasts. The City of Hindman and Knott County does not have any bike lanes, biking trails, or paths other than the route used by bicyclist on the TransAmerica Bike Route. It is hopeful that with multi-purpose paths and bike lanes being added in the future, citizen organizations will become more enthused about using and teaching bike safety to the youth in the community. The Kentucky section of this national trail is more than 500 miles long. This route runs through Kentucky from rural Crittenden County at the Ohio River to the mountainous area of Pike County. KYTC has updated the USBR 76 signage for the entire route across the state. KYTC continues to work with neighboring states interested in the USBRS and other cross-state bicycling touring routes. Adding bike racks in front of businesses they may patronize, and or adding additional signage for way finding and safety.

EXISTING PEDESTRIAN RESOURCES AND EVENTS

Most of the pedestrian activity in Hindman is mostly recreational. The running tracks in the county are associated with the local high schools, but most of the running/walking activity in the area occurs in the downtown area.

Hindman has one shoe store Holly Hills Footwear that sells running shoes.

No designated walking tours exist of the downtown area. Interviews with residents, local government, and responses to the public survey also indicate a desire for enhanced marked pedestrian friendly crosswalks downtown.

Within Knott County, outdoor enthusiasts can enjoy the walking tracks at the local high schools and parks.

FACILITIES CURRENTLY AVAILABLE FOR BICYCLING AND PEDESTRIAN ACTIVITIES

Collection Methods

Data was obtained from the Kentucky River Area Development District database of bicycle and pedestrian facilities. This data was reviewed and updated as appropriate.

Results

The City of Hindman has a network of sidewalks in the downtown area. There are gaps in the connectivity due to deteriorated or missing sidewalk sections. The total length of sidewalks in the city is approximately 1.5 miles. Marked crosswalks are placed inconsistently around the city. There are fewer sidewalks outside of the downtown area. A map of the facilities is included in Appendix D.

The counts of bicyclists, pedestrians, and recreational runners that use the transportation system in Hindman and Knott County are not reliable. Evidence shows that the number of regular walkers and runners are few and a smaller number of active cyclists. The number of cyclists that are visiting is equal to or greater than those who live within the city. Strava heat maps help indicate routes heavily

used by bicyclists and/or pedestrians.

Highlights

The City of Hindman holds many events throughout the year. The Gingerbread Festival is held in the month of September, starting the Thursday after Labor Day. A Relay For Life Walk is held in the summer months as well. Knott County also has many attractions for people out of town to enjoy. Mine Made Adventure Park and Campground holds many events throughout the year. The park hold many trail rides for those who enjoy riding all-terrain vehicles, side by sides, jeeps and horses. The Park has trails for those who are just beginning to ride to those whom are more experienced riders. In May the Knott County Horse Trail Ride is held. The Mine Made Bluegrass Festival is held in June. With all the events happening in the area the town will get many visitors from out of the area.

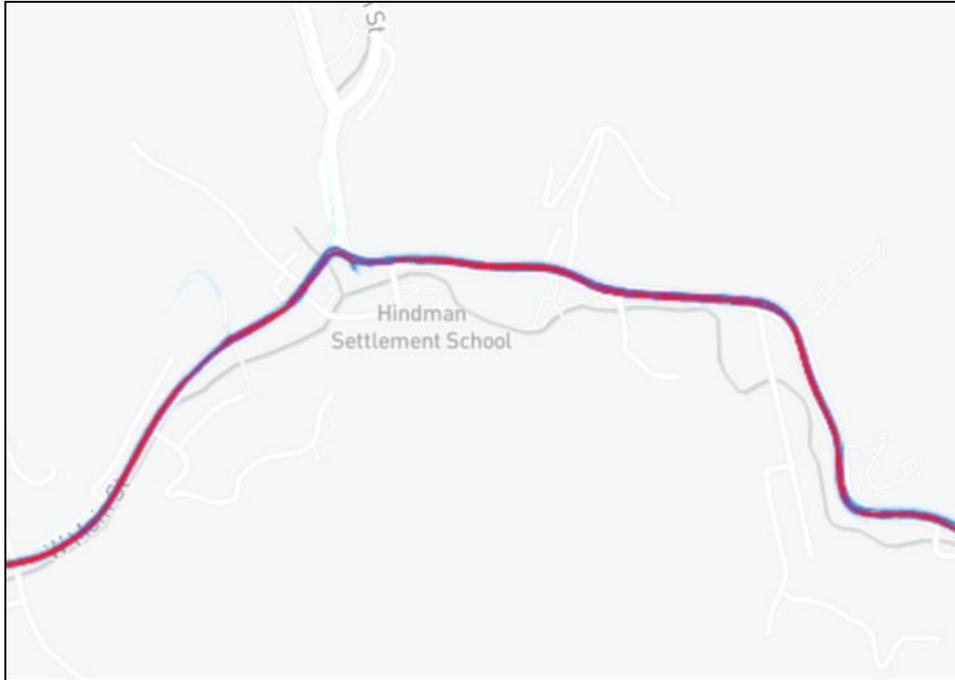


Example of a small sign in Pikeville, KY that could be adapted in Hindman to promote walking

STRAVA MAPS OF CURRENT USERS

The use of Strava Heat Maps can be used in determining the popular areas for bicycling and walking. The maps below show areas for bicycling and walking in Hindman. For bicycling, the hot area shows the use of the U.S. Bike Route 76. There is no significant activity in the downtown area for pedestrians.

Strava Heat Map of Bicycle Activity in Hindman, Kentucky



Strava Heat Map of Pedestrian Activity Pedestrian in Hindman, KY



RESOURCES AND PUBLIC INPUT

COMMUNITY AND CIVIC RESOURCES

The Knott County School System has five elementary schools, and two high schools which are mostly scattered throughout Knott County.

The Knott County Public Library is located on Hwy. 160 south on the first floor of the Opportunity Center. The library shares this building with Knott County Drug Abuse Council, and the Carl D. Perkins Head Start.

Knott County has an abundance of recreational facilities. There is an outdoor swimming pool, baseball/softball fields, basketball courts, tennis courts, a playground, several shelters, a walking track, and skateboard park. There are also smaller parks located in different parts of the county.

The area of downtown Hindman is a mixture of commercial and residential development. There are retail business areas, restaurants, as well as banking and city government offices. There are also churches in the downtown area. The Knott County Sportsplex is also located near the city. The sports plex has basketball, and volleyball courts, baseball and softball fields, a fitness center, walking track and a driving range.

Carr Creek State Park is located about 10 miles from the city of Hindman.

PUBLIC INPUT AND PREFERENCES

Electronic Survey

The early stages of the plan development process included an electronic survey. The survey link was shared on the social media pages of the city, county, the ADD, and other local organizations. The survey included questions for the citizens of Hindman and Knott County to provide input on their walking and biking habits and preferences. This information was used in the development of the proposed bicycle and pedestrian facility networks and also informed the development of goals and objectives. The following is a summary of some of the survey results. Results are in Appendix A.

- ◆ Parks, Schools, Church, and homes of friends and relatives are within 2 miles of home that residents could walk or bike to. However, 86.0% of the survey respondents said they used a motorized vehicle as their main source of transportation.
- ◆ The main factors that discourage citizens from walking and biking more are traffic, not enough sidewalks, and too far from home. These are also the main factors that discourage citizens from letting children walk or bike to school.
- ◆ 74.4% of residents would consider walking or biking to destinations if they had a better path.
- ◆ 79.1% of the residents surveyed would walk or bike more regularly if Hindman had more friendlier paths.

Bike/Walk Events

There are several walking events in the City of Hindman with many of the organizations in the city and surrounding area. The Gingerbread Festival is held the first Thursday after Labor Day. On the Saturday of the Gingerbread Festival a 5k is held. On the first Friday in December a Christmas parade goes through town. It is hopeful that new events can be held downtown with new and improved sidewalks.

BIKEABILITY AND WALKABILITY AUDITS

BIKEABILITY AUDIT ANALYSIS

Due to no bike lanes or bike facilities in the county bikability audits were not conducted. In the future when bike lanes and bike facilities are added the City of Hindman and Knott County, the following questions will be used when performing a bikability audit. Bike lanes will be marked according to the U.S. Department of Transportation's Manual on Uniform Traffic Control Devices (MUTCD).

- Did you have a place to bicycle safely?
 - A) On the road, sharing the road with motor vehicles?
 - B) On an off-road path or trail, where motor vehicles were not allowed?
- How was the surface that you rode on?
- How were the intersections you rode through?
- Did drivers behave well?
- Was it easy to use your bike?
- What did you do to make your ride safer?

WALKABILITY AUDIT ANALYSIS

Representatives from the Kentucky River District Health Department and from the Kentucky River Area Development District conducted a Walkability Audit of downtown Hindman and surrounding areas. Inventory was taken as to where crosswalk signals were not working/not available, sidewalks that were broken or unlevel, and other issues for pedestrians.

Some of the questions brought up during the Walkability Audit of Hindman included:

- Location?
- Is there a presence of a suitable walking surface?
- Is there potential for conflict with motor vehicle traffic due to driveway crossing, speed and volume of traffic, large intersections, and low pedestrian viewing?
- Presence and visibility of crosswalks on roads intersecting the segment? Traffic signals meet pedestrian needs with separate walk lights that provide sufficient crossing time?
- Is there cracking, buckling, overgrown vegetation, standing water, etc. on or near the walking path?
- What is the useful path width, accounting for barriers to passage along pathway?
- Is there space separating path from adjacent roadway?
- How is the access for the mobility impaired?
- What is the proximity of construction zones, fences, buildings, noise pollution, quality of landscaping, and pedestrian oriented features?
- What is the amount of shade accounting for different times of day?

One of the first things we noticed during our walking audit was the high rate of speed vehicles seemed to have when entering the downtown area. Speeding was identified as the most dangerous behavior from motor vehicle operators. We will coordinate with the KY Transportation for opportunities to identify and incorporate traffic calming treatments/measures in these areas. Some treatments include building curb extensions (bump outs) to help pedestrians see oncoming traffic, as well as help motorists on side streets enter onto the major street in a safer matter. Traffic calming treatments are needed at the intersection of KY-160/ Hindman Bypass and Main Street/ KY-550. Traffic calming treatments should be placed on KY-550 coming into town from the west. Some locations were noted to have raised sidewalks sections, and other issues creating trip hazards and steep cross/side slope conditions. We suggested the city or state replace these sidewalks or use special equipment and grind down the sidewalks to be even. As a result, the sidewalks would be restored to ADA compliance so that everyone can use them safely.

PROPOSED FACILITIES AND NETWORK

LIST OF PROPOSED PROJECTS

Every project identified and described in this section is intended to fill an existing need. These projects have been planned to take advantage of existing state or city owned property whenever possible. They have been planned to provide safe, accommodating, and the cost efficient non-motorized transportation solutions.

Project 1: Sidewalk Repairs

Repair existing walks by edging, eliminating trip hazards, adding proper crossing signs and properly draining low places. Sidewalks should meet Americans with Disabilities Act (ADA) standards. The City of Hindman should work on identifying and repairing trip hazards on existing sidewalks. They can work on repairing other sidewalks that need to be destroyed and rebuilt.

Below is a list of the sidewalks needing immediate repairs:

- Rehabilitate the sidewalks at the junction of Hindman Bypass and KY 160/550
- Rehabilitate sidewalk on Professor Clark Circle
- Rehabilitate existing sidewalk on bridge at Center Street
- Rehabilitate and connect sidewalk from town to Sara Everage drive to existing rehabilitated sidewalk
- Rehabilitate existing sidewalk in city limits were deemed necessary

Project 2: Identify Places for New Pedestrian Path Ways

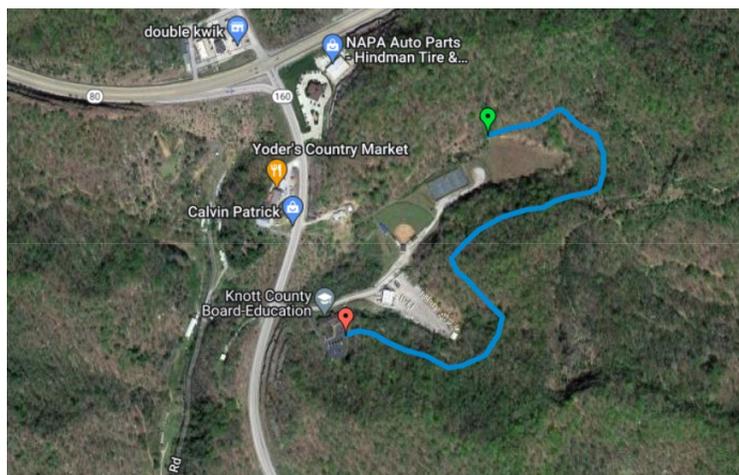
Several locations in Hindman and Knott County are in need of new sidewalks, with proper street lighting. By providing sidewalks, it will assist those walking to do so in a safe manner. There is a need to connect existing sidewalks in areas that have mixed use development with shopping, restaurants, and medical facilities. Proper lighting would also create a safer area so that pedestrians are more visible.

Below is a list of locations for new or extending sidewalks (roadway right-of-way)

- Add pedestrian multi-use pathway on KY-160 to KY-80
- Add sidewalk from Knott County High School to Vocational School
- Extend sidewalk on KY-550 from Bypass Intersection to Dairy Bar
- Add pedestrian route on KY-899 from KY-160 to East Kentucky Medical Clinic
- Add pedestrian route from the Vocational School to KY-899

Location for proposed community hiking trail (off roadway right-of-way)

- This is a proposed .7-mile natural surface trail (phase1). This land is county owned and located just outside of the city boundary close to existing recreational facilities.



Project 3: Connectivity and Signage of Future Bike Routes

For safety awareness of both cyclists and motor vehicles, “Share the Road” or bicycle warning signs (MUTCD W11-1/ <https://mutcd.fhwa.dot.gov/hdm/2009/part9/pert9b.htm>) signs may be need to be installed in appropriate locations to remind drivers that other forms of transportation are in the are. The Adventure Cycling Association (ACA/<https://www.adventurecycling.org/routes-and-maps/us-bicycle-route-system/>) has a data to show 4,000-10,000 cyclists a year use the USBR 76 route. In the future shared lane markings, also called “sharrows,” may be used to indicate shared space for bicyclists and motorists on streets that have low posted speed and low traffic volume. These roads typically don’t have space for traditional bike lanes. Bike lanes may be used in some on wider roadway areas, when possible. These treatments may be added or changed when roadways ar resurfaced. If space allows, some bike lanes can be buffered with a wider (minimum 2 feet) pavement marking. We will work with the KYTC on opportunities to re-mark and reallocated space on roads ways during resurfacing jobs.

Project 4: Pedestrian Crossings

Cross walks are designed to allow pedestrians to congregate and cross a busy road or street in an organized and safe matter. Safe pedestrian crossings determine how many and how often walkers cross in the area. Throughout Hindman, there are crossings that are either not marked, or not well marked. In high traffic areas, not all crossings have lights. Some crossings do not have long visibility, and some pedestrians cross where there are no crosswalk, traffic light, or sign to slow the traffic down. Several areas were identified that need crossing protection, or proper markings. Pedestrian signage should be installed per AASHTO and FHWA guidance.

Crosswalk Marking Projects:

- Add crosswalk at 3-legged intersection of KY-550 and KY-160
- Add crosswalk along KY-160 at Center Street and the entrance before Education Lane
- Repaint/stripe existing crosswalks in city limits were deemed necessary

Pedestrian Crossing Marking:

- Add pedestrian signage along KY-550 at Hindman Elementary School
- Add pedestrian signage on KY-160/550 going into town
- Replace pedestrian signage with high visibility signs with flashing lights

Project 5: Create Rest Areas for Bicyclists and Pedestrians

It is recommended that bike racks should be located near businesses and other points of interest in the city. Benches should be added throughout the city where space allows, as well as at all city schools and parks. Benches will provide an option for bicyclists to park their bike and pedestrians to rest in between visits to a store, restaurants, or on their way to and from work. Benches should also be placed throughout the city to provide a place to rest while walking.

Project 6: Create a Walking Tour of Hindman

Knott County and the City of Hindman may have historical features with its architecture and natural assets that is appealing to people from out of town. Stakeholders should put together a Walking Tour show all the uniqueness of the city. This tour should include all the historical events that’s happened in the community, the old and new modern architectural buildings and churches and the museum in the city.

Project 7: Wayfinding Signage

The City of Hindman should indicate public parking areas in the community with wayfinding signs as needed. Walking paths with smaller mileage signs could be created to show how far a pedestrian has walked along a corridor. Signs to show out of town visitors where to park would be extremely helpful.

A map that shows where all the businesses are in the city could also be created and placed at all of

the area hotels for out of town visitors.

Project 8: Provide Better ADA Accessibility

The City of Hindman should strive to promote accessibility for all with additional dedicated handicapped parking spots on Main Street, side streets, and city owned parking lots. Parking spots that have ample room for someone with a wheelchair ramp to load and unload from the vehicle should be placed throughout the city. The city shall ensure that the sidewalk ramps are not too steep for wheelchair users. Brick pavers should be avoided due to becoming trip hazards for those who walk with the assistance of a cane or walker.

Project 9: Multi-use Path on Hindman Bypass

Survey results suggests the need of a multi-use path along the Hindman Bypass. The path would encourage residents who are motivated to exercise to better their health to use the path instead of the local walking tracks in the county.

Appendix A

Pedestrian and Bicycle Survey Results

From March 1, 26 2022 to March 15, 2022 KRADD conducted a Pedestrian/Bicycle Survey. The survey was available online and advertised on social media. Below are the questions that were asked:

1. How much do you currently travel to work, shopping, parks, or other destinations just by walking or bicycling?

- a) All of the time
- b) A few times a month
- c) Once a month or less
- d) Never - I drive a car everywhere I go

2. Select all the following that are within 2 miles or less from your house:

- a) Work
- b) Restaurant
- c) Medical Facilities/ Pharmacy
- d) Friend's/Relatives House
- e) School
- f) Shopping
- g) Library
- h) Recreation/Gym
- i) Church
- j) Park

Other:

3. Select all of your most frequent destinations (3+ visits per week) by any form of transportation:

- a) Work
- b) Restaurant
- c) Medical Facilities/ Pharmacy
- d) Friends/ Relatives House
- e) School
- f) Shopping
- g) Library
- h) Recreation/ Gym
- i) Church
- j) Park

Other:

4. Would you consider traveling more on foot or biking to your destinations (compared to driving a car) if you had a better path?

- a) Yes
- b) No

5. Select all the factors that discourage you from making more trips on foot or bike? Check all that apply

- Traffic
- Lack of Signage
- Not Enough Sidewalks
- No Bike Lane
- Too Far From Home

___ Not Physically Able

6. Do you like to walk or bike for recreation or exercise?

- a) Walk
- b) Bike
- c) Both
- d) No

7. If Hindman had more user friendly pedestrian and bicycling would you use them more regularly?

- a) Yes (___Walk ___Bike)
- b) No

8. How do your children/grandchildren get to school most often?

- a) School Bus
- b) Car
- c) Bicycle/Walking
- d) N/A

9. Select all factors that discourage you from allowing your children/grandchildren from walking or bicycling to school? Check all that apply.

- a) Traffic
- b) Lack of Signage
- c) Not Enough Sidewalks
- d) No Bike Lane/Rack
- e) Too Far From Home

Other:

10. What sidewalks are in need of repair/replacement in Hindman/Knott County?

Where should the city place more sidewalks?

11. Where do you think bike lanes are needed?

12. Additional comments:

Appendix B

Where are pedestrian facilities (sidewalks/crosswalks/signage) needed or in need of improvement? (Please include locations needed or locations in need of improvement)?

Area	Comment
Downtown	Along the roadway beginning at Hindman Elementary to downtown as well as the turn off to Highway 160 at the red light to the Settlement School/library
Downtown	And repair all the sidewalks downtown
Downtown	City limits of Hindman, bypass, more sidewalks in every neighborhood in the county.
Downtown	In city limits
Downtown	From Frogtown all the way into town.
Highway !60/550	Along the roadway beginning at Hindman Elementary to downtown as well as the turn off to Highway 160 at the red light to the Settlement School/library
Highway 160/550	Library
Highway 160/550	from hwy 80 into town and to the elementary school
Highway 160/550	Sidewalks are needed between downtown Hindman and Holly Hills, especially for students to reach KCCHS
Highway 160/550	From Knott Central to Holly Hills Shopping Center.
City	In town needs repaired
City	All over town
City	All through city
City	The sidewalk in Hindman, mainly the only spot to be able to.

Additional Comments:

As a resident, my family would utilize the sidewalks to exercise in the evenings. This would be a great asset to our city. Having safe sidewalks for walking/running and/or biking would be great.

This is a great idea!

Thank you for your consideration.

Appendix C

Walkability Audit Results

In March of 2021, the Kentucky River Health Department and Kentucky River Area Development District completed a survey to identify each street's walkability throughout the city limits of Hindman.

The walkability audit was completed using the following questions:

Location: _____ Date: _____

A. Pedestrian Facilities (High): presence of a suitable walking surface, such as a sidewalk or path.

1 No permanent facilities; pedestrians walk in roadway or on dirt path

2

3 Continuous sidewalks on both sides of road, or completely away from roads

4

5 Sidewalk on one side of road; minor discontinuities that present no real obstacle to passage

B. Pedestrian Conflicts (High): potential for conflict with motor vehicle traffic due to driveway and loading dock crossings, speed and volume of traffic, large intersections, low pedestrian visibility.

1 High conflict potential

2

3

4

5 Low conflict potential

C. Crosswalks (High): presence and visibility of crosswalks on roads intersecting the segment.
Traffic

signals meet pedestrian needs with separate 'walk' lights that provide sufficient crossing time.

1 Crosswalks not present despite major intersections

2

3

4

5 No intersections, or crosswalks clearly marked

walking path. Does not include temporary deficiencies likely to soon be resolved (e.g., tall grass).

1 Major or frequent problems

2

3

4

D. Maintenance (Medium): cracking, buckling, overgrown vegetation, standing water, etc. on or near

walking path. Does not include temporary deficiencies likely to soon be resolved (e.g. tall grass).

1 Major or frequent problems

2

3

4

5 No problems

E. Path Size (Medium): measure of useful path width, accounting for barriers to passage along pathway.

1 No permanent facilities

2 < 3 feet wide, significant barriers

3

4

5 > 5 feet wide, barrier free

F. Buffer (Medium): space separating path from adjacent roadway.

1 No buffer from roadway

2

3

4 > 4 feet from roadway

5 Not adjacent to roadway

G. Universal Accessibility (Medium): ease of access for the mobility impaired. Look for ramps and handrails accompanying steps, curb cuts, etc.

1 Completely impassible for wheelchairs, or no permanent facilities

2 Difficult or dangerous for wheelchairs (e.g. no curb cuts)

3

4 Wheelchair accessible route available but inconvenient

5 Designed to facilitate wheelchair access

4

5 Pleasant

H. Aesthetics (Medium): includes proximity of construction zones, fences, buildings, noise pollution, quality of landscaping, and pedestrian-oriented features, such as benches and water fountains.

1 Uninviting

2

3

4

5 Pleasant

I. Shade (Low): amount of shade, accounting for different times of day.

1 No shade

2

3

4

5 Full shade

Sum of High importance (A-C): _____ x **3** = _____

Sum of Medium importance (D-H): _____ x **2** = _____

Sum of Low importance (I): _____ x **1** = _____

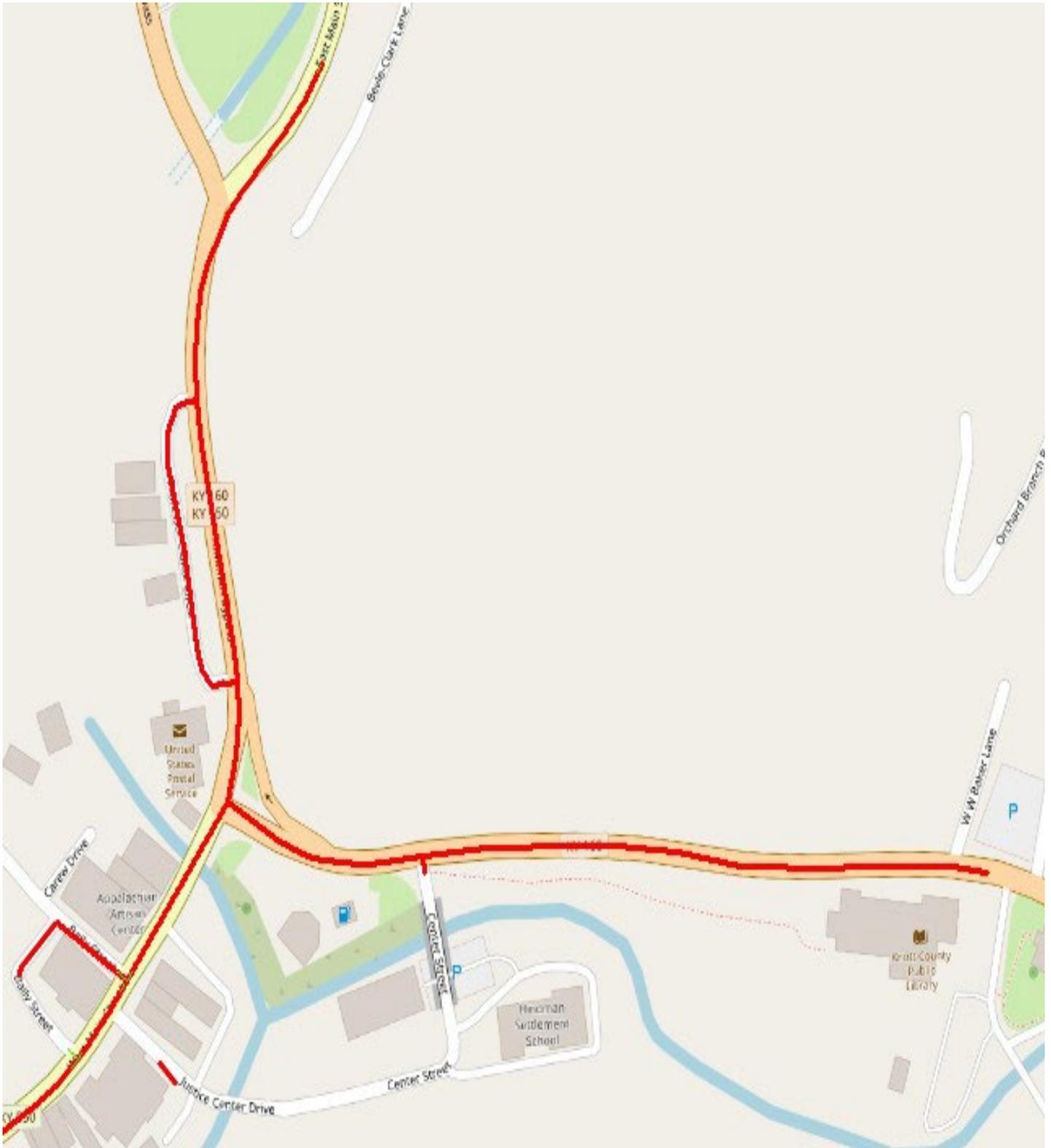
Total Score: _____ / 100

Observations

1. What is the most dangerous location along this segment?
2. What is the most unpleasant element of this segment?
3. What improvements would make this segment more appropriate for pedestrian use?
4. Would it be possible to design a more direct route to connect the ends of this segment?
5. Are the conditions of this segment appropriate and attractive for exercise or recreational use?

Appendix D

Sidewalk/Crosswalk Inventory Map



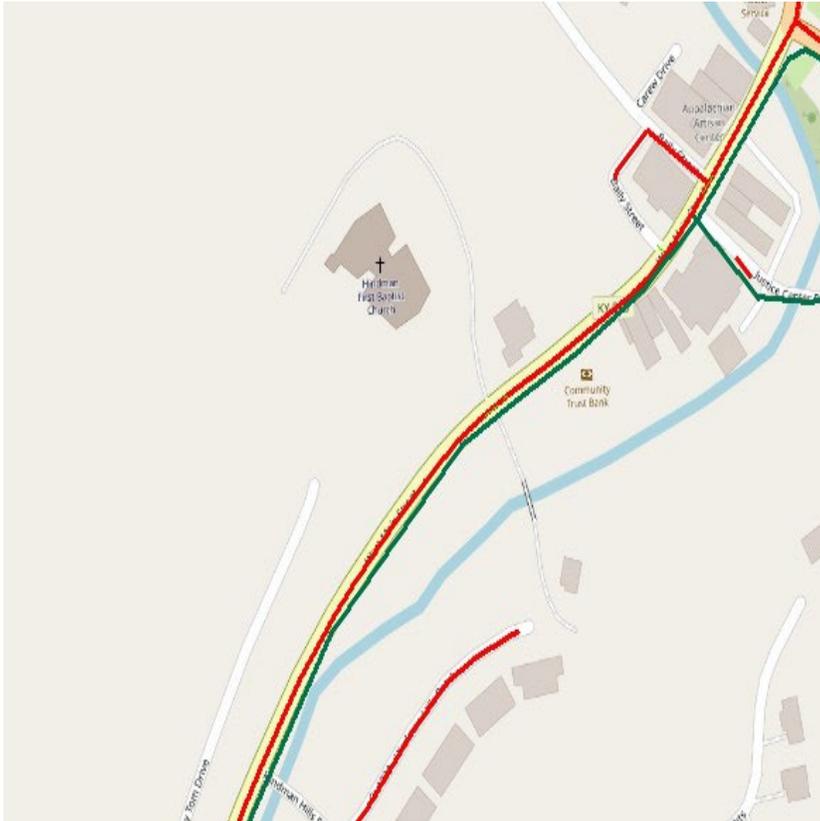
Red lines represent existing sidewalks.



Appendix E

Sidewalk Repair Maps

Below are maps showing the locations of sidewalks in the Hindman city limits that have been identified as having trip hazards or in need of replacement. The red lines represent the existing sidewalk, the green line represents the proposed rehabilitation project.



- Rehabilitate sidewalk from town to Sara Everage Drive
- Rehabilitate sidewalk in city limits
- Rehabilitate sidewalk on bridge at Center Street



- Rehabilitate sidewalks on KY-550 from Bypass Intersection to town
- Rehabilitate sidewalks on Professor Clark Circle

Appendix F

High Visible Crosswalks Needed

Crosswalks in the Hindman city limits are indicated in blue on the following maps. The crosswalks have been identified as needing more visibility features, such as warning flashing lights, better striping and better signage.



Crosswalk projects that are needed are highlighted this map.

- 3-legged intersection of KY-550 and KY-160
- Sidewalks crosswalks along KY-160 at Center Street and entrance before Education Lane

Appendix G

Promoting Events in Hindman and Knott County

Throughout the year, the City of Hindman and the Knott County Fiscal Court along with several non profit organizations hold numerous events. With the events taking place in the area around Hindman a lot of business is conducted with the restaurants, gas stations, and other establishments providing goods and services to out of town visitors. With improved sidewalks, pedestrian paths, and better crosswalk intersections the city can be more pleasing to those from out of town. The trail rides at Mine Made Adventures will bring many people from out of town to the area.



300 Elk Drive Leburn, KY

Knott County Trail Ride 2022

May 5 - 6 - 7
Gates Open Sunday May 1st 1 pm

Friday - SAT

Horse Show & Auction Both nights following
Open Stage - Karaoke And Campsite Talent

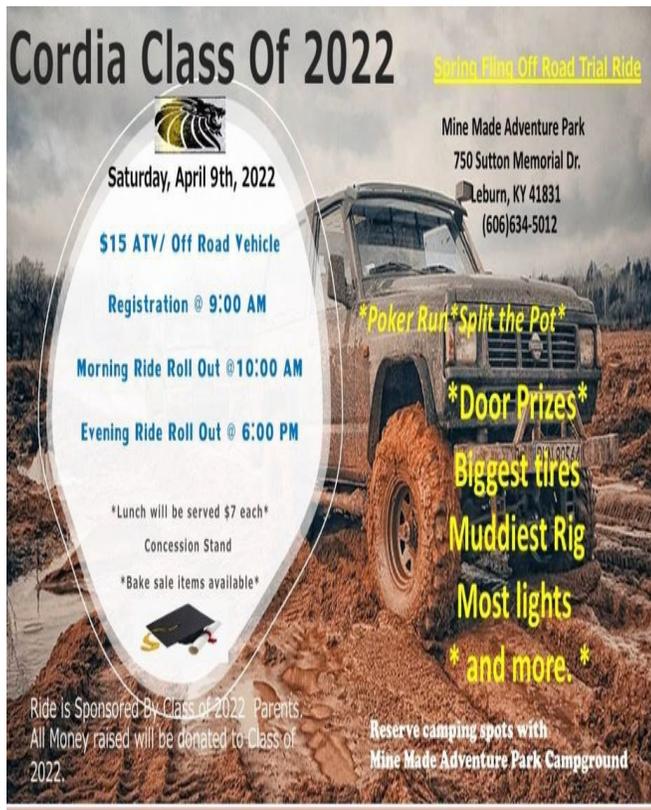
Accommodations
Primitive Camping
Shower Houses - Portable Rest Rooms
Garbage Pickup - Must be beside the road
First AID Station & Ice available
Security on Site
Bring your own Generator
Food Vendors & Tack Vendors
Parking Available

Family Fun for the entire Family!

Information Call 606-785-5592

MAKE PLANS TODAY

HILTON Graphics

Cordia Class Of 2022

Spring Flinn Off Road Trial Ride

Mine Made Adventure Park
750 Sutton Memorial Dr.
Leburn, KY 41831
(606)634-5012

Saturday, April 9th, 2022

\$15 ATV/ Off Road Vehicle

Registration @ 9:00 AM

Morning Ride Roll Out @ 10:00 AM

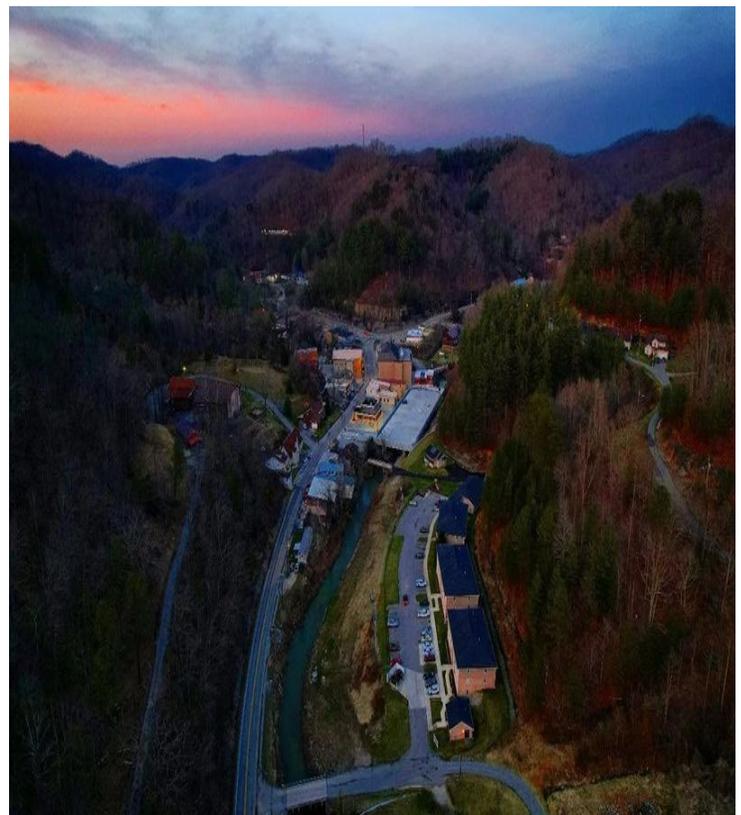
Evening Ride Roll Out @ 6:00 PM

Lunch will be served \$7 each
Concession Stand
Bake sale items available

Poker Run *Split the Pot*
Door Prizes
Biggest tires
Muddiest Rig
Most lights
and more.

Ride is Sponsored By Class of 2022 Parents
All Money raised will be donated to Class of 2022.

Reserve camping spots with
Mine Made Adventure Park Campground





Kentucky Public Health
Prevent. Promote. Protect.



The Hindman-Knott County Bicycle/Pedestrian Plan was completed in partnership of the following entities:

Kentucky River Area Development District
941 N. Main Street
Hazard, KY 40701
Phone: 606-436-3158
www.kradd.org

City of Hindman
10 Professor Clark Circle
Hindman, KY 41822
Phone: 606-785-5544

Knott County Fiscal Court
54 W Main St. East
Hindman, KY 41822
Phone: 606-785-5592

Knott County Board of Education
1156 Hindman Bypass
Hindman, KY 41822
Phone: 606-7853153
www.knott.k12.ky.us

Knott County Public Library
238 KY-160
Hindman, KY 41822
Phone: 606-785-5412
www.knottcountylibrary.com



The Hindman-Knott County Bicycle/Pedestrian Plan was completed in partnership of the following entities:

Knott County Tourism
54 W Main Street
Hindman, KY 41822
Phone: 606-785-5592
www.knottcountytourism.com

Knott County Health Department
880 W Main Street
Hindman, KY 41822
Phone: 606-785-3144
www.krdhd.org

Cabinet for Health and Family Services
Division of Prevention & Quality
Improvement
Physical Activity & Nutrition Program
275 E. Main Street HS1EE
Frankfort, KY 40621
Phone: 502-564-9358

The KY River Area Development District
Transportation & Community Planning
941 North Main Street
Hazard, KY 41701
Phone: 606-436-3158

