



# KY 115 Pembroke Connector

Christian County, KY

KYTC Item #2-385

January 14, 2021

The Kentucky Transportation Cabinet (KYTC) is examining an improved highway connection between I-24 and the Pembroke community in Christian County. This website provides an update on the project development process to date, with an opportunity to [share your comments](#) at the bottom of this page.



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### Project Location

A smaller construction project is planned to begin in 2021 to provide some interim safety improvements to this section of KY 115. This project is not to be confused with the larger widening project which is the subject of this website.

Narrow, windy KY 115 connects Pembroke to I-24, forcing a wide range of different vehicle types to share the highway.



## Purpose and Need

The purpose of the project is to improve the safety and efficiency for highway users along KY 115 from I-24 to Pembroke such that...

- Existing industrial areas are aided in moving employees and products to I-24
- Proposed economic properties are enabled to maximize their economic potential

- The flow of people and goods is not interrupted by train traffic
- Pembroke Elementary School is accommodated with a safe and appropriate roadway for school-related traffic
- Emergency response from Oak Grove to Pembroke is improved
- All roadway users, including farm related and non-motorized transportation, are accommodated
- Tourism to the corridor and area is aided

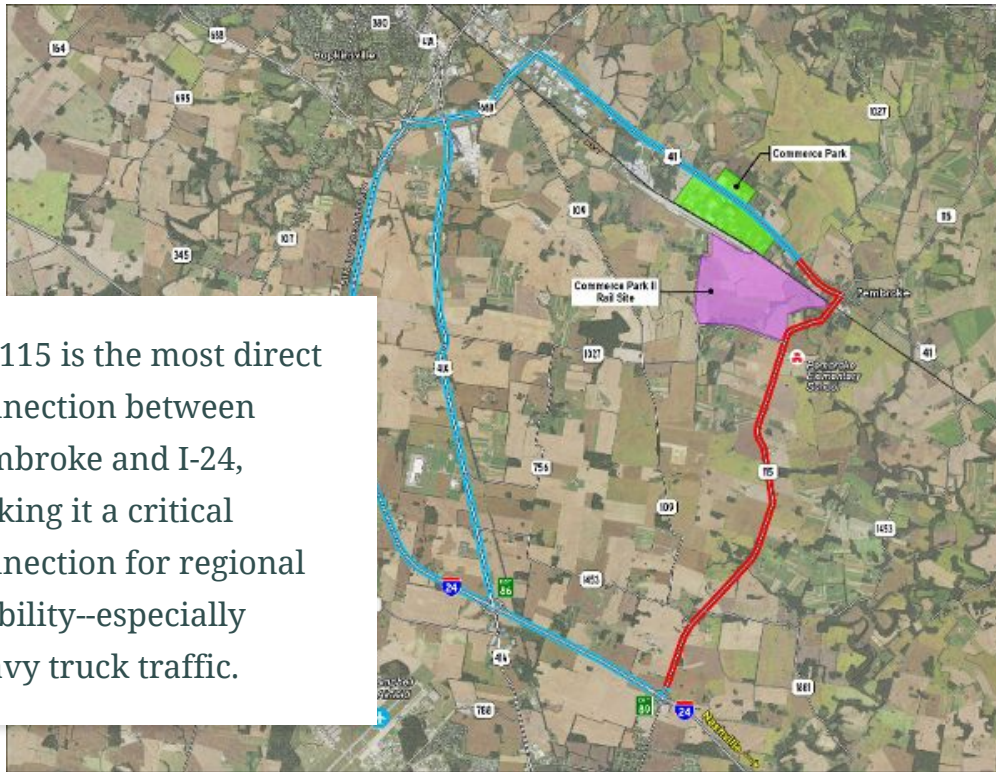
Scroll through the slides below to explore why the project is needed.

The highway dates to the 1870s and--despite subsequent improvements--predates modern design standards. Its narrow lanes and meandering route were not designed to accommodate modern vehicle sizes, volumes, or travel speeds.

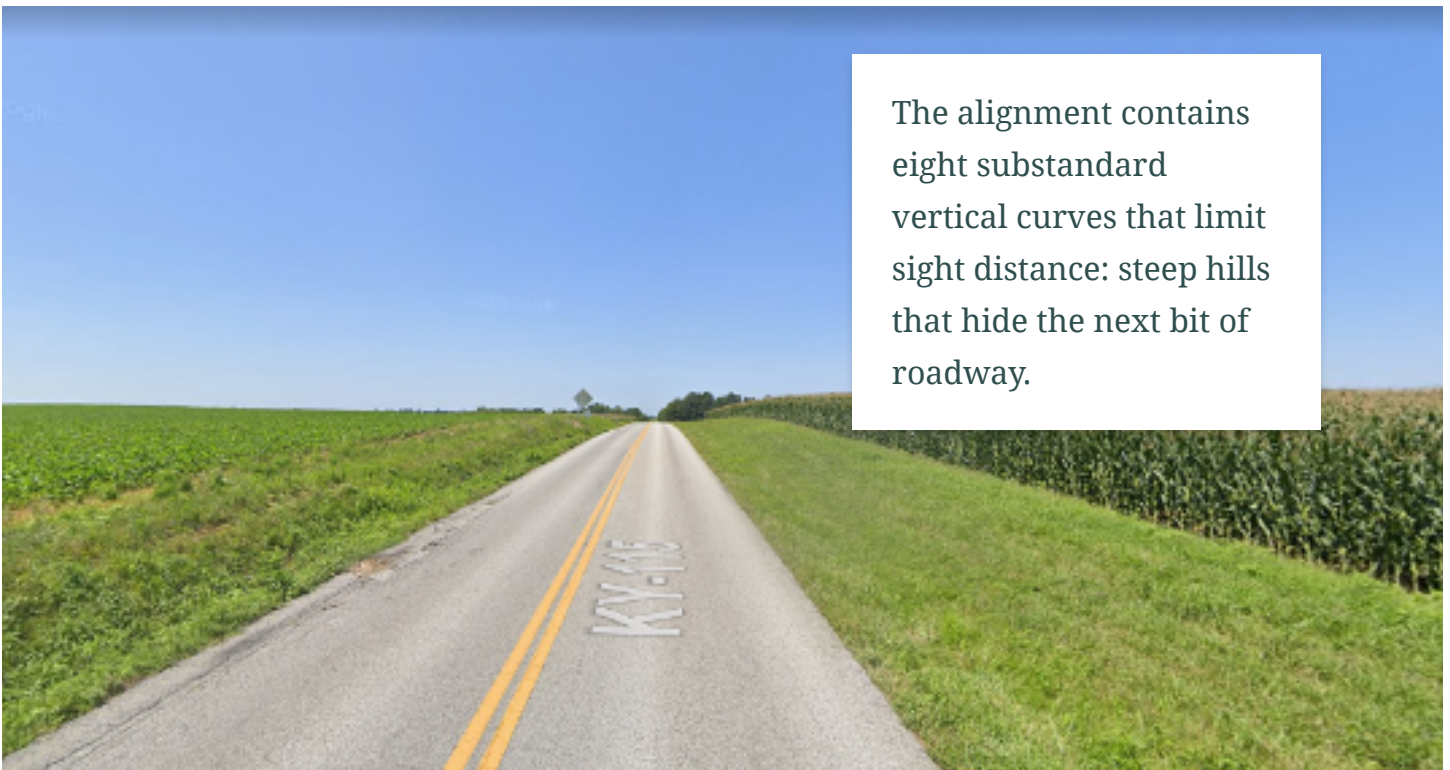




KY 115 is the most direct connection between Pembroke and I-24, making it a critical connection for regional mobility--especially heavy truck traffic.



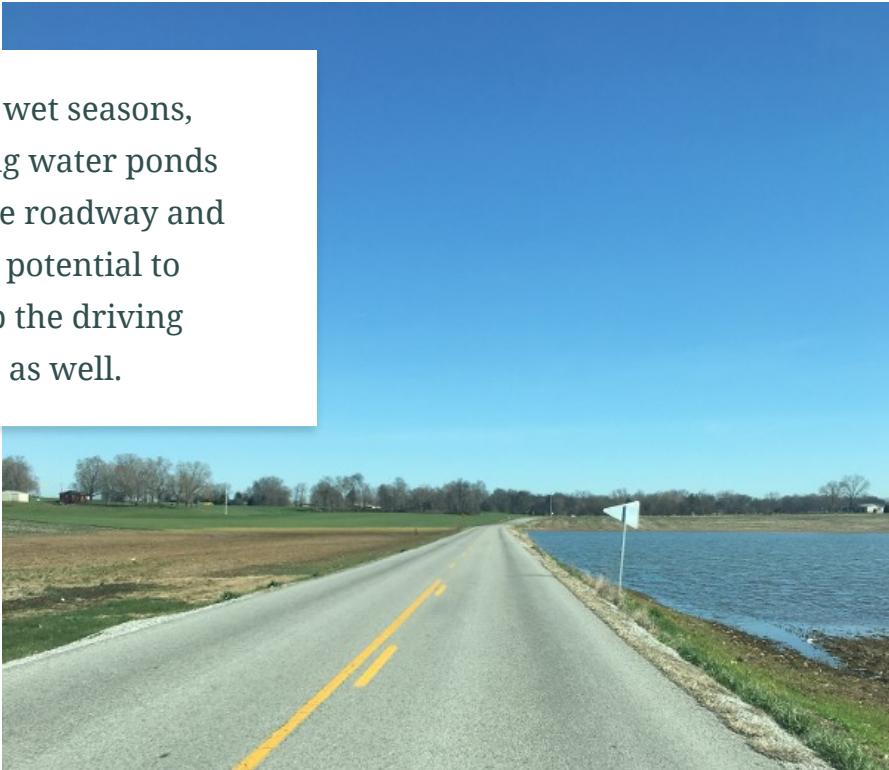
The alignment contains eight substandard vertical curves that limit sight distance: steep hills that hide the next bit of roadway.





With minimal shoulders, steep drop-offs and trees close to the road's edge leave little recovery area.

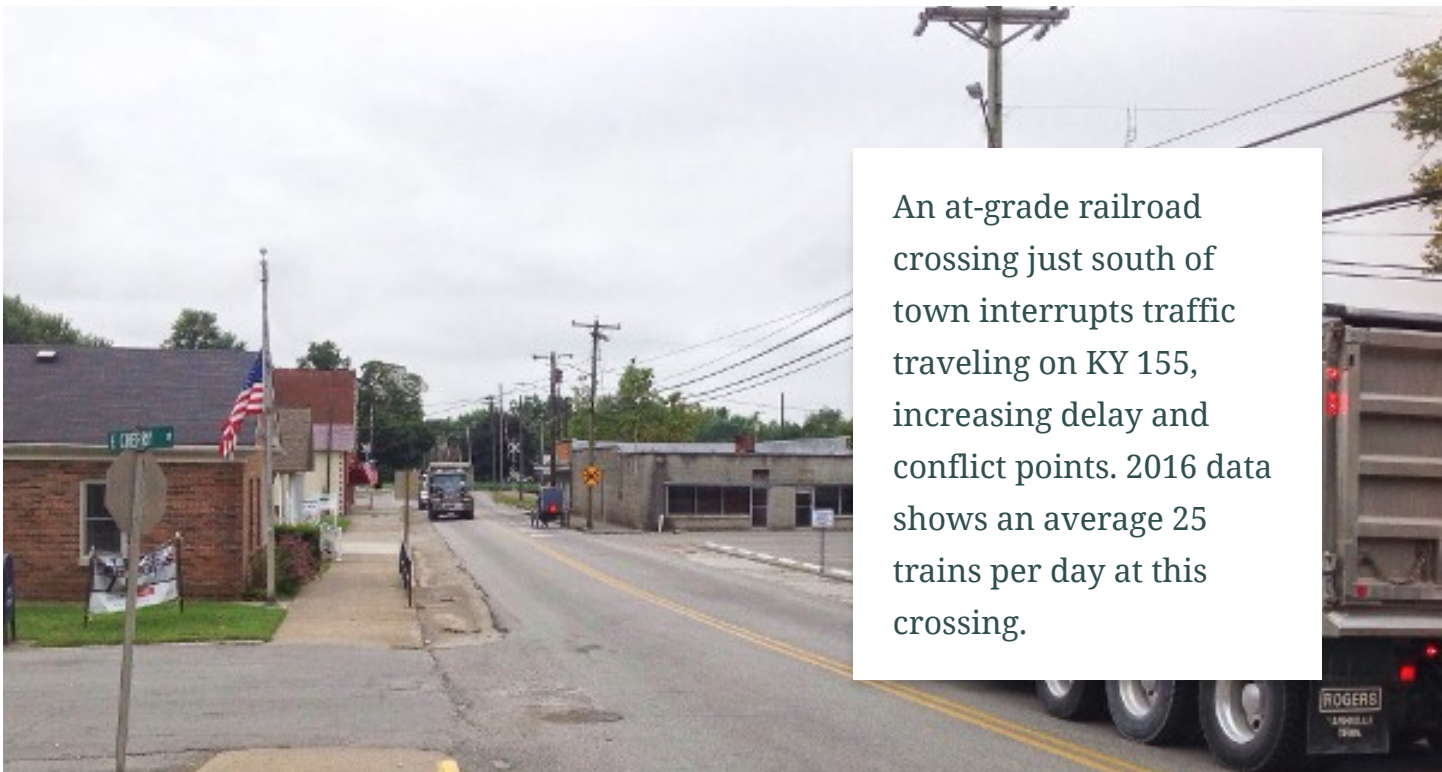
During wet seasons, standing water ponds near the roadway and has the potential to overtop the driving surface as well.





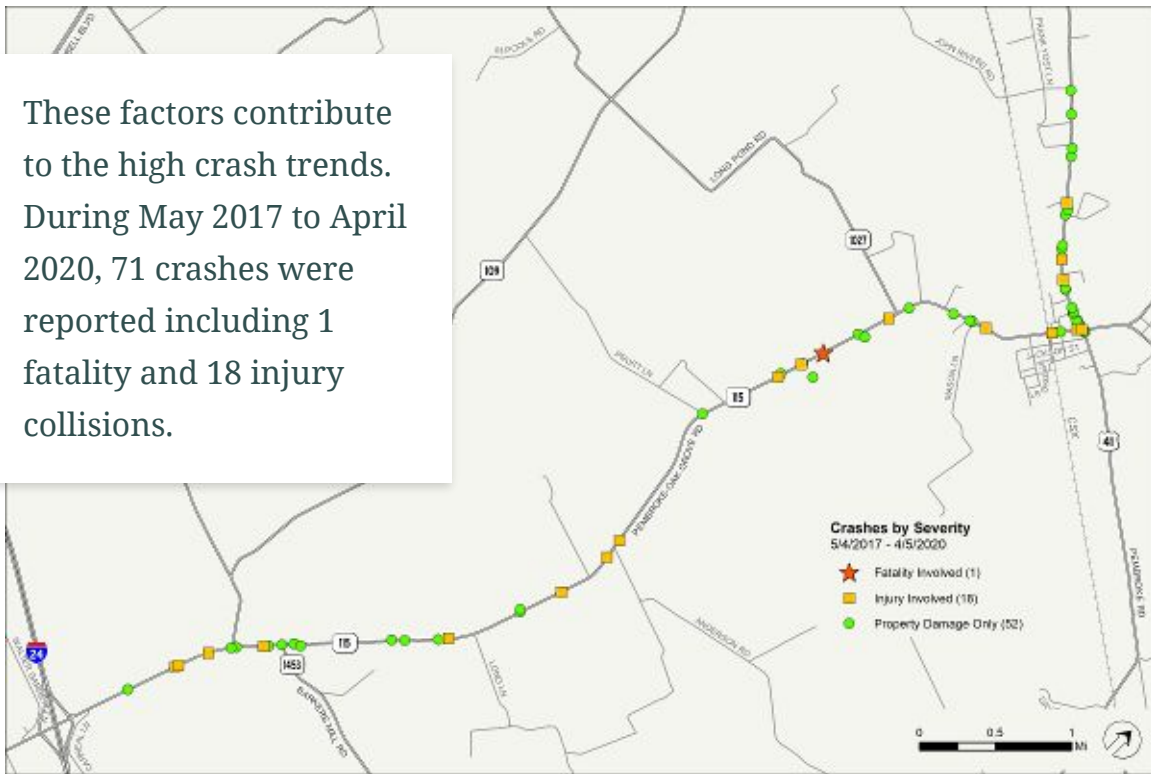


Turns at the US 41/KY 115 intersection in downtown Pembroke are too tight for large trucks traveling to/from industrial areas west of town.



An at-grade railroad crossing just south of town interrupts traffic traveling on KY 155, increasing delay and conflict points. 2016 data shows an average 25 trains per day at this crossing.

These factors contribute to the high crash trends. During May 2017 to April 2020, 71 crashes were reported including 1 fatality and 18 injury collisions.



## History



Range of Planning Concepts Considered

In 2017, KYTC completed a planning study that looked at several improvement concepts, in addition to a No-Build scenario. It considered widening KY 115, spot improvements within Pembroke, new alignment connectors south/west to reach industrial areas, and widening stretches of US 41.

In addition to coordination with local elected officials, the planning study included a public meeting in April 2017. Over 60 people attended and 42 returned surveys. While 93% of survey respondents agreed KY 115 should be widened, community input was divided between the B1 and B2 sections on new

alignment. The planning study is available online through the KYTC Planning website or by clicking the button below.

[View the Planning Study](#)

## Alternatives

Building from the planning effort, build concepts for different sections of the route are being evaluated today. Kentucky's 2020-2026 Highway Plan breaks the project into three sections with different funding levels for each section.

> **Item #2-381** includes federal design, right-of-way, and utility funding in the biennium for the new connector between KY 115 and US 41.

> **Item #2-8953** includes federal design funding in the biennium for widening K 115 between Anderson Road and the new connector.

> The section **south** of Anderson Road is not funded in the current Highway Plan.

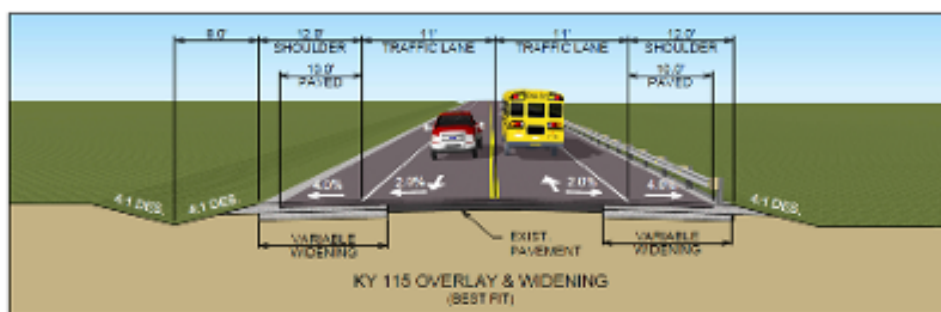
Costs are estimated around **\$35 million** for all three sections together.

The **interactive map** below highlights the remaining build alternatives under consideration; click and zoom in to explore. Buttons at the bottom let you change the base map, view the legend, or adjust visible layers. Please note that the footprints shown are approximate as designs will continue to evolve as additional engineering work is completed.



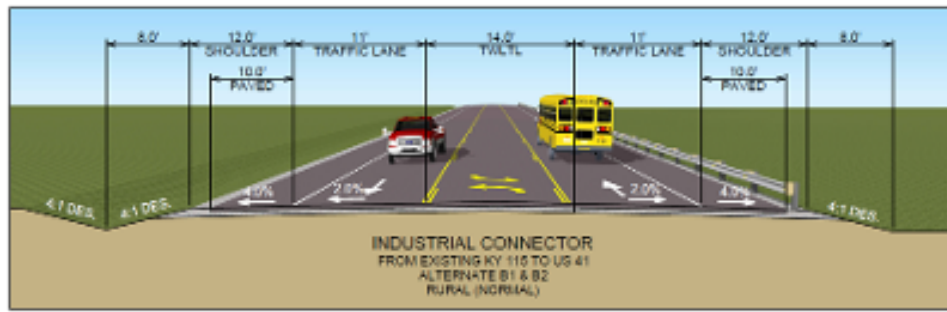
KY115 Interactive Viewer

For the KY 115 widening, the proposed project expands the highway to have two 11-foot wide lanes with 10-foot paved shoulders, wide enough to accommodate bikes and horse-drawn buggies outside the travel lanes. Widening occurs mostly to the east side, switching to the west through St. Elmo and near the school to minimize impacts. Turn lanes will be added to Pembroke Elementary School.



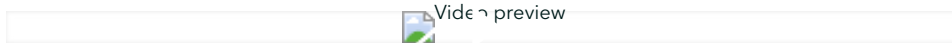
Typical Section for Widening KY 115

For the new route around Pembroke, sometimes referred to as the "I-24 Industrial Connector," two options from the planning study are being considered--B1 (red) or B2 (blue) as shown in the map below. Either option provides three lanes with 10-foot paved shoulders.



Typical Section for Industrial Connector

Along the Connector, a new grade-separated crossing of the railroad line is created, minimizing delay and reducing potential conflict points. The animation below shows a representative rendering of the new Connector although the latest plans include three lanes.



Conceptual Rendering of representative Connector

Environmentally, field studies have shown minimal resources likely to be impacted by the widening or connector.

- Up to five homes and three businesses could be relocated.
- There is a historic gas station in the St. Elmo community but it will not be affected.
- Sinkholes and other karst features have been field located and will be accounted for in engineering designs.
- Farmland impacts, including right-of-way acquisition within two agricultural districts, will occur on the new connector section.
- It is likely to encounter buried archaeological sites; additional investigations will be undertaken once a preferred alternative is selected.
- Limited impacts to streams, wetlands, and protected bat habitat are likely, requiring future coordination with the US Army Corps and US Fish & Wildlife.

## Contact

For additional information, please contact one of the project managers: George Phelps or Kevin McClearn.

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