

**WISE INNOVATION
HIGHWAY
DRAFT FINAL REPORT**

JUNE 26, 2009

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I. EXECUTIVE SUMMARY

The Wise Innovation Highway is a proposed roadway connecting the Lonesome Pine Regional Business & Technology Park (LPRBTP) with Alternate US 58 east of the town of Wise and the city of Norton in southwestern Virginia. The roadway is proposed as a secondary highway permitting full access to adjacent properties. The Lonesome Pine Business & Technology Park, located south of the Lonesome Pine Airport, is a growth area. It is planned to occupy approximately 115 acres, be built out in the year 2030, and generate approximately 17,000 vehicle trips per day and approximately 2,100 vehicles in the PM peak hour. The development of the area has generated a need to provide improved access to this area of Wise County, which is shown in Figure 1.

The project is divided into two phases. The first phase begins at Alt US 58 / Bear Creek Road (Rte 681) and ends at Coeburn Mountain Road (Rte 646). Phase I splits into two possible alternatives approximately 2.7 miles northeast of the beginning of the project. The western alignment connects with Coeburn Mountain Road near its intersection with Route 801. The eastern alignment connects with Coeburn Mountain Road at its intersection with Tacoma Mountain Road (Rte 706).

The No-Build alternative results in severe congestion at intersections throughout the study area. This study looked at intersection capacity and not roadway segment capacity. Therefore, it focuses on intersection operations and potential improvements.

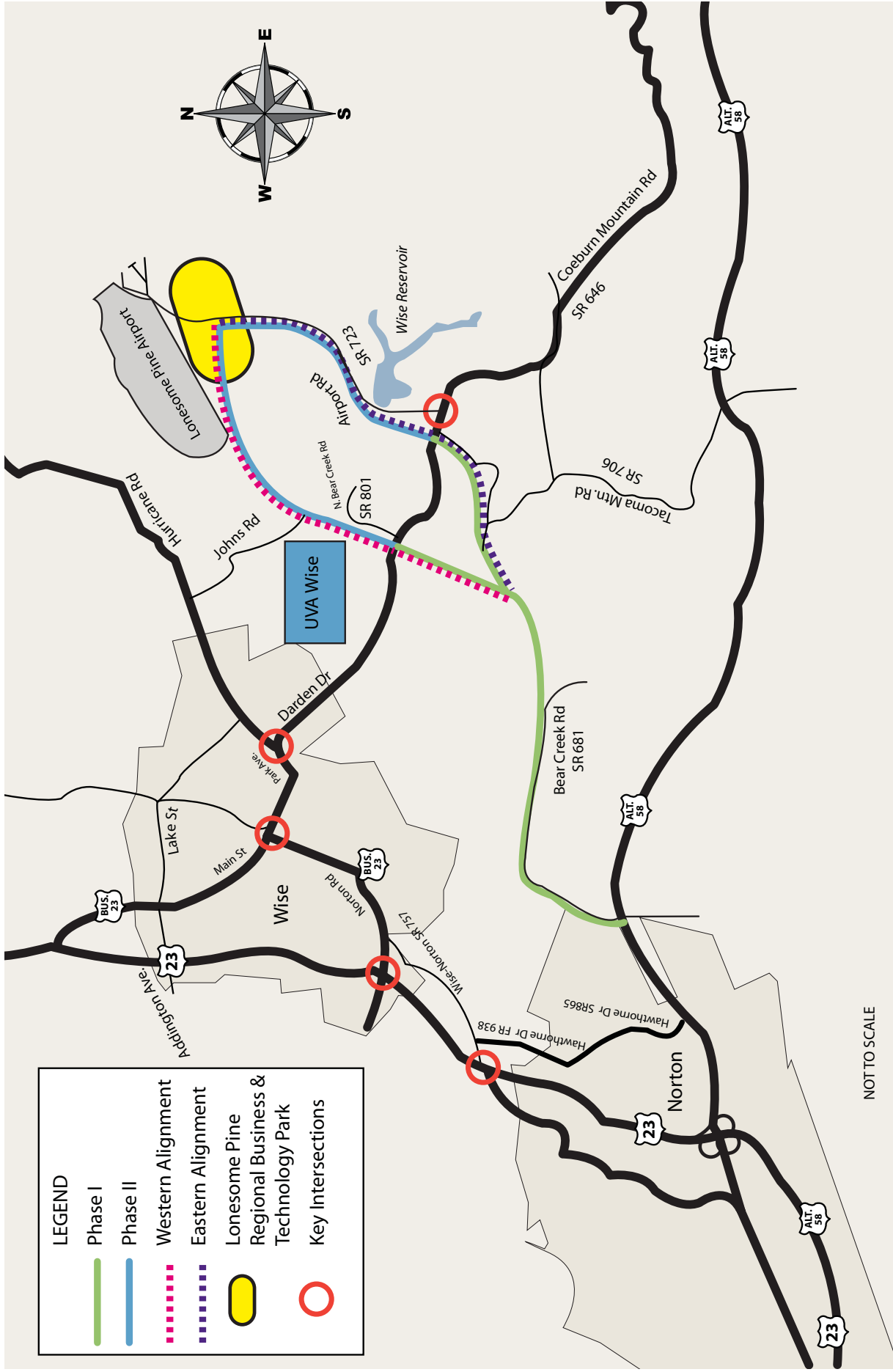
The construction of the Wise Innovation Highway provides some relief for the roadway network, but it will not alleviate all the congestion. It will certainly help extend the number of years that some existing facilities will be able to provide adequate levels of service before they become congested, but significant congestion will still occur in some locations. However, there are some short-term improvements that may help extend the usefulness of existing facilities even longer.

Short-term improvements not requiring purchasing of right-of-way can be constructed at the US 23/Norton Road (US 23 Business) intersection. They include:

- Westbound Approach
 - Convert through lane to a combined through and left-turn lane
- Eastbound Approach
 - Convert left-turn lane to a combined through and left-turn lane. Re-striping of westbound departure lanes on the opposite side of the intersection will be required.

A short-term improvement that may require right-of-way acquisition can be constructed at the US 23/Norton Road (US 23 Business) intersection. It involves:

- Northbound Approach
 - Add a second northbound left-turn lane



Study Area - Potential Alignments

FIGURE 1
Wise Innovation Highway

As for a long-term improvement, there is a negligible difference between the build alternatives in the amount of congestion relief provided, in the estimated mitigation and construction cost, exclusive of definitive right-of-way acquisition costs, (net difference of less than \$100,000) and neither has substantial environmental impacts that cannot be mitigated. Therefore, the recommendation boils down to choosing between the alternative that provides the greatest potential for future mobility and LPRBTP access redundancy or the one that has potentially less costly/disruptive right-of-way acquisition requirements. The following table summarizes the evaluation of the alternatives.

Alternative Evaluation Summary					
Alternative	Properties Impacted	UVA-Wise Diversion Potential	Opportunity to Link to Hurricane Road	Approximation Of Cost	Additional LPRBTP Access Point
No-Build	0	NO	SOME	0	NO
Western Alignment	91	YES	BEST	\$53.8M	YES
Eastern Alignment	100	YES	SOME	\$53.7M	NO

The eastern alignment is recommended because it:

1. Avoids higher right-of-way acquisition cost areas for new alignment (County Social Services building or new townhome development),
2. Utilizes more existing right-of-way (widening Airport Road right-of-way will be less costly than acquiring right-of-way on new alignment)

Local officials can determine the benefits of implementing the potential short-term improvements while funding for one of the long-term alternatives is sought.