



VI. DETERMINING A RECOMMENDED PLAN

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Prior to the September Advisory Committee meeting, additional analysis was completed and sent to the committee members for the new Alternative 5C as compared to the Do Nothing / No Build alternative and Build Alternatives 1A and 3B. The alternative plans considered are not equal in terms of benefit, impact or cost. The following two tables present a comparison of the safety and transportation benefits of each of the three Build Alternative Plans and the Do Nothing / No Build alternative. The same methodology as used in the comparison of the original six alternatives with the Do Nothing / No Build as described above was applied to these tables. The analysis is based on the Year 2030 projected traffic for each scenario using the OKI Regional Travel Demand Model output. The proposed improvements and components of each scenario were input to the model to assess future travel patterns and volumes.

The first table, Table 6, compares the potential safety benefits of each plan with the projected Do Nothing / No Build conditions.

Table 6: Safety Benefits	Do Nothing / No Build	Alternative 1A	Alternative 3B	Alternative 5C
Potential increase or reduction in number of traffic accidents on US 27 and SR 73 (compared to <u>existing</u> accidents)	108% Increase	41% Increase	1% Reduction	17% Increase
Potential increase or reduction in number of traffic accidents on US 27 and SR 73 (compared to <u>predicted year 2030 Do Nothing / No Build</u> accidents)	--	32% Reduction	52% Reduction	44% Reduction

Similarly, the second table, Table 7, illustrates the comparison of the transportation benefits.

Table 7: Transportation Benefit	Do Nothing / No Build	Alternative 1A	Alternative 3B	Alternative 5C
Percentage of US 27 in the NBTS with unacceptable Level of Service (does not include US 27 within corporate limits of Oxford)	91%	63%	6%	51%
Projected change in through volumes from Do Nothing / No Build <u>on existing streets</u> within corporate limits of Oxford*	--	No Change	23% Reduction	16% Reduction
Projected change in traffic volumes from Do Nothing / No Build <u>on existing SR 73</u> within corporate limits of Oxford*	--	2% Reduction	30% Reduction	15% Reduction

* = based on average daily traffic on US 27 (High Street) and Chestnut Street.

While Tables 6 and 7 provide important measures of the potential benefits and performance of the alternative plans, another consideration in the decision-making process is the potential cost of implementing the proposed plan. While it was recognized that the plan is long range and would require prioritization of individual components and staging plans for implementation (individual components of the plan would be implemented over the span of the next thirty years), an overall compilation of the full cost of each plan in current dollars was developed for comparison purposes.

Understanding these caveats, the cost estimates can be a factor in helping to evaluate the differences in the plans, particularly when used in conjunction with the comparison of benefits presented in Tables 6 and 7. The following table, Table 8, was presented to the Advisory Committee prior to their consensus discussion and final voting for a preferred strategy.

Table 8: Preliminary Cost Estimates <i>(costs are in millions of dollars and are based on similar, recent improvements in Ohio; estimates do not include right-of-way costs)</i>			
Components	Alternative Plans		
	1A	3B	5C
Upgrades (intersections; lane and shoulder widths)	\$24.2	\$16.6	\$16.6
Major Improvements (widening, new alignment)	\$33.2	\$92.0	\$76.0
Service Roads (property access)	\$ 0.0 *	\$ 1.9	\$ 0.4
Total (without right of way costs)	\$57.5	\$110.4	\$93.0 **

Notes:

* an additional \$2 to 4 million will be required under 1A to address access management (access problems will increase as traffic increases).

** cost of re-routing US 27 over local roads not included

NBTS Advisory Committee Consensus on a Preferred Strategy

The Northwest Butler Transportation Advisory Committee met on September 10, 2003 to review three Build alternative long range plans and the Do Nothing / No Build alternative and to vote on advancing a recommended preferred strategy to the OKI Board for incorporation into the OKI Regional Transportation Plan.

Before making a final recommendation, the Committee members acknowledged the following key points:

- The recommended plan is a long range plan intended to serve as the guide to accommodating not only the area's existing needs but also the future transportation needs to the year 2030. Potential staging of the implementation of parts of the plan over the 30 year period is a given, but the full realization of the plan is long range.
- The Year 2030 Do Nothing / No Build alternative is an important component of the comparison of Build alternatives. However, in short, the No Build alternative fails to address the project's established goals. As discussed in previous meetings, the population of the area is growing and significant population growth is projected for this area over the next thirty years. Projected traffic demand will increase significantly even without any transportation improvements to the existing system

exacerbating the identified existing problems, undermining the ability to support land use plans and goals and resulting in extensive changes in the area's character.

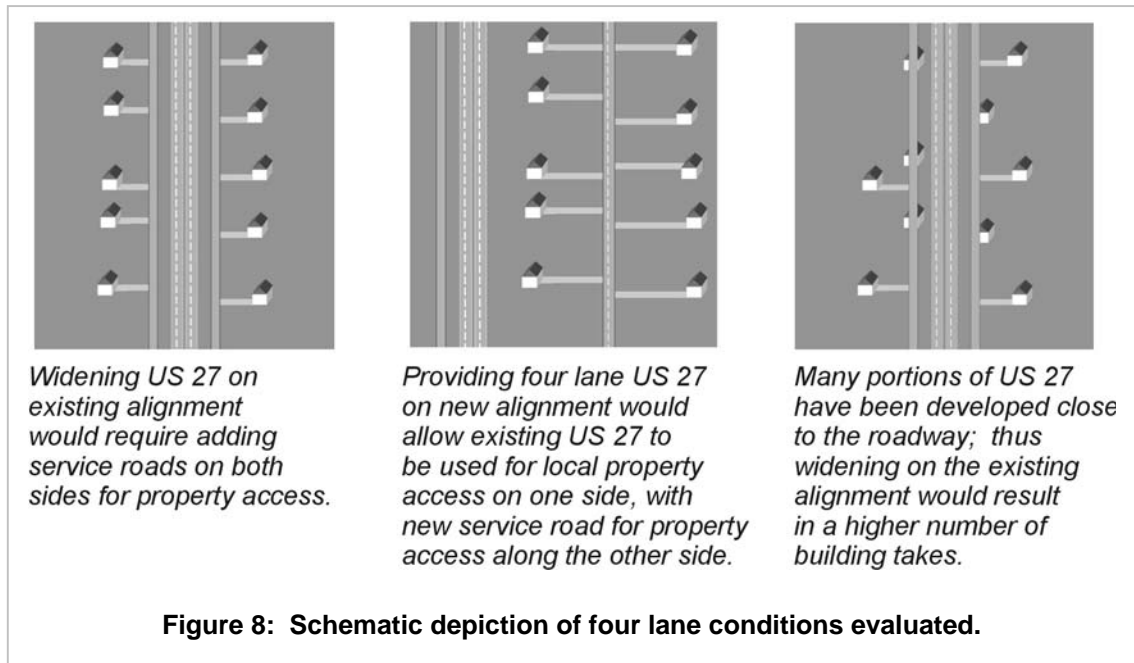
- The purpose and need and goal statements established by the Committee are the backbone of the comparison of alternatives and the foundation of determining a recommended plan (see [Appendix D](#)). Failure to meet the project's stated purpose and need is the first basis of eliminating an alternative from consideration. Potential implementation of any major improvement will require a combination of local, state and federal funding, and without a strong basis in addressing the project's stated purpose and need, funding will be denied.
- The environmental analysis presented in this planning study is an overview level study based primarily on available secondary source studies, with a limited amount of field verification and survey (see [Appendix B](#)), and as such represents a very preliminary assessment of the likelihood of impact on environmental resources, features and issues. Any advancement of any alternative (or any major component of an alternative) will require a more in-depth environmental assessment of impact and investigation of potential mitigation opportunities and requirements. Any major improvement requiring federal funding, will require in-depth environmental impact assessment to comply with the National Environmental Policy Act (NEPA) and applicable state regulations.
- The components of the alternative plans under consideration are not highway alignments or detailed plans (locational studies are not included in this stage of planning), but the plan components do represent potential areas or corridors that could accommodate the development of intersection and roadway alignments.
- As determined by the Advisory Committee, re-alignments of US 27, either east or west of Oxford, are understood to be a limited or controlled access, tree-lined parkway type facility with a limited number of intersection access points, and specifically designed to support the adopted future land use plans of the areas traversed. Driveways will not be permitted access to the facility and roads not provided an intersection for access will need to be handled as over or under passes or re-connected to the nearest intersection. In other words, neither the west or east re-alignments are intended nor are to be designed to



Example of limited access, parkway type design envisioned in NBTS area

encourage commercial (or other non-residential) growth outside the Oxford corporate area.

- The four lane widening of US 27 south of Oxford has been analyzed under two possible conditions for consideration at this stage of study (recognizing that detail studies would be needed in either case to fully evaluate benefits and costs). The two conditions evaluated are (see Figure 8):
 - Widening on the existing centerline, i.e., adding two additional lanes the existing two lane US 27, and providing a network of parallel service roads on each side to provide access to the abutting properties (i.e., driveway access to a four lane facility will be prohibited).
 - Constructing a four lane parallel road east or west (or a combination) of US 27, and then transforming the existing US 27 to a service road to provide access to the existing properties that abut it. Some network of parallel service road may still be needed for the opposite side of the new facility to provide access to those existing properties.



- All the three Build plans include a common base consisting of the following improvements:
 - TSM and Upgrade Package: lane and shoulder upgrades on US 27, SR 73 and SR 177, and critical intersection improvements throughout study area, and the US 27 re-alignment around Millville. As such, all three alternatives

do address some of the project goals, specifically in addressing the study's identified problem intersections and roadway segments and correcting system deficiencies. However, the evaluation tables for each alternative do re-iterate the benefits and impacts of these improvements even though common to all plans under consideration.

It is also important to note that the current OKI Regional Transportation Plan already includes several proposed transportation improvement projects located in the NBTS area:

- the improvement of approximately 2 miles of US 27 north of the City of Oxford (widen to three lanes, sidewalks and signal improvement),
- the development of a shared use (bicycle and highway) corridor around the City of Oxford, and
- the construction of a park-and-ride facility along US 27 near the City of Oxford.

The Ohio FY 2004-2007 Statewide Transportation Improvement Program (STIP) as part of OKI's Draft FY 2004-2007 Transportation Improvement Program, includes: 1) the improvement of approximately 2 miles of US 27 north of the City of Oxford (widen to three lanes, sidewalks and signal improvement), and 2) the construction of approximately 0.8 mile of bikeway from Brookville Road to Fairfield Road on the west side of the City of Oxford.

After reviewing a comparison of the safety and transportation effects or benefits of each of the alternatives, and consideration of each alternative's ability to address the project goals established by the Committee, the Committee eliminated the least preferred alternatives through a series of votes, and then voted for a preferred between the two remaining alternatives. In the final vote, the Committee selected Alternative 5C to be recommended to the OKI Board. The recommendation of this plan was based on the conclusion that it most effectively addressed the project's goals and purpose and need elements (see Section VII and [Appendix D](#) for more on purpose and need).

It was noteworthy that 29 of the 32 Committee votes were for major transportation improvements in the Northwest Butler County area (three abstained from the final vote). In that all three Build alternatives shared several major improvements, the overwhelmingly strong Committee consensus and support for recommending the following common improvements is also significant:

- Upgrade lane and shoulder widths of critical portions of US 27, SR 73 and SR 177;
- Upgrade critical intersections identified in this study;
- Re-align US 27 west of Millville; and
- Re-align SR 129 in Millville area.

The recommended long range plan, Alternative 5C is illustrated in [Exhibit 8](#).