2 – Alternatives Screening Process

2.1 Evaluation of Preliminary Alternatives

As described in Chapter 1, the process of brainstorming of ideas, identifying initial concepts, and mixing and matching the best attributes of various concepts has resulted in a refined group of options. From this point forward, a more detailed analysis is required to reduce further the number of options to a shortlist of preferred options. This more detailed analysis is referred to as the screening process.

The screening process includes the following steps intended to result in a clear division of:

- Peak hour traffic modeling and assessment
- Assessment of performance related to study goals and objectives, and
- Review and comment by the Advisory Committee, stakeholders and the public

2.1.1 Peak Hour Volumes of Preliminary Alternatives

Using the traffic volumes predicted for the year 2030, ConnDOT's traffic forecasting unit, together with input from the study team, modeled peak hour traffic volumes for each of the 10 options. Peak hour traffic volumes were computed for the Friday afternoon peak, reflecting the combination of commuter, weekend, and shopping traffic. The modeled volumes were reviewed critically to determine whether the benefit-to-cost ratio of any alternatives warranted their exclusion from further study. Option 1, for example, showed a peak hour volume of 190 vehicles on the new ramp intended to provide access to I-291 from the Pleasant Valley Road highway on-ramp. With an estimated construction cost in millions of dollars, the study team concluded that the nominal traffic benefit did not warrant the cost, and the option was eliminated from further study.

A number of matrices were developed to assess of performance of the alternatives based on factors such as access, congestion reduction, safety, and intermodal connectivity.

Refer to Appendix G for matrices used to evaluate study alternatives.

2.1.2 Technical Working Group and Advisory Committee Input

The preliminary options were presented for review and comment at a number of meetings with the studies Technical Working Group. The Technical Working Group is composed of ConnDOT and other state agency specialists, CRCOG advisors, and area town representatives from their respective planning and engineering offices. These meetings were very constructive in providing important details to the study team. Some weaknesses and flaws were also identified which led to further refinement of the

proposals. In some cases, the points raised at these meetings provided guidance on the dismissal of options, thereby assisting with the screening process.

An Advisory Committee meeting was held to gain further input and recommendation of the screening of options. All AC meetings are advertised well in advance and are also open to public participation.

Though comments and ideas from these groups were sometimes less quantifiable than pure traffic performance, they contributed to elimination of alternatives with little or minimal positive impact, and aided in refining the alternatives that appeared to have the greatest potential in achieving the study goals. Local preferences, right-of-way conflicts, and economic development objectives became apparent and aided in determining options that appeared to provide the most benefit to the towns as well as commuters, shoppers and the general public at large.

Refer to Appendix H for various AC and Technical Work Group meeting minutes.

A comment period was continued beyond the close of the AC meeting to allow for AC members and the public who may not have been in attendance to submit their input. Comments received from all of the meetings were referenced and all remaining options were repackaged in preparation for a Public Information Meeting.

2.1.3 Public Input

Once the AC and Technical Working Group comments had been incorporated into the various options, a Public Information Meeting was held to present all options to the general public. Following a short introduction that summarized the study, the public was invited to comment and ask questions. Large scale drawings of the various options were displayed and aerial images were also provided for the public to sketch their ideas on. Residents and commuters who frequently use the transportation system in the study area are a valuable source of information. They have an intimate knowledge of where and when traffic problems regularly occur, and in many instances they understand the basic cause of the problems.

Refer to Appendix I for Public Information Meeting minutes.

2.2 Screening of Alternatives

Through the process described above, ten (10) roadway options were reduced to four (4) roadway options believed to have the greatest potential to meet the studies goals and objectives. Just as before, the most beneficial elements of various options were retained and recombined with other options to result in stronger, more effective proposals.

The concept of adding a connection from the Pleasant Valley Road Ramps to northbound Interstate I-291, for example, proved beneficial based on the traffic volume computations, and also received very positive reviews from the AC, Technical Working Group and the public. Therefore, this concept was appended to all options under further consideration.

Options that did not prove beneficial were omitted from further study. The reasons for omission may have included one or more of the following; low impact on improving traffic capacity or safety, prohibitive construction costs (based on engineering judgment), and unwarranted social or environmental impact.

Refer to Appendix J for Screening Matrices.