

**NORTH COUNTY CORRIDOR  
TRANSPORTATION EXPRESSWAY AUTHORITY  
TECHNICAL ADVISORY COMMITTEE**

**ITEM: 4a**

**SUBJECT:**

Project Updates

**STAFF RECOMMENDATIONS:**

Discussion Only

**FISCAL IMPACT:**

Not determined

**DISCUSSION:**

Jacob's staff provides the following updates:

Risk – No new risks have been identified and the current risks for the traffic model to be used have been resolved and removed.

Public Outreach Update –

The Community Focus Group (CFG) was held on Wednesday, December 8, 2010 at 6:30 p.m., at the StanCOG Board Room, 1111 I Street, Suite 308, Modesto. Meeting notes are attached.

Traffic Update –

The Traffic Forecasting Model Calibration/Validation report has been submitted to Caltrans. A conference call was held with Caltrans to discuss the Existing Conditions Operations Report.

Environmental Update –

The Purpose and Need section of the Environmental Impact Statement (EIS)/Environmental Impact Report (EIR) is in progress and a Draft Purpose and Need Methodology memo was distributed to the Project Development Team. (See attached) The screening process of alternatives that were identified from public scoping has begun. The alternative screening methodologies report is attached. This includes a first screening that focuses on determining if the alternatives will meet the year 2030 traffic demands in northern Stanislaus County. The screening process also includes evaluation of whether there are any major engineering considerations that would affect the safety or function of the facility, as well as a second screening that includes a quantitative assessment of how well the alternatives would meet the purpose and need and a comparison of the operational function and impacts of the alternatives. The specific criteria are as follows:

Purpose and Need Criteria:

- Does the Alternative Improve Network Circulation?
- Does the Alternative Reduce Existing and Future Traffic Congestion?
- Does the Alternative Benefit Commerce in the cities of Modesto, Riverbank, and Oakdale?
- Does the Alternative Enhance Traffic Safety?

Other Evaluation Criteria:

- Excessive Construction Costs?
- Severe Operational or Safety Problems?
- Unacceptable Adverse Social, Economic, or Environmental Impacts?
- Combination of Reasons, Which Taken Individually May Not Be Significant but Would Be Significant Cumulatively?
- Previously Rejected at an Earlier Stage (Regional Planning Process as Documented in an Environmental Document)?

The screening approach has been developed to satisfy the intent of the National Environmental Policy Act of 1969 (NEPA). The California Department of Transportation (Caltrans), acting as the delegated NEPA agency pursuant to 23 U.S.C. 327, in cooperation with the North County Corridor Transportation Expressway Authority (NCCTEA), will comply with the Federal Highway Administration (FHWA) guidelines for implementing NEPA, and related environmental policies and regulations, as well as comply with the Caltrans Standard Environmental Reference (SER).

The alternatives that have been screened out and those still being evaluated for further consideration can be accessed at:

<http://www.dot.ca.gov/dist10/environmental/projects/ncc99to120/maps.html>.

A second Section 6002 meeting was held on January 19, 2010, for the Participating or Cooperating Agencies on this project. In attendance were:

- California Fish & Game
- SFPUC
- USFWS
- Army Corps, and
- Local agency representatives

A draft 6002 Coordination Plan was distributed and is intended to define the process by which the Californian Department of Transportation (Caltrans) will communicate information about the North County Corridor Environmental Impact Statement (EIS) to the participating and cooperating agencies and the public. The plan also identifies how input from agencies and the public will be solicited and considered. The coordination plan is meant to promote an efficient and streamlined process and foster good project management through coordination, scheduling, and early resolution of issues. A discussion on the Purpose and Need Methodologies and alternative screening process occurred and the anticipated schedule was presented.

Approximately 70% of the "Permission to Enter" (PTE) letters have been received from residents/property owners have been prepared to obtain access to private property for environmental study for the areas that have been defined for spring-time surveys. Follow up letters were sent to the remaining residents/property owners via certified mail on January 9, 2011.



# Community Focus Group Meeting Report

## December 8, 2010 (DRAFT)

The first meeting of the 23-member North County Corridor Community Focus Group (CFG) was held on December 8, 2010, in the StanCOG Board Room, 1111 I Street, 3<sup>rd</sup> Floor, Modesto, California. Seventeen CFG members were present (see attached listing), along with seven members of the general public<sup>1</sup> and several members of the project team.<sup>2</sup> Members of the general public were asked to sign in. Members of the CFG were given an agenda, comment sheet, map identifying the residence or business of each CFG member, mission statement, and a document detailing roles and responsibilities of the CFG.

Laurie Barton, Project Manager for the North County Corridor Transportation Expressway Authority (NCCTEA), welcomed the group and explained that the meeting supplements the scoping process, which included two public meetings in September 2010 and the environmental document review process, which is scheduled for late 2012. As the lead agency, Caltrans is not required to respond to comments submitted outside of the noticed public circulation period for the Draft Environmental Document.

Judith Buehe, Public Outreach Coordinator for the NCC project, facilitated the meeting. She explained that the name, Community Focus Group, reflects the group membership, which represents a broad range of organizations, interests, and geography.

CFG members gave self-introductions. Each member identified the community interest or organization he or she represents on the CFG and identified some key areas of concern. One of the members noted the lack of awareness of the project in the general public. Judith also asked the members of the group to confirm their contact information on the list included in their CFG package.

Matt Machado, Authority Manager, NCCTEA, emphasized the Authority commitment to informing the public about the project and expressed his appreciation of the personal commitment each CFG member is making by participating in the group.

Judith asked group members to review the CFG Roles and Responsibilities document and provide feedback.

Judith asked members to indicate whether they would prefer to receive information in the future by e-mail or U.S. mail. Two members of the group would prefer print material via U.S. mail; the others will accept e-mail.

The group discussed the best time and date for meetings and agreed on 6:30 p.m. on a Wednesday, except for the first Wednesday of each month. The CFG will meet about every three months.

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<sup>1</sup> Jim and Jan Haydyn-Myer, James Robinson, Ralph Sikkema DVM, Manuel Vierra, Jim Mayol, and Geoff Pyka.

<sup>2</sup> Matt Machado, Laurie Barton, Kris Balaji, Theron Roschen, Judith Buehe, Michele McCormick, Carlos Yamzon, Cindy Malekos, and David Myers.

The group members agreed that the Mission Statements in their packages seemed clear. Roles and Responsibilities were also reviewed.

Project Manager Kris Balaji explained that the CFG will be made aware of public outreach activities, such as news releases before they are issued to the news media, so group members can help foster broader awareness.

Kris stated that he feels very connected to this community. He then reviewed the environmental process that is underway in the Project Approval and Environmental Document (PA&ED) stage.

Kris reviewed ground rules for the CFG and stated that all comments will be accepted with courtesy and respect. He also noted that in the CFG meetings, participants are expected to represent community perspectives, not just personal perspectives.

Kris explained the project structure: this project was born as the result of a StanCOG Feasibility Study. The project then became a part of the StanCOG Regional Transportation Plan (RTP). During the previous Project Study Report (PSR) process, because the project corridor would extend through multiple jurisdictions, a Joint Powers Authority (JPA) was formed. The JPA includes representatives from the affected jurisdictions: Stanislaus County and the Cities of Riverbank, Oakdale, and Modesto. Caltrans and StanCOG are ex officio members of the JPA. The JPA's role is to complete the project approval and environmental documentation for the project. The JPA will not oversee the design phase.

Caltrans funding of \$91 million, previously designated for a separate, cancelled project, was transferred to this effort on May 20, 2010, through a Route Adoption process by meeting a set of strict criteria. One essential element is that the facility must be within the state highway system. This year, SB-532 designated State Highway 108 as an interregional facility.

This PA&ED stage will result in the identification of a specific alignment.

Questions asked included the following:

*Can the project be developed in segments?* It can but must tie into the bigger project.

*Will the preferred route be selected based on the Draft Environmental Impact Report (DEIR)?* A preferred route will be recommended. Public input has shaped the alignments now under consideration.

*Will the environmental studies be based on developed or undeveloped land? Is the project goal to provide improvements in east-west transportation to Riverbank and Oakdale existing populations or future populations? The process has changed over many years and the goal is now less clear.* Matt replied, "It's all."

*Will the new route be built as an expressway, freeway, or something else?* Kris replied that the route adoption was done in two parts from Oakdale to Albers Road to McHenry Avenue. Part is a freeway; part is a limited-access expressway. Traffic operations will dictate whether a section will be an expressway, freeway, or some other roadway.

In reviewing the work done thus far, Kris stated that scoping meetings have been held and comments received. Now, a strong Purpose and Need Statement must be developed and alternative screening criteria established.

State law requires in-depth study of all impacts. Further impact analysis will be conducted and mitigation will be examined. This study will determine what kind of roadway will best meet community needs and for how long. An environmental document will be prepared to assess (1) a

350-foot alignment from SR-99 to SR-120, and (2) a construction-level analysis of a buildable segment beginning at SR-120 and extending westward.

To perform the essential, detailed environmental studies, environmental specialists must visit certain properties along or near the route. Permit-to-enter letters are being sent to property owners.

Theron Roschen, Deputy Project Manager, reviewed the timeline milestones on a large chart, copies of which will be sent to the CFG members. Scoping meetings were held in September 2010. He reiterated that technical studies for the environmental document are underway and field work will kick off in early 2011. Workshops will be held next year to keep the general community informed. A Draft Environmental Impact Report /Environmental Impact Statement is scheduled for public review in October 2012, and a Final Environmental Impact Report/Environmental Impact Statement is expected in August 2014.

Kris reviewed the permit-to-enter activities in more depth. A letter will be sent to property owners, along with a brochure explaining this process. The permit-to-enter letters are not being sent to all alignments. The letters were directed toward alignments containing less developed parcels with the potential to contain habitat for sensitive resources, such as threatened and endangered species, vernal pools, and wetlands. If a property owner refuses to sign, a visual inspection can be conducted from off-site in some cases. Kris pointed out that property owners can benefit from allowing the studies to be done so that factors of concern can be identified early and the alignment adjusted accordingly at an early stage. Learning information early in the process can save significant costs.

Judith briefly reviewed the Community Involvement Plan. A mailing database includes more than 6,000 names of individuals, agencies, and organizations. Additional names are welcome. Among the methods being used to inform people about the project are public meetings/open houses/hearings, public workshops, a Technical Advisory Committee, 1-on-1 conversations, a speakers bureau, JPA meetings, the project Website, and this Community Focus Group.

After thanking StanCOG employees Carlos Yamzon and Cindy Malekos for their help in setting up for the meeting and for the use of the StanCOG board room, Judith adjourned the meeting promptly at 8:00 p.m.

*Action Items:*

- 1. The milestones schedule chart will be sent to CFG members. (Done)*
- 2. A lexicon of acronyms will be developed and distributed to CFG members.*
- 3. News releases will be sent to CFG at the same time they are sent to the news media.*
- 4. Schedule next CFG meeting for a Wednesday evening at 6:30 p.m.*

Other

1. Mr. John Brichetto asked that the NCC CFG Mission Statement include the following statement: "The focus will avoid any significant loss of jobs to any community."
2. Mr. Geoff Pyka, ConAgra Foods submitted a comment sheet directed to Gail Miller, detailing why the ConAgra Foods Oakdale facility operations are dependent on John Brichetto's cattle and orchard land for wastewater discharge.

# **NORTH COUNTY CORRIDOR ALTERNATIVES SCREENING METHODOLOGY REPORT**

## **INTRODUCTION**

The North County Corridor (NCC) Environmental Impact Statement (EIS) / Environmental Impact Report (EIR) involve establishing a draft Purpose and Need Statement along with alternative development and initial screening. Once a clear Purpose and Need Statement is developed and possible actions to address need are established, then the process of developing and refining potential transportation system alternatives that meet travel needs, of assessing potential impacts and mitigation, of delivering a complete environmental process, and of concluding the transportation decision-making process can be achieved.

The purpose of this report is to outline the methodological approach to be undertaken in identifying alternatives for additional study in the NCC EIS/EIR. The primary intent of the report is to introduce the screening process and criteria utilized in identifying and evaluating potential alternatives. The process involves a first screening that determines if a given alternative will meet the year 2030 traffic demands on State Route 108 in northern Stanislaus County, California. The screening process also includes evaluation of any major engineering considerations (if applicable) that could affect the safety or function of the facility. The second screening includes a quantitative assessment of how well an alternative addresses the Purpose and Need Statement along with a comparison of the operational function and impacts of each alternative evaluated, along with a more detailed assessment of potential environmental impacts.

The approach has been developed to satisfy the intent of the National Environmental Policy Act of 1969 (NEPA). The California Department of Transportation (Caltrans), acting as the delegated NEPA agency pursuant to 23 U.S.C. 327 and in cooperation with the North County Corridor Transportation Expressway Authority (NCCTEA), will comply with the Federal Highway Administration (FHWA) guidelines for implementing NEPA, with related environmental policies and regulations, and with the Caltrans Standard Environmental Reference (SER).

The following report is organized around and consists of the regulatory guidance overseeing the process, the screening process participants, a preliminary definition of Purpose and Need, and the various screening steps and criteria that will be utilized to evaluate and screen alternatives.

## **REGULATORY GUIDANCE**

The identification of alternatives to be studied in detail within the EIS/EIR is an important step in preparing a NEPA EIS. Specifically, 40 CFR 1502.14 requires project proponents to:

- Rigorously explore and objectively evaluate all reasonable alternatives; for alternatives which were eliminated from detailed study, briefly discuss the reasons for having been eliminated;
- Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits;
- Include reasonable alternatives not within the jurisdiction of the lead agency;
- Include the alternative of No Action;
- Identify the agency's preferred alternative or alternatives, if one or more exists; identify such alternative in the draft and final statement unless another law prohibits the expression of such a preference; and
- Include appropriate mitigation measures not already included in the proposed action or alternatives.

When screening alternatives, it is important to include sufficient information when developing, evaluating, and eliminating alternatives. The screening process should include clear reasons as to why the range of alternatives was developed, as well as note what process and the type of public and agency input that was used. Equally important is why alternatives were eliminated from consideration. This entails documenting the type of criteria used, the point at which the alternative was eliminated in the process, and the parties involved in deciding the criteria for assessing alternatives and measuring an alternative's effectiveness.

The No Action Alternative will be included in the range of alternatives. This alternative may include short-term activities such as upgrades to existing systems and maintenance activities. This alternative serves as a baseline to which all other alternatives can be compared. The No Action Alternative includes projects listed in the adopted Stanislaus County *Regional Transportation Plan 2011* (RTP). The report utilizes all current, 2030 demographic data available, and will be updated as new versions of the model and transportation plan become available.

## **SCREENING PROCESS PARTICIPANTS**

Through the screening process, the Project Development Team (PDT), composed of representatives from Caltrans; NCCTEA; the cities of Modesto, Riverbank, and Oakdale; the County of Stanislaus; and the Stanislaus Council of Governments (StanCOG), will be engaged. The PDT will be responsible for conducting a quality control review, testing the methodologies and assumptions inherent in each step, and applying the methodologies and assumptions. The Consultant Team will meet with the PDT (defined below) to discuss the alternatives methodology as well as the first and second screening processes. Additional meetings with specific technical team members may be required to discuss the results of technical analysis prior to meeting with the full PDT. The PDT will ultimately verify and agree on the screening results.

The PDT represents a multi- and interdisciplinary group of experts that can offer insight into Project factors. The PDT consists of traffic analysts, engineers, and environmental staff, including the following team members:

- Caltrans Project Managers: James Hammer, Gail Miller, David Sangha, Vu H. Nguyen
- NCCTEA Joint Powers Authority/County of Stanislaus: Matt Machado, Laurie Barton
- City of Modesto: Jeff Barnes
- StanCOG: Carlos Yamzon
- City of Riverbank: J.D. Hightower
- City of Oakdale: David Myers
- Consultant Project Managers: Kris Balaji, Theron Roschen
- Consultant Environmental Managers: Jack Allen, Lauren Abom, Gary Fink
- Consultant Engineering Manager: Trin Campos
- Consultant Traffic Engineer: Eddie Barrios
- Consultant Public Outreach Coordinator: Judith Buethe

Note: Changes may occur in assigned team members as the process progresses.

## **PURPOSE AND NEED**

As a vital element in the screening process, the Purpose and Need Statement defines the transportation “problem,” which the proposed action is attempting to address. As such, a viable alternative should reasonably achieve the needs that the proposed action is intending to address. The Purpose and Need for the NCC Project was developed considering input from the public scoping meetings in September 2010 and through a series of meetings with the PDT between September and November 2010. The Purpose and Need Statement developed for this Project is defined in the attached Purpose and Need Development Memo.

## **SCREENING PROCESS**

### **Step 1: Identify Alternatives**

Identification of alternatives for the NCC EIS/EIR has been an open process accessible to stakeholders. Alternative identification began during the Project scoping phase. Agencies and public participants suggested several system/modal alternatives during the scoping phase. These concepts were incorporated



into the list of alternative concepts noted below. Additional alternative concepts have been suggested through review of previous studies. Overall, the process intended to capture all possible alternatives that might be suggested through the course of preparing the EIS/EIR. Identifying and considering a wide range of alternative concepts at an early stage in the process minimizes the potential for new alternatives to surface later.

Two public scoping meetings were held on September 8, 2010, and September 13, 2010, in the communities of Oakdale and Salida. Each meeting was designed to solicit public input into the environmental compliance and alternatives screening processes. Participants were invited to draw alternative concepts on study area maps and aerial photos as well as provide written comments. Through the process, system/modal or alignment alternative concepts were identified, though it should be noted that components of one or more concept may still need to be combined to create a complete alternative. Each independent concept is distinguished by a number in parentheses. Sub-headings are provided for organization but are not included as alternative concepts.

**No Action concepts include:**

- (1) Land Use (Adopted Existing General Plans of Affected Cities/County)

**Transit concepts include:**

- (2) Use Existing/Improved Public Transit System

**Transportation Systems Management (TSM)/Transportation Demand Management (TDM) concepts include:**

- (3) Intersection and Signal Improvements
- (4) Improve Existing Roadway System
- (5) Use of Carpools, Vanpools, Train, Bus, Bicycle, Walking
- (6) Compressed Work Hours/Telecommuting
- (7) Increased Park and Ride Use

**Build concepts outside of study area include:**

- (8) Highway 120 Bypass (Public Comment)

**Build concepts include:**

- (9) Existing State Route 108 from State Route 99 to State Route 120
- (9A) F Street 3 to 5 Lanes one-way and G Street one-way (Public Comment)
- (9B) Extend eastern Project boundary farther east to eliminate hills and curves east of Oakdale (Public Comment)

- (9C) Ladd/Patterson/State Route 99
- (10) State Route 99 to Langworth
- (10A) Begins at Langworth
- (10B) Begins at Langworth
- (10C) Begins at Langworth
- (10C-1) Stearns Road to State Route 120 (Public Comment)
- (10C-2) Alternative 10C with Lexington Avenue (Public Comment)
- (10C-3) Hammett/Lad to Alternative 10C
- (11) Kiernan/Claribel Corridor
- (11A) Alignment C to Claus Road, then Alignment 10A, 10B , or 10C to Oakdale (Public Comment)
- (11B) Kiernan to Wamble Road (Public Comment)
- (12) Patterson Road to 300' east of Albers Road to Langworth Road (Public Comment)
- (13) Widen 219 to eight lanes to McHenry Avenue to SR 108 (Public Comment)
- (14) Kiernan/Claus/SR 108 Option (Public Comment)

Once cohesive alternatives have been developed based on the concepts listed above, each alternative will be evaluated to assure an accurate assessment of operational and physical impacts. Alternatives will be conceptual during the first screening level, and alternatives with obvious “fatal flaws” will be removed. From there, a more defined second screening will occur once all the appropriate data has been produced.

Note: Alternatives will be designed to comply with Caltrans design standards. Design exceptions will not be considered during the first screening process.

## **Step 2: First Screening**

### **First Screening Process**

Each of the alternatives will be screened through a preliminary screening process that focuses on determining if a specific alternative will meet the 2030 traffic needs and if any major engineering considerations would affect the safety or function of the facility. Guidance provided in Chapter 10 of the Caltrans Project Development Procedures Manual (PDPM) will be used, with a focus on six criteria identified in the PDPM that will allow for a preliminary evaluation of alternatives. Preliminary screening

(i.e., the first screening process) is generally a qualitative step using readily available data and professional judgment.

During this step, the PDT will apply the preliminary screening criteria identified in the PDPM. Once done, the PDT will document the justification for eliminating or moving ahead with alternatives in an alternatives screening matrix. These criteria include the following:

- Would the alternative meet the Purpose and Need for the project as defined at this stage in the planning process;
- Would there be excessive construction costs associated with the alternative;
- Would the alternative result in severe operations or safety problems;
- Would there be unacceptable adverse social, economic, or environmental impacts;
- Would there be a combination of reasons that taken individually may not be significant but would be cumulatively; and
- Was the alternative previously rejected at an earlier stage, such as a regional planning process and as documented in an environmental process.

The Consultant Team will conduct the first screening exercise for this step. Upon completion, the Consultant Team will present its findings/recommendations to the PDT. At this presentation, the PDT will review the findings/recommendations and assess the validity of the findings.

### **First Screening Criteria**

Below are the Purpose and Need, engineering, and environmental criteria that will be considered in the first screening process. The process also assesses feasibility of implementation.

#### ***Purpose and Need***

This criterion includes preliminary screening measures to determine if the alternative would conceptually result in conditions that would support the stated Purpose and Need of the proposed action as defined at this stage in the planning process. If an alternative does not meet the Purpose and Need of the Project, it will be eliminated from consideration. The following questions will be applied when evaluating each alternative:

- Will the alternative reduce congestion on existing State Route 108? (An answer of “yes” is required to proceed)
- Will the alternative reduce congestion on roadways parallel to State Route 108? (An answer of “yes” is required to proceed)

### ***Engineering Considerations***

This criterion includes consideration of both the safety and function of the proposed transportation system. Preliminary screening measures were developed based on known engineering issues. To date, minimal design has been completed on each of the alternatives, and the qualitative analysis focuses on engineering “fatal flaws” that would preclude implementation of the facility. If an alternative does not pass the engineering screening, it will be eliminated from consideration. The following questions will be applied when evaluating each alternative:

- Would the alternative meet existing State interregional system connectivity?
- Would the alternative meet alignment geometric standards for a freeway/expressway facility?
- Would the alternative not significantly impact existing key public infrastructure facilities, i.e., the Hetch Hetchy water system, railroad, irrigation canals, and major power distribution lines?

### ***Environmental Considerations***

This criterion includes consideration of the potential for unacceptable and adverse social, economic, and environmental impacts. Referencing the public scoping comments, the PDT will consider these potential impacts in order to determine if there would be a substantial performance difference among alternatives. The following question will be applied when evaluating each alternative:

- Would the alternative result in substantial impacts to social, economic, and environmental issues as identified through use of the Caltrans PDPM?

### ***Feasibility of Implementation***

This criterion includes consideration of costs, political acceptance, consistency with adopted plans, and general environmental impacts.

## **Step 3: Second Screening (Alternatives Comparison)**

### **Second Screening Process**

Following the first screening, the remaining alternatives will be compared in order to identify the benefits and impacts associated with each alternative. The second screening step will quantify how well the alternative meets the 2030 traffic needs and how well the facility operates. The step will also assess any potential critical community or environmental impacts along with feasibility of implementation. The second screening step is a quantitative step that uses modeling in the study area. As such, the Consultant Team will provide data from the traffic analysis to indicate how each of the remaining alternatives would perform relative to the selected evaluation criteria. Alternatives will not be eliminated based on any single operational, environmental, or feasibility issue. Rather, the performance of an alternative will be

determined and ranked based on the sum of its benefits and impacts. The results of the screening will be documented in the alternatives screening matrix.

During this time, a PDT workshop session will be conducted to accomplish two goals:

- Evaluate and rate the relative importance of the various screening considerations; and
- Apply this consideration to each alternative, which is based on judgments about the data provided and will result in ranking alternatives according to operational and environmental impacts as well as implementation feasibility.

These rankings will form the basis for the final ranking of the alternatives. The PDT will decide, based on these rankings, which alternatives are recommended for additional study in the EIS/EIR. The alternative comparison will be documented in the alternatives screening matrix.

## **Second Screening Criteria**

Below are the Purpose and Need, engineering, and environmental criteria that will be considered in the second screening process. The process also assesses feasibility of implementation.

### ***Purpose and Need***

This criterion includes screening measures to determine if the alternative would result in operational traffic conditions that would support the stated Purpose and Need of the proposed action. Traffic modeling for each alternative would provide the data to complete the analysis. Elements to consider related to mobility include:

- Travel time,
- Travel speed,
- Corridor Level of Service (LOS),
- Primary Intersection LOS, and
- Screenline Volume Reduction.

### ***Engineering Considerations***

This criterion includes consideration of both the safety and function of the proposed transportation system. Conceptual designs will be used to evaluate alternative issues that may impede the performance of the proposed facility or reduce conflicts between modes of transportation and/or turning movements evaluated on a qualitative basis.

- **Operation of State Route 108:** Would the alternative maintain a State Route 108 mainline LOS D or better?

- **Connectivity:** Would the alternative provide improved transportation network connectivity?
- **Convenience/Accessibility:** Would the alternative provide additional transportation options for the traveling public?
- **Driver Expectancy:** Would navigation of the alternative be understood and provide expected movements?
- **Safety:** Would the alternative reduce the number of movements with the potential conflict with one another?

### ***Environmental Considerations***

This criterion includes consideration of both impacts to the community and the natural environment. The Project Team will consider all environmental elements and environmental considerations identified below. The criterion was developed based on major and known environmental issues that could be differentiated between alternatives as well as on public comments indicating valuable community resources.

Note: resource surveys (e.g., cultural resources and wetlands delineations) are not available at this time, and that additional consideration of environmental resources would be included and evaluated in the EIS/EIR. To assess potential impacts to environmental resources the Project Team will rely on publicly available information on the following topics that will be addressed in the EIS/EIR:

- **Agricultural Impacts:** Which alternatives would affect farmlands under the Williamson Act contract or on prime agricultural soils?
- **Air Quality Impacts:** What air quality impacts would result under each alternative?
- **Biological Impacts:** Would the alternative affect rare, endangered, or threatened species, and if so, to what extent? Would wetland resources be affected? What plant and animal species would be affected?
- **Cultural Resources/Historic Resources Impacts:** Would archaeological resources be affected by the alternative? How many structures more than 45 years of age would be affected by each alternative? (based on year built data)
- **Community Cohesion/Land Use/Growth Impacts:** Would each alternative divide an established community, and if so, how?
- **Emergency Services Impacts:** Which alternatives would negatively increase anticipated emergency response times?

- **Geology/Soils/Seismicity Impacts:** Would an alternative result in impacts to the area's underlying geological conditions, soils, or seismicity?
- **Hydrology/Water Quality Impacts:** Which alternatives may result in impacts to local and regional hydrology and water quality?
- **Noise Impacts:** Which alternatives may result in noise impacts to surrounding land uses?
- **Right-of-way Impacts:** Would the alternative result in acquisitions? (number of partial and full acquisitions, number of commercial and residential acquisitions)
- **Visual impacts:** Would the alternative create substantial visual impacts?

#### ***Feasibility of Implementation***

- Would the alternative be consistent with adopted transportation and land use plans?
- Is there support by the local municipalities for the alternative?

#### **Conclusion**

The goal of the alternatives screening process is to complete an initial screening of all alternatives. Additional screening and analysis will need to be completed as the Project proceeds. Elements that may need to be considered but are not addressed in this screening include a more detailed assessment of environmental resources and consideration of design refinements to reduce impacts.