The Collaborative Decision Making Framework

The transportation decision making process is made of many individual steps. Most of these steps are work activities that take place in the technical decision making process. Key decisions are those places in the process where the general work activities need review and approval from higher levels of authority or where consensus needs to be reached among diverse decision makers before the project can advance further. For this reason key decisions most often occur in the policy decision-making process. Key decision points, therefore, represent only a portion of the overall decision-making process, but these points effectively link existing planning and project development processes and practices. Many key decision points will be common among transportation agencies. Some of them are defined by law. Others have been created through the development of standard or best practice application. The individual work activities that link and feed key decision points can be quite different from state to state.

The C01 project has developed the Collaborative Decision-Making Framework (CDMF) to identify key decision points (KDPs) in four phases of transportation decision-making processes. For the purpose of this project the environmental review process is considered to be merged with the permitting process. The four phases of the CDMF are:

(i) Long-Range Transportation Planning
(ii) Corridor Planning
(iii) Programming
(iv) Environmental Review and Permitting

The CDMF incorporates overall context sensitive solutions and project management principles and is built on a set of design goals established by the Technical Coordinating Committee for Capacity research. The design goals provide the following guidance:

Establish a collaborative decision-making approach that identifies participant roles and responsibilities at each KDP and includes:

- Early and on-going involvement of formal decision makers and individuals who have the potential to significantly impact the timely and cost-effective delivery of transportation improvements
- A tiered decision-making approach to capacity improvements that encourages binding decisions at the earliest possible point

Encourage timely and cost-effective project delivery through a process that:

- Ensures transfer of information and decisions between phases
- Encourages early and comprehensive agreement on data sources, level of detail, evaluation criteria and performance measures
- Establishes a comprehensive and proactive risk management strategy

Encourage a decision-making approach that evaluates transportation needs within broader community and natural contexts and integrates land planning and development policy, capital improvement planning, protection and enhancement of the human and natural environment, and addresses sustainability issues to the greatest extent possible in order to support community vision and goals.

Encourage consideration of a wide range of options to address capacity problems during the planning phase of decision making as well as early and on-going incorporation of operational elements as a part of the overall decision-making approach.
Establish a decision-making approach based on fulfilling the intent of legal and regulatory requirements while providing implementation flexibility and adaptability consistent with the design goals.

The CDMF is intended to be readily available to all practitioners who wish to incorporate a collaborative decision-making approach throughout the entire transportation process or only in specific areas. For this reason the ultimate vision is for the framework to be accessed through a web-based tool. The architecture of the CDMF is being designed with this in mind. The structure of the CDMF represents a series of portals through which increasingly detailed information can be retrieved for each KDP, first at the Entry Level and then at the Practitioner Level.

**CDMF Entry Level**

The diagram above represents the CDMF Entry Level through a series of portals in each phase of the transportation process where one or more KDPs may occur. This level demonstrates the upper-level steps in decision making as well as how the individual phases relate to one another. The community visioning process illustrated here is recommended as a best practice to ensure that the transportation decision-making process includes the larger goals and visions of the region. However, this process exists outside the transportation process, and therefore is not detailed within the CDMF. The Entry Level allows the practitioner to select an area of specific interest within the process to approach at the more detailed level.
Although the Entry Level provides a concise overview of the CDMF, transportation practitioners will need specific information at each KDP in order to consider implementation of the collaborative decision-making process. The CDMF Practitioner Level provides access to the full extent of information available at each KDP including:

- Purpose and outcome of the KDP
- Decisions made at this step
- Roles and responsibilities of the formal decision makers
- Stakeholder/project champion roles and relationships
- Supportive data, tools, and technology
- Related influencing and sub-processes
- Primary products of this step
- Associated best practices
- Linkage to other SHRP 2 Capacity research such as the C02 Performance Measurement Framework

There are other community planning processes that are external to the transportation process but which have an impact on transportation decision making. Within the CDMF these processes are identified as sub-processes or influencing processes. While sub-processes have a direct effect on the transportation process through certain critical-path steps, other external processes strongly influence transportation decision making and best practice in collaboration would engage these processes as well. The CDMF contains KDPs that link the air quality, land use, and fiscal constraint sub-processes to the transportation process as well as to detailed information to allow integration of the influencing process such as the natural and human environment, safety and security planning, and capital improvement planning.
The ultimate vision for use of the CDMF is through an integrated web-based tool that will allow users to enter the framework at any point and follow a topic of interest through all the available information. Results of individual SHRP 2 Capacity Program research projects will be synthesized and condensed in a final user-oriented product with links to full-text source material supported by examples and illustrations. This is essentially a new collaborative planning document focused on decisions, not process.