A New Route to Complete Streets? Using the TCAPP Model in Grand Rapids, Minnesota

DETAILS

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SHRP 2 Capacity Project C18C

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Minnesota Department of Transportation

Humphrey School of Public Affairs
University of Minnesota

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Executive Summary

Introduction

The fundamental purpose and goal of this pilot test was to evaluate and propose enhancements to the Transportation for Communities - Advancing Projects through Partnerships (TCAPP) collaborative planning tool. The Minnesota project involved using TCAPP to guide planning activities that would result in a collaboratively developed Complete Streets plan in the City of Grand Rapids, Minnesota. This was an important project because the final Complete Streets plan will be incorporated into the city's comprehensive plan update. The final planning process would be deemed a success if it was found to be both acceptable to stakeholders and fiscally possible.

The Minnesota research team has been forthcoming throughout this process in asserting that this particular pilot test lacks some of the controversy of the other three C18 pilot tests. While some might consider that fact to be a weakness in the team's ability to effectively test the TCAPP tool, the team believes that the test was successful because the very nature of Complete Streets planning requires the active participation of a broad and disparate variety of partners and stakeholders. Since these project participants shared many of the same values and a common vision of their city, the team was confident that the planning process would ultimately result in an agreed-upon plan. That allowed the team to focus on the value and effectiveness of TCAPP in an environment where the participants have different specific interests, but mostly are inclined to want to work together to achieve a common objective.

Project Context

The city of Grand Rapids, Minnesota, is a town in north central Minnesota of about 10,000 people that offers something for everyone. The city is well served by a network of major state highways. The regional economy is heavy on tourism and forestry and their related products and activities which are reliant on an efficient road transportation network. Freight mobility is crucial to the local and regional economy, since the city is home to UPM Blandin Paper Company. Other local industries include mineral processing and agriculture. In town, a vast network of trails and sidewalks provide access for pedestrians and bicyclists to the city's most popular destinations, including access to the area's abundant natural amenities.

The diversity of economic, cultural, and natural features that make Grand Rapids an exciting and vibrant town also create certain challenges for its transportation network. Considering the diversity of its economy and the wide variety of cultural, social, and recreational activities around town, city leaders have been focusing on identifying improvements to the city's multi-modal transportation network that will increase mobility and modal choice, and enhance safety and community livability for all the residents and visitors of Grand Rapids.

To that end, the city agreed to participate in this SHRP 2 study by working with project stakeholders and partners to develop a Complete Streets plan for the city that would be incorporated into the city's comprehensive plan. The goal of that effort was to plan for a balanced transportation system that integrates all modes (i.e., transit, freight, automobile, bicycle,

and pedestrian); address the specific needs of system users of all types, ages, and abilities and to promote broad public benefits including physical activity, environmental quality, and quality of life for citizens and visitors.

Project Partners

TCAPP identifies partners as those parties with a decision-making role at one or more points in the transportation planning process. These decisions are fiscal and/or legal in nature. Partners for the Complete Streets planning process are the City of Grand Rapids, Itasca County, Minnesota Department of Transportation, and the Federal Highway Administration

Description of the Test, Summary of Outcomes by TCAPP Task

The research focused on the implementation of eight planning tasks, associated with eight "decision point files" of the TCAPP decision tool, mostly from the corridor planning (COR) phase, but also from the long range planning (LRP) phase. Each of the tasks that were included in the pilot test is identified in the summary list below. The body of the report provides a concise "summary by task" of the specific outcomes and benefits that each associated TCAPP decision point informed throughout the process.

1. Develop a consensus on a community and stakeholder vision.
2. Establish the scope of the planning process.
3. Identify problems and opportunities.
4. Select the criteria, methodology, and performance measures used to evaluate potential solutions.
5. Identify and propose solutions.
6. Select preferred solutions and strategies.
7. Develop criteria used to rank and prioritize the preferred solutions.
8. Finalize and adopt the plan.

Stakeholder Involvement

TCAPP identifies stakeholders as those parties who may be affected by a transportation plan, program, or project. The list below identifies the most active stakeholders.

- Grand Rapids Chamber of Commerce
- Get Fit Itasca
- Independent School District 318
- Elder Circle
- Minnesota Department of Health
- Northern Lights Nordic Ski Club
- Meds 1 Emergency Medical Services

- Itasca Community College
- Blandin Foundation

Assessment of TCAPP

This section of the report contains 18 of the more substantive recommendations for modifying the TCAPP site that our project team identified throughout the process. This section also includes a table (pages 27 and 28) that presents the team's recommendations from a thorough review of the functionality and utility of all of the tables contained within each of the tabs (Basics, Integration, Decision-Making Questions, Case Study Examples, Technical Support, and Special Topics) that comprise the elements of each of the 42 decision points.

Conclusion

The greatest and most lasting contribution of applying the TCAPP model is likely that bringing the stakeholders and partners together in a long-term, iterative process created a venue for continued dialogue and collaboration out of which new and creative solutions were found. The TCAPP tools provided valuable guidance on effective collaboration techniques with the community that was instrumental in developing alternatives beyond "traditional" highway improvements. Applying the TCAPP tools helped to identify multi-modal options, additional enhancement features, and innovative solutions that were critical to developing a successful Complete Streets plan for the City of Grand Rapids.

One of the more enlightening and unanticipated insights the team discovered by using the TCAPP model was the recognition that collaboration and partnerships are not only needed among organizations, but within them as well. The large, decentralized nature of the Minnesota DOT, which led to decision-making authority being placed in multiple offices at multiple locations, created a new opportunity for the project team to apply steps from the Decision Guide to intra-departmental decisions.

At Mn/DOT, one of the goals for this research has been to identify other opportunities around the state that might benefit from implementing a TCAPP-based planning process, including more complex projects. As an example, the MnDOT project team staff has discussed the potential for using elements of TCAPP for the very controversial St. Croix River Bridge from Stillwater, Minnesota, to Wisconsin.

Overall, we concluded that the TCAPP tool is an effective resource for helping transportation planners to "get the right people at the table, at the right time, with the right information" to lead to decisions that stick.

Introduction

The fundamental purpose and goal of this pilot test was to evaluate and propose enhancements to the TCAPP collaborative planning tool. The project team utilized the tool from December, 2010, through April, 2012, to guide much of the planning activities in the development of a Complete Streets planning process in the City of Grand Rapids, Minnesota. The focus was in assessing the tool's value in providing guidance to facilitate project partners and local stakeholders to work collaboratively, leading to decisions that would stick. The final planning process would be deemed a success if it was found to be both acceptable to stakeholders and fiscally possible. Although the team has asserted that this test is somewhat unique in that it is not characterized by abundance of controversy or mistrust among the participants (although the test did reveal a little more controversy than initially expected), a pilot test of TCAPP on this project was useful because of the broad and disparate variety of partners and stakeholders involved in the project. In short, the team was confident that the planning process would ultimately result in an agreed-upon plan, so it was useful to assess the value of TCAPP to guide the planning process in an environment where most participants have different specific interests, but mostly are inclined to want to work together to achieve a common objective.

Project Context: About Grand Rapids and Complete Streets

The city of Grand Rapids, Minnesota, is a town of about 10,000 people that offers something for everyone. The city is well served by a network of major state highways that approach the city from every direction. Most notably, the junction of U.S. Highways 169 and 2 is located in the heart of the downtown business district. Other state highways, including Highway 63 (Sugar Lake Road), Highway 38 (3rd Ave NW), and Highway 3 (River Road), all serve the regional traveling needs of Grand Rapids' citizens, businesses, and visitors. The regional economy is heavy on tourism and forestry and their related products and activities, which are reliant on an efficient road transportation network. Freight mobility is crucial to the local and regional economy, since the city is home to UPM Blandin Paper Company, which operates a large paper mill and is the city's largest employer. Other local industries include mineral processing and agriculture. In town, a vast network of trails and sidewalks, as illustrated in Figure 1, provide access for pedestrians and bicyclists to the city's most popular destinations, including access to the area's abundant natural amenities.

Figure 1. Complete Streets includes connections between recreation areas, major destinations, and transportation corridors.

The diversity of economic, cultural, and natural features that make Grand Rapids an exciting and vibrant town also create certain challenges for its transportation network. Considering the diversity of its economy and the wide variety of cultural, social, and recreational activities around town, city leaders have been focusing on identifying improvements to the city's multi-modal transportation network that will increase mobility and modal choice, and enhance safety and community livability for all the residents and visitors of Grand Rapids.

As indicated in the introduction above, the very nature of Complete Streets planning requires collaboration and input from a wide variety of interested stakeholders. The Federal Complete Streets Act of 2009 defines Complete Streets as:

> A roadway that accommodates all travelers, particularly public transit users, bicyclists, pedestrians (including individuals of all ages and individuals with mobility, sensory, neurological, or hidden disabilities), and motorists, to enable all travelers to use the roadway safely and efficiently.

In Grand Rapids, the goal of Complete Streets planning effort is to develop a balanced transportation system that integrates all modes (i.e., transit, freight, automobile, bicycle, and pedestrian); and to address the specific needs of system users of all types, ages, and abilities. Indeed, the objective of developing a Complete Streets network goes beyond issues related only to transportation safety and mobility. It also is intended to provide a transportation network that promotes physical activity, enhances environmental quality, and improves the overall quality of life for citizens and visitors.

Project Partners

TCAPP identifies partners as those parties with a decision-making role at one or more points in the transportation planning process. These decisions are fiscal and/or legal in nature. Partners for the Complete Streets planning process are the City of Grand Rapids, Itasca County, Minnesota Department of Transportation, and the Federal Highway Administration. Their specific roles are described below.

The Minnesota Department of Transportation (MnDOT) had the lead role in the TCAPP pilot test. As a national leader in developing Complete Streets standards and promoting multi-modism, Complete Streets planning is a priority for the department which recently convened a Complete Streets Task Force that is interested in the final outcome of the Grand Rapids project. MnDOT was represented by the Central Office (project managers), the District 1

engineering staff, the Bike and Pedestrian Unit, and the Transit Office.

The City of Grand Rapids, led by the City Engineer and his staff, along with the staff from Community Development and Parks and Recreation were integral to all facets of the initiative.

Itasca County engineering and recreation staff was very involved in all aspects of the planning process. In addition, a County Commissioner (and avid cyclist) also joined in the efforts as the planning process entered the prioritization phase.

The Minnesota office of the Federal Highway Administration (FHWA) was invited to all meetings and kept informed on project status throughout. They were not, however, a particularly active participant.

The Planning Challenge Addressed by the TCAPP Collaborative Process

The concept of accommodating all potential travel types within public rights of way is relatively new within the City of Grand Rapids, according to City Engineer and project partner Tom Pagel. Although many of the older developments (those constructed prior to 1970) accommodated pedestrians with the inclusion of sidewalks, developments after 1970 generally did not typically emphasize pedestrian and bicycle modal needs. This began to change in 2003 with the update of the city's comprehensive plan, which specifically articulated the goal for Grand Rapids to become a "walkable city".

As this report will detail in the following pages, the Grand Rapids project team dedicated significant energy to applying the guidance from TCAPP toward the goal of developing a common vision among all the stakeholders, identifying specific challenges that represent barriers to that vision, and then collaboratively proposing a solution set that resolves or at least mitigates those challenges. The project team worked closely with our partner organizations, a broad group of stakeholders, and over 60 focus group participants representing all demographic groups in the city. In no particular order, the following list represents key challenges that this Complete Streets planning effort set out to address.

- Many streets in the city do not have sidewalks.
- Some existing multi-use trails are not connected throughout the city.

- Pedestrian and bike access to major destinations (schools, parks, beaches, library, job centers) is limited.
- Main streets through downtown (US 169 and TH 2) are high volume, high freight, high-speed routes (see Figure 2).
- Difficult for pedestrians and bikes to cross major highways and the Mississippi River.

Figure 2. While this intersection has some pedestrian facilities, it is not truly "complete," as it is designed primarily to facilitate the movement of motor vehicles, goods, and trade.

In response, the project team worked with all involved participants to establish the goals that the city would hope to achieve by implementing the recommendations in the Complete Streets plan.

- Decrease crashes involving bikes and pedestrians.
- Improve the health of community residents.
- Increase opportunities to bike and walk, especially downtown.
- Provide connections to trails and other active recreation opportunities.
- Provide multi-modal access to major destinations.
- Consider and balance the needs of all users (pedestrian, bike, transit, auto, freight).

Description of the Test & Summary of Outcomes by TCAPP Task

The Minnesota project was selected for this pilot project to test and provide useful feedback on the operation and utility of the web-based TCAPP resource. The research methodology we applied in the test was to utilize the TCAPP Decision Guide on a prospective planning issue, i.e., developing a Complete Streets planning process that better integrates community, economic, and environmental considerations into new highway capacity.

As illustrated in Figure 3, the research methodology focused on the implementation of eight planning tasks, associated with eight “decision point files” of the TCAPP decision tool, mostly from the corridor planning (COR) phase, but also from the long range planning (LRP) phase. These steps were selected for our test because they were deemed the most relevant and critical for our planning process, which required collaborative decision making by a broad range

of stakeholders. Collaboration was required both early in the process and also throughout the entire planning process in order to reach consensus on goals and solutions that take into account the historical, cultural, and natural resources of the city.

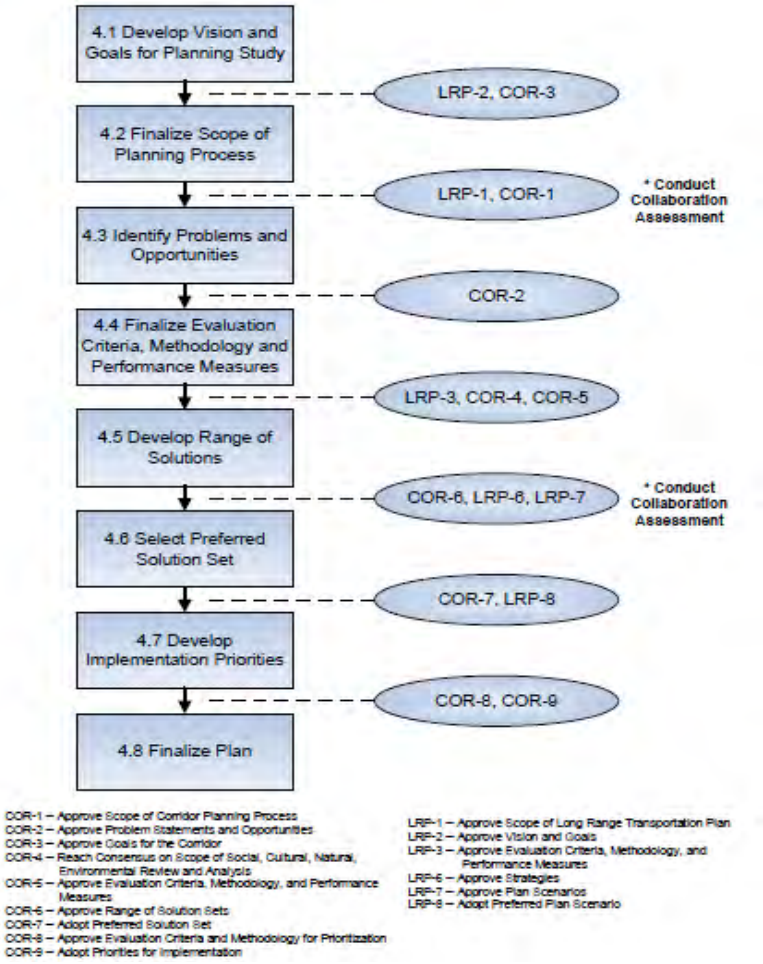

Figure 3. Minnesota TCAPP review – relevant decision points.

Each of the tasks that were included in the pilot test, along with their relationship to the relevant TCAPP "decision point", is described below. In addition, a concise "summary by task" is included that indicates the specific benefit resulting from applying the TCAPP elements for each task.

1. **Develop a consensus on a community and stakeholder vision** for the plan along with goals for the study. This step provided stakeholders the opportunity to define the objectives of the effort and communicate community values.

   - LRP-2 Approve Vision and Goals
   - COR-3 Approve Goals for the Corridor

Key Outcome: TCAPP was used extensively as a tool to identify initial stakeholder concerns and design the focus group meetings. The Decision Guide was very useful in this endeavor because it provided comprehensive lists of potential questions to be posed in the stakeholder meetings and the focus groups under the "Decision-Making Questions" tab for LRP-2 and COR-3. The following goal and objectives were identified, using the TCAPP Decision Guide as a framework:

Goal: Support the economic vitality and quality of life in Grand Rapids through the development of a multi-modal transportation plan for the city that improves safety, access, and active recreation opportunities for all Grand Rapids residents, workers, and visitors.

Objectives:

- Ensure economic vitality through a quality multi-modal transportation system.
- Improve the health of community residents.
- Ensure connectivity for non-auto modes, including river crossings and within new developments.
- Decrease crashes involving bicycles and/or pedestrians (thereby improving safety for all modes).
- Increase opportunities to bike and walk.
- Provide connections to trails and other active recreation opportunities.
- Provide multi-modal access to major destinations.
- Balance the needs of all users (pedestrians, bicyclists, transit, autos, freight), especially in downtown.
- Meet Americans with Disabilities Act (ADA) requirements.

2. **Establish the scope of the planning process.** This stage involved assessing what data, decisions, and relationships needed to be considered, acquired, or made throughout the process.

- LRP-1 Approve Scope of Long Range Transportation Plan
- COR-1 Approve Scope of Corridor Planning Process

Key Outcome: The first key outcome of this step was to use the Decision Guide as a brainstorming tool to help identify a list of the key partners and stakeholders that would be invited to be part of the process. (It is conceivable that the project team could have come up with this list on our own, but we used the Decision Guide ("Decision-Making Questions") to kick start some of our thinking on the issue of "who should be involved?" and "what issues need to be considered?")

Subsequently, we used the Decision Guide to develop the scope for the planning process, which was a two-faceted approach: on the one hand, to create a clear "Complete Streets" plan that could apply to the entire city, while also focusing on several specific problem areas where TCAPP and Complete Streets principles could be applied in a detailed fashion.

3. **Identify problems and opportunities** associated with the city's transportation network. This stage required direct involvement with key stakeholders, including conducting focus groups with community members, to discuss how the transportation system affects "quality of life".

   - COR-2 Approve Problem Statement and Opportunities

   Key Outcome: TCAPP guidance (primarily the "Decision-Making Questions" tab) was used to develop a common understanding of both the deficiencies and opportunities that exist in the current transportation system in Grand Rapids. The problems and opportunities identified were organized below under one of three categories: A) Gap/Connection Issues; B) Problem "areas"; and C) Downtown issues. Though not explicitly directed by TCAPP guidelines, the team determined that breaking the problems and opportunities into these three categories would allow for a more efficient identification and analysis of the proposed solutions later in the planning process.

4. **Select the criteria, methodology, and performance measures used to evaluate potential solutions.** This included reaching consensus on the social, economic, environmental, natural, aesthetic, and transportation elements to be considered in the analysis.

   - LRP-3 Approve Evaluation Criteria, Methodology, and Performance Measures
   - COR-5 Approve Evaluation Criteria, Methodology, and Performance Measures

   Key Outcome: This TCAPP decision point was very useful in helping the team to identify (or confirm) the data needs that would be required to evaluate alternative solutions, and to prioritize solutions. In short, this step resulted in the decision to develop a plan that would focus on network and modal connections and increased safety for both non-motorized and motorized modes.

5. **Identify and propose solutions** for achieving an effective Complete Streets network.

   - COR-6 Approve Range of Solutions Sets
   - LRP-6 Approve Strategies

- LRP-7 Approve Plan Scenarios

Key Outcome: The project team, working in close collaboration with partners, and with ongoing input from the stakeholders, developed a list of "solutions" that proposed broad strategies, system-wide treatments, and site-specific improvements. Throughout this entire process, almost constant communication among all project partners and technical experts (city engineers, state traffic engineers, modal experts) was conducted, which was made possible by the collaborative nature of the project up to that point.

6. Select preferred solutions and strategies.

- COR-7 Adopt Preferred Solution Set
- LRP-8 Adopt Preferred Plan Scenario

Key Outcome: The primary benefit from this step was the selection of the solutions and strategies that are identified in the final Complete Streets plan. A priority list showing the "preferred" solution set was adopted by the project partners in a meeting on November 21, 2011. The final plan includes approximately 20 pages of recommendations on each specific solution that contains a narrative and map, and a proposed "design layout" where applicable. To provide a sense of the types of project priorities that were identified by the group, and also to provide a sense of the collaborative prioritization process, the following list offers a brief description of a few of the key projects and how they addressed key challenges identified earlier in the process.

- ***1st Street South and Pokegema Avenue –*** This intersection is among the busiest vehicle and pedestrian intersections in the city. The proposed solution involved closing the northbound to westbound left turn lane and constructing a center-raised median. It would also remove the traffic signals currently in place and replace them with HAWK (High Intensity Activated Crosswalk) and other pedestrian signal systems. A microwave pedestrian detection system utilizing bright, flashing LED lights on signage along with a striped crossing on the north side of 1st Street South was identified as a good option, although some of the stakeholders did not agree. As a result, underground conduit for future installation of a HAWK or similar pedestrian signal system was also included if the LED signage proved inadequate.

- ***Crystal Boulevard near Crystal Lake and the Itasca County fairgrounds*** – A portion of Crystal Boulevard that currently runs immediately adjacent to a very scenic Crystal Lake would be a desirable location to construct a bike and pedestrian path next to the lake while creating an additional opportunity to construct a "gateway" for the Itasca County fairgrounds. The change would provide a pedestrian-friendly setting at the

popular recreational destination, as well as improving water quality in Crystal Lake. (This project requires approval by the Itasca County Agricultural Board, which has reservations about the project.)

Figure 4. Map of proposed change to Crystal Boulevard.

- ***11th Avenue Northeast and 7th Street*** – This site is close to the public middle school, so enhanced pedestrian and bicycle facilities that promote safety are critical. An opportunity exists to improve the facilities at this location because nearby roadways are currently being reconstructed. A drop-off/pick-up zone and a pedestrian median were also identified as a solution at this location.

- ***Horseshoe Lake Road –*** This narrow highway currently has no pedestrian accommodations. Pedestrian infrastructure is scheduled for construction in 2013. This Complete Streets plan will recommend that those improvements take place as scheduled.

7. **Develop criteria used to rank and prioritize the preferred solutions**. These included safety considerations, funding availability, and general community support.

   - COR-8 Approve Evaluation Criteria and Methodology for Prioritization

   Key Outcome: The project team organized its final prioritized recommendations into five key functional areas: (1) engineering, (2) education, (3) enforcement, (4) encouragement, and (5) evaluation. In general, the TCAPP process helped us to prioritize the engineering solutions which tend to be the most costly. Examples of our priority recommendations, which were developed through the TCAPP-guided stakeholder informational gathering sessions and the focus groups, include the following:

   - Priority will be given to eliminating gaps.

- Priority will be given to streets with higher traffic volumes, speeds, and/or high pedestrian crashes.
- Priority will be given to achieving sidewalks on at least one side of the street initially.

8. **Finalize and adopt the plan.** After additional opportunities for public review and comment, the plan will be finalized and formally adopted by the Grand Rapids City Council.

- COR-9 Adopt Priorities for Implementation

Key Outcome: The final step in the planning process will be for the Grand Rapids City Council to hear testimony and adopt the final Complete Streets plan, which will then be incorporated in to the City's 2011 Comprehensive Plan update (at the time this report was written this step was not yet completed). The city's comprehensive plan is the policy guide used to direct future development or redevelopment in order to solve and avoid problems, meet future needs, and create new opportunities to enhance community life, the region's economy, and its environmental quality.

Initially, the team considered simply requesting that the City Council adopt a resolution in support of the recommendations presented in the Complete Streets plan. The stakeholder group felt very strongly that the plan would be much more impactful if it actually was incorporated into the city's formal Comprehensive Plan update, so that is the strategic direction that the process took. We credit the collaboration from the TCAPP process in large part for promoting this implementation strategy.

The following excerpts from the city's comprehensive plan update illustrate the city's commitment to implementing the recommendations of the Complete Streets Plan.

- *The Complete Streets study will reference and be consistent with Comprehensive Plan goals and objectives, and should provide tools for addressing the capacity opportunities in road corridors…* Ch. 5-92
- *[The Comprehensive Plan will] incorporate the results of the Complete Streets study to better create and retain streets that promote a mix of uses such as car travel, transit, and bicycling. The Complete Streets study will assist in making design and policy recommendations for the full range of travel modes.* Ch. 5-102

The TCAPP Collaboration Assessment

The Minnesota team's pilot test also included two applications of the "TCAPP Collaboration Assessment". As indicated throughout this process, the pilot test project was somewhat unique compared to the other three pilot test communities because – generally speaking – all of the stakeholders and partners who participated in this project have similar visions for the multi-modal transportation network in the city and share similar views on what they value about the

city's quality of life. Therefore, our findings from the TCAPP Collaboration Assessment mostly merely affirmed what we already knew – that there would not be a great deal of controversy or opposition to the ideas and improvements that were being proposed, and that, for the most part, the test could focus on the specific steps and guidance within TCAPP to proceed on developing a Complete Streets plan with confidence that project stakeholders would be willing to collaborate and that agreement would ultimately be achieved.

Table 1 below shows the results of the TCAPP Collaboration Assessment that was undertaken by project team members on June 10, 2011, about halfway through the planning process. The TCAPP Collaboration Assessment was completed by several team members, and the results are presented in order from lowest to highest collaboration measure rating.

Table 1. Results from the TCAPP Collaboration Assessment

Aspect of project	Collaboration rating	Collaboration ranking
Process Steps	3.00	Average
Decision-Making Authority	3.17	Average
Role Clarity	3.75	Average
Shared Goals	3.86	Average
Tools and Technology	4.00	Average
Sense of Ownership	4.17	Average
Practitioner Communication	4.17	Average
Participant Stability	5.00	Strong
Organizational Support	5.08	Strong
Data and Information	5.33	Strong

While members of the project team agreed that the TCAPP Collaboration Assessment is potentially a very powerful tool for identifying collaboration challenges early on, we concluded that a system that could better "tailor" results from the TCAPP Collaboration Assessment based on specific collaboration ratings (as opposed to the more general manner of conveying the results as it is currently constructed could enhance the process of identifying potential solutions based on the input for the specific user.

Stakeholder Involvement

TCAPP identifies stakeholders as those parties who may be affected by a transportation plan, program, or project. The list below identifies the most active stakeholders and their specific interest in the planning process.

The Grand Rapids Chamber of Commerce was represented at many of the stakeholder meetings, and also at the focus group. The Chamber spoke primarily on behalf of business interests in the downtown area, a key site for the Complete Streets plan.

Get Fit Itasca was perhaps the most vocal and active participant representing the area's non-motorized modal interests. Their representative was very well-versed in issues relating to bike and pedestrian concerns and system needs.

Elder Circle is a non-profit organization representing the interests of older residents of Itasca County. They were an active participant representing a very important interest group that can sometimes go under-represented.

Northern Lights Nordic Ski club is a non-profit organization whose mission involves promoting cross-country skiing as a healthful family activity. This stakeholder is critical to represent the interest in maintaining the area's vast network of skiing trails, a very popular winter activity in Grand Rapids.

Meds 1 Emergency Medical Services is the community's primary "pre-hospital" level medical service provider. They provide all hazard management, response, patient care, and medical transportation services in Grand Rapids. It is critical that the Complete Streets plan not result in "improvements" that hinder the services provided by Meds 1.

The State of Minnesota Health Department's Statewide Health Improvement Program was consulted and informed about the Grand Rapids Complete Streets planning initiative, and attended some of the stakeholder meetings, expressing support for the initiative and its potential to be replicated in other communities across the state.

Itasca Community College was another very active participant in the process. The school has 1,200 students, many of whom use a bicycle or walking as their only mode of transportation.

The public school system in Grand Rapids was also an active and critical participant in the process. The school district is responsible for ensuring the safety of all students traveling to and from school, from the youngest students through those in high school.

The Blandin Foundation is a charitable organization that supports communities in rural Minnesota by supporting efforts to build economic vitality. The Blandin Foundation recently sponsored a study of transportation system needs throughout Itasca County, so their input in this planning process was very valuable.

Assessment of TCAPP

This section of the report more specifically evaluates distinct components or elements within the TCAPP tool that were considered during our test of TCAPP to develop the Complete Streets plan in Grand Rapids. This independent evaluation was performed by Frank Douma, Associate Director, and Laura Eash, Research Assistant, at the State and Local Policy Program of the University of Minnesota's Humphrey School of Public Affairs, along with Matt Shands of MnDOT. Many of the "issues" and "proposed augmentations" identified in this section were initially identified and discussed in the technical memoranda prepared for this project during the pilot test, so by the time this report was completed, many of the MnDOT/Humphrey School comments had already been addressed by the TCAPP development team from ICF International. In addition, Matt Shands has served over the last eight months on the TCAPP user group, and some of the conclusions identified in this section were identified (and addressed by ICF International) during that process as well.

The project team also recognizes that some of these suggestions are more "significant" than others, so not all of these merit the same level of attention, a point that the team is confident is well understood by the tool's developers.

Proposed TCAPP Augmentations

General TCAPP Organization

1. **At issue:** At the initial training session in Washington, DC (Oct. 17 to 18, 2010), the Minnesota team initiated a discussion involving the TCAPP terminology focusing on the

term "Corridor Planning" as one of the four principle modules. The discussion was based on the Minnesota team's original work plan which identified applicable decision points in both the Corridor Planning module as well as the Long Range Transportation Planning module. The team's initial view was that a "corridor plan" would not adequately capture many of the intricacies of a regional or area-wide plan as envisioned for the Grand Rapids Complete Streets planning process.

Proposed Value-Added TCAPP Augmentation: ICFI and NAS project partners clarified that the Minnesota work plan for the Grand Rapids Complete Streets planning process could focus exclusively on the Corridor Planning module, which was conceived to be able to address both traditional corridor planning, but also more limited "sub-area" planning. Therefore, the team proposes changing the name of the module from "Corridor Planning" to "Corridor/Sub-Area Planning" to more clearly describe the geographic boundary covered by the planning process.

2. **At issue:** There was some confusion initially (probably mostly the Minnesota team's false assumption) that the planning process decision points followed a somewhat "linear" path illustrated by the full-page Decision Guide graphic identifying all 42 of the decision points. In fact, the team put together a proposal that suggested that the Grand Rapids Complete Streets planning process was a blend incorporating both the Long Range Transportation Planning module and the Corridor Planning module. The team was counseled during the orientation meeting in Washington, DC, last October that the entire planning process could be covered by the Corridor Planning module, however, having utilized the tool to begin the goals, objectives, vision, and problem statement establishing steps, the team has concluded that the project planning process is benefitting by suggestions identified in both the Corridor Planning module and the Long Range Planning module. (For example, the team has found the use of the Integration tab, and specifically the Linkages to Other Phases table very helpful in assisting project partners' efforts in the early phases of the planning process.

   Proposed Value-Added TCAPP Augmentation: The team recommends consideration of a recommendation that the TCAPP tool provide a clearer, more conspicuous statement that says, in effect, "the vast majority of planning processes would benefit from consideration of decision points that may be organized along different modules, and consideration should be given to the Integration" tab, and more specifically, the Linkages to Other Phases table for useful suggestions found in other modules." It may be useful to illustrate a hypothetical planning process and show graphically how various decision points along multiple modules can be applied to assist in the collaborative decision-making process.

3. **At issue:** The TCAPP model tab called Integration contains two tables. The first identifies six processes that should be considered when conducting the planning process. The second table is labeled as "Linkages to Other Phases of Transportation Decision Making". As indicated in item #1 above, the team has found the second table to be useful in terms of identifying other elements of the TCAPP model that should be considered. With the first table, the team found that it is less intuitive as a guide to what the planning process should involve, specifically, to address these integration opportunities.

   Proposed Value-Added TCAPP Augmentation: One suggestion that may apply to all of the "tabs" that are accessible under any of the decision points that might be considered that would make the information on each tab more intuitive and therefore useful, would be to include a descriptive narrative of how the information on that tab can be specifically applied during that stage of the planning process. The team recognizes that there is information available on the utility of the Integration tab within the section of TCAPP called "Understanding the Decision Guide" but it might be useful to incorporate that information more conspicuously in the main body of the TCAPP tool.

   The TCAPP model is very comprehensive and complex, and contains a lot of great information, but at times the team found it to be a little overwhelming. We suggest that an intermediary "step" be incorporated into the model that provides information for how each of the information contained in each tab can or should be applied, or under which circumstances it should be applied.

   A related recommendation concerning the tabs is to rename them to more clearly reflect the function of each. For example, the tab "Special Topics" is about how a decision point relates to "other topics" but the team concluded that there is no "list" of what those "other topics" are. So perhaps the tab should be renamed to something like "Other important factors related to this decision point" or something similar. Also, perhaps some of the materials in multiple tabs could be combined to make it simpler and more intuitive. For example, does the Integration tab contain some of the same information as the Special Topics tab? Perhaps a re-configuration of the supporting tabs could be considered.

4. **At issue:** The structure of the TCAPP model is designed such that all information and guidance is organized within one of the 42 decision points. Sometimes it seems that not all of the information contained within the links on a specific decision point are directly associated with that particular decision point, but rather to another decision point elsewhere in the model.

   Proposed Value-Added TCAPP Augmentation: Again, this might be too radical a suggestion, and the designers of the TCAPP model have presumably considered this alternative and found cause to reject it; but nonetheless, the project team believes that the

"Outcome" articulated on the Basics tab – or even the "Purpose" on the Basics tab, might provide a better description of the steps currently articulated by the name of the decision points than the names of the decision points themselves. We recommend consideration of organizing supporting information contained in all the tabs under the "objective" rather than the more static decision point.

5. **At issue:** A significant challenge for the developers of the TCAPP tool is to effectively convey to potential users the value of the tool in terms of its use to save time and scarce resources, and to achieve the best possible outcome. In the Minnesota team's view, some public planning entities that could otherwise benefit substantially by applying TCAPP to their own planning initiatives might be reluctant to do so on the grounds that "we know how to do public involvement planning here" or "our plan is non-controversial" or "we don't have the time to review and redesign our planning process." In other words, we believe that many public entities who are entering into planning initiatives do not immediately understand how easily things can go wrong, so they do not consider using the TCAPP tool from the beginning.

   Proposed Value-Added TCAPP Augmentation: It probably goes without saying that the success in "marketing" TCAPP will determine in large part the ultimate success of the tool. The Minnesota team proposes that – as a component of its marketing effort – some resources be dedicated to illustrating "what can – and often does – go wrong in a planning process." The team suggests that one way to "frame" the message is by utilizing the TCAPP catchphrase: "the right people at the table at the right time with the right information". The team thinks that including some real examples of how things can often go wrong will get the planning authorities to consider more carefully the potential pitfalls in their own planning agendas, and at least get them to consider taking a harder look at the TCAPP tool and what it might be able to do for them. The "planning pitfalls" element of the marketing campaign could be a component of the website itself, under a banner of some kind that says something such as, "Why You Need to Consider TCAPP in Your Planning Effort" or some similar theme that drives home the point that not having the right people at the table at the right time with the right information can – and often does – have dire consequences.

6. **At issue:** The Minnesota team's experience using the TCAPP tool, along with the conversations we have had with the other pilot test agencies, has driven home the idea that no two planning processes are alike. Each planning challenge is unique, due to the wide variation in the project, community needs, local politics and personalities. As a result, the decision points that any particular planning process will utilize will often be different. As a result, one of the challenges in effectively applying the TCAPP model involves determining the proper "path" to follow – in other words, which decision points are relevant – for any specific planning challenge.

Proposed Value-Added TCAPP Augmentation: There is ample guidance contained in the TCAPP model regarding what each of the decision points is intended to address and accomplish, however, the Minnesota research team believes that there might be an opportunity to build in a system that will help agencies that are new to TCAPP to understand how the "flexibility" of the tool, insofar as it can provide guidance on multiple "modules" (our term for the four broad planning areas – LRP, PRO, COR, and ENV) within the same project. So, the team proposes consideration of the following two modifications:

a. Adding a function that allows a user to "customize" the tool, by selecting different folders from any relevant module, and building their own planning framework. This customized framework could be saved to the system, and allow the user to access a more customized version of the tool.
b. Use the term "path" or "blueprint" or some similar metaphor to describe the specific decision points that are to be applied to any specific project planning process. Then create a database in which a potential user who is considering using the tool can review the past applications of the tool by users with similar planning challenges. This will give potential users a better feel for the flexibility of the tool in addressing the whole spectrum of planning challenges.

7. **At issue:** This is related to the issues identified above, but – as the team has suggested – it is difficult for the user to understand intuitively how to navigate the website in the most efficient way. The team is concerned that the slightest frustration or confusion (when the user asks him/herself: "Am I doing this right?") that a user experiences while trying to navigate the site may result in that user "giving up".

   Proposed Value-Added TCAPP Augmentation: Many interactive websites these days have a "bar" along the top of the home page that indicates a series of chronological steps that a new user should go through to most efficiently navigate the website. Yes, these are typically sites that involve a transaction or some other process, i.e. selecting seats on a flight, but many users seem to be most comfortable navigating sites that tell them: first do this, then this, then this.

   Perhaps the main home page, or possibly the "Decision Guide tutorial" should contain a "process bar" that a user could use to navigate the website. Sometimes it is even reassuring to the user to provide an estimate of how long it takes to go through the process. This idea needs some fine tuning, but the general idea is clear, we think.

8. **At issue:** One of the potential pitfalls of any planning process is that the lead organization may not be able to anticipate problems before they happen. Even the "TCAPP Collaboration Assessment" – if undertaken too early, before project

participants have shown their "true colors" – may not reveal potential issues that may arise later in the process.

Proposed Value-Added TCAPP Augmentation: The TCAPP site does a commendable job of identifying the potential problems that can result from a planning process that does not adequately promote collaboration. But in order to sell a new user on the benefits of the TCAPP model, it might be advisable to include links to some of the "reference links" articles (or excerpts) that indicate how and where things can go wrong. Many of the TCAPP pilot project teams have suggested including testimonials of how the TCAPP product works. The Minnesota team suggests that it might also help to have articles from credible organizations that provide "evidence" of how and why TCAPP can be an effective planning tool.

9. **{Note: This suggestion is included for historical purposes only. The new and improved homepage has significantly addressed the issues identified under this item.}**

At issue: The TCAPP home page contains a header, links in the form of tabs to the main sections of the site, a search engine, a graphic on TCAPP Connect, a paragraph of narrative on the TCAPP tool and its purpose, a link to a "Capacity Project Brief" website, and six boxes on various program elements contained within TCAPP, each with one or more links to other TCAPP features. In other words, there is a whole lot happening on this home page for a new user to digest and understand what the TCAPP site offers.

Proposed Value-Added TCAPP Augmentation: While there is something to be said for trying to "strike while the iron is hot" by exposing the user to all of the TCAPP features at his or her initial visit to the home page, the team believes that the site might be better off with a "simpler" home page that tries to get across the main idea ("the right people at the table at the right time with the right information to make decisions that stick") and then include statements with links to other TCAPP functions. Statements that address the specific question that a first time user would no doubt have, like:

- What is the purpose of TCAPP?
- What challenges is TCAPP designed to address?
- Who would benefit from using TCAPP?
- What does TCAPP offer that our current planning process might not include?
- How do I start using TCAPP?
- What other organizations are using/have used TCAPP?
- What are the components of TCAPP?

All of these elements are contained in the TCAPP website, but they seem to be delivered – as one participant in a TCAPP user group conference call noted – "through a fire hose" which is difficult for a new user to digest and absorb.

10. **{This issue has also been well addressed in recent TCAPP updates.}**

At issue: The Decision Guide is the "foundation" of the TCAPP tool. However, the Decision Guide is not given any special dispensation in terms of how it is introduced to the new user. (Yes, it is called "the foundation of TCAPP" but is not elevated as such in the graphical representation on the home page.) It would take the uninitiated user several minutes to determine that that is the first thing to understand about using TCAPP, and even longer to get a feel for its structure.

Proposed Value-Added TCAPP Augmentation: Perhaps the first link from the main TCAPP web page should be the link to the Decision Guide – and nothing else. A new user would be drawn to the diagram because any experienced planner understands the different stages of a planning process and how collaboration is critical in each stage. The research team believes that once the user had a workable knowledge of the Decision Guide, all other "supporting" components of the tool (i.e., the TCAPP Collaboration Assessment, the "practical applications" and its sub-components) are much easier to understand in terms of how they "fit into" the tool – and perhaps more importantly – when they should be used.

Or, another option might be to use the great narrative that is on the "Practical Applications" page, which very effectively describes the four phases of the Decision Guide. This information could also be considered for inclusion as one of the first links that the user would flow through when familiarizing him- or herself with the site. It offers a very good overview of the way the site and the Decision Guide are structured.

COR-2

11. **At issue:** The research team believes that the Corridor Planning decision point "COR -2", labeled "Approve Problem Statement and Opportunities" fails to expressly establish the need to incorporate the views of both project "partners" and "stakeholders". It may be difficult to accurately and comprehensively "approve problem statements and opportunities" until both of these groups have been identified and had the chance to weigh in.

Proposed Value-Added TCAPP Augmentation: The Minnesota Team has determined that separate meetings should be held to identify "problem statements and opportunities"; the first meeting should include only the project partners and will focus both on identifying problem statements and opportunities as well as identifying all project

stakeholders who should also be involved in the process. A second meeting will bring together all of the project stakeholders to solicit their input on "problem statements and opportunities." Each of these processes (the partner meeting and the stakeholder meeting) merits its own "decision point" in the TCAPP Decision Guide framework. Then, the existing COR-2 decision point "Approve Problem Statements and Opportunities" would be conducted by the project partners (either in a formal meeting or via electronic communication)**.**

12. **At issue:** This is a very minor issue, but in the "Decision-Making Questions" tab under COR-2, under the "Questions Partners Ask to Gather Stakeholder Interests," the research team concluded that the questions are very general and could be a little more probing to draw out additional information from the stakeholders.

    Proposed Value-Added TCAPP Augmentation: The team recognizes that the question "What is important to you, to your neighborhood, to the local area, to the region (transportation, community, environment) in the corridor?" is intended to be a "catch-all" type of question, but the team suggests adding a few more specific questions, such as:

    - What are the positive impacts from the transportation system? (in any given area, e.g. downtown business district.)
    - What are the negative impacts from the transportation system (in any given area, e.g. downtown business district.)

13. **At issue:** Under the "Technical Support" tab for COR-2, under the "Supporting Data for the Key Decision", there is no mention of the need for data related to "alternative modes".

    Proposed Value-Added TCAPP Augmentation: Consider adding to the "Supporting Data for the Key Decision" data related to other modes, such as bike, pedestrian, freight, and rail. The research team recognizes that the TCAPP model focuses primarily on highway capacity, but other modes should also be considered.

LRP-2

14. **At issue:** The goal setting and visioning process may be the most important stage for establishing a collaborative planning process, because it sets the tone for everything that follows. These decision points, contained at least in part in COR-2, COR-3, LRP-2, and LRP-4, could be enhanced by offering a little more guidance in terms of the best ways to go about collecting information from stakeholders and partners on visioning, goal setting. There are very good "questions" identified, especially on the "Decision-Making

Questions" tab, but insufficient specific guidelines on what might be the proper forum to ask or collect data on those questions.

Proposed Value-Added TCAPP Augmentation: Perhaps the TCAPP developers did not feel compelled to offer extensive guidance on the subject because identifying community "interests" is such a common activity for planners, but the Minnesota Project Team dedicated quite a bit of energy to these functions, primarily by using a series of focus groups targeting a wide variety of stakeholders and system users to get as complete a picture as possible on the vision, goals, concerns, and needs of the community. The team conducted no less than six meetings targeting the business community, various residential communities, and various demographic groups to collect this information. It may be useful for TCAPP users to be able to access information on how to organize and conduct focus groups to collect this information, or to identify and discuss other means of collecting the information.

This may be beyond the scope/intent of the planning tool. Certainly, most professional planners understand how to design a focus group. However, it may be instructive to include some information on focus group design, in terms of a model agenda, how to achieve a broad and unbiased result based on participation of stakeholders, who should observe. Perhaps this could be included under the "Case Study Examples" tab.

The "My Agency Is" Tab

15. **At issue:** The TCAPP model identifies four organizations as "partners": MPOs, FHWA, State DOTs, and Resource Agencies. The project team has determined that at least for this specific project, certain additional organizations have sufficient authority to warrant their status as "partners" as opposed to mere stakeholders.

    Proposed Value-Added TCAPP Augmentation: The Minnesota research team is sure that the TCAPP developers spent ample time considering how the "partner" designation should be assigned to specific entities, so it may be that for many users, the current system works best. However, for this project, a larger group of "partners" was identified based on the following criteria: Any organization that has "decision-making authority", meaning one or more of the following: 1) budget authority; 2) legal authority, or 3) regulatory authority, over project development decisions. For this process, organizations that meet these criteria were granted "partner" status, and afforded that level of involvement in the collaborative planning process. For example, the City of Grand Rapids most certainly has decision-making authority over the budget, the legal process, and regulatory requirements, so they were "granted" partnership status in the planning process.

We recommend that these factors at least be discussed when planning authorities begin to identify when and how various agencies and other entities should be involved in order to optimize collaboration throughout the planning process.

The Decision Guide "Basics" Tab and Link

16. **At issue:** The "Decision Guide Basics" page contains an "Essential Information" box that includes the following statement:

    > *"A short tutorial is recommended to become acquainted with the content, context, and intent of the Decision Guide. This is available in Understanding the Decision Guide."*

    The problem is that this page is not really "short", nor is it really a "tutorial". And while it contains lots of great information that must be included at some point, the research team believes that it goes far beyond what is necessary "to become acquainted" with the Decision Guide.

    Proposed Value-Added TCAPP Augmentation: The Minnesota research team believes that the idea of a tutorial is a great, but when we think "tutorial" we are picturing a very basic, user-friendly "lesson" that walks the user through one step at a time. Instead, the link connects the user to the "Understanding the Decision Guide" page which is quite long and detailed. The research team's concern is that while there is plenty of great information on that page, it is too soon to saddle the new user with that level of detail all in one bite. A more effective "tutorial" would be to link to a PowerPoint-type presentation, maybe even with audio from users, but certainly with easy to understand "slides" that are a little less "dense" with information than the information contained in the "Understanding the Decision Guide" link.

TCAPP Collaboration Assessment – Reference Links

17. **At issue:** On the "TCAPP Collaboration Assessment" link, the "reference links" box contains some truly great references. The research team believes these are slightly undersold, and should be emphasized a little more.
    Proposed Value-Added TCAPP Augmentation: The team suggests that you consider expanding the items identified in the "reference links" box with not just the title of the work, but the author or organization who prepared the work, and possibly even a one- or two-sentence abstract.

Key Decision Tabs and Tables – Miscellaneous

18. **At issue:** Under the direction of Beverly Bowen of ICFI, the TCAPP user focus group undertook a thorough review of the functionality and utility of all of the tables contained within each of the tables contained in the tabs (Basics, Integration, Decision-Making Questions, Case Study Examples, Technical Support, and Special Topics) that comprise the elements of each of the 42 decision points. The review prepared by Matt Shands is duplicated and updated in Table 2, below.

Table 2. Review of Key Decision Data

Tab/Table *The tabs/tables listed below correspond to the detailed information found by clicking on each key decision.*	**Priority** *Give each tab/table a priority based on your own experience and judgment.*	**Name Change** *Recommend a new name for the tab/table.*	**Recommendations for Improvement** *Explain any other recommendations to improve the tab/table. Think about suggestions like moving or regrouping information and changing the way it is displayed.*
Basics			
Purpose	1 – essential information		
Outcome	1 – essential information	"Desired Result/Outcome"	Use a verb in the narrative such as "develop", or "identify", or "adopt."
Partner Roles	2 – important supporting information		A statement next to the table title saying something like "Each of the partners could play an important role at this decision point, as described below" or something like that to just make it clear what the purpose of the box is.
Integration			
Integration (unnamed table)	3 – of limited importance	"Relationship to other Planning documents / objectives"	Consider including a brief description of each of the six planning "documents" or categories somewhere, and how they impact activities at this decision point.
Linkages to other Phases of Transportation Decision Making	2 – important supporting information	"Relationship to other decision points"	Be careful of the term "linked" because it connotes a computer term. I think just using the word, "relationship" is clearer.
Decision-Making Questions			
Policy Questions	1 – essential information		Of all the components of TCAPP, this tab has been among the most useful for the Minnesota project. Our planning team concluded that this section is very well laid out and developed.
Questions to Gather Stakeholder Interests	1 – essential information		
Questions to Incorporate Stakeholder Interests	1 – essential information		
Case Study Examples			
Case Study Examples	2 – important supporting information	"Relevant Case Study Examples"	The research team supports the idea of including case studies but also concluded that consideration should be given to providing an intermediate step that links to a "short narrative" that describes the project, including perhaps how TCAPP was used, so that the user can get a quick sense of whether or not more fully investigating the case study is worth his/her time.

Table 2. Review of Key Decision Data (continued)

Tab/Table *The tabs/tables listed below correspond to the detailed information found by clicking on each key decision.*	**Priority** *Give each tab/table a priority based on your own experience and judgment.*	**Name Change** *Recommend a new name for the tab/table.*	**Recommendations for Improvement** *Explain any other recommendations to improve the tab/table. Think about suggestions like moving or regrouping information and changing the way it is displayed.*
Technical Support			
Supporting Data for the Key Decision	1 – essential information	"Data Required to Support key Decision"	This was another component of TCAPP that the Minnesota research team found particularly useful.
Supporting Tools and Technology	3 – of limited importance		Others may disagree, but the Minnesota research team concluded that this table has limited value. The team believed that most professionals will know where and how they can go about collecting or gathering data. It is more important for them to understand what data to collect, and TCAPP covers that in the section above. Maybe if there is some very clever method or tool of collecting data, then that information could be spelled out in another section.
Special Topics			
Key Decision Relationship to Other Topics	2 – important supporting information		Again, the research team felt that a user must go explore this page to really get a feel for what this tab is intended to accomplish. For instance, how have the "other topics" been identified?
General Recommendations			
Under the current system, the user must click on each tab to get a sense of what is there and how it could be used, and then when he or she does, the user must ascertain what the functionality of that tab is. The research team suggests consideration of developing a function in which the user "mouses over" each tab, and gets a popup message that spells out what the purpose behind the features on this tab, i.e. "decision-making questions" is to identify many of the questions that could be asked of stakeholders, in focus groups, with partner organizations, to identify goals, etc.			

Advisory Evaluation Team

An additional activity that the project team incorporated into the TCAPP evaluation process was to convene a series of evaluation team meetings throughout the project. The researchers from the Humphrey School's State and Local Policy Program assembled a team with expertise in evaluating public and stakeholder involvement processes for significant transportation projects, including the Interstate 394 High Occupancy/Toll (HOT) Lane in Minneapolis, and Urban Partnership Agreement projects in Minneapolis, Miami, and San Francisco. Team members also brought expertise in urban and regional planning, with specific research interests in researching the impacts of transit and non-motorized transportation.

The purpose of these meetings was to give the project team feedback regarding the best methods for evaluation of the TCAPP process in the Grand Rapids context and also to offer opportunities for feedback and suggestions for improvement to the Complete Streets effort as it proceeded. Results of these meetings included a better understanding and more precise definition of partners and stakeholders during the end of 2010 and beginning of 2011, as well as suggestions for how to best intervene and obtain information from the stakeholders and partners to determine the effectiveness of the TCAPP process.

Conclusions

Since the fundamental principle behind the TCAPP tool is collaboration, the planning process developed for this study was to work closely with the project partners (those public entities with budgetary, regulatory, or legal decision-making authority) and project stakeholders, which includes any organization or informal group who are affected by the ultimate decisions and outcomes. This process requires the commitment of both stakeholders and professionals to stay engaged and consider the interests of all participants. The TCAPP tools provided valuable guidance on effective collaboration techniques with the community that was instrumental in developing alternatives beyond "traditional" highway improvements. Applying the TCAPP tools helped to identify multi-modal options, additional enhancement features, and innovative solutions that were critical to developing a successful Complete Streets plan for the City of Grand Rapids.

Utilizing the TCAPP Decision Guide to develop a new and replicable planning process will directly benefit the multi-modal users of the transportation network in and around Grand Rapids. But just as importantly, the development of this new process will benefit other, similarly situated communities in Minnesota, and across the country. At Mn/DOT, one of our objectives at the conclusion of the research process will be to conduct our own assessment to identify other communities in the state that would benefit from implementation of a similar planning effort, including opportunities to apply the TCAPP tool to even more complex transportation infrastructure development projects.

Perhaps the most unanticipated insight provided by using the TCAPP model was the recognition that collaboration and partnerships are not only needed among organizations, but within them as well. The large, decentralized nature of the Minnesota DOT, which led to

decision-making authority being placed in multiple offices at multiple locations, created a new opportunity for the project team to apply steps from the Decision Guide to intra-departmental decisions.

Similarly, the team found that the Decision Guide steps could be applied effectively at the "micro" (project level) scale while continuing to make progress at the "macro" (plan level) scale. The Complete Streets plan provided the impetus and "road map" for making progress across the city, but the process of developing the plan also created opportunities for bringing different subsets of stakeholders and partners together to address individual projects that, if successfully completed, would greatly enhance the success of the overall Complete Streets effort.

The team did encounter some challenges in keeping all stakeholders engaged throughout the process, however. This may have been due to the fact that transportation was not viewed as central to improving the quality of life in the city, as we found in the focus group discussions. Another possible explanation is that participants may have concluded that the effort was not drastically different from recently completed planning processes in which they had already participated, so they may have been confident that the plan would reflect their interests even without their continued active participation. Finally, some stakeholders may have simply found that the issue was not a high enough priority for their time.

Despite this difficulty, however, the greatest and most lasting contribution of applying the TCAPP model is likely that bringing the stakeholders and partners together in a long-term, iterative process created a venue for continued dialogue and collaboration out of which new and creative solutions were found. Specific examples of this include the willingness to consider and provide contingency options for accommodating and protecting pedestrian movements at the intersection of Pokegema and 1st Street South, and the decision to pursue a grant to fund re-striping of 5th Street North in a way that would encourage bicycling with minimal impact on traffic flow.