

Citizen Transportation Planning

A Working Model

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ABSTRACT

All communities, regardless of their location or size, face the need to re-think and plan their transportation futures. In recent history transportation planning has begun to move from the formal public hearings to more input and consensus based processes. To facilitate this trend it has become necessary for transportation officials to communicate technical information in a manner that is accessible and understandable. One technique that has come into increasing use is that of graphic visualization. This method, while very effective in presenting a variety of planning and design options to a community, runs the risk of closing down dialogue by being “too formal” or “too final” in its appearance. To bridge the gap between information and public dialogue the Minnesota Department of Transportation (Mn/DOT) has begun using a process called the Transportation Action Model. The Transportation Action Model (TAM), initiated and designed by a national consortium led by the U.S. Department of Agriculture, was created with two guiding principles. First, sound transportation systems and the decisions behind them are critical to the social and economic well-being of communities. Second, informed community participation creates better transportation decisions. By linking technical information, with a citizen-driven decision process, the TAM helps communities produce their own blueprint for local action. In twenty-one weeks, with a minimum of twenty-five participants from a broad range of transportation stakeholders and citizens, a community can become an active voice in their transportation future. Two rural communities in Minnesota, Two Harbors and Nisswa, challenged themselves and their planning histories by using the Transportation Action Model. Both communities, each with unique transportation histories and development, sought this model as a way to deal with existing congestion impacts and future development pressures. Through public dialogue and graphic visualization, each community could frame and prioritize local transportation issues and develop potential solutions, creating a Transportation Action Plan that will assist the formal transportation plans and decisions of the future.

THE TRANSPORTATION ACTION MODEL

Transportation shapes and defines how we relate to and experience our communities and all communities, regardless of their location or size. Most communities face the need to re-think and plan their transportation and, subsequently, their community's future. Favoring one mode over another or failing to plan for an integrated accessible transportation network can drastically alter a community's livability or its ability to sustain its economic future. The impacts of not planning or not having an informed public process can be seen everywhere, but the effects are most immediate and obvious in smaller communities.

Prior to Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), many communities left planning to experts and whether it was the district level of a state's transportation department or consultants, each designed plans with little input from the citizens of the community. Citizens rarely had a chance to voice ideas or concerns until a final public hearing in which their input had a minimal effect on the outcome of a transportation decision. This method, while accepted by tradition, has little opportunity for the informed community participation that allows for quality transportation decisions, which reflect the needs and interests of a community. One process, the Transportation Action Model, challenges the status quo of transportation planning.

In 1991, the U.S. Department of Agriculture initiated a national consortium to design the Transportation Action Model (TAM). Recognizing the impact of transportation decisions on rural localities and the potential of ISTEA, TAM was created with two guiding principles. First, sound transportation systems and the decisions behind them are critical to the social and economic well-being of communities. Second, informed community participation creates better transportation decisions.

By uniting visual and technical information with a citizen-driven decision process, the Transportation Action Model helps develop a literal framework for identifying and communicating a community's issues. In twenty-one weeks, a broad range of transportation stakeholders' work through a series of exercises that cultivate a wider discussion of transportation issues. The addition of renderings to the TAM process creates a visual conversation that lets communities interact with and see their collective vision take shape and evolve over time. Renderings also provide the necessary visual documentation for inclusion into the final plan to be used for future consideration by decision-makers.

The twenty-one week process is divided into twelve steps called the Action Planning Process. Each step is designed to engage citizens and stakeholders in learning about their transportation systems. For discussion purposes the steps of the action planning process can be grouped into four main parts: community selection and commitment, orientation and background, solutions and strategies, and plan development.

Community selection and commitment comprise the first three steps of the Transportation Action Model. These organizational steps include finding a sponsoring committee, identifying and inviting the transportation stakeholders to the TAM process and securing a facilitator.

Steps four through six are focused on orienting a community to the TAM process and their own transportation system. During these four weeks two of the community meetings are held.

The first meeting is an orientation meeting at which the TAM process and expectations are reviewed and citizens are introduced to the transportation funding

process and the history of their community's development. The first piece of the visual conversation is presented at this meeting in the citizen created presentation of local history. Through a slide show, still photography and other representations communities establish a visual baseline that allows them to see the influences and broad patterns of development that created their present day environment. At the close of this meeting the technical committee and the public involvement committees are formed. The purpose of these committees, respectively, is to gather technical information and keep the public informed of TAM proceedings and upcoming meetings.

In the second meeting ("A Look at Today's Transportation System"), the community reviews their existing transportation system and demographic trends and plans. Part of the review is done through the presentation of slides or photos of their transportation system. This allows participants to catalog what are the key issues and bring forward what might be potential solutions. This exercise places information in a visual format that and encourages citizens to see their community beyond the statistics. From the information that is presented at the first two meetings a community's transportation system begins to exist within a multi-layered context. With this base citizens generate a list of potential transportation issues that they would like to address. Through a nominal selection, three issues are then determined and issue committees are formed to work on each topic.

For steps seven through ten, citizens in their issue groups, begin to define potential solutions and strategies for their transportation issues. Preliminary ideas and draft sketches are brought to the third community meeting for suggestions and revisions. During the third meeting citizens also have the opportunity to vision what their future transportation system will look like. At the fourth and final meeting the issue groups will present their refined strategies to the community and the technical committee. During this time the technical committee will act as a review panel and make additional suggestions to the issue committees to improve their recommendations.

Plan development begins at the close of the fourth meeting with the formation of an Action Plan Committee. This group will be responsible for putting closure on the TAM process by writing the Action Plan and presenting it to the appropriate government entities. There should also be someone on this group who will track the progress of the Action Plan once it has been completed.

During 1997 and 1998 the Minnesota Department of Transportation (Mn/DOT) worked with the communities of Two Harbors and Nisswa to implement the TAM process. Both communities, each with unique transportation histories and development, sought this model as a way to deal with existing congestion, safety and future development pressures. Through public dialogue, each community framed local transportation issues and developed potential solutions to create a Transportation Action Plan that will assist the formal transportation plans and decisions of the future.

The first community is Two Harbors, Minnesota. Located on Lake Superior's North Shore, Two Harbors was founded on an economy based in shipping, forestry and mining. As the reserves diminish mining, shipping and forestry take a less central role and the Two Harbors economy now includes more light industry and services. Many of the residents now work in nearby Duluth or cater to the tourist traffic that frequents the North Shore. While Two Harbors has been slow to develop as a tourist destination, they are impacted by the growing recreational traffic headed to points further north.

The Two Harbors' city planner and administrator began the community selection and commitment phase in August of 1997. When Two Harbors approached Mn/DOT, initial concerns were centered on topics that had been discussed for years and had many grassroots groups behind them. The issues encompassed a potential extension of Scenic Highway 61 into the downtown area and projects relating to the overlay of Trunk Highway 61(7th Street). Concerns specific to Trunk Highway 61 included improving traffic flow and creating a more cohesive look for the east/west corridor. Highway 61 has begun to follow a pattern of strip development, as it becomes the center of Two Harbors' commercial development. The influx of tourist traffic on summer weekends has caused extreme congestion on T.H. 61, which also serves as their "main" street.¹ During peak traffic times it is difficult for North/South vehicular traffic and virtually impossible for bicycles and pedestrians to move from one side of town to the other.

To prepare for the TAM Mn/DOT hired a facilitator from the Arrowhead Regional Development Commission. The individual selected was a transportation planner who had an extensive knowledge base of Two Harbors from previous work with the community. From the concerns noted by the city planner a key set of transportation stakeholders was determined to be the landowners and business owners along Seventh St. and those committed to downtown revitalization. A broad public notice in the paper was made about the TAM, but no special mailings or contact was made to reach stakeholders mentioned.

The orientation meeting was held in January, five months after Mn/DOT was first contacted by the city. While the commitment to do the TAM was secured in the amount of time recommended by the model, the starting time was delayed by the approaching holiday season and other activities in the town. At the first meeting attendance was lower than anticipated and the agenda was deviated from slightly. Rather than grounding the meeting in information about the town's history and development, which would have demanded more citizen involvement, most of the evening was spent on the transportation system as it currently exists and the issue of transportation funding and how it related to the county and state.

In the second meeting more ownership was taken by the citizens through a series of presentations. One of the most compelling presentations was a citizen's adaptation of the slide show exercise in which areas of transportation concern are photographed. By creating a five-minute documentary video "walk" through the community that was narrated with a series of open-ended questions, the participants saw their transportation environment and concerns in an understandable framework that provided an effective point of discussion. While the video provided a useful tool that assisted the citizens in identifying potential transportation issues, selection was stifled by a predetermined set of suggested issues. Attendance was up for this meeting due in large part to a more aggressive approach taken by the public involvement committee to obtain broader participation. This was accomplished by creating a flyer that was distributed in church bulletins. The flyer listed a series of potential transportation issues that could be discussed, many of which already had focused constituencies behind them.

¹ Two Harbors commercial main street was originally 2nd Street, which is closer to the harbor. As the town became more automobile oriented development shifted to Highway 61 and has followed the "strip" development mentioned. Today several buildings on 2nd Street and in downtown are vacant and it is possible to go through Two Harbors on Highway 61 and not see much of the original downtown or Lake Superior.

Two distinct forces drove issue selection in Two Harbors. First, as mentioned earlier, many of the issues that face the town have been in the public forum for as many as ten years and have been discussed at length without resolution. Second, in an effort to give the TAM process focus and distinction from other planning processes, it was decided to create flyers that had a list of potential issues that might be discussed. Citizens were not discouraged from bringing in new issues that they felt might be of importance, but there is a sense an opportunity for broader participation was missed by recommending topics. The issues that were selected suggest that the participant pool may have been limited since three of the four selected were on the flyer. The issues selected were: the extension of Scenic 61; improvements on Trunk Highway 61; the Trails System and Through Streets; and the Segog Neighborhood on the Northeast side of Two Harbors.

The third segment of the process, solutions and strategies, created the most unique part of the Two Harbors experience. Meetings three and four were the most productive of the meetings, due in large part to how the issue groups were handled. The model works under the assumption that the issue groups are autonomous and will meet twice with little formal guidance. Two Harbors had the issue groups meet on four separate occasions with facilitators for each issue. Using this method, the strategies that the citizens brought to the large group meetings were far more detailed and complete than they would have been otherwise. There was a tradeoff for following this method. While the strategies brought forth were detailed they were not refined with any sort of visioning that would typically happen in meeting three, leaving some issues looking out only five years rather than the long range of fifteen to twenty years.

The fourth meeting, in which the citizens' finalized strategies are presented to a technical panel of transportation officials and citizens, ran closer to the model. Of the four issues three reached resolution at this meeting. The fourth issue, the extension of Scenic Highway 61, proved to be too large, from both a technical and political standpoint, to deal with that evening. A fifth meeting was held three weeks later following the format of the fourth. This method allowed the issue committee to voice concerns about a lack of technical information on potential routes for Scenic 61 and political developments from the Transportation Equity Act for the 21st Century (TEA-21) that made the extension of Scenic 61 a demonstration project with \$800,000 in funding. Resolution on the Scenic 61 issue rested in the determination that more information was needed before a final decision could be made. A recommendation was made to conduct an engineering study that would rough out potential extension routes.

The facilitator from the Arrowhead Regional Development Commission handled the writing of the final plan with information drawn from the minutes of the issue groups. A draft version of the plan was presented to the participants for comment before the final plan was written. The plan was presented to the City Planning Commission in May. In June the City Council made a resolution to adopt the Action Plan into the city's comprehensive plan bringing the TAM process to an official close.

The second community of Nisswa, with a population of approximately 1,400, is located in central Minnesota and traces its roots to the logging industry. As the timber industry moved to more profitable locations, Nisswa, like Two Harbors, moved to a service economy based on tourism. In recent years Nisswa has seen a slight growth in their population and an explosion in tourism that is fueled by the lakes that surround Nisswa and the construction of the multi-use, recreational Paul Bunyan Trail that was

built parallel to Main Street on an abandoned railroad grade. Summer use of the trail is currently estimated at 200,000 people and that number is expected to double in the next two to three years.

Nisswa's Mayor and the City Council handled initiation of the TAM. In December of 1997 the Mayor called a special council meeting with the TAM as the only agenda item. Citizens in attendance had been contacted by a special mailing. It was decided that evening, by a citizen vote, to start the TAM in January of 1998. To prepare for the TAM, Mn/DOT hired a facilitator from the local area University of Minnesota's Extension Service, and two of Nisswa's citizens began developing a presentation of Nisswa's transportation history.

Like Two Harbors, Nisswa's decision to become involved in the TAM was the result of longstanding transportation concerns that were being exacerbated by growth. In Nisswa, safety was the cornerstone of their issues when they began. Trunk Highway 371 is intersected by Nisswa's County Road 18 (Main Street) at an obtuse angle and traffic movement from one to the other is hindered by an obstructed view. This intersection has been the sight of numerous fatalities and that number is anticipated to climb as traffic increases. Additionally the connection of 18 to 371 has created an ambiguous entryway into the town, making clear traffic patterns almost nonexistent for all modes during the height of the tourist season. Another concern was planning for the potential turnback of County Road 18 to the city of Nisswa when County Road 18 is rerouted. The town also wanted to increase the amenities provided for the bicyclists that use the trail.

The Orientation Meeting was held in January, one month after their decision to do the TAM. The meeting closely followed the prescribed agenda, setting the tone that would continue in the other meetings. The historical development presentation provided a common ground that everyone, citizens and transportation officials alike, could refer to. The presentation of transportation financial workings, while necessary, proved to be overly technical.

The second meeting focused on the demographic trends and the selection of transportation issues. The demographic presentation revealed that population in Nisswa would grow by 10 to 18% by the year 2001, and traffic on County Road 18 (Main Street) would expand by 70% by 2013. With this context the issues were determined to be Re-Routing of County Road 18 to eliminate congestion on Main Street, Improving Safety at the Intersection of Main Street and Highway 371, Improving Parking and Pedestrian Traffic Flow. From the issues that were generated and selected, it was clear that the citizens of Nisswa had more ownership in the information and issues than the citizens in Two Harbors. This was evident in the strategies and solutions that the citizens developed.

At the third meeting, citizens presented their draft strategies and worked on the visioning exercises. Few recommendations were made to the plans presented; but, by the end of this meeting, there was a clearer sense of how issues and their solutions related to the future vision of Nisswa. This connection was evident when issue committees met again on their own and the time lines developed began to have both long-term and short-term components.

During the fourth meeting the final strategies and solutions were presented to the community and technical panel. Of the three issues only two were brought to resolution that evening: parking and pedestrian issues and the rerouting of County Road 18. The third issue, the intersection of Highway 371 and County Road 18, would need to be addressed at a later meeting to clarify technical and financial issues.

The fifth and final meeting of the TAM occurred two weeks later. The Technical Panel was reconvened, and the solution that had been presented was reviewed. The main concern was finding a solution that would address the immediate safety needs of the intersection without negatively impacting Nisswa's long range goal of rerouting County Road 18 and closing the existing intersection. The engineering that will improve the intersection is fairly straightforward and could be programmed into the construction schedule in the next two seasons. The issue is with funding. The county, which is strapped for funding, will likely delay a rerouting of 18 if they feel that the fix of the intersection is adequate, particularly if they must participate in covering the cost of the project. The goal is to recognize the short-term issue with a solution that meets safety concerns and is fiscally responsible. The final determination was to realign the east/west segment of County Road 18 with Highway 371 at a right angle. Further studies will be conducted to determine if a traffic light is needed.

City staff authored Nisswa's action plan with consistent input from one to two members from each issue committee. The draft was presented to the community in July and the final was completed in August. The Action Plan has already been adopted by the city, and presentation to the county by the Mayor of Nisswa has been made.

Nisswa and Two Harbors represent only the second and third times that Mn/DOT has conducted the TAM and many valuable lessons were learned from their experiences and their outcomes. Throughout both TAM processes several strengths, weaknesses and potential improvements were highlighted. Some of these observations follow.

The first lesson is that the TAM is highly flexible. Both towns made changes in how the model would be carried out. Neither town utilized the optional visioning exercises that the model prescribes, and Two Harbors handled the issue committees with a higher level of structure than the model deems necessary. All of these changes reflected the needs and temperaments of the town and largely strengthened the experience. There will always be pros and cons in deviations that are made; but if the basic components of open public input and creating a positive learning environment are maintained, the TAM will meet its intended goals.

One aspect of the TAM that does not work well with change is the time line. The TAM was created to be a quick-paced learning environment with a definite conclusion. In each town we experienced alterations of the time line that diminished the quality of the process. In Nisswa there was concern that the public involvement meetings be completed before the beginning of the tourist season. The twenty-one-week time line was condensed by two weeks, but there is simply too much information to absorb for it to be handled effectively in less time. In Two Harbors we learned the importance of momentum to the success of the TAM once the process has been committed to. The five-month span from discussion to implementation was somewhat causal in the slow start in January. This time gap was not aided by the fact that a positive article for the upcoming TAM process was run in October, a full three months before the process began.

One additional note on time. Both towns needed a fifth meeting. This is one time alteration that we fully expect to make and are now including in our presentations to towns interested in doing the TAM. In our limited experience we are finding that there is always an issue that is so ingrained in a community that the decisions that will be made will have an impact well beyond the asphalt elements and deserves the time of an additional meeting if necessary and desired.

The second, and most important lesson, that we have learned from our experiences in Nisswa and Two Harbors is the importance of the Technical and Public Involvement Committees. The role of each committee is defined, but it is possible for each committee to languish without proper support and direction. In each TAM the role that these two groups play becomes clearer.

In the area of technical support, transportation officials, along with citizens, make up the Technical Committee and are responsible for gathering and conveying technical information as recommended by the model and as demanded by the process in a given town. In this capacity Mn/DOT has been only moderately effective. Citizens in both communities expressed concern that basic information and who is responsible for it is often unclear. In terms of delivering special services, especially design services, Mn/DOT has been an invaluable resource.

Throughout the TAM process we have used a wide range of graphic tools to create a foundation of reference information, from traditional overhead transparencies and wall mounted layouts to slides and video presentations. We have found that even the most basic tools available to our TAM facilitator and transportation professionals may surpass the understanding of a large community group. Consequently, we have attempted to incorporate new, easily understood graphics techniques to create conceptual design information, using DeCartes Image Manager and Microstation software. Simplified municipal reference maps and greatly simplified, uncluttered highway base maps with color, crisp edge, and boundary delineation, provide a basic graphic process to build upon during the TAM process. We have realized it is best to avoid engineering language in graphic and verbal communication, but not to oversimplify or underestimate the abilities of the TAM participants.

In future TAM applications, we hope to infuse computer rendering and visualization techniques to show potential transportation issues. Development of a full, engineering-accurate 3D model surpasses the time constraints within the TAM process, but creating cross-sections showing different alternatives, or “painting” different issues and alternatives without a 3D model, are realistic TAM possibilities.

The graphic images presented to the TAM participants in both Nisswa and Two Harbors greatly aided in visualizing and comprehending complex transportation issues. Citizens could relate to the black and white aerial photos, finding their own homes, businesses, and neighborhood landmarks. Applying CAD conceptual designs over the top of scanned aerial photos has become a valuable tool within the TAM process, going beyond standard engineering plan symbols and layout techniques. This technique seems to cultivate a wider discussion of issues, and renders a picture of the potential issues and solutions in an easily understood manner, creating a chance for citizen interactive input and shared vision for their community.

In future TAMs there are potential solutions that may be used to aid the citizens in utilizing and serving on these two committees. First, develop a contact list that clearly indicates who the members of the technical and public involvement committees are and their area of expertise. Second, prepare a simplification of how transportation funding works and how it relates to the community. In both cases citizens did not feel this information was accessible, and a potentially valuable tool was left unused. Third, develop a press kit that will walk the members of the public involvement committee through what they need to do and when.

In the area of public involvement citizens create the entire committee, and we found that this is a task that has the potential to be forgotten, especially as TAM moves further along. The role of the public involvement group needs to be kept in the forefront to keep the community aware of what is occurring at the TAM meeting. Maintaining a high level of awareness on the progress of the TAM allows citizens the opportunity to comment as the process proceeds. In each TAM this group has taken a more proactive role as a result of the expectations being made clear at the beginning of the TAM process and assistance is provided.

The third lesson is the importance of a neutral facilitator. When Mn/DOT introduced the TAM, we began with the ground rule that a Mn/DOT employee or someone who is a transportation stakeholder in the community would not facilitate the process. By not having a government entity facilitating the TAM many suspicions that the government is here to “help” are immediately diffused and citizens feel free to participate. In both towns the importance of the objectivity provided by a facilitator was confirmed. Neither facilitator had a specific stake in the town, and that allowed for open discussion on issues that, at various points in the towns’ history, had been rather contentious.

The fourth lesson of the TAM is the strength that it has to bring city, county and state levels of government into a cooperative planning process. All of these entities have worked with one another in the past on a project by project basis but not always in a long-range planning capacity. This resource is an invaluable opportunity for citizens. The TAM provides the opportunity for a community to see its transportation system from a variety of perspectives; modal, historically, and politically.

The fifth and final lesson is cost. The TAM was designed in such a way that a community could conduct a TAM on a relatively small budget with the facilitator comprising the largest cost. Currently, Mn/DOT covers the cost of facilitation with no local contribution and it is Mn/DOT’s goal to keep that cost at approximately \$6,000. To date we have been successful in keeping to budget; however, as we look to private parties for facilitation we are expecting that cost to increase slightly. The other cost of the TAM has not been formally tracked, but is no less important—the cost of time for the local staff to participate. From the time that the process is initiated to the plan’s formal adoption a town can expect to spend up to \$2,000 in staff time and should take the availability of their staff into account when deciding to participate in the TAM.

As a process the TAM is showing promising signs of success. In both towns the participants indicated that it was one of the most positive public involvement experiences they had participated in. Citizens felt that they had an opportunity to be heard and make decisions about their town’s transportation future. Also, many came away feeling that they had learned a good deal about their towns and transportation in general.

In both cases the ultimate measure of the Transportation Action Model’s success, the implementation of recommendations, is not yet apparent. Many of the recommendations that were made were on State and County projects that will not be programmed for another two to three years. There is encouraging evidence that the Action Plans will be used. In Nisswa before the first draft of the plan was even completed they had acted on one of their recommendations—the expansion of parking: and, at the time of this writing, a total of twenty-five new spaces had been striped.

As TAM moves forward it will have several growth issues that Mn/DOT will need to address. One immediate issue that faces the future of the TAM is finding enough

facilitators and fiscal resources to conduct the TAM. Four more TAMs are scheduled in the next year, and there is interest for double that number. The TAM, while a relatively short process, is time consuming while going on and the quasi-government agencies that we have used in the past may not be able to accommodate the demand. For the next series of TAMs, Mn/DOT is looking to private industry for facilitators.

In conclusion, Mn/DOT is satisfied with the initial success of the TAM and optimistic about its future. Mn/DOT's Districts and Central Office alike have found it to be a useful method to interact with their communities in an innovative, nonconfrontational manner. As the TAM process is refined, we will be looking at expanding it to a sustainable planning base. The participants in the TAM have already indicated that there are logical links between this process and the discussion of sustainability. Another potential for the TAM would be a closer alignment with existing formal transportation planning methods such as the State Transportation Improvement Plan.