

Notes Taken By: VHB

Place: Virtual (Zoom)

Re: VTrans Vermont Multimodal & Highway Guidance SAG & TWG Meeting #2

Project No.: 59029.01

ATTENDEES: Aaron Guyette (VHB), Amy Bell (VTrans), Ben Tietze (VTrans), Billy Coster (ANR), Bill Schultheiss (Toole Design), Catherine Dimitruk (NRPC), Chad Greenwood (VTrans, Devon Neary (RRPC), Drew Gingras (VHB), Erin Sisson (VTrans), Jason Rasmussen (MARC), Jonathon Weber (Local Motion), Kara Yelinek (VTrans), Kati Gallagher (VNRC), Laura Stone (VTrans), Margaret Krauss (Toole Design), Mason Kemerer (VTrans), Matt Hogan (VHB), Matthew Arancio (VTrans), Michele Boomhower (VTrans), Patricia Shedd (Fuss & O'Neill), Richard Amore (VTrans), Rick Plenge (VHB), Rob White (VTrans), Ryan Darling (VTrans), Sommer Bucossi (VTrans), Wayne Symonds (VHB)

Stakeholder Advisory Group (SAG) / Technical Working Group (TWG) Meeting #2

1. Meeting Introduction

- Kara outlined the agenda, highlighting that six key topics would be covered, despite seeming brief, these topics were expected to be dense and critical for moving the project forward.
- Attendees were encouraged to engage actively throughout the meeting.

2. Overview of Project Progress

- Drew provided an update on the progress since the last meeting, emphasizing the feedback received from participants.
 - A recurring theme discussed at the prior meeting was the need for context sensitivity in road classification and design, shifting away from the traditional classification approach to a more context-sensitive framework.
- The team shared that they'd reviewed the Vermont State Design Standards (VSS), the M2D2, and a wide array of state guidance documents. This review was crucial in shaping the draft outline and vision for the project.
- Feedback from the first meeting had been integral in developing the draft outline. The focus was on ensuring that the document reflected the needs and concerns raised by stakeholders, such as the importance of context sensitivity, multimodality, and equitable representation in transportation systems.

3. Draft Outline Presentation

Drew introduced the draft outline, explaining that it had been developed by blending the existing VSS and M2D2 recommendations along with input received by the Steering Committee and within the first joint SWG and TWG meeting. The proposed structure was aimed at making the guide more context-based, focusing on the needs of roadway users rather than rigid classifications.



- Proposed Updates:
 - Design Guidance Hierarchy: A new chapter was proposed to explain how this document fits within the broader ecosystem of state and national guidance. This would serve as a "how to use" section, clarifying the hierarchy of design documents and guiding users on where to find relevant information.
 - Context-Based Classification: A shift was proposed from traditional roadway classifications to a more flexible, context-based system that considers the surrounding environment and the needs of various users.

4. Discussion on Shifting the Paradigm

- Product vs. Outcome-Based Approach:
 - Current Model: The existing system was described as product-based, focusing on the classification of roadways without sufficient consideration of the context.
 - Drew used the example of the Town of Randolph to illustrate how the same classification could apply to vastly different contexts, leading to inequitable design decisions.
 - Bill provided practical example of a state road through a rural village which was constrained by
 private property on both sides where in many instances, the choices for "improvement" are
 relatively straight forward: to share all users on the road, to add shoulders, or to add a sidewalk.
 Examples of strategies to design in these contexts were shown to illustrate the concept of thinking
 about the desired outcome at the start to inform the types of design guidance required such as
 allowing traffic calming in these contexts as an approach to achieve desired goals.
 - Proposed Model: The new approach would be outcomes-based, focusing on the desired outcomes for each context rather than rigidly adhering to classification. This would allow for more flexible and contextsensitive design, such as adjusting roadway features based on whether a road serves as a village connector or a rural town road.

5. Review of Precedent Guidance

- National Best Practices: Rick discussed several precedent guidance documents from states like Colorado and Florida, as well as the City of Denver and Montgomery County, MD.
 - These examples provided valuable insights into how other regions have successfully integrated contextsensitive design, multimodality, and equitable transportation systems.
- Key Takeaways:
 - Integration of Guiding Principles: Colorado DOT's guide effectively integrated principles like multimodality and context sensitivity throughout the document, rather than isolating them in specific chapters.
 - Links to other Guides: Colorado DOT's guide was also referenced for its use of interactive links to other state and federal guides.



- Use of Graphics and Interactive Tools: Montgomery County's guide was noted for its effective use of graphics and context overlays, which made the document more accessible and user-friendly.
- Maintenance and Practical Design: Denver's guide was highlighted for its focus on maintenance responsibilities and practical design considerations, which are crucial for the long-term success of any transportation project.

6. Breakout Groups

• Following the presentation, all meeting attendees were divided into Breakout Groups for discussion about the draft materials and information shared. The breakout group exercise has been summarized below.

Breakout Group 1 (Moderator: Drew)

1. Introduction

- Drew opened the meeting, confirming that all participants had access to the Miro board. He gave a brief overview of the meeting's objectives, which focused on refining the guiding principles for the design guide.
- Each attendee introduced themselves, providing a brief description of their role and interest in the project.

2. Miro Board Setup

- Drew guided the attendees on how to use the Miro board, highlighting its key features for commenting, brainstorming, and organizing ideas.
- Chad experienced difficulties accessing the Miro board, which led to a brief discussion on alternative participation methods, such as providing feedback via email or a follow-up session. Drew assured everyone that their input would be captured, regardless of the method used.

3. Discussion on Guiding Principles

- The core discussion centered on the guiding principles for the design guide, which are meant to ensure that the guide is both effective and inclusive.
 - Design Flexibility: Jonathan emphasized the importance of creating a guide that can adapt to different project needs, ranging from urban to rural settings. The guide should allow engineers to tailor designs based on specific project contexts.
 - Equity and Inclusivity: All attendees agreed that the guide must be inclusive, particularly in addressing the needs of diverse user groups, including those in rural areas and the aging population. The group agreed that equity should be a cornerstone of the guide.



- Vermont-Specific Challenges: Laura noted that Vermont's unique characteristics, such as its rural landscapes, older infrastructure, and narrow rights-of-way, pose challenges. The guide must account for these factors to be truly effective.
- Key Takeaway: The group concluded that the design guide needs to balance flexibility with a strong commitment to equity and inclusivity, while being tailored to address the specific challenges faced in Vermont.

4. Context-Sensitive Design vs. Traditional Classification

- Laura expressed concerns about shifting from traditional roadway classification systems to a context-sensitive design approach. She pointed out that while context-sensitive design offers greater flexibility, it complicates the process of defining and mapping roadway contexts, which could impact how projects are planned and executed.
- It was noted that the current classification system is deeply embedded in state processes and is straightforward for engineers to apply.
 - However, it may not fully address the needs of all user groups, particularly in mixed-use or rural settings.
- Key Takeaway: The team acknowledged the potential benefits of a context-sensitive design approach but recognized the challenges with implementation, particularly regarding how contexts are defined and mapped.
 - A hybrid approach that retains elements of the traditional classification system while incorporating context sensitivity was suggested as a potential solution.

5. Trade-Offs and Project Prioritization

- Erin highlighted the need for clear guidelines on how to manage trade-offs between different design principles, such as safety, cost, and user experience. She questioned whether the design guide should prioritize certain principles over others or if it should provide a framework for balancing them based on specific project needs.
- Jason raised the concern that if the guide prioritizes certain principles, it might inadvertently influence project selection, favoring projects that align more closely with those principles. This led to a discussion on whether the guide should be used to influence project selection or if it should strictly guide design decisions after a project has been defined.
- Jonathan suggested that the guide could include case studies or examples where different trade-offs have been managed successfully, providing practical insights for future projects.
- Key Takeaway: The group agreed that the design guide should offer guidance on managing trade-offs without conflicting with existing project selection processes. There was consensus on the need for the guide to be practical and adaptable, offering real-world examples to support decision-making.

6. Action Items and Next Steps

• Drew summarized the action items and next steps:



- Refinement of Guiding Principles: The principles discussed will be refined to ensure they address Vermontspecific challenges while remaining adaptable to various project contexts. Further input from stakeholders will be sought to ensure a comprehensive approach.
- Integration of Context-Sensitive Design: The team will explore how context-sensitive design can be integrated into the existing classification systems, potentially starting with state routes where the impact can be more easily managed.
- Guidance on Trade-Offs: Further discussion is needed to develop clear guidelines on managing trade-offs, with a focus on practical application in Vermont's diverse project environments.

Breakout Group #2 (Moderator: Margaret)

1. Meeting Introduction

• Agenda Overview: The primary focus was on reviewing and discussing the draft chapters of the project guide, with particular emphasis on how to integrate various feedback and ensure the document would be practical for a wide range of users. The group was encouraged to interact via the Miro board, with a brief warm-up exercise to familiarize everyone with the tool.

2. Initial Warm-Up Exercise

- Objective: Participants engaged in a warm-up exercise to reacquaint themselves with the Miro board's functionality. The activity included sharing their first job experiences and the lessons learned, aimed at breaking the ice and easing participants into the collaborative environment.
- Technical Challenges: Some participants experienced slowness with the Miro board, which was acknowledged and managed during the session.

3. Review of Chapters 1-3

- Overview: The group reviewed the draft outline of Chapters 1-3, which included a blend of existing Vermont State Standards, the M2D2 changes, and new proposed frameworks.
- Key Changes:
 - Hierarchy of Guidance: One of the major changes discussed was the introduction of a decision-making framework and the potential reorganization of Chapter 3 to include not just project design but also project development. This was seen as a way to better address gaps and assist with the hierarchy of guidance, especially considering the vast amount of existing material.
 - Project Development Focus: Emphasis was placed on how the planning and project design process should be articulated within the document, ensuring a clear pathway from visioning through to implementation.



> Community and Volunteer Involvement: The group highlighted the importance of making the guidance accessible to small towns and volunteer-led projects. In Vermont, many project initiatives are driven by volunteers or part-time town staff, making it crucial to lower the barrier to entry for using the guide effectively.

4. Discussion on Context Sensitivity and User Focus

- Shift to User-Centric Design:
 - Context Sensitivity: The discussion emphasized the need for roadway designs to be more context-sensitive, focusing on the users and the specific environment rather than adhering strictly to traditional roadway classifications. This approach would better serve Vermont's diverse communities by considering the unique characteristics of each area.
 - Examples and Case Studies: Participants suggested that including real-life examples and case studies of how small rural towns successfully moved from visioning to project implementation would be valuable. These examples would help illustrate the practical application of the guide and serve as inspiration for other communities.
- Outcomes vs. Product-Based Approach:
 - Engineering Perspective: There was a consensus that shifting from a product-based approach (focused on fixed roadway classifications) to an outcomes-based approach (focused on the needs of the users and the context) would require a cultural shift within the agency. This approach encourages flexibility in design and better alignment with community goals.
 - Challenges Identified: The group recognized that this shift might face resistance, particularly from those accustomed to the traditional methods of design. However, they agreed that the benefits of a more adaptable, user-focused approach would outweigh these challenges.

5. Discussion on Guiding Principles and Maintenance Considerations

- Guiding Principles:
 - Robustness for Practitioners: There was a strong focus on ensuring that the guiding principles are robust enough to support both practitioners and community volunteers. The group discussed how these principles should aim to protect the environment, enhance mobility, and foster economic development.
 - Integration of Community Feedback: The importance of integrating community feedback into the project development process was highlighted, particularly in ensuring that the design life of projects accommodates future changes and potential growth in the community.
- Maintenance and Environmental Considerations:
 - Long-Term Viability: The discussion also covered the importance of considering maintenance in the design process, particularly considering Vermont's challenging environmental conditions. The group suggested



that the guide should include considerations for how design choices impact long-term maintenance and adaptation to climate change.

 Design Life and Iterative Approaches: The concept of "design life" was discussed, emphasizing that projects should not only meet immediate needs but also accommodate future changes in land use and user needs. Participants suggested that some projects might need to be viewed as iterative, with the possibility of phased implementation as funding and context evolve.

6. Modal Hierarchy and Chapter Organization

- Organizational Structure:
 - Hierarchy of Modes: The group discussed the proposed structure of the guide, which organizes modes of transportation from most to least vulnerable users. This structure prioritizes pedestrians, cyclists, and other non-motorized users, with motor vehicles and freight considered within their own contexts.
 - Motor Vehicle Chapter: Although initially there was resistance to creating a specific chapter for motor vehicles, the group ultimately agreed that it would be useful. This chapter could address the intersection of motor vehicles with other modes, including considerations for context sensitivity and progressive design parameters. It would also provide a space to include topics like agricultural equipment, ATVs, and electric vehicle charging stations.
 - Context and Place Focus: The discussion reiterated the importance of focusing on the specific place and context when designing transportation infrastructure. The guide should ensure that the design reflects the needs and desires of the local community rather than strictly adhering to generic classifications.

7. Next Steps and Closing Remarks

- Further Input: The Miro board will remain open for additional comments and feedback over the next few weeks. Participants were encouraged to revisit the board and add any further thoughts or suggestions.
- Refinement of Outline: The project team will refine the draft outline based on the feedback received during this meeting. The next version will be shared with the Project Steering Committee for further review and input.
- Upcoming Meetings:
 - September-October 2024: Separate meetings will be held for the Technical Working Group and the Stakeholder Advisory Group to discuss the refined outline and other project developments.
 - December 2024: A full group meeting will be held to review progress and discuss the next steps before the New Year break.



Breakout Group #3 (Moderator: Bill)

1. Introduction and Overview of Miro Board Functionality

• Bill began the meeting by welcoming the team and explaining the functionality of the Miro board. He shared his screen to walk participants through the board's features, emphasizing the importance of collaboration.

2. Interactive Session: Guiding Principles and Voting Exercise

- Objective: To refine the guiding principles that will direct the Vermont Design Guidance.
- Discussion:
 - Bill guided the team through a structured voting exercise on the Miro board. Participants used sticky notes and dots to highlight essential principles and suggest additions.
 - Key Principles Discussed/items to include:
 - Determining how to incorporate environmental resiliency and working within the unique constraints of VT terrain is critical
 - Ensuring prioritization of outcomes that support VMT reduction goals, multimodal travel, and safety are important recognizing long distances between the denser communities (cities, villages, towns) to access resources
 - Multimodal designs for rural, low volume roads where there are not alternative networks working within constrained state highway corridors with farmland up to edge of pavements
 - Incorporating a relationship to the future land use classifications established in Act 181
 - The need for maintenance considerations to be integrated throughout the project lifecycle, especially in regions with harsh winters.
 - The importance of context-sensitive design that addresses the unique characteristics of different Vermont communities in particular rural towns that have compact urban centers
 - Incorporation of stakeholder input early in the design process to ensure that projects meet local needs and expectations.
 - Outcome: Participants agreed on several core guiding principles and identified areas where further discussion and refinement are needed.

3. Integration of Maintenance Considerations in Project Development

• Sommer emphasized the critical role of maintenance teams in project success, particularly in Vermont's challenging winter conditions.



- Key Points:
 - Early involvement of maintenance teams in project planning can prevent issues during the operational phase, such as difficulties with snow removal or road maintenance.
 - Bill shared an example from his experience in Franklin County, where maintenance input on traffic calming measures proved invaluable.
 - The group discussed practical steps to ensure that maintenance considerations are included in design guidelines, with a focus on collaboration and shared goals.

4. Discussion on Context Sensitivity and Design Flexibility

- Context Sensitivity: The team discussed how Vermont's diverse landscapes require flexible design standards that can be adapted to local conditions.
- Key Examples:
 - Shelburne: Bill provided a detailed example of how gradual changes over time, such as adding bike lanes and sidewalks, transformed Route 7 in Shelburne. He noted the importance of designing for current and future needs.
 - Waterbury: Sommer highlighted the challenges of designing for areas with varying traffic volumes and user needs, where what works in one location may not be suitable in another.
- Outcome: The team agreed on the need for a guide that allows for flexibility and adaptation, ensuring that designs are appropriate for the specific context in which they are implemented.

5. Evolution of Projects and Long-Term Planning

- Discussion: The team explored the concept of project evolution, where small, incremental improvements lead to significant long-term outcomes.
- Key Points:
 - Bill emphasized the importance of having a long-term vision for projects, using his family's experience in Shelburne as an example of how projects evolve over decades.
 - The group discussed how to incorporate long-term planning into the design guide, ensuring that projects are designed with future growth and changes in mind.
- Outcome: The team acknowledged the need for design guidance that supports both immediate and long-term goals, allowing for projects to evolve over time while maintaining consistency with overall objectives.

6. Addressing Pedestrian Safety and Crosswalk Design

• Sommer raised concerns about the challenges of designing safe pedestrian crossings, particularly in rural areas where crosswalks are less common.



- Key Points:
 - The group discussed the balance between pedestrian safety and maintaining traffic flow, especially in areas with limited infrastructure.
 - Bill shared examples of communities where tactical urbanism has been used to improve pedestrian safety, such as using temporary measures to test the effectiveness of crosswalks and bike lanes before making permanent changes.
 - Summer noted that crosswalk design often requires judgment calls due to the lack of specific guidance, leading to inconsistencies in implementation.
- Outcome: The team agreed on the need for clearer guidance on pedestrian safety and crosswalk design, particularly in rural areas, to ensure that all users can safely navigate Vermont's roadways.

7. Project Development Processes and Trade-Offs

- The group delved into the complexities of project development, particularly the trade-offs that must be made between competing priorities.
- Key Points:
 - Bill highlighted the importance of understanding the trade-offs between different design options, such as wider shoulders for bicyclists versus narrower lanes for traffic calming.
 - The group discussed the role of community input in making these trade-offs, with Summer emphasizing the need for clear communication with stakeholders about the benefits and limitations of each option.
 - Bill provided examples of how different communities have approached these trade-offs, such as the decision to add bike lanes or sidewalks in areas with limited space.
- Outcome: The team recognized the need for a comprehensive approach to project development that considers all potential trade-offs and involves stakeholders in the decision-making process.

8. Form and Function of the Design Guidance Document

- Discussion: The team considered how the design guidance document should be structured to be user-friendly and effective.
- Key Points:
 - The group likes a format similar to the Denver Guide, which clearly defines street typologies and provides detailed design parameters.
 - The team discussed the importance of visual aids, such as diagrams and case studies, to help users quickly understand complex concepts.
 - Sommer emphasized the need for interactive tools that allow users to explore different design options and understand the trade-offs involved.



• Outcome: The team agreed that the design guidance document should be visually engaging and easy to navigate, with a focus on practical tools and resources that support informed decision-making.

9. Wrap-Up, Next Steps, and Action Items

- Conclusion: Bill wrapped up the meeting by summarizing the key points discussed and outlining the next steps.
- Next Steps:
 - The Miro board will remain open for additional comments and input from team members.
- Action Items:
 - All Participants: Continue to provide feedback on the Miro board, particularly on the guiding principles and project development processes.

Breakout Group #4 (Moderator: Rick)

1. Meeting Introduction

- Recording Notification: The meeting was officially started with a notification that it was being recorded. This was done to ensure that the discussion could be accurately transcribed and reviewed later if needed.
- Miro Board Introduction: Rick introduced the Miro board, highlighting its use as a collaborative tool for the meeting. A brief walkthrough was provided to familiarize participants with navigating the board, particularly for those who were using it for the first time.

2. Initial Warm-Up Exercise

• Objective: The warm-up exercise was designed to get participants comfortable with using the Miro board while also serving as an icebreaker to kick off the meeting.

3. Review of Chapters 1-3

- Purpose: The goal of this segment was to critically review the initial chapters of the draft document, focusing on identifying any missing elements and ensuring that key concepts were adequately covered.
- Discussion Points:
 - Hierarchy in Design Guidance:
 - National vs. State Guidelines: A significant portion of the discussion revolved around how VTrans guidelines should align with or differentiate from national standards like AASHTO. The consensus was that while VTrans should maintain a level of autonomy, it is essential to clearly establish how these guidelines interact with broader national standards.



- Practical Application: Attendees debated the best way to present this hierarchy in the document to ensure that practitioners could easily understand and apply the guidelines in their work.
- Content Review: Participants provided detailed feedback on what they perceived as missing or underrepresented in the chapters reviewed. Suggestions included adding more context-specific examples and enhancing sections related to Vermont's unique infrastructure challenges.

4. Guiding Principles

- Overview: The meeting then transitioned to a discussion on the guiding principles that would underpin the document. These principles are meant to guide the development and application of VTrans guidelines.
- Key Areas of Focus:
 - Comprehensive Review: The group systematically reviewed each principle to determine if it was comprehensive or if additional principles needed to be included.
 - Multi-Modality as a Standalone Principle:
 - Current Grouping: Currently, multi-modality was grouped under equity and inclusivity. However, it
 was proposed that multi-modality should be elevated to its own principle. This change would
 better reflect its importance in ensuring that transportation systems serve all users, regardless of
 their mode of travel.
 - Vermont-Specific Challenges: There was a discussion on whether the document adequately addressed challenges specific to Vermont. These included not only the limited right of way in many areas but also the opposite issue—excessive right of way width that may not be fully utilized. This discussion highlighted the need for a balanced approach that takes into account both extremes.
 - Local Authority & Flexibility:
 - Integration: Participants suggested that the principle of flexibility should explicitly mention local authority, ensuring that local governments have the ability to adapt the guidelines to their specific needs.
 - Hierarchy of Principles: The group discussed whether certain principles should be prioritized or highlighted more prominently throughout the document. The idea was to create a hierarchy of principles that would guide decision-making at different levels of project development.

5. Project Development & Selection

- Focus of Discussion: This segment focused on how the VTrans guidelines would integrate with existing documents and processes, particularly in project development and selection.
- Key Questions Addressed:
 - Integration with Existing Guidance:



- Extent of Reference: The group debated whether existing VTrans project development guidance should be lightly referenced within the new document or if it should be fully integrated. The consensus leaned toward integration, ensuring that the new document serves as a comprehensive reference. Examples were noted where different project managers apply different interpretations of the project development guide which can lead to inconsistent outcomes. It would be good to give everyone the same understanding and playing field when developing their projects.
- External Documents: There was also discussion on the potential need to reference other relevant documents, such as the Vulnerable Road Users Guide, within the VTrans guidelines. The group emphasized the importance of not duplicating content but rather providing clear references to these documents.
- o Context Sensitivity in Project Selection:
 - Balancing Modes: The importance of context sensitivity was highlighted, particularly in how different transportation modes are balanced. The group agreed that the guidelines should avoid favoring one mode over another but should instead provide a framework for making balanced decisions based on the specific context.
 - Maintenance Considerations: The discussion also covered the need for the guidelines to include more comprehensive principles around maintenance, especially given Vermont's unique challenges. This includes dealing with infrastructure that is often under strain from environmental factors like flooding and harsh winters.

6. Next Steps

- Summary of Key Decisions: Rick summarized the key points and decisions made during the meeting, particularly around the guiding principles and the integration of existing guidance documents.
- Action Items:
 - Incorporation of Feedback: The next version of the document outline will incorporate the feedback provided during this meeting and based on review of peer agency documents.
 - Future Discussions: The group agreed to continue discussions on project development and selection processes in upcoming meetings. The project team will schedule follow-up meetings and circulate materials in advance to ensure productive discussions.

Meeting Closeout

- Miro Board Access: The Miro board will remain open for participants to provide additional feedback and comments over the next few weeks.
- Refinement of the Outline: The project team will review and refine the draft outline based on the feedback received during this meeting. The refined outline will be shared with the Project Steering Committee for further input.



- Upcoming SAG / TWG Meetings:
 - September-October 2024: Separate meetings will be held for the SAG and TWG to discuss the refined outline and other project developments.
 - December 2024: A full group meeting will be held to review progress and discuss the next steps before the New Year break.