THE CASE FOR CHANGE

In 2002, there was a record-high number of roadway fatalities in the state of Minnesota: 657 people died on our roads and annual fatalities were trending upward. Minnesotans knew this was not acceptable—we did not want to continue losing loved ones from tragic and preventable crashes. Something had to be done.

Driven by the desire to save lives on our state’s roads, in 2003 the Minnesota Departments of Health, Public Safety and Transportation came together and formed the Minnesota Toward Zero Deaths (TZD) program. Minnesota made great progress toward this goal in the early years of TZD. However, there has recently been little reduction in deaths and serious injuries on Minnesota roadways. In 2021, a decades-long decline reversed and Minnesota saw the highest number of traffic deaths since 2007. The TZD program is now nearly 20 years old and has seen little organizational structure change since its inception. TZD leadership recognized that they must act now to re-establish progress toward zero deaths.

ABOUT TZD

Minnesota TZD is the state’s cornerstone traffic safety program, employing an interdisciplinary approach to reducing traffic crashes, injuries, and deaths on Minnesota roads. Our state is a national leader in traffic safety, and Minnesota’s TZD program is modeled by many.

The TZD program team identified four major focus areas for communities working to reduce traffic injuries and fatalities:

<table>
<thead>
<tr>
<th>The 4 Es</th>
<th>Description</th>
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<tbody>
<tr>
<td>Education</td>
<td>Giving drivers the knowledge they need to avoid hazardous driving practices and choose responsible behavior.</td>
</tr>
<tr>
<td>Enforcement</td>
<td>Ensuring compliance with traffic laws to change driver behavior and reduce unsafe driving practices.</td>
</tr>
<tr>
<td>Emergency Medical &amp; Trauma Services:</td>
<td>Providing fast, efficient emergency medical and trauma services to reduce fatalities and serious injuries whenever a crash does occur.</td>
</tr>
<tr>
<td>Engineering</td>
<td>Changing the roadway—with cable median barriers, signage, the roadside, and more—to make travel safer.</td>
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</table>
**PROJECT GOAL**

The goal of the TZD 2.0 project is to assess and update the Minnesota TZD organizational structure, providing a fresh framework that will allow the program to be flexible to local needs, produce new and innovative strategies to improve traffic safety, and reenergize stakeholders in our drive toward the ultimate goal of zero fatalities.

**TZD 2.0** strives to answer two big questions:

1. What role does the current program structure and operations play in the TZD’s effectiveness in reducing traffic fatalities and serious injuries on Minnesota roadways? 
2. What changes to program structure and operations will help the TZD be more effective in achieving its goals?

**ASSESSMENT AND EVALUATION PROCESS**

The process to assess the effectiveness of TZD’s existing organizational structure and operations and recommend changes to make TZD more effective in reducing traffic deaths and serious injuries on Minnesota roadways included four key steps:

- **Understand Possibilities**
  - Define the opportunity
  - Traffic safety literature review
  - Organizational design literature review
  - Equity crash analysis
  - Conduct 5 peer agency interviews

- **Understand Current State**
  - Conduct 5 Regional workshops; 292 unique participants
  - Receive input via 13B survey responses
  - Interview ~40 stakeholders
  - Interview ~25 “new voices”
  - Engage TZD 2.0 Steering Committee

- **Analyze Opportunities**
  - Determine overall themes
  - Define potential actions to solve the opportunities
  - Provide analysis on actions
  - Summarize future state

- **Design Implementation**
  - Share direction with agency leaders
  - Define implementation approach
  - Build high level change plan
  - High level impact analysis

- **Implement**
  - Implement Change Plan
  - Socialize decisions & implementation timeline

- **Equity crash analysis**

- **Peer agency interviews**

- **High-Level Implementation Plan**

- **Literary & Research Reports**

- **Stakeholder Engagement Summary**

- **Action Recommendations**

- **Hand off to TZD for execution**

**Understand the possibilities**

**Traffic safety literature and program review**

The project team reviewed four recent scholarly reports which assess traffic safety programs from North America and London. Key takeaways include:

- Top-down leadership is common to get things started but can over burden those at the center over time and underutilize key skills of other partners.
- Collaboration with local agencies is key.
- Successful programs prioritize safety by creating a safety culture and adopting a Safe System approach.
- Establishment of measures to track accomplishments and identify areas to improve can make a difference.

**Organizational design review**

The project team researched potential types of organizational structures from a variety of for-profit, not-for-profit and public areas, analyzed TZD’s current organizational structure, and identified promising organizational design options with an eye toward addressing preliminary successes and challenges noted for TZD. Promising organizational design options include:

- Single leadership structure (i.e., traditional organizational chart structure).
- Collective impact structure, which is common in non-profit organizations and social initiatives.
- Matrixed organization, which is typically found as a corporate structure.
- Data-driven organization, which is especially popular in the public sector and also found in tech start-ups and for-profits.

**The goal of this review as not to select one program structure for TZD, but to identify elements of different organizational designs that may benefit TZD. Elements of different designs were combined, to an extent, in the final TZD 2.0 recommendations to best address the needs identified through background research and stakeholder engagement.**

**Equity crash analysis**

The project team analyzed equity indicators using Census data, demographic data and crash data (i.e., MnDOT crash data and Fatality Analysis Reporting System (FARS) data). The goal of this analysis was to identify inequities in traffic deaths on Minnesota roadways. Specifically, the project team analyzed indicators based on MnDOT’s protected classes and group, including limited English proficient populations, Environmental Justice populations (i.e., minority and low income), sex, age, Title VI Classes (i.e., race, color and national origin), and disability. Key takeaways include:

- Certain crash types are more of a concern in specific geographies—it is important for TZD to be able to tailor its approach based on geography. For example, run-off-the-road crashes are more common in rural areas and pedestrian and bicycle related crashes are more common in urban areas.
- Low-income and minority individuals are overrepresented in pedestrian, bicycle and unlicensed crashes—it is important for TZD to be able to focus on different crash types in specific communities.
- Minnesota’s tribal communities are overrepresented in fatal crashes—it is important to include input from tribal nations in Minnesota as part of the TZD 2.0 project and on an ongoing basis as part of TZD moving forward.

**Peer agency interviews**

The project team interviewed staff focused on traffic safety within five peer programs in Norway, New Jersey, Nevada, Massachusetts and Iowa. Key takeaways include:

- Minnesota is a model for others.
- Executive level coordination is important.
- Formal structures or informal networks both can work. Structures need resources. Networks need strong commitments of support and robust integration within agencies.

- Successful programs need to:
  - Quickly react to data trends.
  - Support participation from all stakeholders.
  - Provide meaningful assistance to local agencies.
  - Promote positive collaboration/communication regardless of who is in specific positions.

**High-Level Impact**

It is most common for a single agency or small group of agencies to have the most control.

Two models of leadership are common — agency-led and executive-led. In both models, there is risk of initiatives being deprioritized when leadership changes.

Many times, large organizations do not turn as efficiently as smaller organizations. Small organizations can adapt to changes more quickly and effectively.

**TZD 2.0** strives to answer two big questions:

1. What role does the current program structure and operations play in the TZD’s effectiveness in reducing traffic fatalities and serious injuries on Minnesota roadways? 
2. What changes to program structure and operations will help the TZD be more effective in achieving its goals?
The project team engaged TZD stakeholders to learn what is working well and what is challenging about the current organization. Engagement included:

- 21 Participants in Steering Committee
- 292 Participants in TZD Regional Workshops
- 40 Participants in Existing Stakeholder Interviews
- 25 Participants in New Voices Stakeholder Interviews
- 138 Responses in Statewide Survey

### Analyze opportunities

The project team used the background review and analysis and the stakeholder engagement to identify opportunity areas for TZD. The opportunities focus on enhancing the program structure and operations to increase its overall effectiveness. Key opportunities include:

- **Program focus:** Add a focus on building a culture of traffic safety in Minnesota
- **Internal communication:** Better coordinate and streamline communication among TZD staff and partners
- **External communication:** Better coordinate and streamline public-facing traffic safety communication and shift the focus to building a culture of traffic safety
- **Data:** Create a hub for traffic safety data and research
- **Resources:** Address gaps in funding and staff resources
- **Role clarity and decision rights:** Clarify roles and decision rights, and formalize the program’s decision-making process

### Safe System approach

TZD can use a Safe System approach to design and operate traffic safety systems and structures to protect against human error and injury tolerances to minimize death and serious injuries.

### THE FUTURE OF TZD

To be effective moving forward, TZD will need to focus on building a culture of traffic safety in Minnesota and designing and operating a safe transportation system. Program structure and operations will help TZD focus on what matters.

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<thead>
<tr>
<th>What</th>
<th>Traffic Safety Culture</th>
<th>Safe System</th>
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<tbody>
<tr>
<td>Make the safe choice</td>
<td>Create a safety net to protect people when things go wrong</td>
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<table>
<thead>
<tr>
<th>How</th>
<th>Organization Operations</th>
<th>Organizational Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve ways of working to increase effectiveness</td>
<td>Revise organizational structure to leverage needed expertise</td>
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</table>

### Moving forward, it is important that any organizational changes made to the TZD program preserve and enhance these elements.

Other elements that stakeholders noted as successful included:

- TZD has been good at identifying and implementing innovative safety strategies
- Local empowerment (i.e., leadership and ownership) at the TZD regional level makes TZD successful
- TZD has been successful in creating effective education and communications materials for the program’s current focus
- TZD is good at creating opportunities for traffic safety practitioners to share ideas and learn from one another
- There are currently many funding opportunities for traffic safety activities
- TZD has been successful in providing good tools and resources for partners

### Incorporating equity

TZD stakeholders noted some specific ways the program could support more equitable traffic safety processes and outcomes moving forward:

- Localize decision-making as much as possible to allow communities to implement the traffic safety activities that best fit their needs.
- Incorporate direct community involvement in selecting and implementing traffic safety activities.
- Develop and encourage a multifaceted approach to traffic safety because not every strategy is a good option for every community, no matter how successful it may be elsewhere.
- Programmatically support and facilitate tailoring and strategies to individual communities.
- Incorporate equity into all decision-making processes within TZD and related traffic safety processes.

### What is currently working

TZD stakeholders often noted the following two elements as working well within the current program structure and operations:

- Cross-agency collaboration: TZD currently does a good job bringing staff from partner agencies together to coordinate traffic safety activities.
- Multidisciplinary approach: TZD is successful at bringing together people working on different aspects of traffic safety—Education, EMS, Enforcement and Engineering.

### Existing challenges

TZD stakeholders most often noted the following four elements as challenges within the program’s current structure and operations:

- Culture and individual behavior are hard to change: TZD needs to focus more on building a culture of traffic safety in Minnesota to accelerate progress toward zero. This is an area with a lot of potential gains but that hasn’t historically been a focus for TZD.
- Lack of public awareness and understanding: People in Minnesota, including many potential traffic safety partners, don’t know what TZD is and how traffic safety impacts their lives or work.
- Imbalance between agency influence: Stakeholders don’t see TZD as a true partnership among the partner agencies, though people have differing perspectives on who is leading. This causes confusion about who can or should be involved in TZD and limits the scope of what TZD currently focuses on. Many stakeholders believe TZD is solely or primarily a MnDOT program.
- Unclear decision-making: Stakeholders don’t know who is responsible for making which decisions within TZD. There isn’t clear direction or clear lines of accountability, which causes decision-making to take a long time and creates tension among partners about who owns which decisions.

### Moving forward

Moving forward, it is important that any organizational changes made to the TZD program address and improve these elements.

Other elements that stakeholders noted as challenges include:

- There isn’t enough staff to support the work of TZD, or not the right skillsets in the right places to effectively support.
- There isn’t enough political support at the state and local levels for TZD and traffic safety activities in general.
- All the relevant traffic safety partners don’t currently participate in TZD and there isn’t enough buy-in to the program among current and potential partners.
- TZD needs different and better messaging and communications strategies, specifically focused more on creating a culture of traffic safety.
- There is a lack of diversity and cultural sensitivity within TZD as a program and within traffic safety work in general.
- The current public feelings towards law enforcement make it difficult to TZD to implement enforcement strategies to improve traffic safety.
- There is not enough reliance on data in TZD decision-making, or it is not clear to stakeholders how data is used in decision-making.
- Traffic safety funding is available, but it is difficult to use because it is mostly from federal sources with a lot of restrictions on what it can fund and reporting requirements, making it impractical for many partners.

### Safe System approach

TZD can use a Safe System approach to design and operate traffic safety systems and structures to protect against human error and injury tolerances to minimize death and serious injuries.

Note: Graphic from FHWA
Moving forward

There is a role for all traffic safety partners in both building a culture of traffic safety and implementing a Safe System approach. However, adding more of a focus on traffic safety culture will leverage different expertise than historically has been most active in TZD.

<table>
<thead>
<tr>
<th>TRAFFIC SAFETY CULTURE</th>
<th>SAFE SYSTEM</th>
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<tr>
<td><strong>Primary</strong></td>
<td><strong>Primary</strong></td>
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<td>Education</td>
<td>Enforcement</td>
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<td>EMS</td>
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<td><strong>Everything Else</strong></td>
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**TZD Created**

**Today**

**RECOMMENDED ACTIONS**

The project team identified the following recommended actions for TZD. These actions are changes to the program structure and operations that will help TZD move toward the desired future state described in the previous section.

**ORGANIZATIONAL STRUCTURE**

1. Add new partners focused on positive community norming at all levels - leadership, regional, local
2. Create new statewide TZD positions to support program operations and data and communication coordination
3. Adopt a new program structure, re-align staff based on expertise and accountability and hire/reassign for any gaps
4. Secure dedicated, flexible funding to support TZD-specific activities and staff

**ORGANIZATIONAL OPERATIONS**

1. Develop and implement internal communication strategy for TZD partners
2. Develop and implement external communication and education strategy for public
3. Create TZD research program to focus on having right data and root cause analysis to inform organization and drive decisions
4. Revise decision making process with clear responsibilities and rights
5. Empower regions with decision-making authority and funding to allow for more localized and tailored activities

**Implementation and next steps**

Implementation of these recommendations is being led by existing TZD leadership. Starting in 2022, TZD leaders will be reviewing the recommendations, engaging stakeholders, and defining and refining the specific next steps for the program.