Regional Solicitation Unique Projects Development Process – Meeting #2
How are we going to operate?

BE ACTIVE
Come prepared to engage (you all volunteered!)

RESPECT OUR TIME
Limit the side chatter, stay focused on topic

KEEP AN OPEN MIND
Be considerate of others’ opinions

ALLOW FOR EVERYONE
Don’t dominate the conversation

HAVE FUN
This is an exciting topic, let your creative side loose!

USE TECHNOLOGY
Use Webex tools and Mentimeter to communicate

OTHERS?
Will improve monitoring chat and hand raising
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Agenda

1. Recap of Meeting #1
2. Insights from MnDOT and Community Development Funding Programs
3. Goals Prioritization Exercise
4. Discussion of Evaluation Metrics
5. Reflection and Next Steps
Meeting #1 Recap – Key Themes

Purpose of Unique Projects

• **Innovation**, high-risk, creative ideas; pilot projects
• **Immediate impact**, urgent projects,
• **Social equity**, reducing racial disparities
• **Climate change**, reducing transportation impacts
Meeting #1 Recap – Key Themes (cont.)

Goals/Outcomes for Unique Projects (# of Comments)

• **Environmental impacts**, climate change, reducing transportation system impacts (14)
• Improving **transit, walking, biking** (9)
• **Social equity**, reducing racial disparities (6)
• Improving **access** to places, **connectivity** to transportation (6)
• Improving **land use connection** (1)
• Transportation for **seniors** (1)
Goals/Outcomes for Unique Projects

• Successful program (8)
  – Social acceptance
  – Pilot, successful proof of concept
  – Disruption technology
  – Prepare for new federal funding opportunities
  – Collaboration, partnerships

• Broad impact, regional balance (4)
Meeting #1 Recap – Key Themes (cont.)

Unique Projects Ideas

• Solar over parking lots
• Studies of potentially innovative ideas (e.g., goods and services “deserts”)
• Multi-use charging stations (e.g., food trucks, e-bikes)
• Successful replacement of Metro Mobility
• Drones to save road use
• Road design flexibility
• Autonomous vehicle technology
• Mobility hubs
Questions?
MnDOT and Community Development Program Insights
Lessons Learned from MnDOT Competitive Programs

• Use an expression of interest process
  • Encourages more dialogue/better projects
  • Applicants know requirements for the funds
  • Weak candidates don’t put in significant time/resources into developing applications

• Use the strategies from your plan to create a scoring system that allows multiple paths to achieving full points (i.e. you don’t have to do everything to get all the points)

• For scoring innovation, consider the potential for broader adoption
CAV CHALLENGE BACKGROUND

- Launched in October 2018 and resulted in 16 awards and 7 fully-negotiated contracts.
- Winner of the 2019 National Cronin Award for Procurement Excellence, the 2020 AASHTO Innovation Award and the 2021 WTS Innovation Award.
- Projects include Rochester autonomous shuttle pilot, fiber optic feasibility study, Smart Snelling connected vehicle corridor, and autonomous maintenance trucks.
- Partnering with new entities: economic development, IT, counties, medical centers, cities, tech industry and new voices in innovation, defense contractors.
- Saved $2M+ in RFP resources and 200+ hours of staff time.
PROCESS

Intro
‘Stage 1’ meeting

Workshop
• Ideation
• Goals
• Brainstorming

Proposal submission
• Refine concept
• Hear from technical experts
• Discuss scope

Decision
• Fund
• Hold for future funding
• Reject & debrief

Negotiations
• Legal terms
• Scope
• Schedule
• Budget
• Risk

Implementation
• Iteration
• Evaluation
• Engagement
• Systems analysis

Proposal submission
Workshop
Decision
Negotiations
Implementation

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USE CASES

1. Public-private partnerships
2. Testing and deployment
3. Developing clear policy
4. Winter weather testing
5. CAV corridor planning
6. Expanding mobility options for underserved communities
7. Work zone safety
8. Outreach and engagement
9. Data and cybersecurity
10. Direct public benefit
11. Scalable, replicable ideas
12. Public health
13. Maintenance and operations
14. Multi-modal transportation
15. Freight
16. Shared mobility
17. Public safety
18. Localize national research
19. Infrastructure investment
20. Build off other programs
21. Tech readiness
22. Interoperability
23. Connected vehicle tech
24. Autonomous vehicle tech
25. Shared mobility
WHEN TO USE CHALLENGE-BASED PARTNERSHIPS

- Ideas seeking new outside partners
- Flexible timelines; not urgent
- Open to ideation and brainstorming
- Willing to use new ideas, innovation, technology
- You can pose a problem to solve or define broad goals for vendors to meet
- Requirements are unknown, hard to define, rapidly changing or you don’t have all the expertise
TOP 10* LESSONS LEARNED

1. Begin with the end in mind
2. Equity must be addressed explicitly
3. Prioritize the priorities
4. Workshop ideas
5. Use design thinking and human-centered design
6. Protect IP and trade secrets
7. Technology is a means to an end
8. Create interdisciplinary teams
9. Performance measures and accountability
10. Seek feedback
11. Advertise your program
12. Manage expectations

*Disclaimer: I’m a lawyer not a mathematician. I make no warranties for my (in)ability to count.
THANK YOU

MINNESOTA CONNECTED AND AUTOMATED VEHICLES PROGRAM

KRISTIN WHITE
Executive Director
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Livable Communities Act Grants

- Interrelate development or redevelopment, affordable housing, and employment growth;
- Create more compact development or redevelopment;
- Create a mix of housing opportunities;
- Provide public infrastructure that connects communities, attracts investment, and expands job opportunities; and
- Address environmental sustainability and advance racial equity
Livable Communities Act Grants

2020-2021 Changes

- Focusing on outcomes and impacts
- Putting community need at the center
- Expanded pre-development grants
- Supporting prospective applicant cities and project teams in advance
Goal Prioritization and Criteria Discussion
Exercises
Goal Prioritization Exercise

• Focus on impact-oriented goals; program-success goals will be secondary
• Narrowing down to 1-2 goals will give applicants clear message about intent
• Not necessarily a commitment to these goals over many Solicitation cycles, can be revisited each cycle
• Considerations from key themes:
  – Environment and equity are existing evaluation criteria in most funding categories, but often not highly weighted
  – Access to people and places is existing evaluation criteria weighted highly as “usage” in most funding categories
  – Multimodal is both an existing evaluation criteria and several funding categories, could be addressed through modal funding ranges
Goal Prioritization Exercise (more detail)

- Environment and equity are existing evaluation criteria in most funding categories, but often not highly weighted
  - Equity is generally around 5% of points in roadways, bike and ped and around 15% in transit
  - Reduced emissions are between 0% and 15% of points, although some criteria get at this indirectly (e.g., potential multimodal usage)

- Multimodal is both an existing evaluation criteria and several funding categories, could be addressed through modal funding ranges
  - Multimodal is generally between 9% of the points in most categories
  - Transit and TDM and Bicycle and Pedestrian funding categories make up 44.5% of Regional Solicitation funding based on midpoints approach
# Draft Evaluation Framework

<table>
<thead>
<tr>
<th>Goals</th>
<th>Metrics</th>
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<tbody>
<tr>
<td>Outcome #1 – TBD</td>
<td>One to two metrics</td>
</tr>
<tr>
<td>Outcome #2 – TBD (if necessary)</td>
<td>One to two metrics</td>
</tr>
<tr>
<td>Outcome #3 – TBD (if necessary)</td>
<td>One to two metrics</td>
</tr>
<tr>
<td>Innovation/Disruption</td>
<td>Qualitative metric</td>
</tr>
<tr>
<td>Regional Significance/Scalability</td>
<td>One to two metrics</td>
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<tr>
<td>Partnerships/Collaboration</td>
<td>Qualitative metric</td>
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# Goals Prioritization Exercise

<table>
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<tr>
<th>Goal</th>
<th>Examples of Impact</th>
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| Reduce Environmental Impacts of Transportation | • Reduce GHGs (VMT)  
• Reduce impervious surfaces  
• Reduce local pollution                    |
| Reduce Racial Disparities                     | • Improve access for people of color  
• Remove barriers for people of color  
• Increase engagement/understanding of needs  
• Address project consequences of historic harm |
| Improve Multimodal Options                    | • Address real or perceived safety and security issues  
• Expand emerging modes or shared mobility options |
| Improve Access to Places                      | • New ways to physically connect to places                                       |
| Improve Connectivity and Reduce Barriers to Transportation | • New ways to socially connect (e.g. Apps)  
• Reducing cost or language barriers         |
| Improving Transportation and Land Use Connection | • Creating better plans or city ordinances  
• Parking strategies                         |
| Improving Transportation for Seniors          | • New mobility options, better coordination                                      |

Question #1: Top focus

Question #2: Second focus
Goal Prioritization Wrap-up

• What’s missing?
• Concerns?
• Questions?
Evaluation Metrics Discussion

• Based on top goals, tell us what is important to evaluate about each focus area:
  – Think about things that can potentially be measured
  – Try to consider impact-based metrics, as opposed to how-we-operate metrics

• Alternatively, tell us the specific problem you think we should be evaluating for improvement

• What advice do you have to technical staff looking to develop an evaluation framework for these goals?
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Meeting Reflection

• What worked?
• What didn’t work?
• Any meeting rules to add or revisit for next time?
Contact:

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Cole.Hiniker@metc.state.mn.us
Travel Behavior Inventory Program Overview

The Travel Behavior Inventory (TBI) program provides data on regional travel patterns to inform transportation planning and to develop and maintain regional travel forecast models. The program consists of recurring and periodic data collection and model enhancement projects, including a household travel survey (every 2 years), a transit on-board survey (every 5 years).

**Funding Request for 2017-2022 (2016 solicitation cycle)**

<table>
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<tr>
<th>Funding Partner</th>
<th>Funding</th>
<th>% of Total</th>
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<td>TAB</td>
<td>$2.7 million</td>
<td>36%</td>
</tr>
<tr>
<td>Met Council</td>
<td>$3.2 million</td>
<td>42%</td>
</tr>
<tr>
<td>MnDOT</td>
<td>$1.7 million</td>
<td>22%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$7.6 million</strong></td>
<td><strong>100%</strong></td>
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Projects include 2019, 2021, and 2023 household travel surveys, 2022 transit on-board survey, 3rd party data purchases and regional model updates.

**Funding Request for 2023-2024 (2018 solicitation cycle)**

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<td>$585,000</td>
<td>33%</td>
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<tr>
<td>Met Council</td>
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<td>33%</td>
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<td><strong>Total</strong></td>
<td><strong>$1.755 million</strong></td>
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Projects include 2025 household travel survey, special generator survey, regional model updates, and a potential 3rd party data purchase.

**Funding Request Range for 2025-2026 (2022 solicitation cycle)**

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<td>$850K - $1.1M</td>
<td>33%</td>
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<tr>
<td><strong>Total</strong></td>
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Projects include 2027 household travel survey, 2027 transit on-board survey, special generator survey, and updates to the regional model.