

Infrastructure Resilience Advisory Task Force

Final Report to the Minnesota Legislature

January 2024

Executive Summary

The Infrastructure Resilience Advisory Task Force was charged with evaluating issues related to coordination, sustainability, resiliency, and federal funding on state, local, and private infrastructure in the state. The Task Force has identified a number of weaknesses and inefficiencies related to infrastructure across the state and, therefore, has developed the Minnesota Infrastructure Board to rectify these issues.

This board would be charged with defining and maintaining a vision for the future of Minnesota's infrastructure that provides for proper management, coordination, and investment. The board will work in a non-regulatory capacity and in tandem with stakeholders to develop and promote best practices that will preserve and extend the longevity of Minnesota's public and privately-owned infrastructure. The board will consist of 14 non-voting members that are experts in an aspect of infrastructure and 11 voting members. The duties the board is charged with include, but are not limited to, electing a chair, hiring an executive director, identifying approaches to enhance and expedite infrastructure coordination across jurisdictions, agencies, state, and local government, and public and private sectors, including in planning, design, engineering, construction, maintenance, and operations, developing an educational program on asset management, and writing an annual report to the legislature. More details on the specifics of the board can be found in the draft legislation in appendix H.

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Membership

Minnesota Laws 2023 Chapter 62, Article 2, Section 121

(a) The task force consists of the following members:

(1) two members of the senate, with one appointed by the senate majority leader and one appointed by the senate minority leader;

(2) two members of the house of representatives, with one appointed by the speaker of the house and one appointed by the house minority leader;

(3) the commissioner of administration;

(4) the commissioner of agriculture;

(5) the commissioner of commerce;

(6) the commissioner of employment and economic development;

(7) the commissioner of health;

(8) the commissioner of management and budget;

(9) the commissioner of natural resources;

(10) the commissioner of the Pollution Control Agency;

(11) the commissioner of transportation;

(12) two members appointed by the governor;

(13) one representative from a federally recognized Tribal government, appointed by the governor;

(14) one member appointed by the Association of Minnesota Counties;

(15) one member appointed by the League of Minnesota Cities;

(16) one member appointed by Minnesota Association of Townships;

(17) one member appointed by the Minnesota chapter of the American Public Works Association;

(18) one member appointed by the Associated General Contractors of Minnesota;

(19) one member appointed by each public utility that owns a nuclear-powered electric generating plant in this state; and

(20) one member appointed by the Minnesota Municipal Utilities Association.

Jessica Burdette

Director of the Office of Energy Reliability and Security for the Minnesota Department of Commerce

Appointed by: Commissioner of Commerce

Sandeep Burman

State Drinking Water Administrator for the Minnesota Department of Health

Appointed by: Commissioner of Health

Jim Carlson

Senate

Appointed by: Senate Majority Leader

Tom Dicklich

Executive Director of the Minnesota Building and Construction Trades Council

Appointed by: Governor

Greg Ewig

Division Director of Real Estate and Construction Services for the State of Minnesota

Appointed by: Commissioner of Administration

Lyle Femrite

Appointee

Appointed by: Minnesota Association of Townships

Dawn Gillman, Vice-Chair

House of Representatives

Appointed by: House Minority Leader

John Jasinski

Senate

Appointed by: Senate Minority Leader

Erin Koegel, Chair

House of Representatives

Appointed by: Speaker of the House

Paul Krabbenhoft

Appointee

Appointed by: Association of MN Counties

Brian Olson

Director of Public Works for the City of Edina

Appointed by: Governor

Kris Manderfield

Appointee

Appointed by: Minnesota Municipal Utilities Association

Russ Matthys

Public Works Director for the City of Eagan

Appointed by: American Public Works Association

Samantha Minkler

Capital Asset Manager for the Minnesota Department of Natural Resources

Appointed by: Commissioner of Natural Resources

Dana Vanderbosch

Assistant Commissioner for Water Policy and Agriculture at Minnesota Pollution Control Agency

Appointed by: Pollution Control Agency

Jean Wallace

Deputy Commissioner and Chief Engineer for the Minnesota Department of Transportation

Appointed by: Commissioner of Transportation

Mike Zastoupil

Agricultural and Food Systems Planner for the Minnesota Department of Agriculture

Appointed by: Commission of Agriculture

Bree Maki

Director of the Office of Broadband Development for the Department of Employment and Economic Development

Appointed by: Commissioner of Employment and Economic Development

John Paulson

Project, Environmental, and Regulatory Manager for the City of Hutchinson

Appointed by: League of Minnesota Cities

Laura Ziegler

Director of Highway and Government Affairs for the Associated General Contractors of Minnesota

Appointed by: Associated General Contractors of Minnesota

James Pearson

Principal Manager of State Government Affairs for Xcel Energy

Appointed by: Public Utility that owns Nuclear-Powered Plant

Micah Intermill

Enterprise Director of Federal Funds Implementation for the State of Minnesota

Appointed by: Commissioner of Management and Budget

Vacant

Tribal Government

Appointed by: Governor

Overview of the Task Force

The Infrastructure Resilience Task Force is charged by the Legislature to

- (1) develop objectives and strategies to:
 - (i) provide for effective and efficient management of state, local, and private infrastructure;
 - (ii) enhance sustainability and resiliency of infrastructure throughout the state;
 - (iii) respond to and mitigate the effects of adverse weather events across the state, including natural disasters, droughts, and floods; and
 - (iv) provide for equitable treatment in areas of persistent poverty and historically disadvantaged communities;
- (2) identify approaches to enhance infrastructure coordination across jurisdictions, agencies, state and local government, and public and private sectors, including in planning, design, engineering, construction, maintenance, and operations;
- (3) identify methods to maximize federal formula and discretionary funds provided to recipients in the state for infrastructure purposes;
- (4) evaluate options for organizational design of state agencies to meet the purposes under clauses (1) to (3), including consideration of:
 - (i) options for establishment of a board, council, office, or other agency; and
 - (ii) models in other states; and
- (5) develop findings and recommendations related to the duties specified in this subdivision.

After five months of hearing testimony from other states, hearing testimony from projects using scalable asset mapping strategies, and discussions between key stakeholders, the Task Force has identified issues and developed recommendations in line with its mandate.

Overview of Testimonies

The Task Force heard testimony from the Michigan Infrastructure Council Executive Director, Ryan Laruwe and Vice-Chair, Erin Kuhn. This testimony included an overview of the enabling legislation and executive orders that allowed the Michigan Infrastructure Council to form.¹ They testified on their mission, which was incredibly aligned with those of the Task Force as, “define a vision for Michigan’s infrastructure that provides a foundation for public and environmental health, economic prosperity, and quality of life.” The testimony went on to explain the “Dig Once” portal that they are using to coordinate the collaboration of ongoing infrastructure projects across the state. “The portal analyzes the temporal and spatial relationships between user submitted GIS infrastructure investment plans to identify conflicts and opportunities in planned work.” They also discussed their ongoing work to establish a 30-year plan that can be used to guide infrastructure development projects in the future. Finally, they discussed the following best practices that they discovered during their work: inclusion of both public and private infrastructure owners, early involvement of state departments, use of pilots to illustrate the business case, early establishment of goals, working across all levels of government, appreciation of existing regional organizations, and working across the aisle. Each of these best practices was included in the draft legislation used to develop the Minnesota Infrastructure Board.²

The Task Force also heard testimony from Kate Knuth, the MPCA Climate Director of the Climate Action Framework. This testimony addressed the purpose of the Climate Action Framework, the members of their subcabinet, and the climate vision for the state of Minnesota. She presented the goal areas of the Climate Action Framework as clean transportation, climate-smart natural and working lands, resilient communities, clean energy and efficient buildings, healthy lives and communities, and a clean economy. She also discussed ongoing initiatives to meet the goals including climate-smart communities, health community green spaces and water resources, and resilient buildings, infrastructure, and businesses. She ended the presentation with reflections and recommendations for the Task Force. Among these are to establish durable and reliable resources that expand local capacity to implement community-driven adaption plans and to create an inventory of tools and guidance to help communities assess tree canopy, stormwater, and resilient infrastructure opportunities, which have been utilized in the final proposal here.³

Finally, the Task Force heard testimony from Kyle Shelton on the Empowering Small Minnesota Communities program. The vision of the project is “to help small Minnesota communities develop resilient infrastructure and strengthen their social, environmental, and economic fabric.” To accomplish this, they are focusing on the goal of working “with small Minnesota communities on efforts that add value to the community, get more benefit from local and state investments, that are competitive projects for a wide range of future funding, and that add capacity to support small communities in pursuit of their goals.” They plan to accomplish

¹ This enabling legislation for the Michigan Infrastructure Council can be found in Appendix F.

² The MIC presentation given to the Task Force can be found at lcc.mn.gov/irtf/meetings.html

³ The Climate Action Framework presentation given to the Task Force can be found at lcc.mn.gov/irtf/meetings.html

this goal by supporting University of Minnesota researchers to “partner with communities to prepare compelling proposal ideas for public and private funding programs.” Finally, he described the types of projects that this program will be taking on as rapid response, or 10-hour projects, tactical action, or multiple months, and community futures, or 9-12 months. These projects start in the discovery phase where communities bring a proposal to the program, then the program supports developing a plan and list of next steps, as well as connecting the community to resources.⁴

⁴ The Empowering Small Minnesota Communities presentation given to the Task Force can be found at lcc.mn.gov/irtf/meetings.html

Overview of Meetings

First Meeting- September 25, 2023

Convener Jean Wallace called the first meeting of the Infrastructure Resilience Advisory Task Force to order. Task Force members introduced themselves and provided an overview of their interest in serving on the Task Force. Convener Wallace provided an overview of the goals of the Task Force. Convener Wallace nominated Rep. Koegel to serve as chair and Rep. Gillman to serve as vice chair. A roll call vote was taken and The Motion Prevailed. Evelyn Weiner, LCC Research Analyst, provided an overview of the enabling legislation. Taya Moxley-Goldsmith, Director, Data Practices Office, provided an overview of the Data Practices Act and the Open Meeting Law. Members discussed the approach to accomplishing work, future meeting topics and schedule for meetings.

Second Meeting- October 9, 2023

Chair Erin Koegel called the meeting of the Infrastructure Resilience Advisory Task Force to order. Chair Koegel provided a land acknowledgement statement as the meeting date fell on Indigenous Peoples' Day. The Michigan Infrastructure Council provided a presentation on their council, how it was started, their successes, their failures, and best practices in the formation of an infrastructure council. The Climate Action Framework provided a presentation on their framework, how it was started, their successes, their failures, and best practices.

Third Meeting- October 23, 2023

Chair Erin Koegel called the meeting of the Infrastructure Resilience Advisory Task Force to order. Members discussed existing relationships between members' organizations, and relationships that should exist. They discussed needs in greater Minnesota vs. the metro in Minnesota. They explored the idea of employing a consultant to help guide the planning work needed for the task force. Members confirmed that mapping using GIS and broader education would be good first strategic initiatives.

Fourth Meeting- November 20, 2023

Chair Erin Koegel called the meeting of the Infrastructure Resilience Advisory Task Force to order. Micah Intermill provided an overview of his new position and how it could be a part of these efforts. Kyle Shelton presented on the University of Minnesota's Empowering Small Minnesota Communities project. He discussed the ways the program can partner with other organizations, and how the program will center community engagement in their process.

Fifth Meeting- December 4, 2023

Chair Erin Koegel called the meeting of the Infrastructure Resilience Advisory Task Force to order. Chair Koegel presented the draft mission statement and members gave feedback on changes they wanted to see. Members discussed diverse definitions of sustainability and resiliency. A draft mission statement was finalized. Chair Koegel and Vice-Chair Gillman guided members through a discussion of voting and nonvoting members for the potential board.

Sixth Meeting- December 18, 2023

Chair Erin Koegel called the meeting of the Infrastructure Resilience Advisory Task Force to order. Chair Koegel presented the draft mission statement and members gave feedback on changes they wanted to see. Members voted on the finalized mission statement and The Motion Prevailed. Chair Koegel guided members through a discussion of voting and non-voting members for the potential board. Members voted on the finalized board structure and The Motion Prevailed. Chair Koegel began a guided discussion of the duties of the board.

Seventh Meeting- January 16, 2024

Chair Erin Koegel called the meeting of the Infrastructure Resilience Advisory Task Force to order. Chair Koegel requested a roll call vote to be taken to enable LCC staff to make edits to the final report without the approval of the task force and The Motion Prevailed. Chair Koegel requested a roll call vote to be taken to enable them to make edits to the final report without the approval of the task force and The Motion Prevailed. Chair Koegel guided members through a discussion of the executive director of the board and where the board would be housed. Members indicated interest in housing the board in MMB while using a MMB facilitator and allow the board to decide on the executive director. Chair Koegel guided members through a discussion of the duties of the board. Members discussed ensuring the board is non-regulatory.

Eighth Meeting- January 29, 2024

Recommendations

In order to address the ongoing challenges of communities across Minnesota in accessing resources to support their infrastructure, the Task Force developed a structure for a Minnesota Infrastructure Board; it is as follows:

This board would be charged with defining and maintaining a vision for the future of Minnesota's infrastructure that provides for proper management, coordination, and investment. The board will work in a non-regulatory capacity and in tandem with stakeholders to develop and promote best practices that will preserve and extend the longevity of Minnesota's public and privately-owned infrastructure. The board will consist of 14 non-voting members that are experts in an aspect of infrastructure and 11 voting members. The duties the board is charged with include, but are not limited to, electing a chair, hiring an executive director, identifying approaches to enhance and expedite infrastructure coordination across jurisdictions, agencies, state, and local government, and public and private sectors, including in planning, design, engineering, construction, maintenance, and operations, developing an educational program on asset management, and writing an annual report to the legislature. More details on the specifics of the board can be found in the draft legislation in appendix H.

Appendix A: Statutory Authority

Minnesota Laws 2023 Chapter 62, Article 2, Section 121

Subdivision 1. Definition.

For purposes of this section, "task force" means the Infrastructure Resilience Advisory Task Force established in this section.

Subd. 2. Establishment.

The Infrastructure Resilience Advisory Task Force is established to evaluate issues related to coordination, sustainability, resiliency, and federal funding on state, local, and private infrastructure in the state.

Subd. 3. Membership.

(a) The task force consists of the following members:

- (1) two members of the senate, with one appointed by the senate majority leader and one appointed by the senate minority leader;
- (2) two members of the house of representatives, with one appointed by the speaker of the house and one appointed by the house minority leader;
- (3) the commissioner of administration;
- (4) the commissioner of agriculture;
- (5) the commissioner of commerce;
- (6) the commissioner of employment and economic development;
- (7) the commissioner of health;
- (8) the commissioner of management and budget;
- (9) the commissioner of natural resources;
- (10) the commissioner of the Pollution Control Agency;
- (11) the commissioner of transportation;
- (12) two members appointed by the governor;
- (13) one representative from a federally recognized Tribal government, appointed by the governor;
- (14) one member appointed by the Association of Minnesota Counties;
- (15) one member appointed by the League of Minnesota Cities;
- (16) one member appointed by Minnesota Association of Townships;

(17) one member appointed by the Minnesota chapter of the American Public Works Association;

(18) one member appointed by the Associated General Contractors of Minnesota;

(19) one member appointed by each public utility that owns a nuclear-powered electric generating plant in this state; and

(20) one member appointed by the Minnesota Municipal Utilities Association.

(b) At its first meeting, the task force must elect a chair or co-chairs by a majority vote of those members present and may elect a vice-chair as necessary.

Subd. 4. Appointments.

(a) The appointing authorities under subdivision 3 must make the appointments by July 31, 2023.

(b) A commissioner under subdivision 3 may appoint a designee who is an employee of the respective agency.

(c) An appointing authority under subdivision 3, paragraph (a), clauses (12) to (20), may only appoint an individual who has expertise and experience in asset management, financial management and procurement, or state and local infrastructure, whether from the public or private sector. Expertise and experience may include but is not limited to the following areas:

(1) asset management planning, design, construction, management, and operations and maintenance;

(2) infrastructure for agriculture, communications, drinking water, energy, health, natural resources, public utilities, stormwater, transportation, or wastewater; and

(3) asset management planning across jurisdictions and infrastructure sectors.

Subd. 5. Duties.

At a minimum, the task force must:

(1) develop objectives and strategies to:

(i) provide for effective and efficient management of state, local, and private infrastructure;

(ii) enhance sustainability and resiliency of infrastructure throughout the state;

(iii) respond to and mitigate the effects of adverse weather events across the state, including natural disasters, droughts, and floods; and

(iv) provide for equitable treatment in areas of persistent poverty and historically disadvantaged communities;

- (2) identify approaches to enhance infrastructure coordination across jurisdictions, agencies, state and local government, and public and private sectors, including in planning, design, engineering, construction, maintenance, and operations;
- (3) identify methods to maximize federal formula and discretionary funds provided to recipients in the state for infrastructure purposes;
- (4) evaluate options for organizational design of state agencies to meet the purposes under clauses (1) to (3), including consideration of:
 - (i) options for establishment of a board, council, office, or other agency; and
 - (ii) models in other states; and
- (5) develop findings and recommendations related to the duties specified in this subdivision.

Subd. 6. Meetings.

- (a) The commissioner of transportation must convene the first meeting of the task force no later than October 1, 2023.
- (b) The task force must establish a schedule for meetings and meet as necessary to accomplish the duties under subdivision 5.
- (c) The task force is subject to the Minnesota Open Meeting Law under Minnesota Statutes, chapter 13D.

Subd. 7. Administration.

- (a) The Legislative Coordinating Commission must provide administrative support to the task force and must assist in creation of the report under subdivision 8.
- (b) Upon request of the task force, a commissioner under subdivision 3 must provide information and technical support.
- (c) Members of the task force serve without compensation.

Subd. 8. Report required.

By February 1, 2024, the task force must submit a report to the governor and the legislative committees with jurisdiction over climate, economic development, energy, infrastructure, natural resources, and transportation. At a minimum, the report must:

- (1) summarize the activities of the task force;
- (2) provide findings and recommendations adopted by the task force; and
- (3) include any draft legislation to implement the recommendations.

Subd. 9. Expiration.

The task force expires June 30, 2024.

EFFECTIVE DATE. This section is effective the day following final enactment.

Appendix C: Michigan Infrastructure Council Governance Model

Michigan Infrastructure Council Governance Model

Voting Members

Name	Appointing Authority	Job Title
John Weiss, Chair	Senate Majority Leader	Executive Director of the Grand Valley Metropolitan Council
Erin Kuhn, Vice-Chair	Governor	Executive Director of the West Michigan Shoreline Regional Development Commission
Kathleen Lomako	House Minority Leader	Executive Director of the Southeast Michigan Council of Governments
Marco Bruzzano	Governor	Senior Vice President of Corporate Strategy & Regulatory Affairs for DTE Energy
Palencia Mobley	Governor	Deputy Director and Chief Engineer of the Detroit Water and Sewerage Department
Daniel Fredendall	Speaker of the House	Vice President of Risk Management at Orchard, Hiltz & McCliment, Inc.
John H. Daly III, Ph.D	Senate Minority Leader	Director of Transportation Infrastructure for the City of Flint
Beverly Watts	Governor	Director of the Public Services in Wayne County

Non-Voting Members

Name	Organization
Sue McCormick	Water Asset Management Council
Joanna Johnson	Transportation Asset Management Council
Charyl Kirkland	Michigan Public Service Commission
Jonathan Mallek	Department of Agriculture and Rural Development
Aaron Keatley	Department of Environment, Great Lakes, and Energy
Erik Eklund	Department of Natural Resources
Eric Swanson	Department of Technology, Management, and Budget
Todd White	State Transportation Department
Kevin Smith	Michigan State Treasury

Staff

Name	Job Title
Ryan Laruwe	Executive Director of the Michigan Infrastructure Council
Nathan Hamilton	Program Manager

Appendix D: Survey Responses

Does your agency/organization have a sustainability or resilience mission? If so, what is it?

Our mission is to protect human health and the environment but embedded within our agency are many sustainability and resilience programs.

Built into the MDH Drinking Water Vision and Mission Statements: - Vision: Safe and sufficient drinking water is available for everyone, everywhere in Minnesota. Mission: Implement strategic safeguards that protect drinking water from source to tap. Statements are valid only if sustainability and resiliency are incorporated.

Sustaining Minnesota's natural resources, landscape, water, habitats, wildlife, etc. is the core work of the DNR and included in our mission: "to work with Minnesotans to conserve and manage the state's natural resources, to provide outdoor recreation opportunities, and to provide for commercial uses of natural resources in a way that creates a sustainable quality of life."

American Public Works Association – MN Chapter has the following vision, “Advancing quality of life for all Minnesotans through Asset Management.” The mission to accomplish this is to “Support public works through Asset Management advocacy and education.” The City of Eagan has the following sustainability vision, “Eagan is a resilient community that values natural living spaces and environmental stewardship”.

Environmental Services exists to protect public health and the environment and support orderly, economic growth for the Twin Cities region through water resource recovery (wastewater treatment) and water sustainability planning.

MnDOT's agency vision: Minnesota's multimodal transportation system maximizes the health of people, the environment and our economy. The 2022 Statewide Multimodal Transportation Plan (SMTP) includes new climate, equity and health commitments: - Shift to more climate-friendly transportation options; - Ensure equity in transportation decision-making - Improve health outcomes and reduce disparities in Minnesota through transportation. The SMTP specifically includes focus areas around aging infrastructure and climate, directly related to resilience. Aging infrastructure: Infrastructure across the country is aging. As the system ages, more resources go to maintenance and repairs to make sure they serve communities as intended. Minnesota's transportation system shows signs of deterioration and requires attention. Climate: Minnesota's climate is already changing. Temperatures are increasing and larger, more frequent extreme weather events are occurring year-round. Climate change will impact the way the transportation system is used, built, designed, operated and maintained. The transportation sector needs to combat climate change by providing people with environmentally friendly choices to ensure their daily transportation needs are met.

Residents and visitors enjoy a clean, environmentally healthy, beautiful city.

Our Mission Statement: To promote the health and sustainability of Minnesota's construction industry through professional leadership and advocacy. In our Code of Ethics (adopted by our

Board of Directors): Environment. Contractor will promote environmentally sensitive and sustainable design and practices.

Yes, one of the Department's core objectives is to plan for climate change resilience. We do so through multiple functions including the Division of Energy Resources, Insurance, and others.

We are heavily focused on a clean energy transition at the state and local level.

MDA's mission is to enhance all Minnesotans' quality of life by equitably ensuring the integrity of the food supply, health of the environment, and the strength and resilience of our agricultural economy.

Recurring Words: transportation, mission, health, climate, water, sustainability, vision, Minnesota's, and resources.

What do sustainability and resilience look like for your agency/organization?

Sustainability would be to ensure that public water supplies are safe, affordable and reliable for the long term. This applies to the natural environment (the source waters - rivers, lakes, groundwater) and the built environment (the infrastructure that delivers water to the consumers).

Resiliency is in terms of ensuring that both the sources and the infrastructure are able to withstand short term impacts of extreme weather events and are also prepared for long term climate adaptation.

We have in depth programs focused at exploring water resource health and developing strategies to restore them (which creates resilient natural resources), we have units of tech staff who rank and score infrastructure projects for funding, we have explicit sustainability programs, and a climate section that is dedicated to exploring climate change, developing technical materials for planning and staff and funding aimed at funding resiliency and adaptation projects.

Climate change is one of the many threats to Minnesota's natural resources. Climate change exacerbates the impacts and risks of on-going issues such as: habitat loss/land use conservation; accelerated storm water runoff including agricultural drainage; ground water depletion and surface water use contributing to ecologically harmful low flows during times of drought; pollution and degradation of water quality; other introduction of toxic materials (lead, pesticide drift, etc.); invasive species/wildlife disease introduction and spread; and over consumption of resources. DNR's approach to sustainability and resilience incorporates a wide gamut of impacts and risks. Resources such as our Ground Water Management Strategic Plan, State Wildlife Action Plan, sustainable timber harvest practices, etc. address a range of risks and opportunities related to natural resources. DNR's programmatic responsibilities incorporate regulatory programs (shoreland, floodplain, water appropriation, work in public water, etc.). DNR's Sustainability Operational Order is currently under revision. The operational order establishes policies and procedures to reduce consumption of energy, water, and fossil motor vehicle fuels, reduce solid waste disposal through waste reduction and recycling, and increase purchasing of environmentally preferable products. The DNR has a department-wide Sustainability Team that supports the development and implementation of strategies, processes, and projects to drive a

sustainable DNR operation. The primary focus is to achieve and exceed Enterprise sustainability targets established by Executive Order 19-27. These include reducing fossil fuel use in fleet, energy and water use in facilities, and greenhouse gas emissions as well as increasing recycling and purchase of environmentally preferable products. DNR also has a department-wide CLIMATE team, 'Climate Impacts, Mitigation, and Adaptation Team' which provides guidance, coordination, and leadership for identifying and implementing climate change mitigation and adaptation strategies across the DNR. Resilience – In terms of infrastructure, applicable building projects follow B3 guidelines. Other built infrastructure projects (dams, flood hazard mitigation projects, water control structures, etc.) incorporate climate predictions/resilience in their design and construction such as culvert size and floodplain delineation.

APWA-MN established an Asset Management Committee in 2021. i. Assets are essentially anything that provides value. An organization's coordinated activities to maximize the value of its assets is the organization's asset management system. Assets can be both tangible and intangible (roads and pipes - tangible vs. traffic signal timing - intangible). ii. To support APWA members that operate, improve and maintain public works and infrastructure through advocacy, education, resource development, and member engagement in the field of asset management. (National Vision) iii. In terms of infrastructure and resource assets, Asset Management is not a destination. It is a continual journey that requires routine assessment of all components that go into maximizing the value that community stakeholders are asking for from these assets. iv. Assist agencies with setting their vision for asset management and marshaling their resources to make this vision a reality. v. Committee is developing asset management standards for public agencies, creating asset management messaging and presentations, and establishing itself as an asset management resource guide. Eagan works with residents and businesses to preserve Eagan's natural environment in many ways. i. The Water Resources team and our volunteer programs protect and preserve Eagan's 1,200 lakes, streams, and ponds. ii. Working with the Sustainable Eagan Advisory Commission (SEAC), Eagan residents appointed by the City Council. The purpose of the SEAC is to respond to the City's environmental goal by making recommendations to the City Council on local environmental sustainability and energy conservation strategies for the City's residents, businesses, and municipal operations. iii. Eagan's forestry team's efforts along with the 12,000 trees residents planted on private property have increased, keeping our air clean and healthy. iv. A new local wind energy program provides some electricity for all City facilities. v. Pavement Management Program (33 years) and Infrastructure Needs Analysis (2+ years) through Public Works Department's asset management to establish long-term infrastructure management/replacement and funding plans. vi. Hired an asset management coordinator (2020) & sustainability coordinator (2023) to help guide the processes. vii. After working with the State of Minnesota to establish an acceptable process, the Eagan City Council approved the use of Best Value Contracting to assure access to the long-term benefit and cost effectiveness of quality construction over the short-lived initial cost of Low Bid contract awards. viii. Eagan has participated in MPCA's GreenStep Cities program since 2010 and has reached the highest level, Step 5, every year since 2018. ix. Over the last few years, the City of Eagan has slowly added some PHEVs and now two BEVs to the city's fleet. x. Eagan plans to address resilience in a climate action plan which will likely include a community vulnerability assessment. This assessment will identify which areas of the community will be most impacted

by future changes to environmental conditions. This assessment will allow the city to plan for resilience where it is most needed. xi. Fund efforts toward a sustainable future through new franchise fees and create a strategic plan through a collaborative process. xii. Public Works efforts include: protection of wellheads/Drinking Water Supply Management Areas; Integrated Water Plan - re-use and conservation; flood protection through modeling and design standards applying updated ATLAS-14 storm events; cyber security; 5-year Capital Improvement Plan with annual updates; meet public expectations for a high quality of life with minimized disruptions.

The Metro has enough water supply sources to grow, communities are not at risk of sudden flooding, public health is protected by keeping wastewater in the pipes and fully treating it, sewer capacity is provided as planned long in advance and not impacted by inflow/infiltration into the sewer system, the significant amount of energy to move and treat wastewater does not increase costs or increase CO2 emissions, maximum valuable resources are recovered from wastewater including energy, biosolids for agriculture, reclaimed water for aquifer recharge, and our natural water resources are swimmable, fishable and drinkable.

a. MnDOT's SMTP identifies performance measures related to asset management and resilience. The Statewide Highway Investment Plan identifies investment targets to meet SMTP goals. b. Performance Measures i. Pavement Condition: Annual percent of state highways with good and poor ride quality ii. Bridge Condition: Annual percent of state bridges in good and poor condition as a percent of total bridge deck area iii. Culvert Condition: Annual percent of highway culverts in poor or severe condition 17% (2020) $\leq 10\%$ iv. System Resilience: Measure that evaluates resilience at a system level (i.e., not just individual assets) v. Asset Resilience: Resilience of assets by type (e.g., bridges, culverts, etc.) c. SMTP Strategies: i. Maximize the useful life of transportation assets while considering performance, costs and impacts to people, the environment and our economy ii. Plan, design, develop and maintain transportation infrastructure and facilities in a way that reflects and is informed by the surrounding context. iii. Improve coordination with partners on the management of all assets connected to the transportation system. iv. Preserve and improve Minnesota's natural resources and minimize harm to the environment. v. Transition of the transportation sector away from dependence on fossil-based fuels. vi. Make transportation and land use decisions that reduce total greenhouse gas emissions. vii. Protect people and communities through regional approaches to mitigate risk from the changing climate and extreme weather. viii. Increase resiliency of people and communities by adapting infrastructure to withstand the changing climate. d. PROTECT Program: funding under this new program (established in IJJA/BIL) will respond to a weather-driven, climate vulnerability. We will use internal experience or scientific data to show that a project is in a climate vulnerable place.

The City of Hutchinson integrates sustainability and resiliency into much of what we do. These principles are included in City Council core values for the environment and include: The watershed and the environment are adequately protected. Air quality is adequately protected. Resources are conserved in a manner that provides environmental and economic benefit. City-wide recycling & composting programs reduce material going to local landfills and provide economic benefits to the community. Use of alternative fuels and renewable energy is utilized

where feasible and a reasonable payback period is provided. A well-maintained urban forest provides environmental benefits and contributes to community aesthetics. Green spaces are maintained in an attractive, cost-effective manner. Appropriate planning and processes are in place to effectively manage city growth.

Our contractor (generals/subs/specialty/suppliers) membership serves very diverse construction markets. Roads, bridges, wastewater, stormwater, sewer, renewable energy, commercial buildings just to name a few. Each contractor has opportunities and challenges in the sustainability and resiliency space, and the role of AGC is to represent these complex issues at an industry level. There are many ways contractors demonstrate environmental leadership at a project or organization level, and it's our duty to be a resource to state agencies (particularly those who procure and help deliver public projects), policy makers, and our many construction partners. We frequently collect and submit comments on specifications or rulemaking determined by agencies. AGC also provides educational opportunities for members about sustainability in their means and methods. Education for policymakers about construction practices and roles is critical - advocacy is a cornerstone of our organization. We advocate for policies that increase infrastructure investment (capital/bonding, transportation revenue, grant programs, etc.), repurpose current buildings (historic tax credit), consider availability of materials and supplies, as well as evaluating total project costs and potential tradeoffs. *It's important to note that AGC neither regulates its contractor members nor dictates how a member company should perform its business responsibilities. We provide the tools necessary to succeed in all facets of construction, such as safety and the environment.

We have multiple funding sources from either the state or federal level, formula or grant funding, to support multiple renewable energy, energy efficiency, and electrification programs. We are supportive of the Climate Action Framework and participate in most of the workgroup objectives. We also support the Office of Enterprise Sustainability as it relates to sustainability for the state enterprise.

Most sustainability efforts involve funding and technical assistance for soil health and water management and related GHG emission reductions. Other sustainability efforts include support for Organic agriculture, biofuel production, and hybrid fleet vehicles for staff use. Resilience efforts mostly involve the ag marketing division through funding and technical assistance.

Examples include support for local & regional food production, drought relief, and a new cooperative agreement with the USDA for resilient food system infrastructure.

Recurring Words: water, management, sustainability, climate, infrastructure, asset, resources, resilience, energy, public, funding, use, plan, assets, city, environment, natural, programs, projects, state, construction, system, environmental, efforts, transportation, resiliency, impacts, resource, strategies, quality, increase, support, community, program, level, and condition.

Are there any roadblocks to accomplishing your agency/organization's sustainability or resilience goals?

Technically sound and economically feasible solutions and practices. Dedicated funding. An integrated and coordinated statewide plan across all sectors.

Consistent funding is a challenge as will ensuring consistent legislative commitment to climate work.

Funding, staff time, technical expertise.

Lack of coordination across external jurisdictions, both public and private. Resistance to change. Political differences between desired partners. Lack of understanding the value of effort by constituents and leaders. Lack of staff resources or funding. Lack of proactive thinking, only reactive, that misses coordination opportunities with others.

Information and data on climate risk and changing weather patterns are essential to modeling the risk of flooding and over-capacity storm and sanitary sewer systems. Funding to develop GIS infrastructure data to assess risk and prioritize investment across the densely built metro area. Funding and legal authority to recover additional resources from wastewater, including thermal energy that could be used for district heating.

MnDOT is in the process of developing a Resilience Improvement Plan (also a federal requirement under the PROTECT program), which is intended to identify increased risks due to climate hazard exposure on the transportation system. The preliminary list of hazards includes extreme heat, heavy precipitation and flooding, winter storms, freeze-thaw frequency, landslides and rockfalls, and wildfires. There may be challenges with inventorying the system, which requires data from local partners and creating a dynamic way to share information.

Staff dedicated specifically to these goals are limited so we rely on a variety of staff to incorporate these concepts into our day-to-day operations. Not all staff are going to be fully committed to these ideals, so implementation happens first where it is embraced. Folding these goals into daily operations and city policy is effective when a good business case is made. Standalone renewable projects are more challenging due to capital demands from new and existing utility infrastructure needs. Shifting financial resources without increasing the total available only dilutes what has typically been invested into repairing or building new utility infrastructure. We are seeing a trend of doing less with the same amount of money.

It's important to remember that AGC members do not decide what to build or where to build projects. (The exception being their own offices/business.) Those decisions are made by project owners at all levels of government and private owners or developers. Contractors have direct control over the means and methods of the construction process. 1.) Permitting. The permitting process needs to be streamlined to ensure more predictable timelines and expectations. Delays lead to increased project costs and inefficiencies. 2.) Utility infrastructure and mapping of underground utilities. Accurate mapping and locating of underground utilities are critical for efficient maintenance, repairs, and safety. Underground utilities reduce environmental footprints, are less vulnerable to natural disasters, increase service reliability, optimize land use, and minimize risks to workers and the public when accurately installed and located. 3.) Well-intended policies can have unintended consequences in the market on materials and cost, taking

up more captured revenue and resources. Policies can also have disproportionate effects on small businesses and minority-owned businesses, pushing them out of certain markets or ability to reinvest in capital.

Funding and coordination with various efforts. Potential duplicative efforts.

Sustainability and resiliency work is spread across multiple divisions and staff and is not very coordinated. The legislature passed funding for the MDA to hire a Climate Coordinator in 2025 or 2026, which would help greatly with both internal and external coordination.

Recurring Words: funding and staff.

Does your agency/organization have a sustainability or resilience mission? If so, what is it?

Sustainability and resiliency are fundamental to the design and functionality of any infrastructure undertaking.

Maintaining a high quality of life. Maximizing public system value, life expectancy, and protection of public.

Partnerships between local, regional, state, federal and private sector are essential to accomplish meaningful gains. Taking a long-term viewpoint is critical. Risk management, protecting human life, avoiding costly infrastructure failure, being proactive.

a. It would be helpful for the mission to describe how the most vulnerable communities and people will be prioritized. b. In this context, it would be helpful to define infrastructure resilience as the way to increase the built environment's capacity to mitigate both the climate hazards observed by the DNR's Minnesota State Climatology Office and projected changes as produced by the climate science community. c. How asset management can provide the foundation for resiliency efforts.

Balance funding for existing infrastructure needs with the ever-changing world of regulations and new directives such as MN's Climate Action Framework. Integrate resilience and sustainable concepts into all that we do in a responsible way so new problems are not created due to competing financial constraints.

-partnerships between public sector, private sector, and workers -practical recommendations.

I would like this task force to include food and agriculture infrastructure in its mission statement. Often when people talk about infrastructure, they mean roads, broadband, sewers, etc. But food is often overlooked, even though it's a basic need. The COVID pandemic highlighted the vulnerability of our food supply chains and infrastructure, such as food processing facilities and distribution hubs, which are critical to ensuring our state's food security.

Recurring Words: infrastructure and food.

Is there anything you'd like to explore during our task force meetings? Are there any individuals or organizations you would like to see present?

Overlaps and synergies between the work of various agencies and how there could be integration - both strategic and operational. It would be good to have Minnesota Public Facilities Authority present on how sustainability and resiliency criteria are incorporated into the distribution of funds from the State Revolving Fund for wastewater and drinking water projects.

I like to coordinate with ongoing efforts. Evaluating how ongoing efforts come together ensures that newly created things are filling gaps and not creating unintended consequences. I mentioned the Climate Action Framework, around which there is a ton of work ongoing in many areas. I am sure there are other ongoing efforts we should know about as we look to create something new.

Mn DNR went through asset inventory; I'm happy to share the presentation I shared at the Sustainable Infrastructure Policy Committee on Feb 15, 2023.

Michigan and Colorado reports; maybe someone from MN Climate Action Framework.

Lessons learned from NYC, Houston, etc. would be instructive through the eyes of public works leaders who have been through significant events - how prepared they were, how they responded, what they learned, what they are doing now, what they wish they would have done in advance.

a. The DNR's Minnesota State Climatology Office offers a presentation describing how Minnesota's climate is evolving. b. The Research Director at the UMN Center for Sustainable Building Research offers an overview of climate change's impacts to Minnesota's critical infrastructure. c. The Director of the UMN's Climate Adaptation Partnership (UMCAP) offers a presentation of multi-sector adaptation strategies that showcase data, examples, and context for increasing infrastructure and community resilience. By November the UMCAP's state-funded Future Climate Hazards data will be available, and the director will be able to give insights into what Minnesota's climate is projected to be at the middle and the end of this century. d. other states' efforts with regards to resiliency and asset management collaboration efforts. e, there is national research (Transportation Research Board) that performed a scoping study on an all-hazards risk and resilience framework for transportation infrastructure. That scoping study has led to the development of an all-hazards risk and resilience manual for state departments of transportation. This multi-year, multi-phase effort will equip state DOTs with a manual, tools, and resources for better quantifying resilience risk and assisting in prioritizing resources to manage and mitigate the highest risks to the transportation system.

It would be helpful to have a repository of what agencies are currently doing in this space and how we can maximize agency time and resources. Permitting would be at the top too. I would recommend not getting in the weeds on construction materials and emissions because there are two other task forces with that focus.

Funding - Request that federal agencies work to simplify and streamline the application process.
- More state resources to assist LGUs on applications. - Investigate even more ways to form partnerships with communities who may have been on the sidelines until now. Duplication of effort - It is not clear to me how the task force will consider and align with the large amount of

work on sustainability and resilience that is already occurring throughout the state-by-state agencies, Tribal Governments, colleges, LGUs, and NGOs.

I would like to learn more about the work of the others on the task force. I'm young in my career and relatively new to the MDA, so I don't have a good grasp of what other agencies and organizations do regarding infrastructure, and how we might work together.

Recurring Words: state, climate, work, agencies, efforts, infrastructure, and resilience.

Are there any other things about infrastructure resilience and/or sustainability that you would like to mention that you haven't already?

There is a strong environmental justice & health equity correlation with sustainability and resiliency. Those groups and areas that are disproportionately impacted in other ways are also often where the infrastructure is the most vulnerable.

If possible, it would be great to avoid duplicate or conflicting efforts with other state teams such as the Sustainability Steering team. Also, it would be great to use consistent definitions across these state teams; OES has a sustainability definition approved by the Sustainability Steering team that is similar to the UN definition.

Long-term investments for overall cost savings may have additional upfront costs, but overall costs will be reduced.

Resilient transportation infrastructure is critical to connecting people and communities throughout the state. Paraphrased from our statewide multimodal plan: faced with an extensive, rapidly aging system and increasing construction costs, transportation partners in Minnesota are struggling to keep the system in good condition. Challenges to prevent agencies from reaching good condition can look like out-of-service transit vehicles, gaps in sidewalks, bridges in need of repair and poor pavement quality requiring more frequent maintenance, resulting in traffic impacts to the traveling public. Not only do deficiencies result in rough roads, sidewalks that fail to meet ADA standards, etc., deterioration can make the system more vulnerable to risks from things like climate change and extreme weather. Climate change will likely disrupt critical systems, increase operating costs, exacerbate funding gaps and cause spillover effects for our communities, underserved and vulnerable populations, and the economy. Few infrastructure assets will be left untouched by the changing climate, and none can be ignored entirely. However, using risk-based approaches and a lens on equity in defining investment needs present opportunities to build back better to adapt the transportation system to meet the challenges of climate change and extreme weather events.

The federal HIFLD critical infrastructure database needs data quality improvements and updating. The number of jurisdictions involved makes coordinated planning more difficult. Even larger LGUs may lack staff capacity and funding to manage multiple projects and work with neighbors in this space. Working with the RDCs may be one option to mitigate that challenge.

While infrastructure tends to be a bi-partisan issue, sustainability and climate resiliency are politically charged topics, unfortunately. This is particularly true in agriculture and among farmers, so just something to keep in mind.

Recurring Words: sustainability, infrastructure, climate, costs, system, vulnerable, state, transportation, critical, and change.

Appendix E: Chair Koegel's Draft Mission Statement

Create a vision for Minnesota in which built and natural infrastructure is used as a tool to create excellent public and environmental health, pristine natural resources, economic prosperity, and a high quality of life.

This board/council/office will serve as the primary interface between state and local communities, provide financial support to local communities, and professional and technical services to local community leaders in the areas of...

Appendix F: Michigan Infrastructure Council Legislation

ENROLLED HOUSE BILL No. 5335

AN ACT to create the Michigan infrastructure council; and to prescribe the powers and duties of certain state and local agencies and officials.

The People of the State of Michigan enact:

Sec. 1. This act shall be known and may be cited as the “Michigan infrastructure council act”.

Sec. 2. As used in this act:

- (a) “Asset” means infrastructure related to drinking water, wastewater, stormwater, transportation, energy, or communications, including, but not limited to, drinking water supply systems, wastewater systems, stormwater systems, drains, roads, bridges, broadband and communication systems, and electricity and natural gas networks.
- (b) “Asset class” means a single type of asset including its network and all associated appurtenances critical to its performance.
- (c) “Asset management” means an ongoing process of maintaining, preserving, upgrading, and operating physical assets cost-effectively, based on a continuous physical inventory and condition assessment and investment to achieve performance goals.
- (d) “Asset management plan” means a set of procedures to manage assets through their life cycles, based on principles of life cycle costing. An asset management plan may be used as a tool to help an asset owner implement its asset management program.
- (e) “Asset owner” means a person that owns or operates an asset.
- (f) “Department” means the department of treasury.
- (g) “Performance goals” means standards of system performance that reflect asset management principles for asset preservation and sustainability, operations, capacity consistent with local needs, and identified levels of service.
- (h) “Person” means an individual, partnership, corporation, association, governmental entity, or other legal entity.
- (i) “Region” means the geographic jurisdiction of any of the following:
 - (i) A regional planning commission created pursuant to 1945 PA 281, MCL 125.11 to 125.25.
 - (ii) A regional economic development commission created pursuant to 1966 PA 46, MCL 125.1231 to 125.1237.
 - (iii) A metropolitan area council formed pursuant to the metropolitan councils act, 1989 PA 292, MCL 124.651 to 124.729.
 - (iv) A metropolitan planning organization established pursuant to federal law.

(v) An agency directed and funded by section 822f of article VIII of 2016 PA 268, to engage in joint decision-making practices related, but not limited to, community development, economic development, talent, and infrastructure opportunities.

(j) “Transportation asset management council” means the transportation asset management council created in section 9a of 1951 PA 51, MCL 247.659a.

(k) “Water asset management council” means the water asset management council created in section 5002 of the natural resources and environmental protection act, 1994 PA 451, MCL 324.5002.

Sec. 3. (1) The Michigan infrastructure council is created within the department.

(2) The Michigan infrastructure council consists of the following:

(a) Nine voting members appointed pursuant to subsection (3) who are representative of 1 or more of the following:

(i) Asset management experts from the public and private sectors with knowledge of and expertise in the areas of planning, design, construction, management, operations and maintenance for drinking water, wastewater, stormwater, transportation, energy, and communications.

(ii) Financial and procurement experts from the public or private sector.

(iii) Experts in regional asset management planning across jurisdictions and infrastructure sectors.

(b) The following nonvoting members:

(i) The chairperson of the water asset management council or his or her designee.

(ii) The chairperson of the transportation asset management council or his or her designee.

(iii) The director of the department of agriculture and rural development or his or her designee.

(iv) The director of the department of environmental quality or his or her designee.

(v) The director of the department of natural resources or his or her designee.

(vi) The director of the department of technology, management, and budget or his or her designee.

(vii) The director of the state transportation department or his or her designee.

(viii) The state treasurer or his or her designee.

(ix) The chairperson of the Michigan public service commission or his or her designee.

(3) Voting members of the Michigan infrastructure council under subsection (2)(a) shall be appointed as follows:

- (a) Five by the governor.
 - (b) One by the senate majority leader.
 - (c) One by the speaker of the house of representatives.
 - (d) One by the senate minority leader.
 - (e) One by the house minority leader.
- (4) The voting members first appointed to the Michigan infrastructure council must be appointed within 60 days after the effective date of this act.
- (5) The voting members of the Michigan infrastructure council serve for terms of 3 years or until a successor is appointed, whichever is later, except as follows:
- (a) Of the members first appointed under subsection (3)(a), 1 shall serve for 2 years, 1 shall serve for 1 year, and 3 shall serve for 3 years.
 - (b) Of the members first appointed under subsection (3)(b), (c), (d), and (e), 2 shall serve for 2 years and 2 shall serve for 1 year.
- (6) A vacancy on the Michigan infrastructure council shall be filled for the unexpired term in the same manner as
- the original appointment.
- (7) A member of the Michigan infrastructure council may be removed for incompetence, dereliction of duty, malfeasance during his or her tenure in office, or any other cause considered appropriate by the office for whom the appointment was made.
- (8) The governor shall call the first meeting of the Michigan infrastructure council within 90 days after the effective date of this act. At the first meeting, the Michigan infrastructure council shall elect from among its members a chairperson and other officers as it considers appropriate. After the first meeting, the Michigan infrastructure council shall meet at least quarterly, or more frequently at the call of the chairperson or if requested by 3 or more members.
- (9) A majority of the voting members of the Michigan infrastructure council and a majority of the nonvoting members of the Michigan infrastructure council constitute a quorum for the transaction of business at a meeting of the Michigan infrastructure council. An affirmative vote of a majority of the voting members of the Michigan infrastructure council is required for official action of the Michigan infrastructure council.
- (10) The Michigan infrastructure council shall perform its business at a public meeting of the Michigan infrastructure council held in compliance with the open meetings act, 1976 PA 267, MCL 15.261 to 15.275.
- (11) A writing created by the Michigan infrastructure council in the performance of an official function is subject to the freedom of information act, 1976 PA 442, MCL 15.231 to 15.246.

(12) Members of the Michigan infrastructure council serve without compensation. However, members of the Michigan infrastructure council may be reimbursed for their actual and necessary expenses incurred in the performance of their official duties as members of the Michigan infrastructure council.

(13) The departments of agriculture and rural development; environmental quality; natural resources; technology, management, and budget; transportation; and treasury shall provide qualified administrative and technical staff to the Michigan infrastructure council.

(14) The department of technology, management, and budget shall serve as the central data storage agency for the statewide database provided for in this act.

Sec. 4. (1) The Michigan infrastructure council shall do all of the following:

(a) Develop a multiyear program, work plan, budget, and funding recommendation for asset management; update these every year; and provide these to the governor and the legislature by September 30 every year.

(b) Ensure that the work plan in subdivision (a) includes an emphasis on coordination and integration across asset classes and regions.

(c) Prepare an annual report on the current statewide asset management assessment that tracks progress on established performance goals.

(d) Undertake research and advise on matters relating to asset management, including all of the following:

(i) Funding and financing models.

(ii) Best practices.

(iii) Information technology advancements.

(iv) Emerging technology to advance smart systems.

(v) Right sizing and cost-efficiencies.

(vi) Impediments to delivery.

(vii) Opportunities for greater coordination and collaboration across asset classes and asset owners.

(viii) Align and link state incentives to asset performance improvement goals, including cost control, asset management, operational efficiency, and cost-effective regional solutions.

(e) Within 180 days after its first meeting, evaluate the regional infrastructure asset management pilot program created under Executive Directive 2017-1, and the findings of the 21st Century Infrastructure Commission created in Executive Order No. 2016-5, and develop and publish a 3-year strategy for establishing a statewide integrated asset management system. The initial multiyear program, work plan, budget, and funding recommendation under subdivision (a) must

include development of the strategy for establishing a statewide integrated asset management system. The strategy must also include, at a minimum, all of the following:

- (i) A determination of appropriate assets within the asset classes.
- (ii) Consistent data standards and definitions for each asset class.
- (iii) Identify and designate a process to plan, analyze, and coordinate asset management across assets and asset owners at the regional level. This process may be implemented through regional planning agencies, the regional prosperity initiative regions, or another approach, which may vary among regions, that ensures all areas of the state are included and efforts are consistent with state and federal requirements. Regions shall be responsible for maintaining and managing the statewide database at a regional level.
- (iv) Procedures for data storage, collecting, updating, and reporting.
- (v) Recommendations related to the appropriate level of financial support for local asset data collection, local development of asset management plans, regional review and collaboration, and participation in an integrated statewide asset management system.
- (vi) A process to coordinate the planning efforts of the transportation asset management council, the water asset management council, the Michigan public service commission, and the Michigan economic development corporation, with other state-required asset management planning requirements. In coordinating planning efforts under this subparagraph, the Michigan infrastructure council shall endeavor to provide efficiencies to the planning process and to reduce any unnecessary duplication of effort.
- (vii) Coordination with the transportation asset management council and the water asset management council to ensure that training and education programs that address all of the following are coordinated across assets:
 - (A) Asset management principles and plan development.
 - (B) The use of the statewide database.
 - (C) Ongoing user support.
 - (D) State department asset management requirements.
- (viii) Develop statewide performance goals for appropriate assets within each asset class and identify regional and statewide progress toward meeting performance goals.
- (ix) Protocols that ensure data security and accuracy at the local, regional, and state levels.
- (x) Development of consistent and coordinated state department, transportation asset management council, and water asset management council asset management plan components and requirements including, but not limited to:
 - (A) Asset inventory, condition assessment, and uniform data.

- (B) Performance goals.
- (C) Revenue structure, investment strategy, and capital improvement plan.
- (D) Asset criticality and risk analysis.
- (E) Public engagement and transparency.
- (F) Self-assessment of asset management maturity.
- (G) Reports at an asset owner, regional, and statewide level. Reporting levels should take into account the size and complexity of the network or system. Priority should be placed on the largest systems.
- (H) A resolution by the appropriate governing body approving the plan.
- (I) Certification that asset management is being coordinated to the asset owners' best ability across asset classes and regionally.
- (f) Beginning 3 years after the effective date of this act, start the second phase of the statewide system for asset management implementation and include, at a minimum, all of the following:
 - (i) Predictive analytics to forecast asset condition.
 - (ii) A public dashboard of state, regional, and local system performance across asset classes, including the appropriate and secure level of geospatial data and aggregated reporting.
 - (iii) Develop and publish a 30-year integrated infrastructure strategy that is updated every 5 years and includes all of the following:
 - (A) Current statewide condition assessment and infrastructure priorities across asset classes, tracked progress on established performance goals, and net changes in asset value.
 - (B) Investment needs to reach targeted overall system ratings and performance goals, with a goal of leveling annual investments to long-term predictable amounts.
 - (C) Network intelligence in asset management planning and monitoring. Retrofit technologies should be considered, pursued, and incorporated as they become available for upgrades and maintenance activities to existing and future assets.
- (2) The multiyear programs, work plans, budgets, and funding recommendations required in subsection (1)(a), the annual reports required by subsection (1)(c), the 3-year strategy for establishing a statewide integrated asset management system required by subsection (1)(e), and the second phase of the statewide system for asset management implementation required in subsection (1)(f) shall comply with both of the following:
 - (a) Not propose, recommend, or fund any government-owned broadband or telecommunications network to provide service to residential or commercial premises, except that this prohibition does not apply to state expenditures for a transportation purpose, connected vehicle communication technologies, or other transportation-related activities.

(b) To the extent government funding is proposed or recommended to subsidize non-government-owned broadband networks to expand service to residential or commercial premises, require that the proposals and recommendations must be limited to areas unserved by broadband, must be technology neutral, and include a competitive bid process that results in the award of the subsidy based on objective and efficient procedures.

Sec. 5. (1) This act does not authorize the Michigan infrastructure council to place any obligations or requirements on providers of telecommunications services, broadband services, or wireless services.

(2) Any network or financial information provided to the Michigan infrastructure council by a provider of telecommunications services, broadband services, or wireless services is exempt from disclosure under section 13(1)(d) of the freedom of information act, 1976 PA 442, MCL 15.243, provided that it is marked as confidential or commercial information. The Michigan infrastructure council shall preserve the confidentiality of this information.

Sec. 6. Funding necessary to support the activities described in this act shall be provided through funds as provided by law.

Enacting section 1. This act does not take effect unless all of the following bills of the 99th Legislature are enacted into law:

(a) House Bill No. 5406.

(b) House Bill No. 5408.

This act is ordered to take immediate effect.

Appendix G: 15.0575 Administrative Boards and Agencies

Subdivision 1. Procedure. The membership terms, compensation, and removal of members and the filling of membership vacancies of boards shall be governed by this section whenever specifically provided by law. As used in this section, "boards" shall refer to all boards, commissions, agencies, committees, councils, authorities and courts whose provisions are governed by this section.

Subd. 2. Membership terms. An appointment to an administrative board or agency must be made in the manner provided in section 15.0597. The terms of the members shall be four years with the terms ending on the first Monday in January. The appointing authority shall appoint as nearly as possible one-fourth of the members to terms expiring each year. If the number of members is not evenly divisible by four, the greater number of members, as necessary, shall be appointed to terms expiring in the year of commencement of the governor's term and the year or years immediately thereafter. If the number of terms which can be served by a member of a board or agency is limited by law, a partial term must be counted for this purpose if the time served by a member is greater than one-half of the duration of the regular term. If the membership is composed of categories of members from occupations, industries, political subdivisions, the public or other groupings of persons, and if the categories have two or more members each, the appointing authority shall appoint as nearly as possible one-fourth of the members in each category at each appointment date. Members may serve until their successors are appointed and qualify but in no case later than July 1 in a year in which a term expires unless reappointed.

Subd. 3. Compensation. (a) Members of the boards may be compensated at the rate of \$55 a day spent on board activities, when authorized by the board, plus expenses in the same manner and amount as authorized by the commissioner's plan adopted under section 43A.18, subdivision 2. Members who, as a result of time spent attending board meetings, incur childcare expenses that would not otherwise have been incurred, may be reimbursed for those expenses upon board authorization.

(b) Members who are state employees or employees of the political subdivisions of the state must not receive the daily payment for activities that occur during working hours for which they are compensated by the state or political subdivision. However, a state or political subdivision employee may receive the daily payment if the employee uses vacation time or compensatory time accumulated in accordance with a collective bargaining agreement or compensation plan for board activities. Members who are state employees or employees of the political subdivisions of the state may receive the expenses provided for in this subdivision unless the expenses are reimbursed by another source. Members who are state employees or employees of political subdivisions of the state may be reimbursed for childcare expenses only for time spent on board activities that are outside their working hours.

(c) Each board must adopt internal standards prescribing what constitutes a day spent on board activities for the purposes of making daily payments under this subdivision.

Subd. 4. Removal; vacancies. A member may be removed by the appointing authority at any time (1) for cause, after notice and hearing, or (2) after missing three consecutive meetings. The chair

of the board shall inform the appointing authority of a member missing the three consecutive meetings. After the second consecutive missed meeting and before the next meeting, the secretary of the board shall notify the member in writing that the member may be removed for missing the next meeting. In the case of a vacancy on the board, the appointing authority shall appoint, subject to the advice and consent of the senate if the member is appointed by the governor, a person to fill the vacancy for the remainder of the unexpired term.

Subd. 5. Membership vacancies within three months of appointment. When a membership on a board becomes vacant within three months after being filled through the open appointments process, the appointing authority may, upon notification to the office of secretary of state, choose a new member from the applications on hand and need not repeat the process.

History: 1976 c 134 s 1; 1982 c 560 s 5; 1983 c 305 s 6; 1984 c 531 s 2; 1986 c 444; 1987 c 354 s 1; 1989 c 343 s 2; 1990 c 506 art 2 s 1; 1993 c 80 s 1; 2001 c 61 s 1; 1Sp2001 c 10 art 2 s 16

Appendix H: Draft Legislation