INFRASTRUCTURE ASSET MANAGEMENT

House Bill 5335 (H-2) as reported from committee
Sponsor: Rep. Rob VerHeulen

House Bill 5406 (H-2) as reported from committee
Sponsor: Rep. Roger Victory

House Bill 5408 (H-1) as reported from committee
Sponsor: Rep. Triston Cole

Committee: Transportation and Infrastructure
Complete to 3-15-18

BRIEF SUMMARY:

House Bill 5335 proposes a new act to create the Michigan Infrastructure Council within the Department of Treasury and to specify its membership and duties.

House Bill 5406 would amend the Natural Resources and Environmental Protection Act to create the Water Asset Management Council within the Department of Environmental Quality and specify its membership and duties.

House Bill 5408 would amend Public Act 51 of 1951 to revise provisions regarding the Transportation Asset Management Council created under Section 9a of that act.

Each bill is tie-barred to the other two, which means that none of the bills can take effect unless all three are enacted into law.

BACKGROUND:

Taken together, the bills propose a statewide asset management approach to Michigan’s water, energy, transportation, and communications infrastructure and create interrelated councils to coordinate planning for those infrastructure systems at local, regional, and statewide levels. The bills are understood to reflect recommendations of the 21st Century Infrastructure Commission created by Executive Order 2016-5, which submitted its final report to the governor and the legislature on November 30, 2016.¹

The bills are also seen as building upon the Regional Infrastructure Asset Management Pilot Program created by Executive Directive 2017-1.² The pilot program has involved local and regional governmental entities and stakeholders in both southeast Michigan (the

Detroit Metro Prosperity Region) and west Michigan (the West Michigan Prosperity Alliance) in developing and coordinating regional asset management processes.³

Under the bills, asset would mean infrastructure related to drinking water, wastewater, stormwater, transportation, energy, or communications, and would include drinking water supply systems, wastewater systems, stormwater systems, drains, roads, bridges, electricity and natural gas networks, and broadband and communication systems. (HBs 5406 and 5408 specifically address water assets and transportation assets, respectively.)

Asset management under the bills would mean an ongoing process of maintaining, preserving, upgrading, and operating physical assets cost-effectively, based on a continuous physical inventory and condition assessment to achieve 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.⁴

**DETAILED SUMMARY:**

**House Bill 5335** proposes a new act, the “Michigan Infrastructure Council Act,” to create the Michigan Infrastructure Council and to specify its membership and duties.

**Composition of the Michigan Infrastructure Council**

The Michigan Infrastructure Council would be created within the Department of Treasury and would consist of nine voting members and nine nonvoting members.

The nine voting members would be experts in regional asset management planning across jurisdictions and infrastructure sectors; financial and procurement experts; and/or asset management experts with knowledge and expertise in the planning, design, construction, management, operation, and maintenance of transportation, energy, drinking water, wastewater, stormwater, and communications infrastructure.

The voting members would be appointed within 60 days after the effective date of the new act: five by the governor, and one each by the senate majority leader, the senate minority leader, the speaker of the house, and the house minority leader. The voting members would serve three-year terms, though members first appointed would serve staggered one-, two-, or three-year terms.

The following state officials (or their designees) would serve as the council’s nine nonvoting members:

- The state treasurer.
- The chairperson of the Water Asset Management Council created by House Bill 5406.


⁴ For a general discussion of asset management and its early history as a public policy concept, see the 2001 HFA Fiscal Forum, “Transportation: Asset Management”: [https://www.house.mi.gov/hfa/Archives/PDF/asset.pdf](https://www.house.mi.gov/hfa/Archives/PDF/asset.pdf)
• The chairperson of the Transportation Asset Management Council created in Public Act 51 of 1951.
• The director of the Department of Technology, Management, and Budget.
• The director of the Michigan Department of Transportation.
• The director of the Department of Environmental Quality.
• The director of the Department of Natural Resources.
• The director of the Department of Agriculture and Rural Development.
• The chairperson of the Michigan Public Service Commission.

Within 90 days after the effective date of the new act, the governor would call the council’s first meeting, at which the council would elect a chairperson and other officers it considers appropriate. Thereafter, the council would meet at least quarterly, though it could meet more frequently at the call of the chair or upon a request by three or more members.

A majority of voting members and a majority of nonvoting members would constitute a quorum to transact council business, and an affirmative majority vote would be required for official council action. Council business would be performed at a public meeting held in compliance with the Open Meetings Act, and a writing created by the council in the performance of an official function would be subject to the Freedom of Information Act.

Members of the council would serve without compensation but could be reimbursed for expenses incurred in performing their duties. A member could be removed for incompetence, dereliction of duty, malfeasance, or any other reason considered appropriate by the office for whom the appointment was made. Council vacancies would be filled for the unexpired term in the same manner as the original appointment.

Qualified administrative and technical staff for the council would be provided by the Departments of Technology, Management, and Budget; Agriculture and Rural Development; Environmental Quality; Transportation; Natural Resources; and Treasury.

The Department of Technology, Management, and Budget would serve as the central data storage agency for the statewide database created by the council.

Duties of the Michigan Infrastructure Council
The Michigan Infrastructure Council would do all of the following:
• Develop a multiyear program, work plan, budget, and funding recommendation for asset management, with an emphasis on coordination and integration across asset classes and regions. (An asset class would mean a single type of asset, including its network and all associated appurtenances critical to its performance.) This recommendation would have to be updated and provided to the governor and the legislature by September 30 of each year.
• Prepare an annual report on the current statewide asset management assessment that tracks progress on established performance goals. (Performance goals would mean 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.)
• Undertake research and advise on matters related to asset management, including financing models, best practices, impediments to delivery, emerging technology, information technology advancements, opportunities for greater coordination and collaboration, right-sizing and cost-efficiencies, and aligning state incentives to asset performance improvement goals.

Within six months after its first meeting, the council would have to evaluate the Regional Infrastructure Asset Management Pilot Program and the findings of the 21st Century Infrastructure Commission (see Background, above) and develop and publish a three-year strategy for establishing a statewide integrated asset management system. The strategy would include at least all of the following:

• A determination of the appropriate assets within the asset classes.
• Consistent data standards and definitions for each asset class.
• A process to coordinate asset management across assets and asset owners at the regional level.
• Procedures for data storage, collecting, updating, and reporting.
• Recommendations on the appropriate level of financial support for various local and regional asset management activities and participation in an integrated statewide asset management system.
• A process to coordinate the planning efforts of state-level planning entities. Reducing duplication of effort and providing efficiencies to the planning process would be goals of the council in coordinating planning efforts.
• Coordination to ensure that training and education programs on asset management principles and plan development, use of the statewide database, ongoing user support, and executive branch asset management requirements are consistent across various assets and the various entities providing that training.
• Statewide performance goals for appropriate assets and identification of regional and statewide progress toward meeting performance goals.
• Protocols for data security and accuracy at local, regional, and state levels.
• Consistent and coordinated requirements for asset management plans among the state-level agencies imposing those requirements. (An asset management plan would mean a set of procedures to manage assets through their life cycles, based on principles of life-cycle costing.)

Three years after the effective date of the new act, the council would start the second phase of the statewide system for asset management implementation, which would include at least:

• Predictive analytics to forecast asset condition.
• A public dashboard of state, regional, and local system performance across asset classes.
• A 30-year integrated strategy developed and published by the council. This strategy would be updated every five years and would have to include:
  ○ Current statewide condition assessment and infrastructure priorities across asset classes, tracked progress on established performance goals, and net changes in asset value.
- Investment needs to reach targeted overall system ratings and performance goals.
- Network intelligence in asset management planning and monitoring.

Telecommunications, Broadband, and Wireless Provisions
Except for transportation-related activities, the council could not propose, recommend, or fund any government-owned broadband or telecommunications network to provide service to residential or commercial premises. If the council were to propose or recommend government funding to subsidize non-government-owned broadband networks to expand service to residential or commercial premises, the proposals and recommendations would have to be limited to areas unserved by broadband, would have to be technology neutral, and would have to include a competitive bid process for the subsidy.

The Michigan Infrastructure Council is not authorized to place any obligations or requirements on providers of telecommunications, broadband, or wireless services. Any network or financial information provided to the Michigan Infrastructure Council by a provider of telecommunications, broadband, or wireless services would be exempt from disclosure under the Freedom of Information Act if it is marked as confidential or commercial information.

House Bill 5406 would amend the Natural Resources and Environmental Protection Act by adding Part 50 (“Water Asset Management Council”), to create the Water Asset Management Council within the Department of Environmental Quality (DEQ) and to specify its membership and duties.

For purposes of the proposed part, **asset owner** would mean a person or agency that owns or operates drinking water assets, stormwater assets, or wastewater assets that serve 1,000 or more individuals.

Composition of the Water Asset Management Council
The Water Asset Management Council would consist of nine voting members who are appointed by the Michigan Infrastructure Council proposed by HB 5335. Members would represent academia and the public, nonprofit, and private sectors and would include individuals representing the state, regional and local governments, drain commissioners, drinking water, wastewater, and stormwater agencies, and environmental organizations. At least one member would be required to have professional engineering experience and a degree in engineering. The Water Asset Management Council could appoint its central data storage agency as a nonvoting member.

The council’s voting members would serve three-year terms, though members first appointed would serve staggered one-, two-, or three-year terms. The council would select a chairperson from among its members at its first meeting. A member of the council could be removed for incompetence, dereliction of duty, malfeasance during his or her tenure in office, or any other cause considered appropriate by the Michigan Infrastructure Council. Qualified administrative staff and technical assistance for the council would be provided
by the DEQ. The council could also appoint subcommittees whose members serve as needed to provide research on issues and projects as determined by the council.

Duties of the Water Asset Management Council
The Water Asset Management Council would do the following:
- Advise the Michigan Infrastructure Council on a statewide water asset management strategy and the tools needed to implement a strategy for all drinking water, wastewater, and stormwater agencies and asset owners.
- Promote and oversee the implementation of recommendations from the Regional Infrastructure Asset Management Pilot Program at a state level for drinking water, wastewater, and stormwater infrastructure.

By October 1, 2019, the council would have to develop a template for an asset management plan for use by drinking water, wastewater, and stormwater agencies submitting asset management plans to the council for approval. The template must ensure that local asset management plans include the following components:
- An asset inventory including the location, material, size, and condition of the assets in a format that allows for digital mapping.
- A level of service analysis including performance goals that address such things as reliability, safety, capacity, affordability, environmental impacts, and legal and regulatory requirements.
- A risk of failure analysis identifying the probability and criticality of failure of the most critical assets and includes contingency plans.
- Anticipated revenues and expenses, including expenditures for repair, improvement, or replacement of assets.
- A performance outcomes analysis that looks at how the investment strategy achieves the performance goals and desired level of service and accounts for any gaps between what is possible and what is desired.
- A description of plans to coordinate with other asset owners to reduce duplication of effort regarding infrastructure maintenance.
- Proof of acceptance, certification, or adoption of the local asset management plans by the jurisdiction's governing body.

By October 1, 2019, the council would also have to establish a schedule for submission of asset management plans for drinking water, wastewater, and stormwater agencies and asset owners. The schedule would include:
- Each drinking water, wastewater, and stormwater agency and asset owner must submit an asset management plan to the council beginning October 1, 2020. The plans must cover and be valid for at least three years and must be consistent with the asset management template provided by the council.
- The council must review each asset management plan within six months of its submission. As part of its review, the council would compare submitted plans to the minimal requirements provided by the bill and by the council's template.
- If the council determines that a submitted plan does not meet the minimal standards and the DEQ agrees, the submitting entity would have six months to submit an acceptable asset management plan.
• Approved asset management plans must be implemented by October 1, 2024.

Each drinking water, wastewater, and stormwater agency and asset owner would have to report to the council annually on how its capital improvement plans are meeting its investment goals. State funding could be proved to drinking water, wastewater, and stormwater agencies and asset owners to implement the provisions of the bill at a cost-share determined by the council. The DEQ and each drinking water, wastewater, and stormwater agency and asset owner would have to keep records of all work performed and funds expended.

A drinking water, wastewater, or stormwater agency or asset owner could seek and use federal grants or loans to achieve the goals and manage the asset inventory described in its asset management plan.

The council would submit to the Michigan Infrastructure Council an annual report on asset condition and investment that includes a summary analysis of the asset management plans received from drinking water, wastewater, and stormwater entities. The report would include recommendations on drinking water, wastewater, and stormwater condition goals and analysis of how the utilities are meeting those goals. The report would have to be consistent with analytic categories and reporting processes established by the Michigan Infrastructure Council.

The Water Asset Management Council would also prepare an annual report on the activities conducted during the preceding year and the expenditures of funds related to the activities identified by the council. The report would have to be submitted to the Michigan Infrastructure Council and the legislature by May 2 of each year.

Finally, the council would identify training needs to develop proficiency in using a multi-asset management system and training needs to identify asset system conditions based on a statewide measure. The council would cooperate and collaborate with the Transportation Asset Management Council on planning, reporting, and training.

Proposed MCL 324.5001 et seq.

House Bill 5408 would amend Public Act 51 of 1951 (“Act 51”) to revise provisions regarding the Transportation Asset Management Council.

Public Act 499 of 2002 amended Section 9a of Act 51 to establish the Transportation Asset Management Council within the State Transportation Commission. Under Public Act 499, the council was charged with “advising the [State Transportation] Commission on a statewide asset management strategy and the processes and necessary tools needed to implement such a strategy beginning with the federal-aid eligible highway system.”

House Bill 5408 would define asset management plan for purposes of its provisions as a plan created by MDOT or by a local road agency and approved by the local road agency’s governing body that includes provisions for asset inventory, performance goals, risk of
failure analysis, anticipated revenues and expenses, performance outcomes, and coordination with other infrastructure owners.

**Transportation Asset Management Council**

House Bill 5408 would move the Transportation Asset Management Council from the State Transportation Commission to the Michigan Infrastructure Council, and would require the funding currently appropriated annually to the State Transportation Commission to support the Transportation Asset Management Council to be appropriated instead to the Michigan Infrastructure Council for that purpose.

The bill would not change the current membership, appointment procedures, or terms of office of the Transportation Asset Management Council. It would, however, add a provision to allow a member of the council to be removed for incompetence, dereliction of duty, malfeasance during tenure in office, or any other cause considered appropriate by the Michigan Infrastructure Council.

Currently, the council may create a technical advisory panel whose members are appointed for three-year terms from transportation construction associations and related transportation road interests. Under the bill, the council could appoint subcommittees or technical advisory committees whose members would serve as needed to provide research on issues and projects as directed by the Michigan Infrastructure Council. These subcommittees and technical committees would be advisory only, and not binding on the Michigan Infrastructure Council.

**Council Duties**

Under the bill, the Transportation Asset Management Council would advise the Michigan Infrastructure Council on a statewide transportation asset management strategy and its implementation, beginning with the federal-aid eligible highway system and infrastructure assets that impact system performance, safety, or risk management, including signals and culverts. (A local road agency would not be precluded from using an asset management process on its non-federal-aid-eligible system.) The Transportation Asset Management Council would also promote and oversee the implementation of recommendations from the Regional Infrastructure Asset Management Pilot Program on a statewide level as the program relates to roads, bridges, and related transportation infrastructure.

By October 1, 2019, the council would have to develop an asset management plan template for use by local road agencies responsible for 100 or more certified miles of road. The template must ensure that local asset management plans include the following components:

- **Asset inventory** including the location, material, size, and condition of the assets in a format that allows for digital mapping. All standards and protocols for assets would be consistent with government accounting standards, and standards and protocols for federal-aid-eligible assets would be consistent with federal requirements and regulations.

- **Performance goals**, including the desired condition and performance of the assets, which would be set by the local road agency. The performance goals could vary among asset classes under the local road agency’s jurisdiction. If a local road
agency had jurisdiction over roads or bridges designated as part of the federal national highway system, the performance goals for that portion of the system must be consistent with established federal performance targets.

- A risk of failure analysis identifying the probability and criticality of failure of the most critical assets and includes contingency plans.
- Anticipated revenues and expenses, including expenditures for repair, improvement, or replacement of assets.
- A performance outcomes analysis that looks at how the investment strategy achieves the performance goals and desired level of service and accounts for any gaps between what is possible and what is desired.
- A description of plans to coordinate with other asset owners to reduce duplication of effort regarding infrastructure maintenance.
- Proof of acceptance, certification, or adoption of the local asset management plans by the jurisdiction's governing body.

The bill would require that MDOT, each county road commission, and each city and village in the state annually submit to the council a report on infrastructure conditions and investment that includes a multiyear program developed through the asset management process. Projects in the multiyear program of a reporting entity would be required to be consistent with that entity’s own asset management plan and be reported consistent with categories established by the council, as follows:

- For a local road agency responsible for less than 100 certified miles of road, this requirement would apply beginning the effective date of the bill.
- For MDOT, this requirement would apply beginning January 1, 2020.
- For a local road agency responsible for 100 or more certified miles of road, this requirement would apply beginning January 1, 2022.

Costs of data collection, analysis, or submittal that is not related to the federal-aid eligible highway system would be borne by the owner of the data. Local road agencies could request a regional authority to collect data on local roads or streets within the region. The regional authority would determine where to collect local road or street data based on requests received from local road agencies.

By October 1, 2019, the council would have to establish a schedule for submission of asset management plans by local road agencies responsible for 100 or more certified miles of road. The schedule would ensure that 1/3 of those local road agencies submit an asset management plan each year. Beginning October 1, 2020, these local road agencies would begin submitting their asset management plans to the council according to the schedule. The plans would have to cover at least three years, and they would have to be consistent with the template developed by the council. If a local road agency required to submit a plan has not done so by October 1, 2024, that agency would not receive funding under Act 51 until it submits a satisfactory plan.

The council would review each asset management plan within six months of its submission. As part of its review, the council would compare submitted plans to the minimal requirements provided by the bill and the council's template. If the council determines that
a submitted plan does not meet the minimal standards and MDOT agrees, the submitting agency would have six months to submit an acceptable asset management plan.

Beginning October 1, 2025, a local road agency responsible for 100 or more certified miles of road that cannot demonstrate annual progress toward achieving the condition goals described in its asset management plan for its federal-aid-eligible county primary road system or city major street system, as applicable, would be prohibited from shifting funds it receives under Act 51 from a county primary road system to a county local road system or from a city major street system to a city local street system, as applicable. A local road agency would be allowed under the bill to submit a revised asset management plan to the council.

Under current law, MDOT staff assigned to the council must submit an annual report to the governor and legislature that includes the results of the prior year’s council activities, the expenditure of funds related to council activities, and an overview of the council’s activities for the following year. The bill would add the Michigan Infrastructure Council to the designated recipients of the report and would require that the report address the expenditure of funds related to processes and activities identified by the Michigan Infrastructure Council. The report would also have to include a summary analysis of asset management plans and annual reports received from local road agencies, a determination of how investments are achieving performance goals and desired levels of service, and an identification of additional steps necessary to achieve performance goals and desired levels of service.

Finally, House Bill 5408 would allow local road agencies to seek and use federal grants or loans to achieve the goals and manage the asset inventory described in its asset management plan.

HB 5408 would take effect 90 days after it is enacted.

MCL 247.659a

FISCAL IMPACT:

House Bill 5335 would create a new Michigan Infrastructure Council in the Department of Treasury. Members on the council would serve without pay; however, the bill would require the Departments of Technology, Management, and Budget; Transportation; Environmental Quality; Natural Resources; Agriculture; and Treasury to provide qualified and technical staff to the council. Additionally, the Department of Technology, Management, and Budget would be required to serve as the central data storage agency. Personnel and services provided by the requisite departments would increase costs for those departments by an unknown amount. Any cost increase would be directly related to the time and amount of resources that were necessary from each department. Presumably, funds appropriated to the Michigan Infrastructure Council (described below) could be used to offset costs to any of the departments.
The council would also incur costs associated with establishing and organizing the council; undertaking research and advising on matters related to asset management; evaluating existing asset management programs; developing a multiyear program, work plan, and budgeting and funding recommendations for asset management; and development and publishing an annual report on the current statewide asset management assessment.

Public Act 201 of 2017, a FY 2017-18 supplemental appropriations act, appropriated $1.5 million in one-time appropriations from the Michigan Infrastructure Fund to the Department of Treasury to fund the activities, costs, and expenses of the Michigan Infrastructure Council. Any costs exceeding this appropriation would need to be funded through further appropriations.

**House Bill 5406** would increase costs for the Department of Environmental Quality by requiring the department to provide administrative and technical support to a new Water Asset Management Council; the extent of this cost increase is unclear. The department would also be charged with reviewing asset management plans that the council deems to be below established standards. The bill provides for drinking water, wastewater, and stormwater agencies and asset owners to share plan implementation costs with the state and specifies that the DEQ shall receive “an annual appropriation” to cover program costs but does not provide additional details on fund source or appropriation amount. Consequently, it is unclear if the bill would provide additional revenue to the department to address the aforementioned costs.

Local units of government that also function as drinking water, wastewater, and stormwater agencies and asset owners may also realize increased costs as a result of being subject to the asset management plan requirements included in the bill. The bill also provides for cost-sharing with the state, however, so it is unclear what the net fiscal impact on local units of government would be.

**House Bill 5408** would amend Section 9a of Public Act 51 of 1951 (“Act 51”), which established and defined the powers and duties of the Transportation Asset Management Council (“Council”). In order to understand the potential impacts of House Bill 5408, it may be useful to describe the history of statutory provisions related to the Council and related Council activities.

Public Act 499 of 2002 amended Section 9a of Act 51 to establish the Transportation Asset Management Council within the State Transportation Commission. Under Public Act 499, the Council was charged with “advising the [State Transportation] Commission on a statewide asset management strategy and the processes and necessary tools needed to implement such a strategy beginning with the federal-aid eligible highway system.”

Public Act 499 defined “asset management” as “an ongoing process of maintaining, upgrading, and operating physical assets cost effectively, based on a continuous physical inventory and condition assessment.” The act also identified the intent of the Council as the provision of “a coordinated, unified effort by the various roadway agencies within the state.”
Among other things, Public Act 499 required the Council to report to the State Transportation Commission, the Legislature, and the House and Senate Committees on Transportation by May 2 of each year. The Council issued its first report in 2003. (Annual reports are available on the council website: https://www.michigan.gov/tamc/0,7308,7-356-82495---,00.html)

The Council continues to meet on a regular basis. Among other things, the Council oversees data collection and analysis, reports annually on changes in statewide pavement condition, and provides training to local road agencies.

Section 9a currently directs that funding necessary to support the activities of the Transportation Asset Management Council be annually appropriated from the Michigan Transportation Fund to the State Transportation Commission. From the Council’s inception, its activities have been funded from a specific Asset Management Council appropriation in the state transportation budget. The FY 2017-18 baseline appropriation of $1.9 million, from the Michigan Transportation Fund, will be used primarily for data collection and analysis, as well as for training activities. MDOT provides staff support and technical assistance to the Council from funds appropriated in other line items within the department’s budget. The bill indicates that on the effective date of the bill, as enacted, this annual appropriation would be allocated to the Michigan Infrastructure Council.

As described in the body of this analysis, House Bill 5408 would make a number of changes to Section 9a with respect to the Transportation Asset Management Council. Some of the changes appear to be primarily administrative and would not have a substantive impact on council activities. However, the bill also appears to establish additional planning and reporting requirements for the council and for local road agencies. The costs of those additional requirements cannot be readily estimated at this time.

Public Act 499 also required that, starting on October 1, 2003, all state road agencies prepare and publish an annual multi-year program, based on long-range plans and developed through the use of the asset management process described by the act.

The bill indicates that a local road agency required to submit an asset management plan, and which had not done so by October 1, 2014, “is out of compliance with this act.” The bill effectively requires that a local road agency submit an asset management plan that satisfies the requirements of Section 9a as a condition for receiving funds under Act 51.

POSITIONS:

Representatives from the following organizations testified in support of House Bills 5335, 5406 and 5408:
- Michigan Department of Transportation (3-13-18)
- City of Grand Rapids (2-13-18)
- Genesee County Road Commission (2-13-18)
- Michigan Rural Water Association (2-13-18)
The Michigan Concrete Association indicated support for House Bill 5335. (2-13-18)

The following organizations indicated support for House Bills 5335, 5406 and 5408:
- Michigan Environmental Council (2-13-18)
- Michigan League of Conservation Voters (2-13-18)
- Michigan Infrastructure & Transportation Association (3-13-18)
- American Council of Engineering Companies (2-13-18)

The following organizations indicated opposition to House Bill 5408.
- County Road Association (3-13-18)
- Michigan Townships Association (2-13-18)