

Public and Private Infrastructure Coordination in Southeast Michigan



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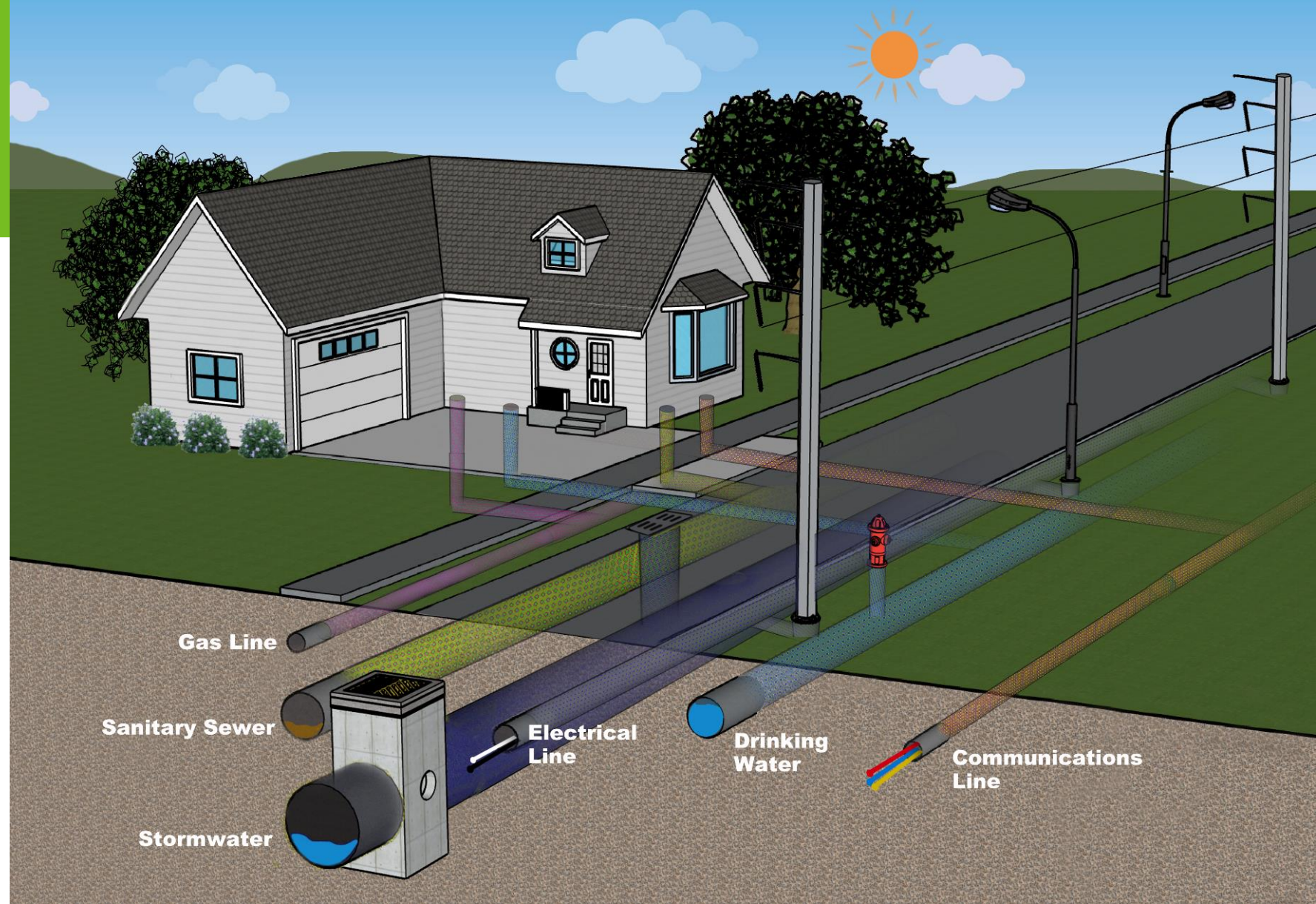
MDOT Role

- State Planning and Research (SPR) Funding
- Partner with SEMCOG in promoting regional planning, cross-jurisdictional collaboration
- A major infrastructure and ROW owner



SEMCOG Activities

- Survey
- Workshops
- Outreach
- Collaboration with Michigan Infrastructure Council, private utilities, consultants



Key Challenges

Funding

- **Aligning investment**
- **Different funding sources**
- **Limited funding**

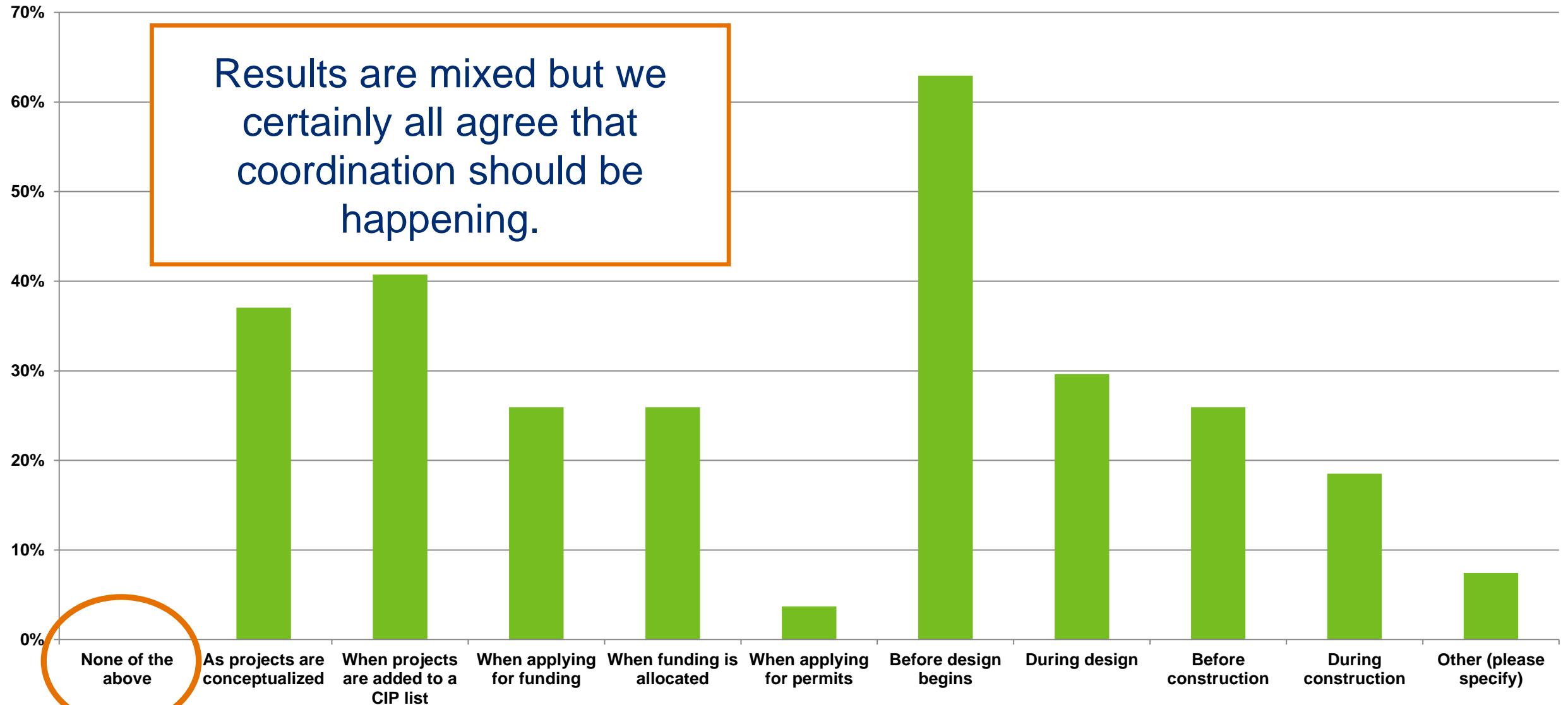
Timing

- **Aligning capital improvement timelines**
- **Realized need to coordinate too late in project development process**
- **Taking too long**

Communication

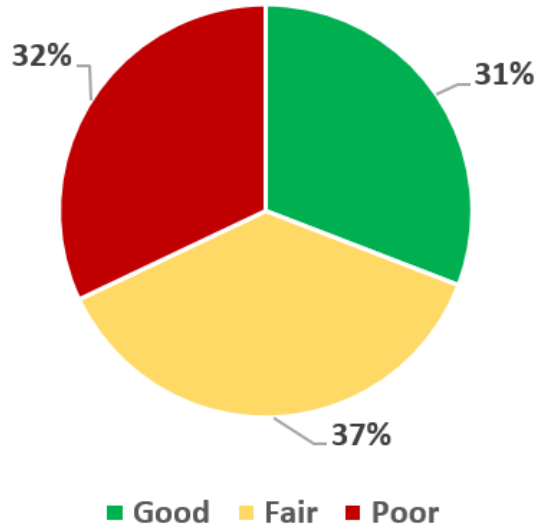
- **Not having the correct contact or relationship with another agency**
- **Other agencies unwilling or unable to coordinate**
- **Public education and communication**

When do you think coordination should occur?

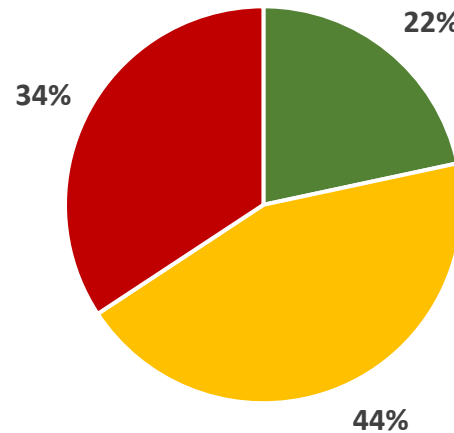


Investment Gap – SEMCOG Region

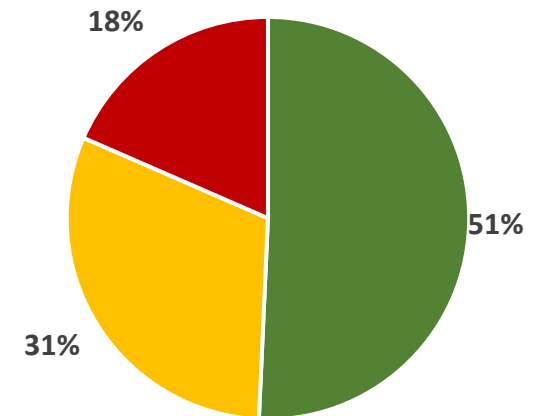
Drinking Water



Sanitary Sewer



Stormwater



Water funding needs to be at least \$3.5 Billion annually to improve water infrastructure in the SEMCOG region

Wastewater/Sanitary Sewer and Stormwater Systems

- Out of Sight, Out of Mind
- Limited asset management planning data
- Flooding & Climate Change: Systems were designed for 3-4 inches of rain
- Competing regulatory priorities



Water System Management Issues

- Regulatory Silos
- Lack of standardized condition assessment methods and capital planning
- Lack of understanding of transportation planning process
- GIS capacity and “tech” readiness
- Aging workforce

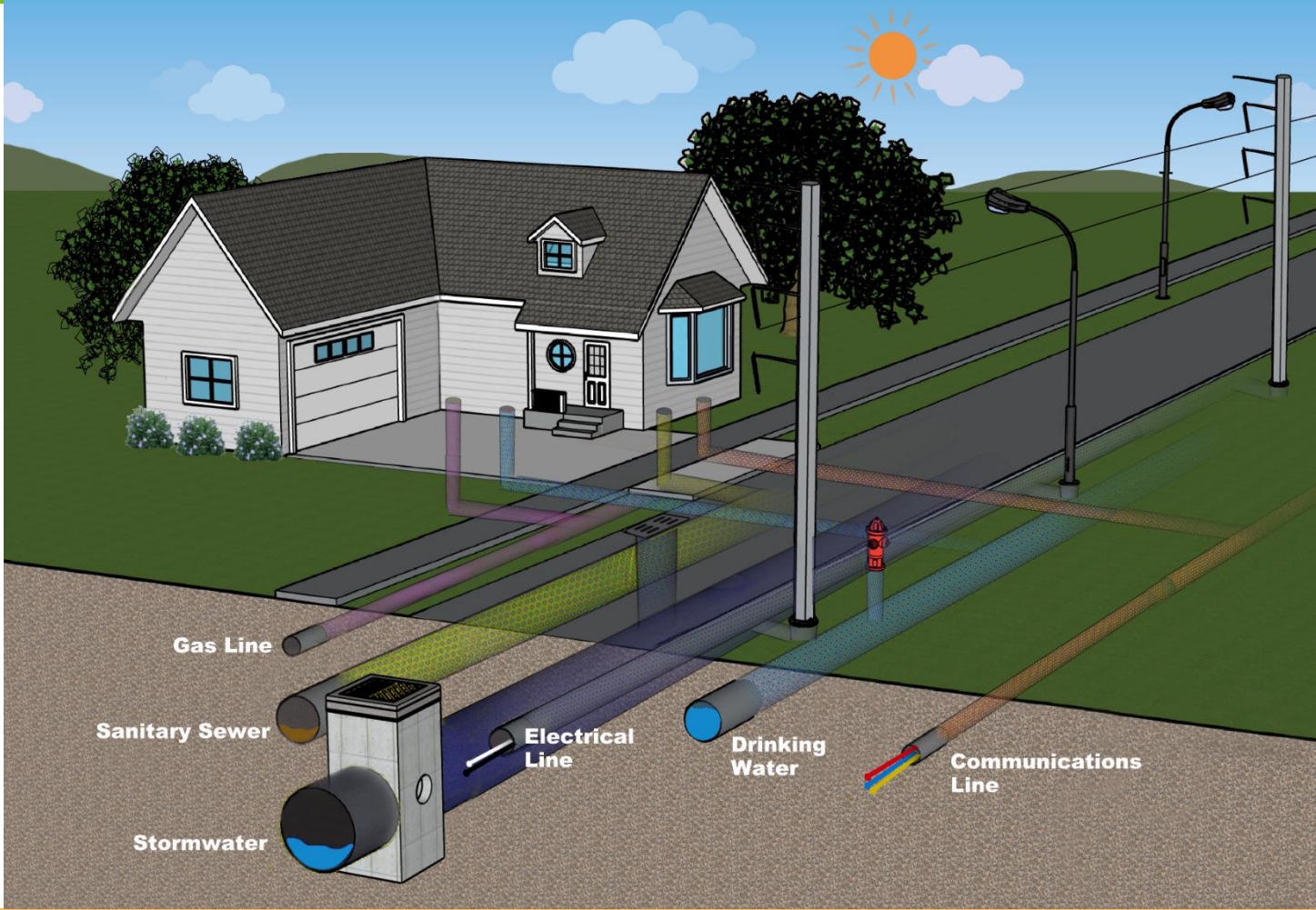


Working Toward Common Goals

Improving Infrastructure

Reducing project costs

Lessening disruptions impacts to residents





Infrastructure Coordination in the Transportation Planning Process

Vision 2050 - Project Planning Process

Program Development



Transportation Asset Management Plan (TAMP) Elements

“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 established performance goals.”

- Asset data inventory
- Performance goals
- Risk of failure analysis
- Anticipated revenues and expenses
- Performance outcomes
- Coordination with other entities-**water/sewer/utility**
- Proof of acceptance
- Multi-year programs

Program Development: Asset Management

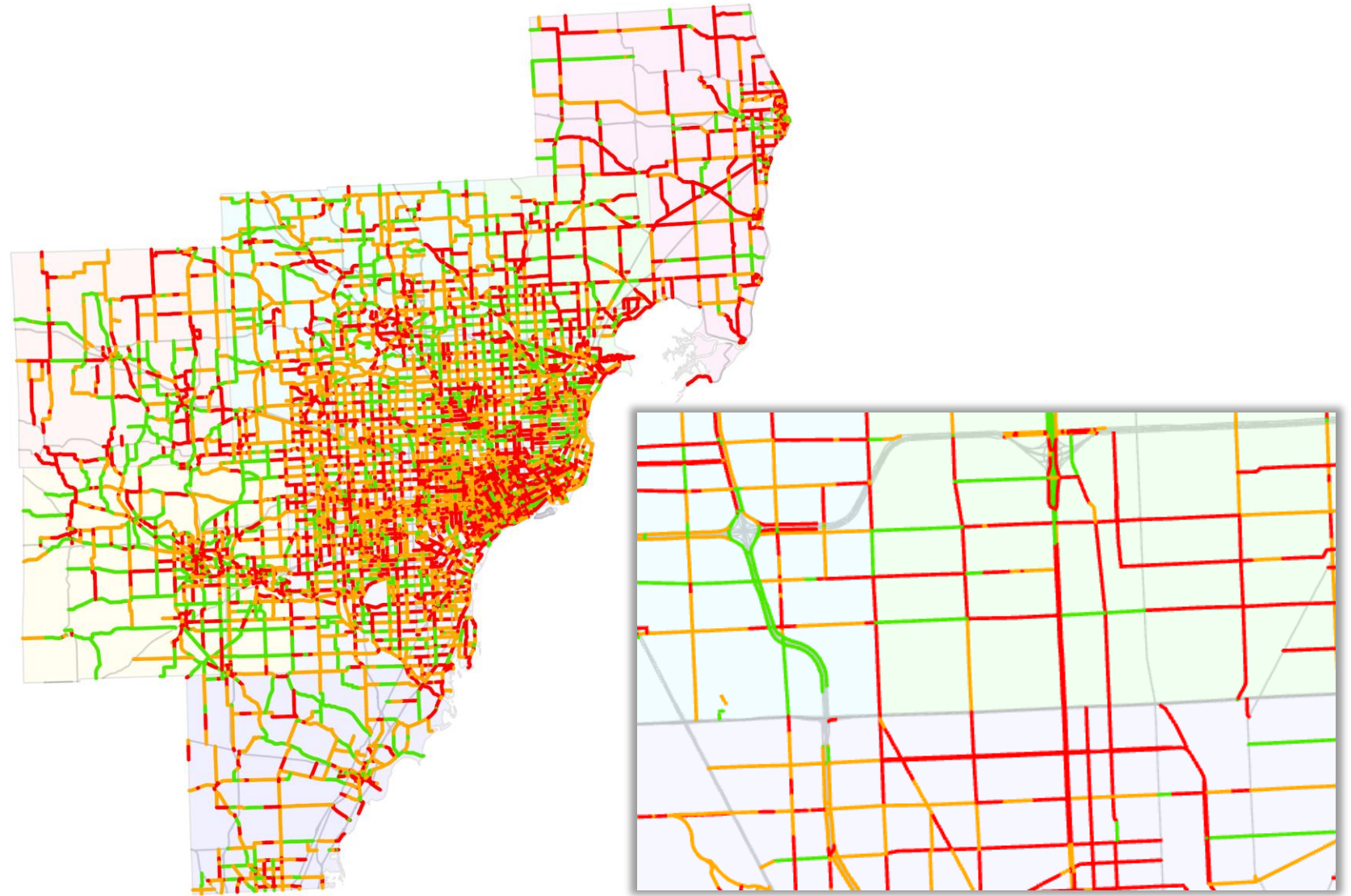
Where do I start?

- If you have an Asset Management Plan – Start there
- Look at asset conditions-particularly in high volume areas
- Develop a general treatment plan to address assets
- Cross reference with municipality Capital Improvement Plans for water/sewer improvements
 - get coordination going in these early steps to incorporate and prioritize efficiently



Program Development: Asset Management

2022 Road Condition



Program Development: Asset Management

Implementation Focus on Preservation

- Mix of fix approach to ensure right fix at the right time
 - Poor conditions
 - Highly utilized roadways
- Infrastructure Coordination – identify overlapping needs with water/sewer and prioritize
 - Particularly for reconstruction projects



Vision 2050 - Project Planning Process

Planning Projects



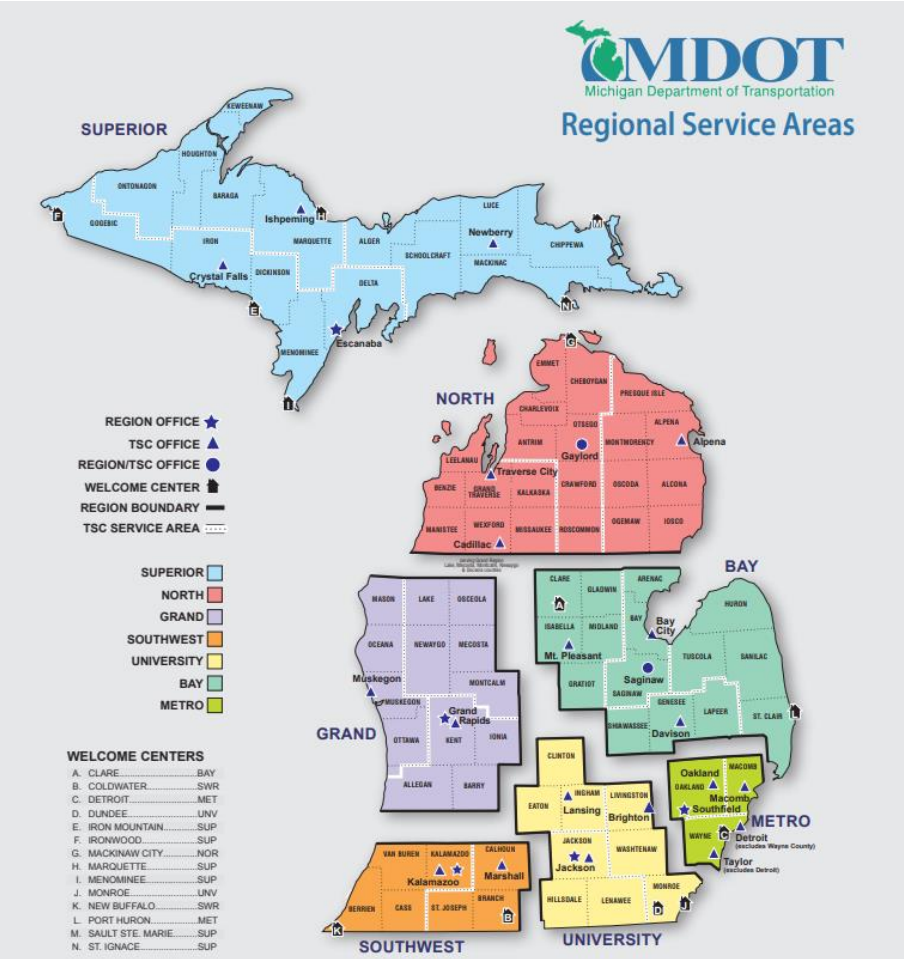
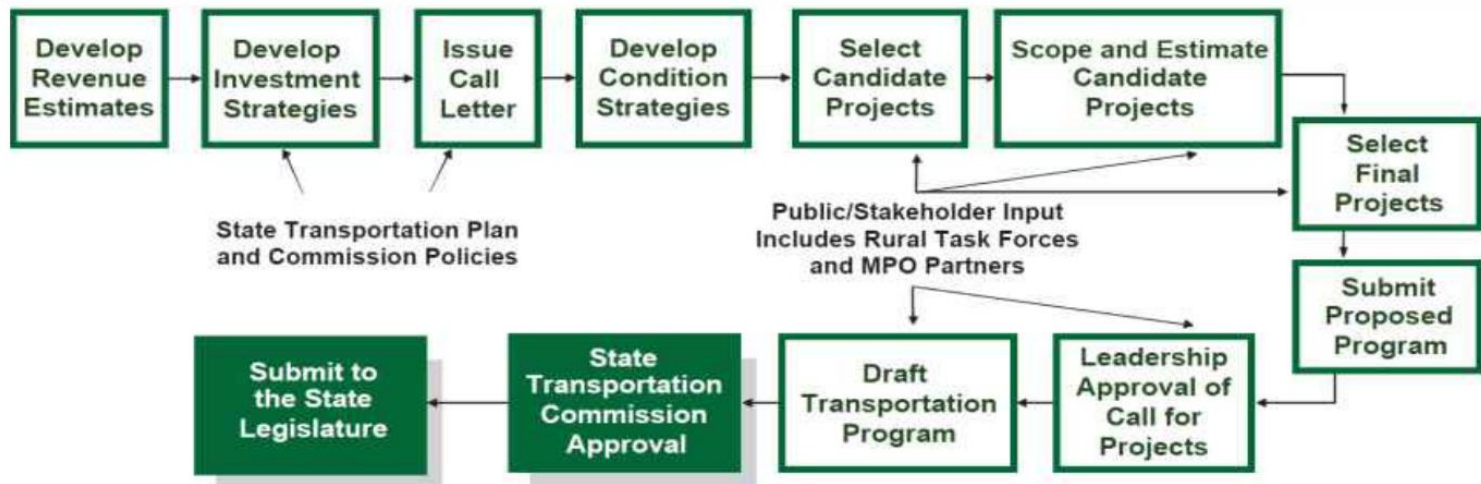
MDOT Call for Projects Process

Early Project Development

Annual MDOT Call for Projects (CFP) process

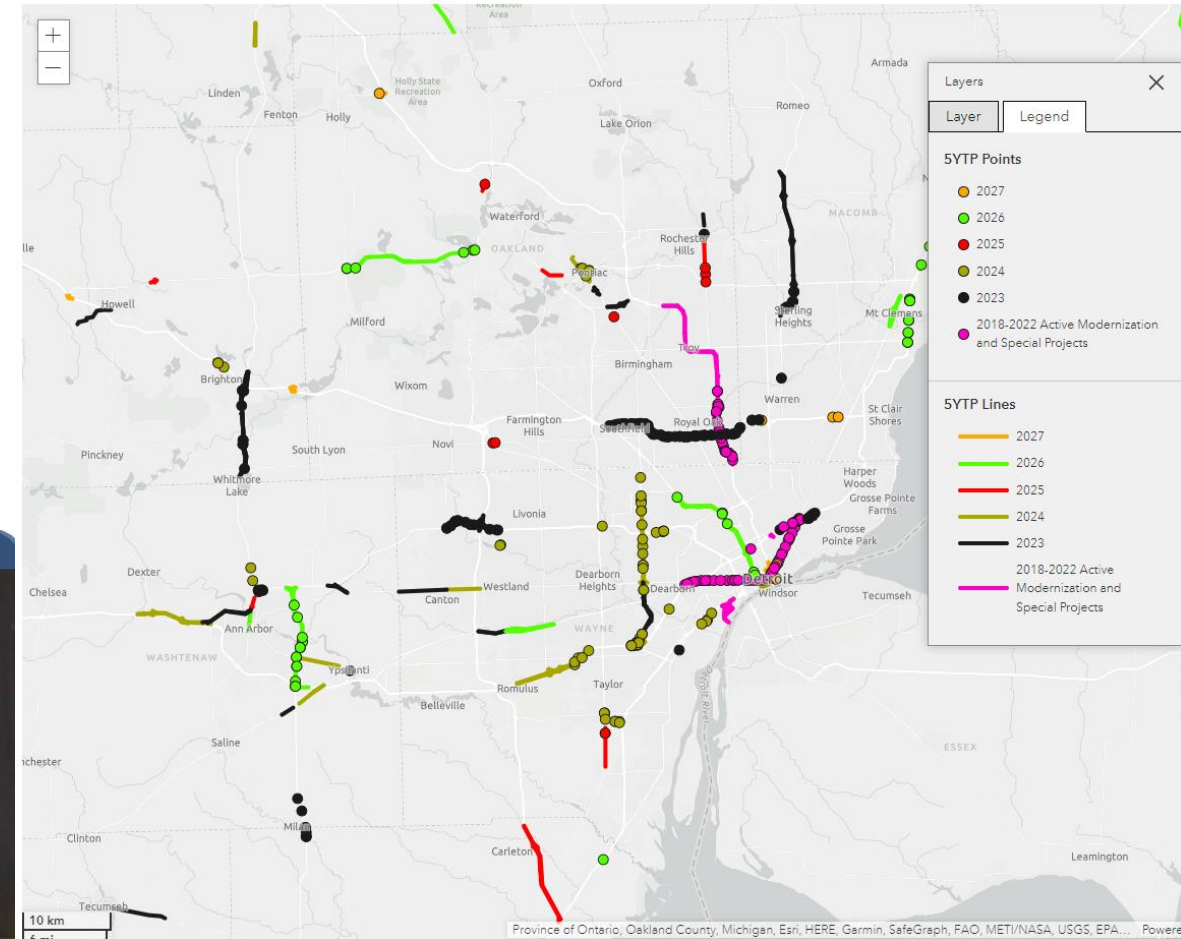
1. Identify upcoming projects from across the state and provide high-level cost estimates, scheduling, and design
2. Select highest priority projects across geographic regions and work types for inclusion in the rolling 5-year plan

Five-Year Transportation Program Call For Projects Process



MDOT 5-Year Transportation Program (5YTP)

Michigan Transportation Program Portal – online maps showing the location and key information of 5YTP projects, Rebuilding MI bond-funded projects, and the Statewide Transportation Improvement Program (STIP)



Transportation Improvement Program (TIP)

- SEMCOG is responsible for planning and managing the flow of federal-aid highway and transit funding in Southeast Michigan.
- Four-Year list of projects using federal-aid highway and transit funding.
- Public review of list
 - Project Estimates are included in the TIP –
 - significant changes to projects may require amendments that may delay work
- List must be fiscally constrained to funding “reasonably expected to be available” during each of the four years of the TIP period.
- Currently we are in the 2023-2026 TIP cycle.

Planning Projects

Transportation Improvement Plan

July 2022

Transportation Improvement Program (TIP) for Southeast Michigan FY 2023-2026



SEMCOG

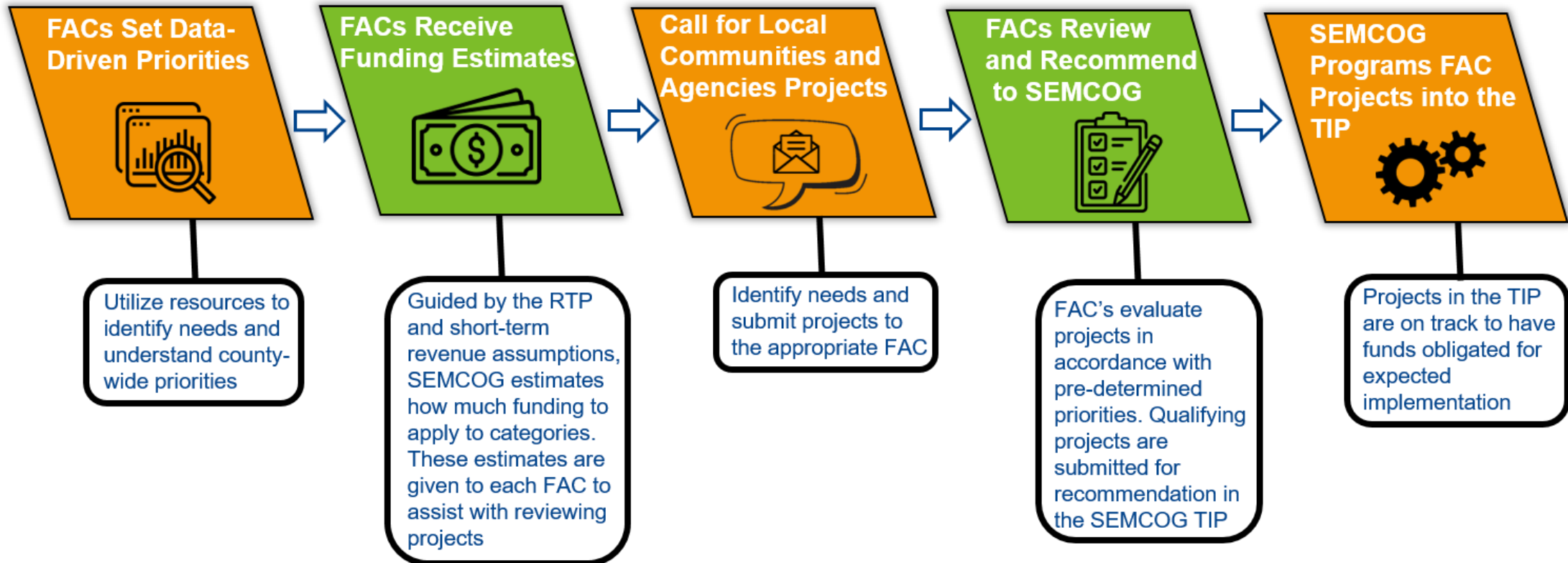
SOUTHEAST MICHIGAN COUNCIL OF GOVERNMENTS

SEMOG Federal Aid Committees (FACs)

8 FACs

**City of Detroit
Macomb County
Oakland County
Washtenaw County**

**Livingston County
Monroe County
St. Clair County
Wayne County**



Opportunities for Coordination – Transportation planning process

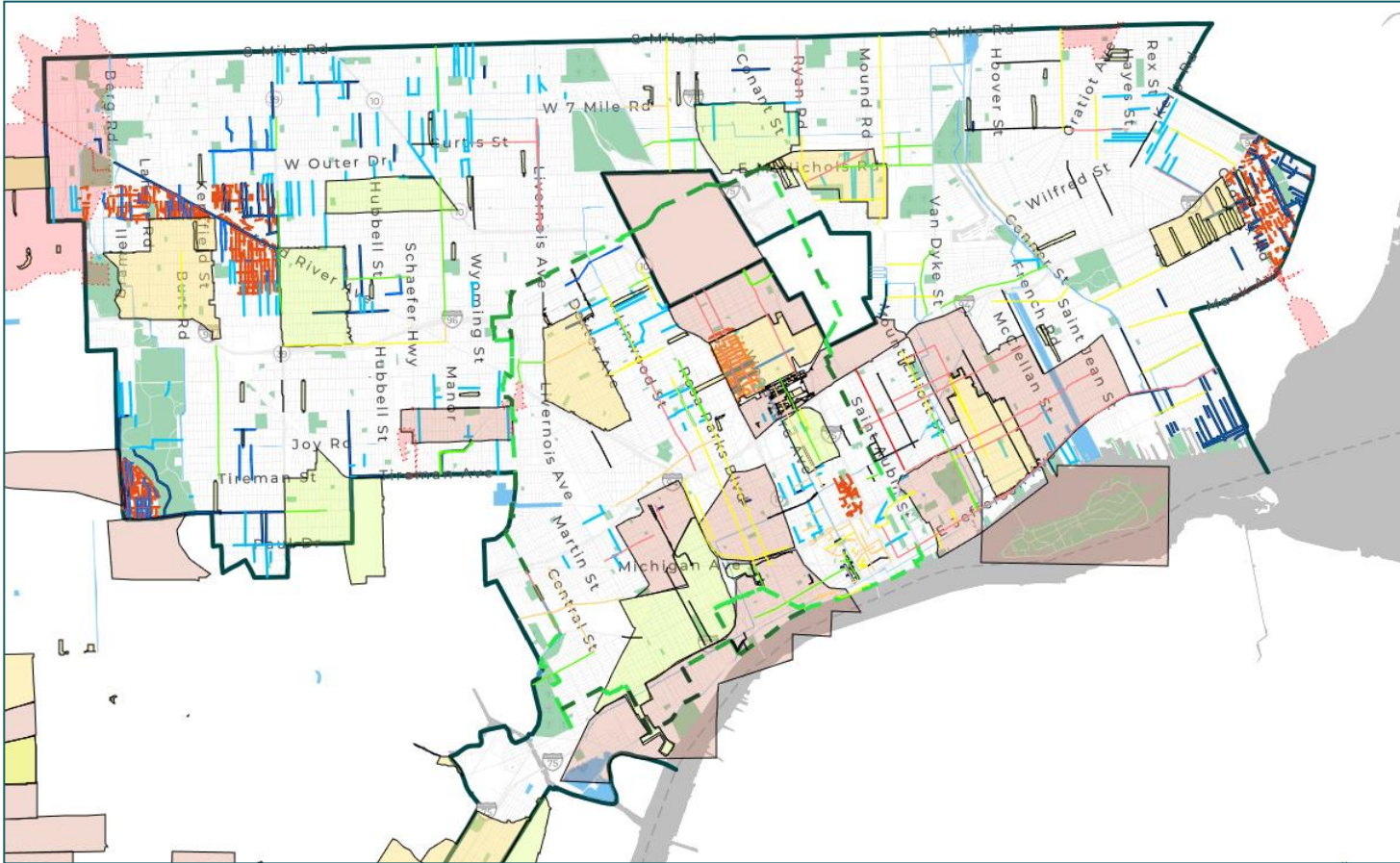
- Regular coordination meetings with ROW owner and other infrastructure agencies to align project planning
- Early proactive outreach/notification
- TIP committees - In SEMCOG, FACs
- Public-facing project portals and planning documents (CIP, Five-Year Program, TIP, etc.)
- Utility coordination as part of project scoping and design

Examples

- Ferndale/Pleasant Ridge cycle track project
 - City coordinating with state
- City of Detroit - ongoing coordination meetings
 - City of Detroit internal coordination + outside partners
- MDOT – Metro Region coordination meetings
 - Major public/private partners (e.g. City of Detroit, ITC., GLWA, SEMCOG, etc.)
 - Sharing information about planned construction projects, planning studies, major events and opportunities
- MDOT - Metro Region ‘High-level scoping’
 - State reaching out to local communities/utility owners early in process

Case Study: City of Detroit Infrastructure Coordination

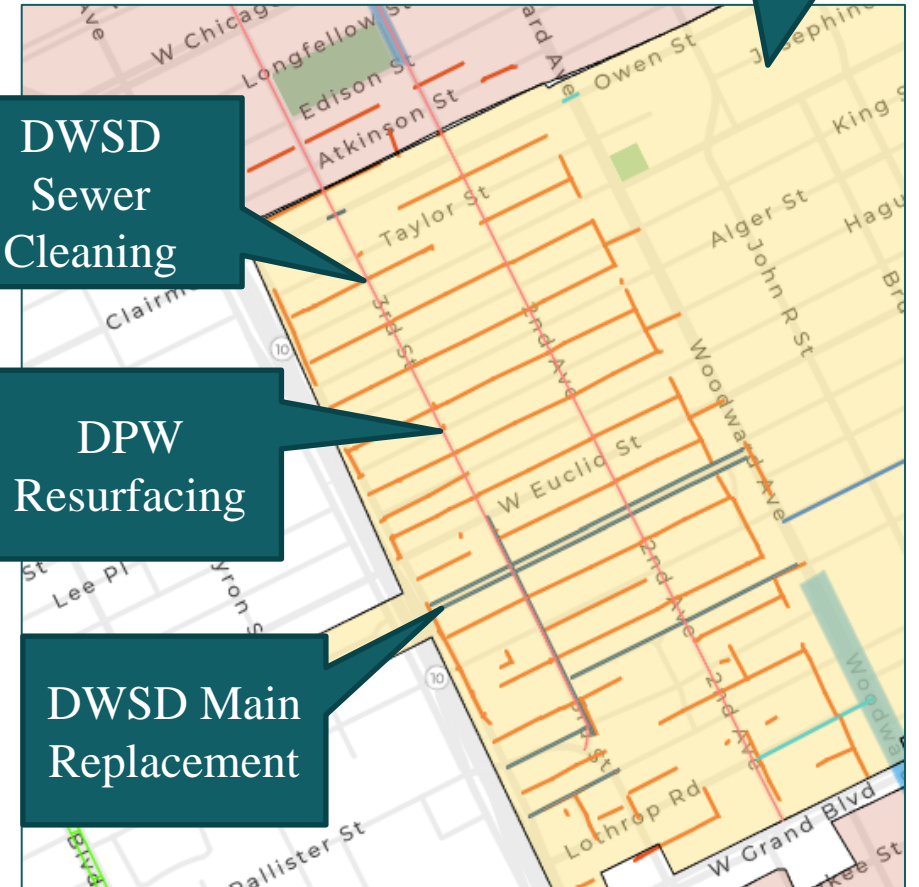
DTE Gas
Renewal
Grid



DWSD
Sewer
Cleaning

DPW
Resurfacing

DWSD Main
Replacement



INFRASTRUCTURE COORDINATION WORKSHOP

Workshop Discussion Outcomes

- Difficulty in aligning timeframes + funding sources
- Political risk
- Integrated portal is needed
- Public education is needed
- Lack of transparency in prioritization process
- Funding issues



COORDINATION WITH MIC

Integrating with MIC

Challenges to Improved Coordination

- Lack of Standards or Procedure
- Changing Workforce
- Time and Resources Constraints
- Lack of Technology and Resources

MIC Project Portal Solution

- Taking Lead on Coordination
- Standardized and Repeatable Approach
- Simple, Accessible, Free to use
- Leverages existing data when available

MIC Project Portal
Michigan Infrastructure Council

[Back](#) **Add Project**

Information about an upcoming or ongoing project can be added or edited using this form. The data will be added to your projects list which displays your current and future projects.

Project Details

Project Name required

Project ID This is your local project ID

Project Type required

Will the road be cut? required

Current Phase Information

Current Phase

MIC Dig Once Portal



Reliable

How Does It Work

The Portal analyzes the temporal and spatial relationships between user submitted GIS infrastructure investment plans to identify conflicts and opportunities in planned work.

Benefits

- Project savings and avoided delays
- Improved workforce utilization and safety
- Proactively notify impacted parties years in advance of delivery.
- Dedicated workspace for coordination activities. (Connecting owners, customized coordination workflows, timely resolution)
- Repeatable and Teachable
- Simple and Interoperable



Cost - Effective

NEXT STEPS

Going forward

Pain points still exist

- GIS Capacity is huge challenge to standardize / share data
- Capital plans/timeline between agencies are not always flexible
- Hard to quantify benefits of coordinating work
- Sharing project resources not always possible/desired

Future goals:

- More organized data sharing
- Coordinated projects that share resources (MOT, restoration, etc.)
- 5-year integrated CIP for road/utility work

Next Steps

- Small Framework Strategy Groups
- Understand policy, regulatory, and legislative impediments
- Continue to meet with MDOT + infrastructure partners
- Rollout of MIC portal and integration of SE Michigan communities



**Thank you!
Questions?**

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