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?

Results are mixed but we certainly all agree that coordination should be happening.
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**

- **Regional Policy**
  - Setting Goals, Objectives, Strategies, Performance Measures

- **Project Delivery**
  - Cities and Counties Implementing Projects and Initiatives

- **Planning and Programming**
  - Transportation Improvement Plan

- **Program Development**
  - Asset Management Plans (TAMP), Application Projects
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
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
2022 Road Condition
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

Regional Policy
Setting Goals, Objectives, Strategies, Performance Measures

Program Development
Asset Management Plans (TAMP), Application Projects

Planning and Programming
Transportation Improvement Plan

Project Delivery
Cities and Counties Implementing Projects and Initiatives
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
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.
**SEMCOG Federal Aid Committees (FACs)**

- **City of Detroit**
- **Macomb County**
- **Oakland County**
- **Washtenaw County**
- **Livingston County**
- **Monroe County**
- **St. Clair County**
- **Wayne County**

**8 FACs**

- **FACs Set Data-Driven Priorities**
  - Utilize resources to identify needs and understand county-wide priorities

- **FACs Receive Funding Estimates**
  - Guided by the RTP and short-term revenue assumptions, SEMCOG estimates how much funding to apply to categories. These estimates are given to each FAC to assist with reviewing projects

- **Call for Local Communities and Agencies Projects**
  - Identify needs and submit projects to the appropriate FAC

- **FACs Review and Recommend to SEMCOG**
  - FAC’s evaluate projects in accordance with pre-determined priorities. Qualifying projects are submitted for recommendation in the SEMCOG TIP

- **SEMCOG Programs FAC Projects into the TIP**
  - Projects in the TIP are on track to have funds obligated for expected implementation
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
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
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
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
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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