



# Peer Exchange Report

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## National Operations Center of Excellence Funding for TSMO: New Opportunities

# Purpose And Overview

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NOCoe's Funding for TSMO: New Opportunities Virtual Peer Exchange is intended to host transportation agency professionals with experience in developing, implementing, and justifying to decision-makers funding requests for TSMO projects and programs to support policy makers and agency leadership.

The peer exchange will be virtual using the NOCoE's Zoom software and developed as a short one after-noon exposure to concise aspects of the topic. Staff from specific programs with experience in the topic will be invited to speak and attend. The peer exchange will also be open to state, regional, and local TSMO stakeholders.

## Agenda

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### TUESDAY, MAY 2, 2023 (ALL TIMES LISTED BELOW ARE EDT)

Time	Topic	Speakers
11:00 am – 11:15 am (15 min.)	<b><u>Welcome and Introduction</u></b> <ul style="list-style-type: none"><li>• Facilitator Welcome</li><li>• Agenda Review</li></ul>	Faisal Saleem, NOCoE ITE
11:15 am – 12:00 pm (45 min.)	<b><u>Segment 1 – Learning About Federal TSMO Funding Opportunities</u></b> <ul style="list-style-type: none"><li>• Formula Funds with TSMO eligibility</li><li>• Grant Programs with TSMO eligibility</li><li>• Discussions/Q&amp;A</li></ul>	John Harding, FHWA David Harris, FHWA
12:00 pm – 12:30 pm	<b>BREAK</b>	
12:30 pm – 1:30 pm (60 min.)	<b><u>Segment 2 – What TSMO Units Need to Consider When Applying for Funding</u></b> <ul style="list-style-type: none"><li>• Michigan DOT BUILD Grant Case Study</li><li>• Nashville DOT TSMO Funding Case Study</li><li>• Open Discussion: Lessons Learned and Suggested Tips for Agencies Applying for Funding</li></ul>	Nathan Bouvy, MDOT Brad Freeze, NDOT Moderated by ITE
1:30 pm – 1:45 pm	<b>BREAK</b>	

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1:45 pm –	<b><u>Segment 3 – Challenges in getting TSMO Funds</u></b>	
2:45 pm (60 min.)	<ul style="list-style-type: none"> <li>• Initial Remarks</li> <li>• Breakouts: Gaps, Potential Actions, and Next Steps</li> </ul>	Aaron Johnson, MDOT Moderated by ITE
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2:45 pm –	<b><u>Summary from Breakout Rooms</u></b>	
2:55 pm (20 min.)	<ul style="list-style-type: none"> <li>• Gaps, Potential Actions, and Next Steps</li> </ul>	ITE
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2:55 pm –	<b><u>Day Wrap Up</u></b>	
3:00 pm (5 min.)	<ul style="list-style-type: none"> <li>• Poll</li> <li>• Closing remarks</li> </ul>	ITE Faisal Saleem, NOCoE

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# Panel Discussion

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The Funding for TSMO: New Opportunities peer exchange was an agile format, a virtual, 4-hour meeting. There were two plenary sessions followed by a breakout group discussion session.

## **PLENARY SESSION: LEARNING ABOUT FEDERAL TSMO FUNDING OPPORTUNITIES**

### **Grant Programs Overview:**

- USDOT administers various grant programs through modal agencies like FHWA, FTA, FMCSA, and NHTSA.
- The FAST Act provides funding for surface transportation infrastructure, subject to changes during reauthorization by the 117th Congress.

### **Preparation for Grant Opportunities:**

- Grant opportunities are typically announced through Notices of Funding Opportunity (NOFO).
- Agencies need to be proactive, maintaining ready-to-go project concepts, strategic partnerships, matching fund discussions, and data for benefit/cost analysis.

### **Sample Programs Under FAST Act:**

- Examples include INFRA (formerly FASTLANE) a discretionary grant for significant freight and highway projects, and BUILD (formerly TIGER), a competitive program for impactful transportation projects.
- ATCMTD (now ATTAIN) focuses on advanced transportation technologies, emphasizing multimodal integrated corridor management and rural technology deployments.

### **Timing and Funding Information:**

- Grant program timing is unpredictable, requiring agencies to be prepared for a 30- to 60-day application window.
- Sample programs like INFRA and BUILD had funding in FY 2020, with INFRA offering \$1 billion in discretionary grants, and BUILD providing \$1 billion in authorized FY 2021 funds.

### **Changes and Resources:**

- Changes in program names (e.g., ATTAIN, RAISE) and the addition of new programs (e.g., SMART Grants) should be noted.
- The USDOT maintains a grants web page for reference, and agencies should stay informed about updates and changes in grant programs.

## **PLENARY SESSION: LEARNING ABOUT FEDERAL TSMO FUNDING OPPORTUNITIES**

### **Gaps in Funding Application Process:**

- Complexity and competition in FHWA grant application processes are challenging for agencies and consultants.
- Need for a written commitment with a 5-10 year post-implementation plan.
- Program Organization for Grants:
- Grant NOFOs force programs to reorganize to meet specific grant requirements.
- Concerns about the complexity of the grant application process and the need for consultants to respond.

### **Operational Funding Challenges:**

- Agencies face challenges in securing operational funds, with competition for various funding sources.
- Differentiation between program funding and grants is a notable challenge.
- Agencies struggle with the competition for Aid demo projects.
- Asset Management and Budget Support:
- Limited use of Asset Management (AM) data to support budget requests.
- Challenges in justifying budgets based on AM data, especially for agencies lagging in AM performance.

### **Integration of TSMO:**

- The integration of TSMO into planning, programming, design, construction, and safety poses challenges.
- Need for clear strategies to integrate TSMO effectively into transportation operations.
- Discussion on the terminology and categorization of TSMO within state laws and FHWA guidelines.

### **Stability and Institutionalization:**

- VDOT reports increasing stability and institutionalization in TSMO activities.
- The challenge of institutionalizing new practices and dealing with the cyclical nature of programs.

### **Operations and Maintenance (O&M):**

- Agencies grapple with the balance between maintaining existing ITS infrastructure and making new investments.
- Terminology issues around maintenance and the need for performance-based contracts.

### **Technology Planning:**

- Strategies for technology planning, including considerations for radio network replacements and maintaining technology networks.
- The need for a systematic approach to replace and upgrade technology components.

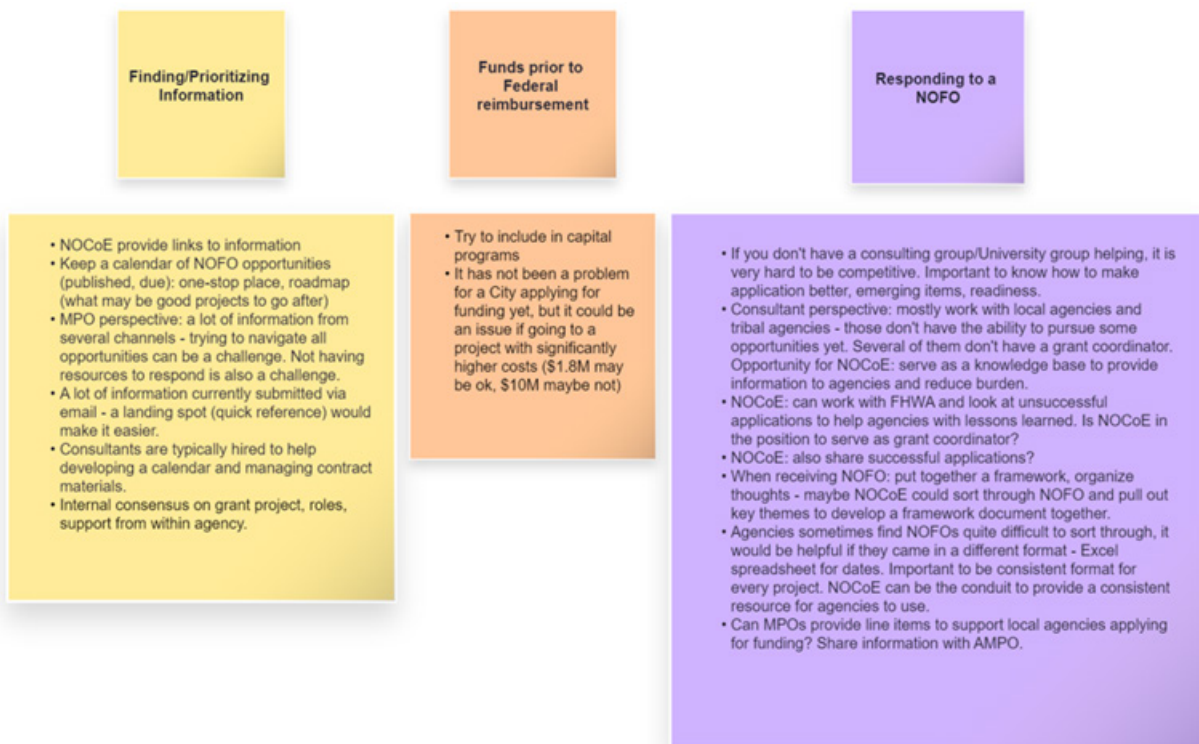
### **Safety Integration Challenges:**

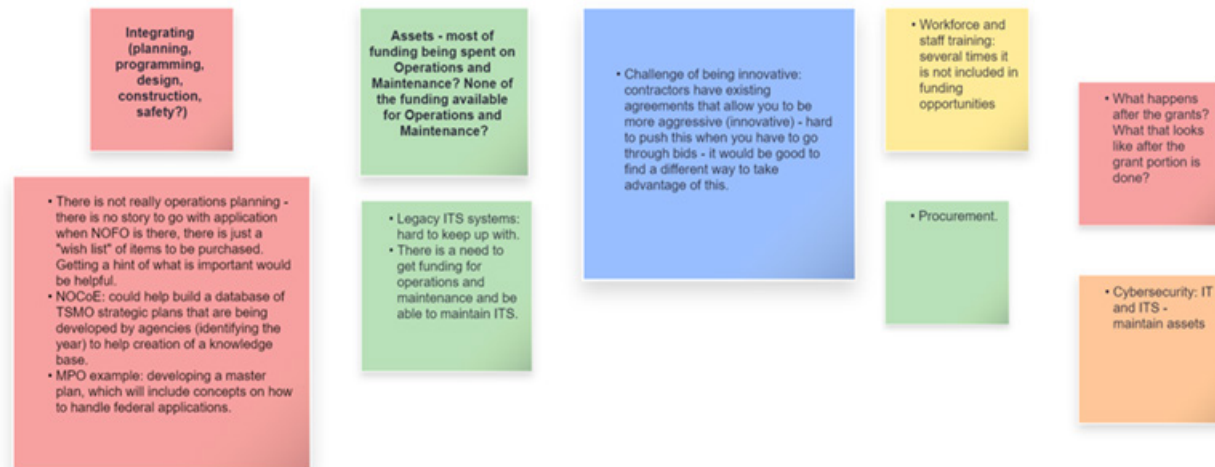
- Challenges in integrating TSMO into safety efforts, with limitations on access to safety databases.
- Specific issues raised regarding flashing yellow signals and other safety-related considerations.

### **Long-Term Commitments and Community Impact:**

- Questions about FHWA's long-term commitment and impact on communities.
- Discussion on the evolving role of consultants and the need for community-wide effects beyond specific projects.

The snippets of the whiteboard from the breakout group discussion are presented here:





## POLL QUESTION/ANSWERS

Following the peer exchange, a poll was conducted, inviting panelists to engage in a survey. The results of the poll are presented below.

### **How informative was the (Funding for TSMO: New Opportunities) peer exchange?**

- 50% of respondents: Very Informative
- 36% of respondents: Informative
- 7% of respondents: mostly informative
- 7% of respondents: not informative

### **What did you think of the "agile" peer exchange format?**

- 65% of respondents: It was easier to commit to since it did not include several days of events
- 30% of respondents: It was informative; however, I prefer attending in-person events rather than virtual events

### **How likely are you to register again for an "agile" NOCoE peer exchange?**

- 57% of respondents: Very Likely
- 29% of respondents: Likely
- 14% of respondents: Neither Likely nor Unlikely

### **Do you see the need for further NOCoE research/events on TSMO funding opportunities?**

- 49% of respondents: Yes, development of case studies with examples of state and local agencies
- 22% of respondents: Yes, a full (2-day) peer exchange with topics informed by the findings from this event

- 22% of respondents: No, the resources from this event suffice for my agency's needs.
- Yes, development of a webinar series with topics informed by the findings from this event
- 7% of respondents: Others (I did not care for the very long virtual meeting. If you feel you have that much info to share, let's go in person. I attended as. How could I not? I thought there would be more new info presented. I know a lot of you worked hard on this, and I respect that, but this meeting filled my day without much take-aways of value).

**What TSMO funding topics need to be further explored in future NOCoE research/events?**

- Bridging the gap between deployment and M&O.
- Explore TSMO funding from non-traditional (aka non USDOT) sources (E.g., DOE, DHS, DOD, etc.)
- PPP for TSMO Capital Investments.
- Pedestrian detection/intersection safety, automated vehicles, infrastructure, smart signals
- Planning for TSMO
- How to fund what you have to maintain. How to get additional funding to support the added maintenance when new roads are deployed.
- Operations and Maintenance are often forgot about and very important
- This should be a recurring event. New funding opportunities arise. Other program rules may change. The speakers were familiar with their programs and provided timely information.



# Definitions

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## 1. Title 23 and operations

- Operating costs for traffic monitoring, management, and control [23 U.S.C. 101\(a\)\(18\)](#):
  - Includes labor costs, administrative costs, costs of utilities and rent, and other costs associated with the continuous operation of traffic control, such as integrated traffic control systems, incident management programs, and traffic control centers.
- Operational improvements [23 U.S.C. 101\(a\)\(19\)](#):
  - Means
    - A capital improvement for installation of traffic surveillance and control equipment, computerized signal systems, motorist information systems, integrated traffic control systems, incident management programs, and transportation demand management facilities, strategies, and programs.
    - Such other capital improvements to public roads as the Secretary may designate, by regulation.
  - Does not include:
    - Resurfacing, restoring, or rehabilitating improvements, construction of additional lanes, interchanges, and grade separations, and construction of a new facility on a new location.

# Federal Formula Funds With TSMO Eligibility

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## 1. Federal-aid overview

- FHWA for Local Public Agencies (LPA) resources: <https://www.fhwa.dot.gov/federal-aidessentials/>
- Congress established the Highway Trust Fund in 1956 to support building the interstate system as one of the earliest major initiatives of the Federal-aid Highway Program.
- Today, this fund continues to provide a steady source of surface transportation financing for the Federal-aid program. User fees such as gasoline taxes go into the Highway Trust Fund to finance surface transportation system projects.
- Federal-aid funds are generally distributed to States using formulas specified in Federal law, although the money is not provided up front (State DOT or LPA must initially finance the project):
  - Reimbursable: FHWA pays grantees and sub-recipients the actual eligible expenses incurred on a progress payment basis.
  - Matching: Federal funds are matched with State or local resources to cover the total project cost. Federal funds typically provide 80 percent of the project's eligible cost, with the remaining 20 percent provided by State or local agency funding.
- Criteria to use Federal-aid funds:
  - Eligible highways: State DOTs maintain maps showing highway functional classifications and can help local agencies determine whether the project is eligible for Federal-aid highway funding.
  - Capital improvements: Federal-aid funding is available for capital improvements and planned upkeep of highway assets. Federal-aid funding may not be used for routine maintenance, such as pothole patching, mowing, snow removal or graffiti removal.
  - Specific funding programs: Federal-aid funds are provided to States within specific funding programs, and each one has its own eligibility criteria for allowable work.
  - Statewide Transportation Improvement Program (STIP): Project must be included in the STIP to be eligible for Federal-aid funds. The STIP is the State DOT's multi-year list of selected projects resulting from collaboration with metropolitan planning organizations (MPOs) and with LPAs.
- Strategic priorities:
  - Safety
  - Transit flex (working with FTA)

- Accessibility (ADA)
- Equity
- Climate change and sustainability
- Labor and workforce
- Truck parking

## 2. Federal-aid apportionments under the Infrastructure Investment and Jobs Act (IIJA), also known as Bipartisan Infrastructure Law (BIL)

- FHWA Office of Operations resource: [https://ops.fhwa.dot.gov/travelinfo/resources/ops\\_guide.htm#n2](https://ops.fhwa.dot.gov/travelinfo/resources/ops_guide.htm#n2)
- FHWA MPO Programming for Operations resource: <https://ops.fhwa.dot.gov/publications/fhwa-hop13050/fhwahop13050.pdf>
- FHWA IIJA funding resource: <https://www.fhwa.dot.gov/bipartisan-infrastructure-law/funding.cfm>
- FHWA IIJA apportionment resource: <https://www.fhwa.dot.gov/bipartisan-infrastructure-law/apportionment.cfm>
- Apportionment of Federal-aid Highway Program funds for FY 2023: <https://www.fhwa.dot.gov/legregs/directives/notices/n4510870/index.cfm>

## 3. IIJA Apportionments and TSMO

- Carbon Reduction Program (CRP): [https://www.fhwa.dot.gov/bipartisan-infrastructure-law/crp\\_fact\\_sheet.cfm](https://www.fhwa.dot.gov/bipartisan-infrastructure-law/crp_fact_sheet.cfm)
- Congestion Mitigation and Air Quality Improvement (CMAQ) Program: [https://www.fhwa.dot.gov/environment/air\\_quality/cmaq/index.cfm](https://www.fhwa.dot.gov/environment/air_quality/cmaq/index.cfm)
- Highway Safety Improvement Program (HSIP): <https://www.fhwa.dot.gov/bipartisan-infrastructure-law/hsip.cfm>
- Metropolitan Planning Program (MPP): [https://www.fhwa.dot.gov/bipartisan-infrastructure-law/metro\\_planning.cfm](https://www.fhwa.dot.gov/bipartisan-infrastructure-law/metro_planning.cfm)
- National Electric Vehicle Infrastructure Formula Program (NEVI): [https://www.fhwa.dot.gov/bipartisan-infrastructure-law/nevi\\_formula\\_program.cfm](https://www.fhwa.dot.gov/bipartisan-infrastructure-law/nevi_formula_program.cfm)
- National Highway Freight Program (NHFP): <https://www.fhwa.dot.gov/bipartisan-infrastructure-law/nhfp.cfm>
- National Highway Performance Program (NHPP): <https://www.fhwa.dot.gov/specialfunding/nhpp/>

- Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) Formula Program: [https://www.fhwa.dot.gov/bipartisan-infrastructure-law/protect\\_fact\\_sheet.cfm](https://www.fhwa.dot.gov/bipartisan-infrastructure-law/protect_fact_sheet.cfm)
- Surface Transportation Block Grant Program (STBG): <https://www.fhwa.dot.gov/specialfunding/stp/>

## Federal Formula Funds With TSMO Eligibility

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### 1. Federal grants overview

- The US Department of Transportation (USDOT) provides capital funding for standard and innovative transportation investments through several programs, administered by the Office of the Secretary of Transportation, as well as several of its modal agencies, including:
  - The Federal Highway Administration (FHWA)
  - The Federal Transit Administration (FTA)
  - The Federal Motor Carrier Administration (FMCSA)
  - The National Highway Traffic Safety Administration (NHTSA)
- The current transportation authorization passed by Congress outlines several grants for surface transportation infrastructure planning and investment. The Fixing America's Surface Transportation Act (FAST Act) is already in an extension year (continuing resolution), and the newly minted 117th Congress is poised to develop a replacement, typically referred to as "reauthorization." During that process, there will likely be changes to the current slate of grant programs.
- From time to time, USDOT and its modal agencies will also provide discretionary research funding. These are often one-time programs - such as FTA's Strategic Transit Automation Research (STAR) program or FHWA's ITS4US grant program - will offer grants for specifically targeted project types, demographic areas, or research topics.
- Notice of Funding Opportunity (NOFO):
  - The most common method for advertising grants will be the release of a NOFO, seeking applications for the specific grant. The timing for each grant program is different, and over the past four years has been highly unpredictable, even for programs that have an annual cycle.
  - Many of the grant applications provide a 30- to 60-day window for submittal, but in some instances the information requested is time-consuming to prepare (e.g., detailed cost-benefit analyses or garnering letters of support from elected officials). Generally, we've found that the project conceptualization process can take 90 to 120 days or even longer if you

are lining up partners.

- There are generic steps that can be taken to be ready for various NOFOs, including:
  - Have a program in place that will have projects and ideas “on the shelf” with concepts fleshed out. Don’t wait for a grant opportunity to be published to begin the process.
  - Cultivate strategic partnerships at the local, regional, and state level in the event the grant can only be awarded to a government agency. Many grant programs must be awarded to a public-sector partner and can’t be awarded directly to a private firm.
  - Discuss matching funds with key strategic partners. Most grant programs require matching funds - or at a minimum their evaluation is influenced by the extent of matching funds - and it is wise to be prepared with a plan for addressing this in advance.
  - Collect and generate required data to complete a benefit/cost analysis (BCA) showing how the project may reduce congestion, accidents, travel times, and greenhouse gas emissions. While not all grant programs require a detailed quantitative analysis, some do - and others will award evaluation points for quantification of potential benefits for the project outcome.
  - Prepare a data governance plan in the event the specific grant program requires transparent data sharing with the USDOT and/or publicly. In many instances, private partners shy away from such general data sharing, but through pre-planning you can identify key elements or concerns with those partners and be prepared to address it comprehensively.
  - Solicit letters of support from local, regional, state, and national elected officials and other stakeholders. A robust collection of letters of support, and possibly financial commitments from local partners, will bolster any application.

## **2. Competitive grants under the Infrastructure Investment and Jobs Act (IIJA), also known as Bipartisan Infrastructure Law (BIL)**

- The [Infrastructure Investment and Jobs Act \(IIJA\) \(Public Law 117-58, also known as the “Bipartisan Infrastructure Law”\)](#) provides approximately \$350 billion for Federal highway programs over a five-year period (fiscal years 2022 through 2026). Most of this funding is apportioned (distributed) to States based on formulas specified in Federal law. However, the Bipartisan Infrastructure Law also provides funding through a wide range of competitive grant programs.
- FHWA IIJA competitive grants resource: [https://www.fhwa.dot.gov/bipartisan-infrastructure-law/grant\\_programs.cfm#](https://www.fhwa.dot.gov/bipartisan-infrastructure-law/grant_programs.cfm#)

## **3. IIJA Competitive Grants and TSMO**

- Strengthening Mobility and Revolutionizing Transportation (SMART) Grants Program: <https://www.transportation.gov/grants/SMART>

- Rebuilding American Infrastructure with Sustainability and Equity (RAISE): <https://www.transportation.gov/RAISEgrants>
- Nationally Significant Multimodal Freight and Highway Projects (INFRA): <https://www.transportation.gov/grants/infra-grants-program>
- Rural Surface Transportation Grant: <https://www.transportation.gov/grants/rural-surface-transportation-grant>
- Safe Streets and Roads for All (SS4A): <https://www.transportation.gov/grants/SS4A>
- Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) Discretionary Grants: <https://www.fhwa.dot.gov/environment/protect/discretionary/>
- Charging and Fueling Infrastructure Grants (CFI) Program: <https://www.fhwa.dot.gov/environment/cfi/>
- Congestion Relief Program: [https://www.fhwa.dot.gov/bipartisan-infrastructure-law/congestion\\_relief.cfm](https://www.fhwa.dot.gov/bipartisan-infrastructure-law/congestion_relief.cfm)
- Advanced Transportation Technologies and Innovation (ATTAIN): <https://www.fhwa.dot.gov/bipartisan-infrastructure-law/attain.cfm>

## Next Steps

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NOCoE will review the key takeaways from this peer exchange work on the next steps. Based on participants' feedback, it is anticipated that priority topics that need to be further explored are:

- TSMO Capital Investments
- Planning for TSMO
- TSMO and Safety

Further, NOCoE plans on continuing to deliver "agile" peer exchange.