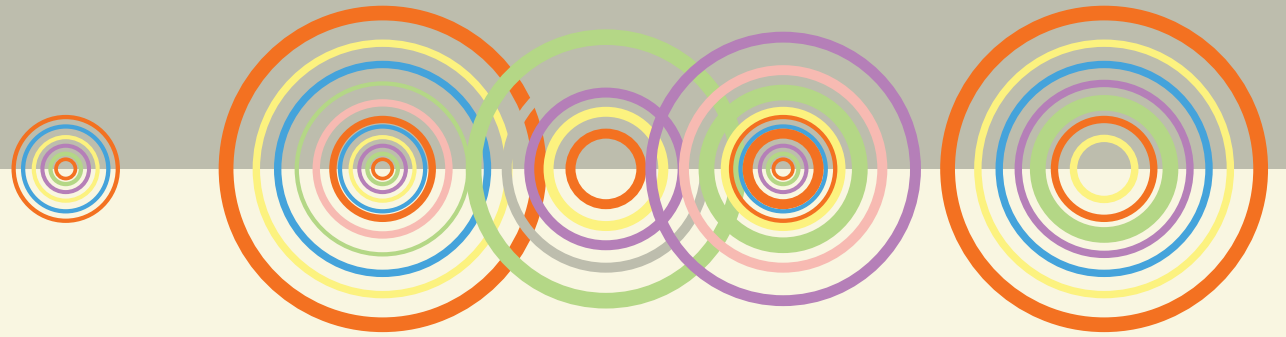


➤ 10.13.26 ➤

INTEGRATED SYSTEM PLAN (ISP) UPDATE



Brad Underwood
Chief Financial Officer



INTEGRATED SYSTEM PLAN (ISP)

- ▶ Guides how OPPD will optimize our energy portfolio to provide affordable, reliable and environmentally sensitive energy services
- ▶ Integrates generation supply, grid delivery and customer solutions into macro-level portfolio recommendations
- ▶ Provides guidance for the transition of North Omaha Power Station

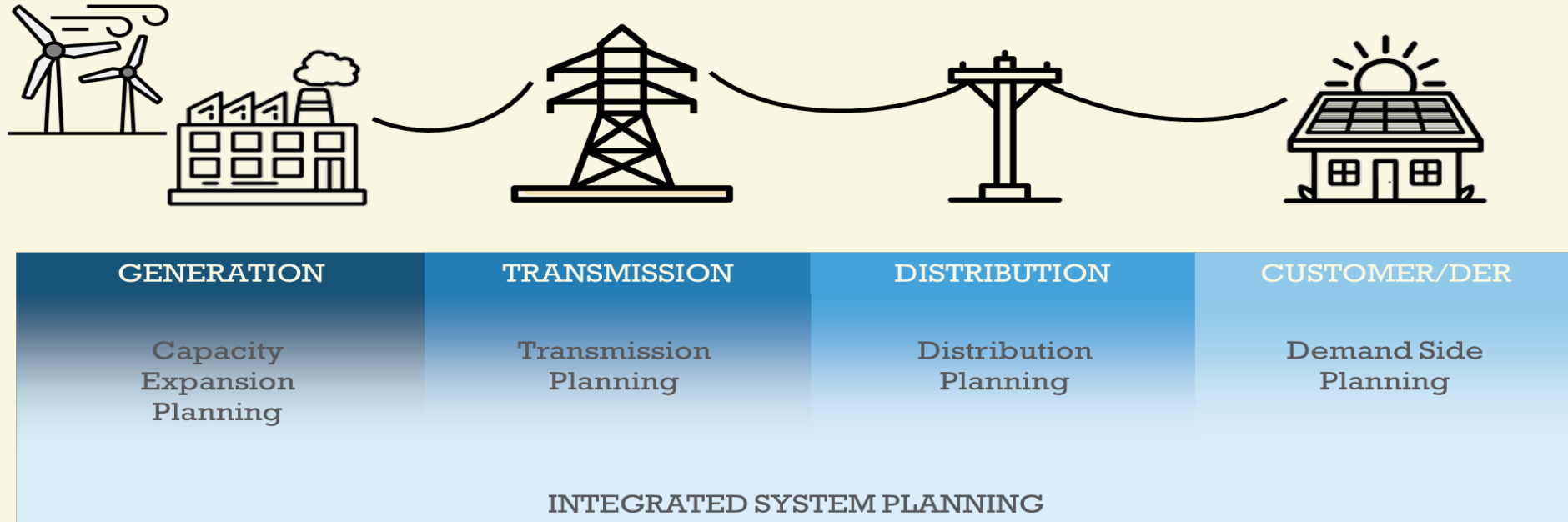


STAKEHOLDER WORKSHOPS

ISP 101 INTRODUCTION	DATA INPUTS/ SCENARIO DEVELOPMENT	INITIAL MODELING RESULTS	FINAL MODELING RESULTS
March 24, 2026 Time 5 p.m.	May 14, 2026 Time 5 p.m.	September 22, 2026 Time 5 p.m.	November 2026* TBD
Workshop #1 ISP 101 INTRODUCTION Duration: 1 Hour IAP2 Level: Inform/Consult Overview of integrated system planning: objectives, approach, and stakeholder engagement plan. Discussion of modeling scenarios. <i>Recording will be available online.</i>	Workshop #2 DATA INPUTS AND SCENARIO DEVELOPMENT Duration: 1 Hour IAP2 Level: Inform/Involve Discussion and feedback on technology performance, costs, assumptions, and modeling scenarios. Deep dive into modeling construct. <i>Recording will be available online.</i>	Workshop #3 INITIAL MODELING RESULTS Duration: 1 Hour IAP2 Level: Inform/Consult Review initial results of capacity expansion modeling. Preview plans for reliability modeling, production cost modeling, and risk analysis. <i>Recording will be available online.</i>	Workshop #4 FINAL MODELING RESULTS Duration: 1 Hour IAP2 Level: Inform Review final results of capacity expansion modeling, reliability modeling, production cost modeling, and risk analysis. Present final report for comment. <i>Recording will be available online.</i>

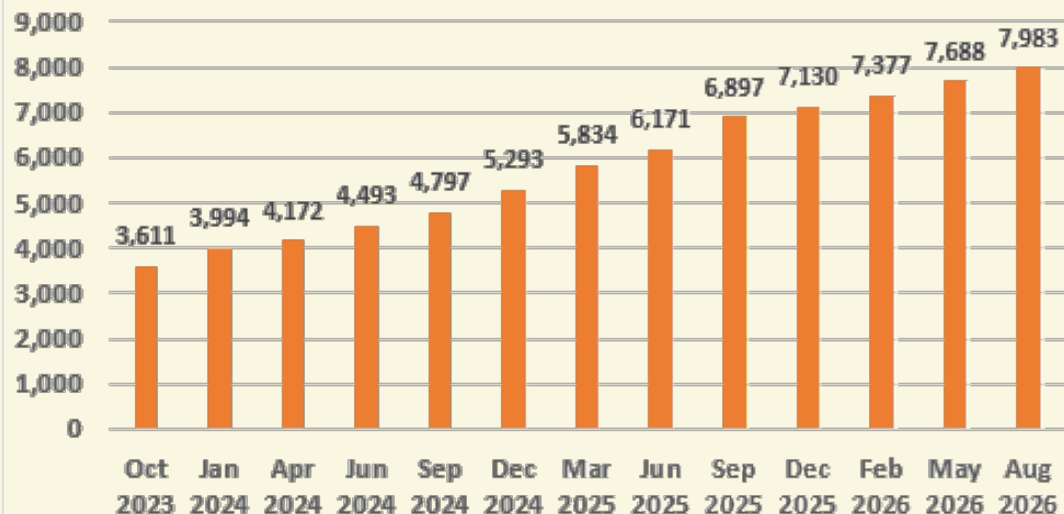
*Anticipated date

ISP INITIAL RESULTS

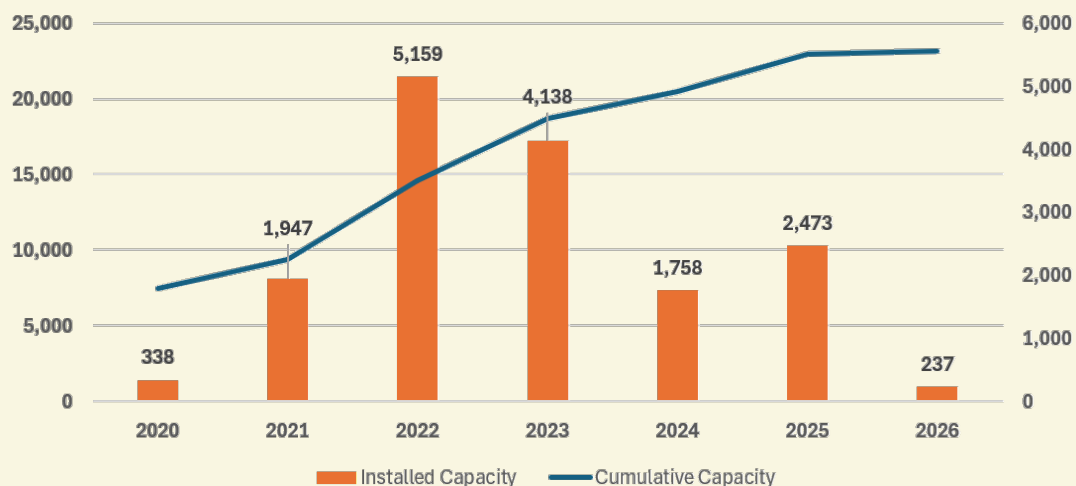


- OPPD's integrated system modeling framework evaluated all portions of the electric system holistically
- Initial results shared during Workshop 3, starting with Demand Side planning followed by Transmission & Distribution grid planning and concluding with Generation Resource planning

**Growth of Registered
Electric Vehicles in OPPD Territory**



**OPPD Distributed Solar Interconnections
(installed capacity in kW-AC)**



DEMAND SIDE PLANNING



Electric Vehicles (EVs)

- EV growth is steady but not threatening system capacity margins
- <1% of total system load
- As larger EV growth occurs, OPPD ChargePoint data shows potential to shift charging off-peak to minimize system impacts



Distributed Solar

- Adoptions increased in 2022-2023 but have tapered recently
- <1% of customer base have installations
- OPPD updated Customer Owned Generation (COG) application process for streamlined system integration



Demand Side Management

- OPPD has three major programs with over 50,000 customers enrolled: Cool Smart, Smart Thermostat and FlexDemand.
- New programs under evaluation

T&D GRID EXPANSION & MODERNIZATION

T&D GRID EXPANSION & MODERNIZATION

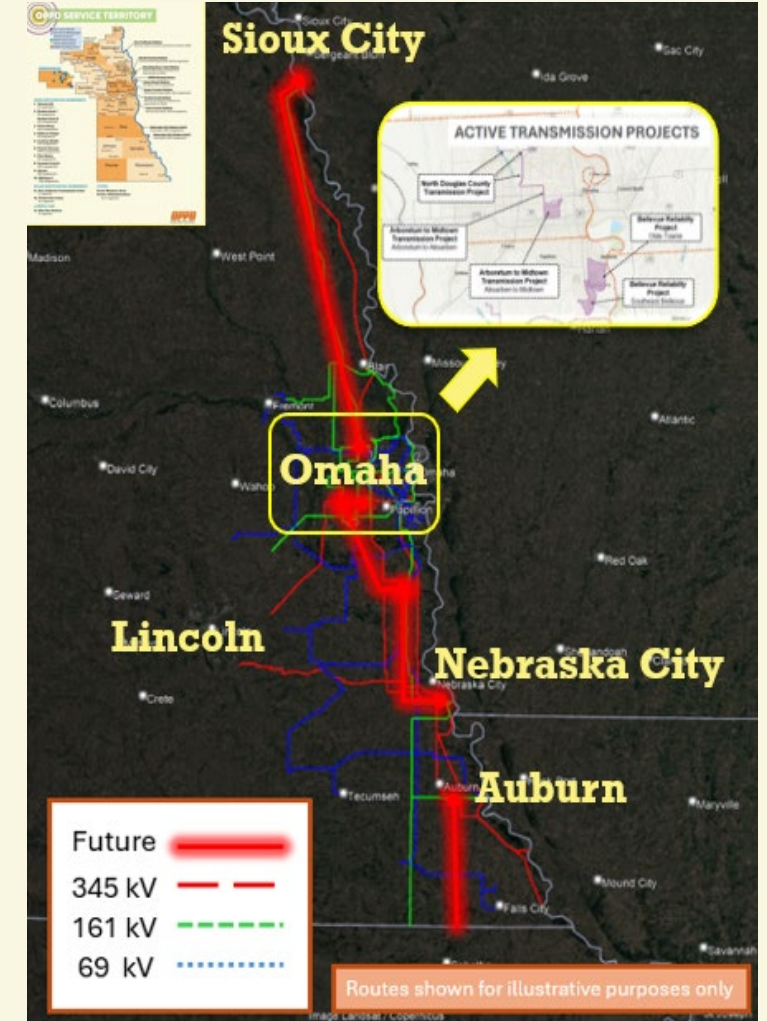


- **Expansion:** Hundreds of miles of new transmission lines and several new substations and distribution facilities
- **Modernization:** Advanced Metering Infrastructure (AMI) and Distribution Automation deployment
- **Enables:** Growing demand, expanding generation fleet and integrating additional levels of evolving customer technologies and demand side program opportunities

Advanced Metering Infrastructure (AMI)



OPPD 345kV Transmission Expansion Plan



GENERATION PORTFOLIOS

EXISTING FLEET



Modeling reflects current operating parameters and includes future state options for existing generation assets.

Analysis of existing fleet over next decade focused on OPPD's North Omaha Power Station transition

New generation expansion considered various technology options across multiple future scenarios

NEW RESOURCES

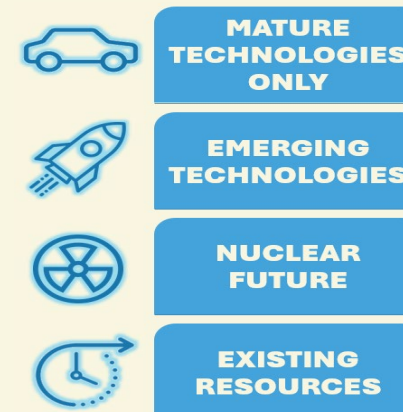
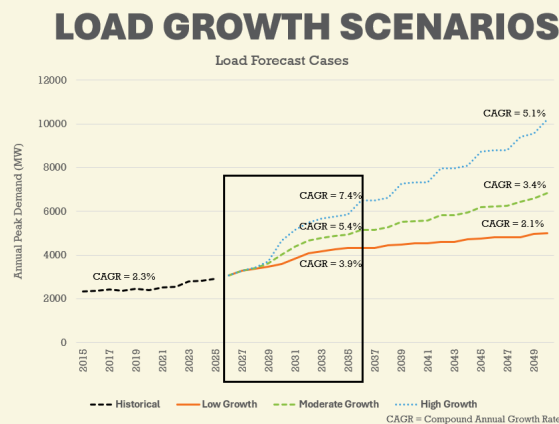
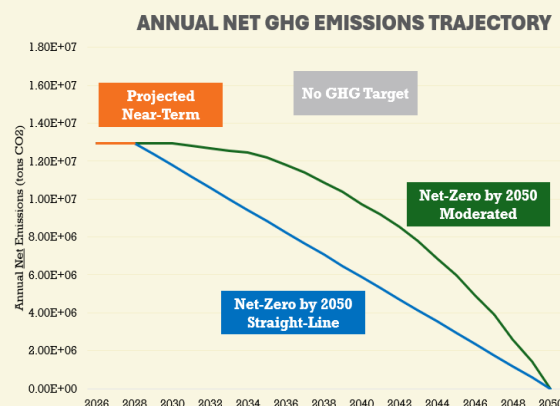


New supply side and demand side resources evaluated for portfolio optimization to serve future load.

PLANNING SCENARIOS

Scenarios levers were developed that varied load forecast, decarbonization trajectories and technology availability.

SCENARIO LEVERS		
EMISSIONS TARGET	LOAD FORECAST	TECHNOLOGY AVAILABILITY
Reference (no target)	Moderate Growth	Mature Only
Net-zero by 2050 Straight Line	High Growth	Mature + Nuclear
Net-zero by 2050 Moderated Pace	Low Growth	Mature + Emerging (All Options)



GENERATION EXPANSION

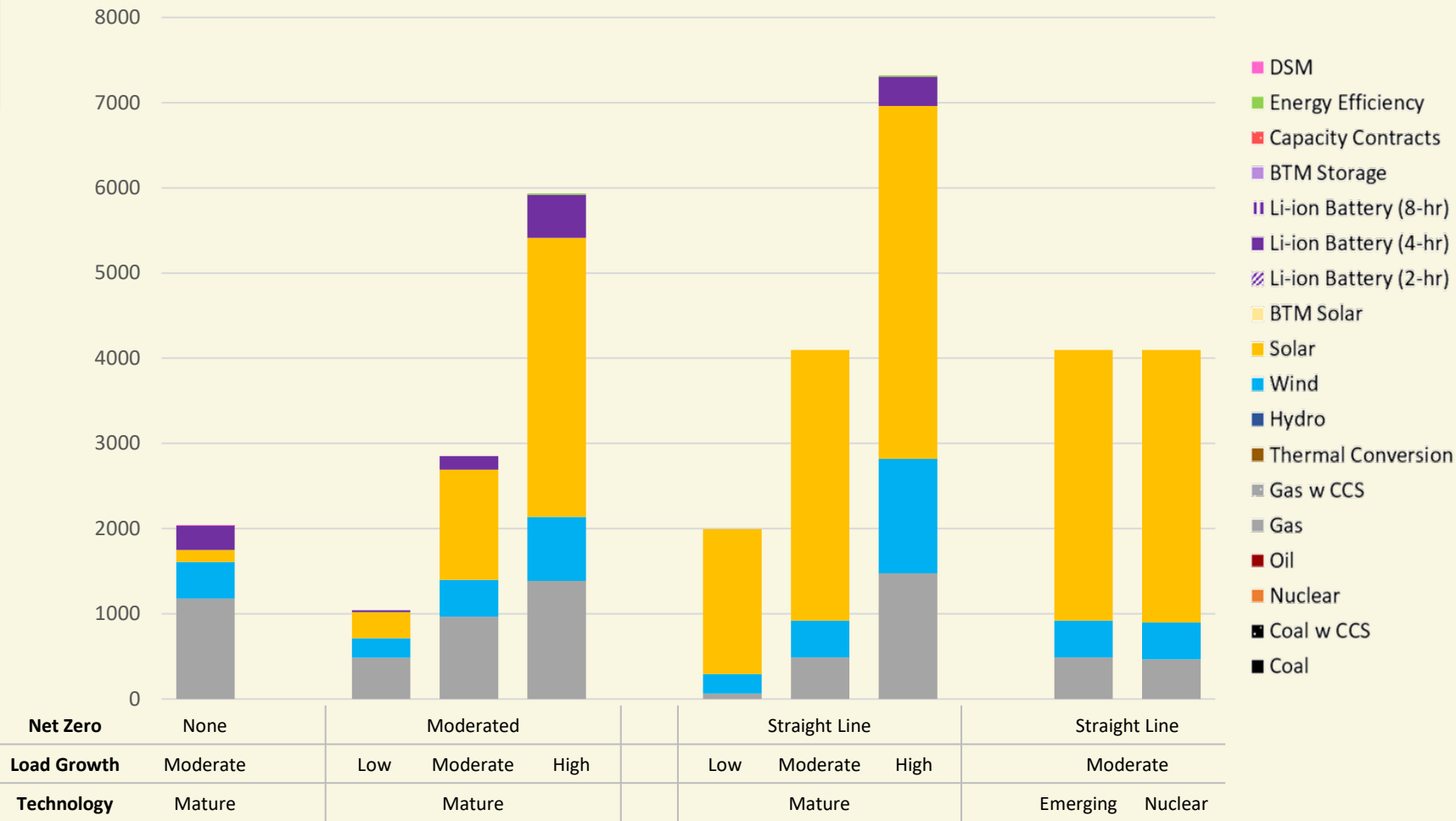
Optimized least-cost portfolios that met resource adequacy requirements and operational constraints

NEW RESOURCES



- North Omaha Station transition included as base assumption
- All scenarios resulted in the same diversified resource mix: Natural Gas, Solar, and Wind
- Storage selected in many scenarios
- Nuclear or emerging technologies generally not seen as viable due to cost
- Remaining analysis focused on:
 - Portfolio costs, emissions, reliability & executability

2036 Candidate Resource Selections by Scenario (MW)



» **STAKEHOLDER ENGAGEMENT**

WORKSHOP 3 OVERVIEW

Attendance: 60 participants (107 total pre-registrations)

Workshop Feedback: 3 real-time polling questions, plus attendees submitted 12 questions regarding emissions, battery storage, solar generation, data center task force, and environmental impacts.

Real-Time Polling Insights:

- External attendees choosing to self-identify represented: 14 residential customers, 1 commercial/industrial customer, 1 community organization, 1 advocacy group, 7 environmental organizations, 5 business/economic development organizations
- Workshop participants selected what they felt is the highest priority when planning for long-term growth:
 - **15** - meeting community and environmental expectations
 - **6** - investing in system reliability and resilience
 - **4** - supporting economic development and commercial/industrial expansion
 - **1** - keeping rates low
- Top line results selected among workshop participants regarding the greatest opportunity to impact system needs:
 - **29** - a mix of various approaches (TOU, expand customer-owned solar, storage and demand response programs, increase energy efficiency, etc.)
 - **4** - by shifting energy use away from peaks (time of use, TOU)

**ISP Workshop #3
INITIAL RESULTS**

**Sept. 22, 2026
5 p.m.**

OUTREACH & COMMUNICATIONS

- **Multi-channel** outreach across OPPD platforms, including social media, newsletters, 1:1 outreach*, lunch and learns, board meetings, speaker's bureau, etc.
- ~ **3,800** OPPDCommunityConnect (OCC) Integrated System Plan page visits
- ~ **700** workshop views/downloads, to date
- **48,700+** social media impressions, to date

HOW TO ENGAGE

Visit OPPDCommunityConnect.com/ISP before **October 22** to provide feedback on Initial Results. Workshop recordings and executive summaries can also be found on this website.



**Engagement among Account Managers, Government Relations, Economic Development, Environmental, Community Outreach and Advocacy Solutions contacts, as well as OCC subscribers and TheWire subscribers.*