

Climate Office Update

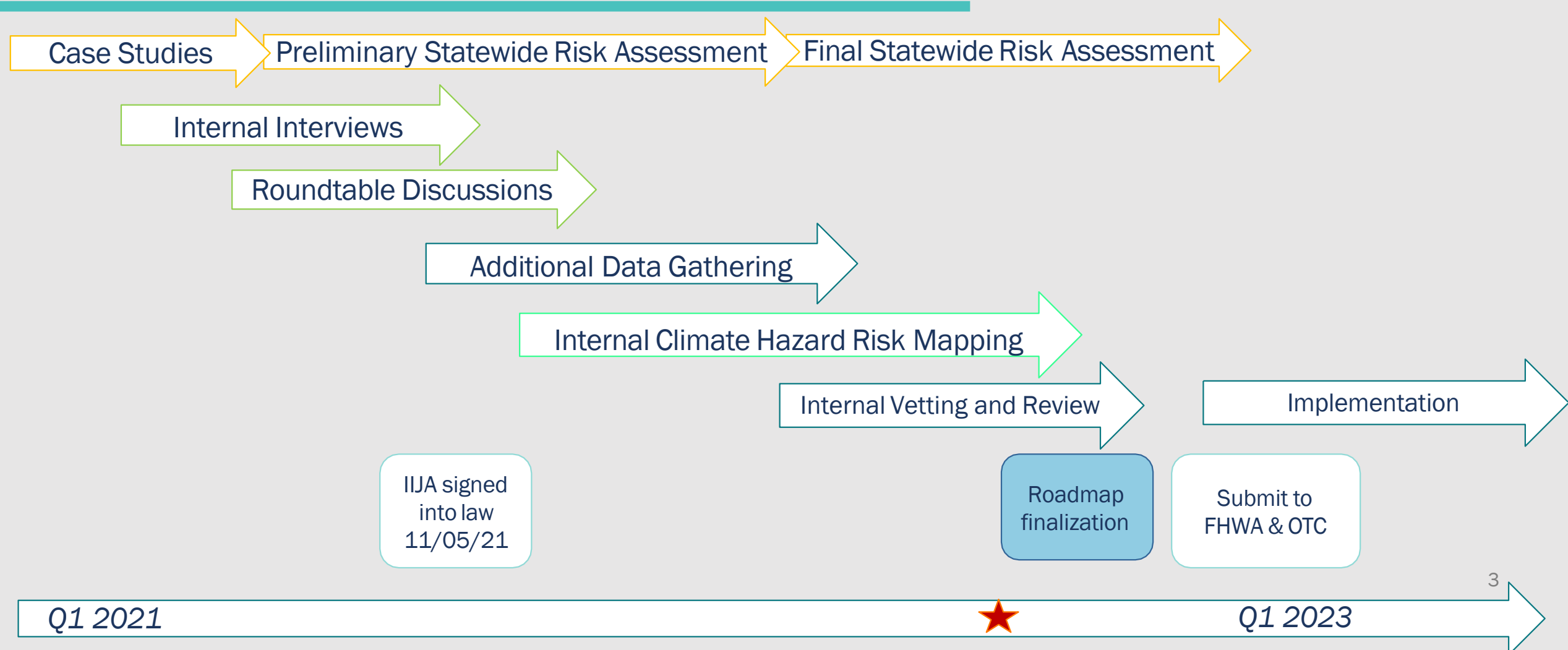
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November 17, 2022

Climate Adaptation & Resilience Roadmap

- Climate adaptation and resilience solutions
- Supports Oregon Transportation Plan and Strategic Action Plan goals.
- Data-informed and context-specific decision-making.
- Prepares ODOT for competitive funding.

Roadmap Development





FEBRUARY
2020
FLOODS

SEPTEMBER
2020 FIRES

WINTER 2021
ICE STORMS

JUNE 2021
HEAT WAVES

WINTER 2022
LANDSLIDES

Statewide Risk Assessment Results

Notable increases in risk for:

- Very hot days
- Inland flooding
- Landslides
- Wildfire
- Coastal flooding
- Coastal erosion

Decreases in risk for:

- Heavy precipitation
- Daily freeze-thaw
- Snow days (+ 6"/day)

Notable impacts:

- Significant spikes in ODOT natural hazard response costs (2009-2021)
- Extreme weather hazards caused cumulative 5,832 hours (or 243 days) of delay (2013-2021)
- Coastal corridors are especially vulnerable, and hazards interrelate for greater damage

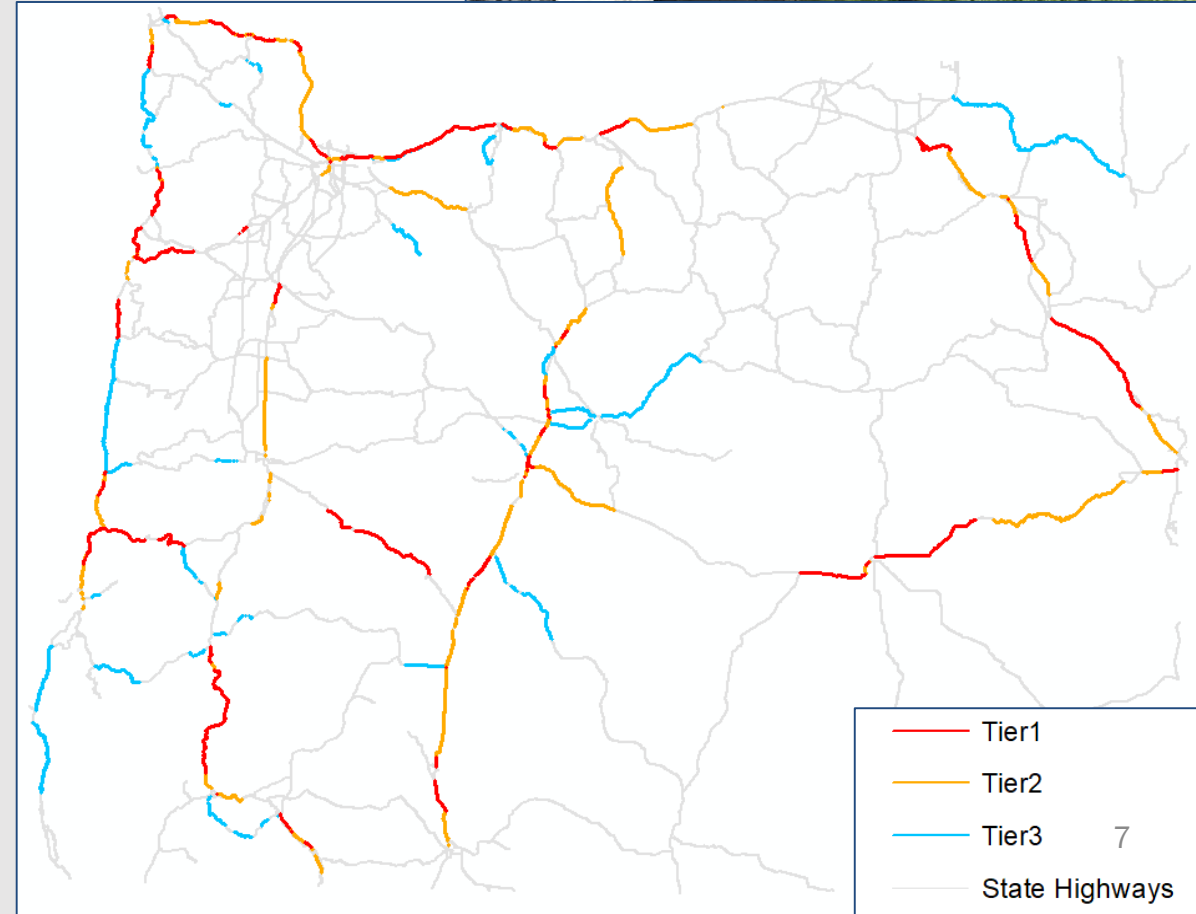


Roadmap Strategies

INSTITUTIONALIZE RESILIENCE PRIORITY		ADOPT RESEARCH AND DATA-DRIVEN DECISION-MAKING		MAXIMIZE RESILIENCE INVESTMENTS		BUILD & MAINTAIN CLIMATE-RESILIENT INFRASTRUCTURE	
1.1	Codify climate considerations in policy plans and decision-making processes	2.1	Develop and implement resilience research plan	3.1	Develop Resilience Investment Strategy	4.1	Connect System-Level Risk Assessment to Project-Level Planning and Decision-making
1.2	Adopt holistic all-hazards approach to address system vulnerabilities	2.2	Adopt resilience performance measures, monitor and report on agency performance	3.2	Build a business case for resilience investments.	4.2	Pilot context-sensitive solutions, promote green infrastructure options wherever practicable
1.3	Facilitate collaborative, multi-partner approaches to climate risk and disaster planning efforts	2.3	Deploy comprehensive incident and hazard event, cost and other data-tracking systems necessary to enable climate informed decisions	3.3	Prepare ODOT for funding opportunities to ensure the agency is competitive	4.3	Adopt climate informed design standards, guidance, and tools
		2.4	Provide guidance, education and training regarding new data systems, tools and emerging technology			4.4	Update maintenance practices to increase proactive maintenance on resilience corridors.

Implementation Action Preview

- Roadmap Goal Area 4:
Build & Maintain Climate Resilient Infrastructure
- Roadmap Strategy 4.1:
Connect system-level risk assessment to project-level planning and decision-making
- Proposed Strategic Action:
Prioritize projects on resilience corridors for strategic investment and adopt hazard risk maps for identifying high-risk location projects for opportunistic investment



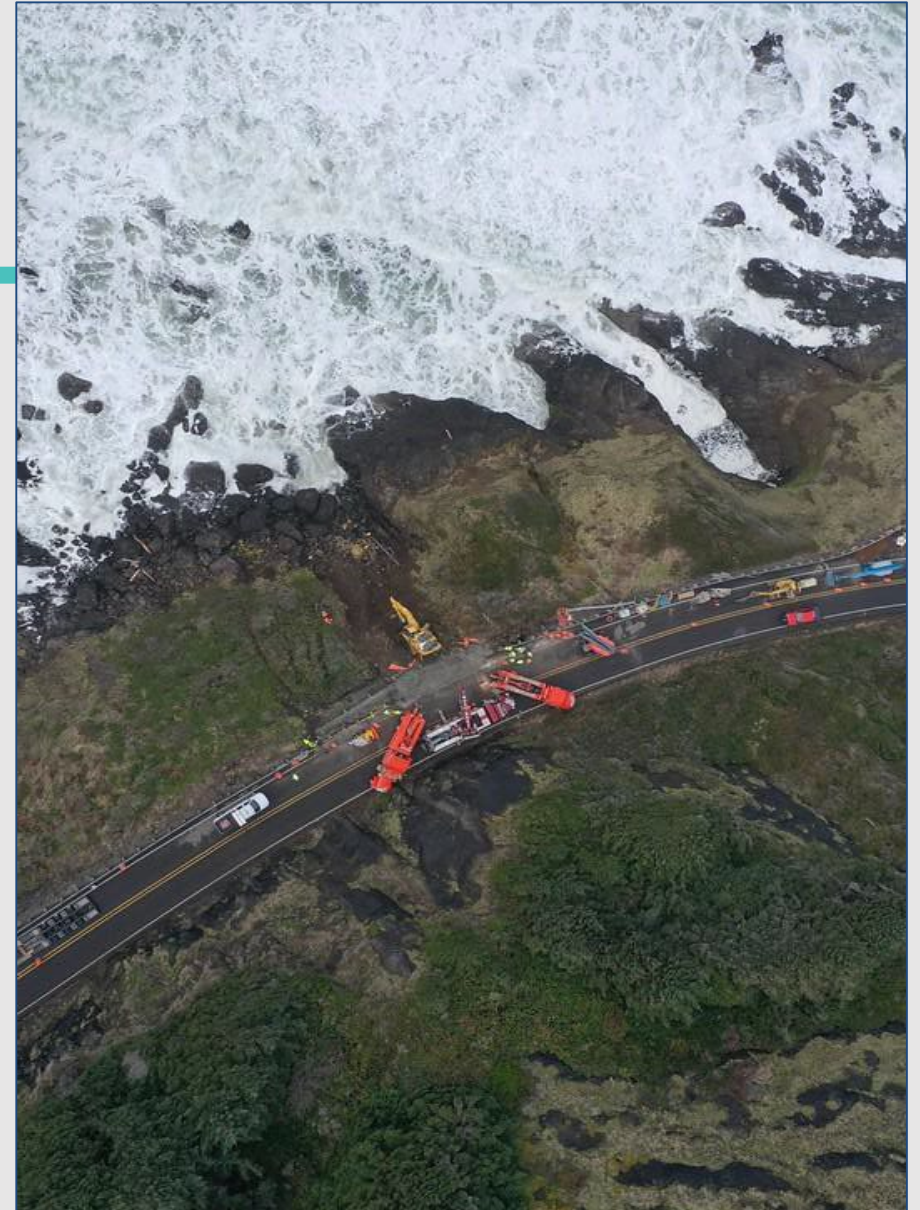
Investment Applications

- Roadmap satisfies FHWA PROTECT Resilience Plan
 - Potential 7-10% match reduction for PROTECT projects
- Piloting resilience corridors and climate hazard risk maps for PROTECT projects
- Modeling underway on economic impacts of potential disruption on goods movement and travelers
 - Establish a business case for resilience improvements
 - Inform corridor and asset investments for legislative engagement and competitive funding.



Next Steps

- Q4 2022 – Roadmap Vetting and Finalization
 - PROTECT Resilience Plan – FHWA Submission
- Q1 2023 - Economic Impact Analysis and Investment Packages
 - Begin agency-wide operational planning and implementation
- Q3 2023 – Monitor and adapt



Medium and Heavy Duty Zero Emission Vehicle Incentives



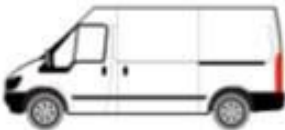









November 17, 2022

Medium/Heavy Duty Incentive Report (HB5202)

- 2021 Legislature requested *“an analysis of existing incentives available to support the transition to zero emission medium and heavy-duty transportation fleets”*.
- Joint effort by DEQ/ODOT
 - DEQ led, ODOT support
 - Industry and stakeholder engagement
- Report includes:
 - Background on climate goals & programs
 - Primer on MHD vehicles and refueling
 - Existing conditions in Oregon
 - National models/best practices
 - Stakeholder feedback
 - Recommendations



Medium and Heavy Duty Vehicle Classifications

Weight Class	Class 2b	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8
Example Vehicles	  		  		  		  
GVWR	8,500 – 10,000 lb 3,856 – 4,536 kg	10,001 – 14,000 lb 4,536 – 6,350 kg	14,001 – 16,000 lb 6,351 – 7,257 kg	16,001 – 19,500 lb 7,258 – 8,845 kg	19,501 – 26,000 lb 8,846 – 11,793 kg	26,001 – 33,000 lb 11,794 – 14,969 kg	> 33,000 lb > 14,969 kg

Existing Conditions in Oregon

- Some funding for zero emission vehicles and infrastructure, with vast majority on light-duty
- Existing MHD Programs include:
 - ODEQ MHD Charging Pilot
 - ODEQ Clean Fuels Program
 - Investor Owned Utility Fleet Programs
 - Competitive federal opportunities: e.g. Diesel Emissions Reduction Act (DERA), Low/No Transit Bus, IIJA Sect. 11401
- Conclusion: Available incentives not sufficient to move market

Partner listening sessions: What we heard



Incentives needed to support transition



Support infrastructure, with and without vehicle purchase



Design should incorporate learnings from other states

Next Steps

- Report due to Joint Committee on Transportation December 1, 2022
- Recommends MHD vehicle and infrastructure incentive programs, including suggestions on program design
- ODOT and DEQ working with partner agencies, industry and local governments to support ZEV adoption



Daimler & PGE's Electric Island in Portland, OR

Questions