

Development of the 2024-2027 Statewide Transportation Improvement Program

December 1, 2020

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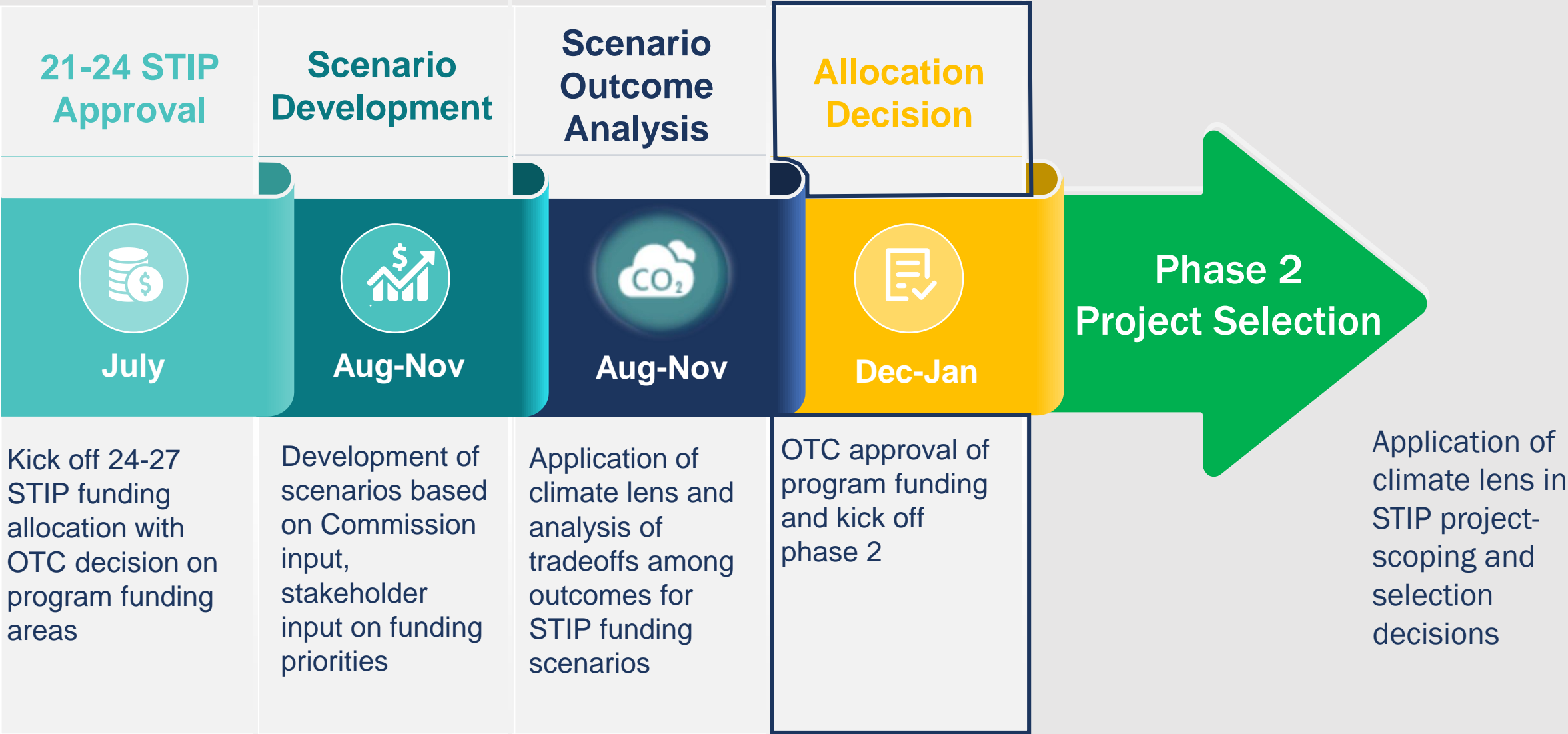
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Outline of Today's Discussion

- Overview of Decisions in December & January
- Public Input Overview
- Scenario Discussion & Decision

2024-2027 STIP Development & Analysis Process





STIP Funding Allocation Decisions

December

- OTC selects funding scenario

January

- ODOT presents program allocations
- OTC direction on how to plan for any additional federal funds

January: Program-Level Funding Decisions



Enhance Highway

What types of projects should we prioritize?



Non-Highway

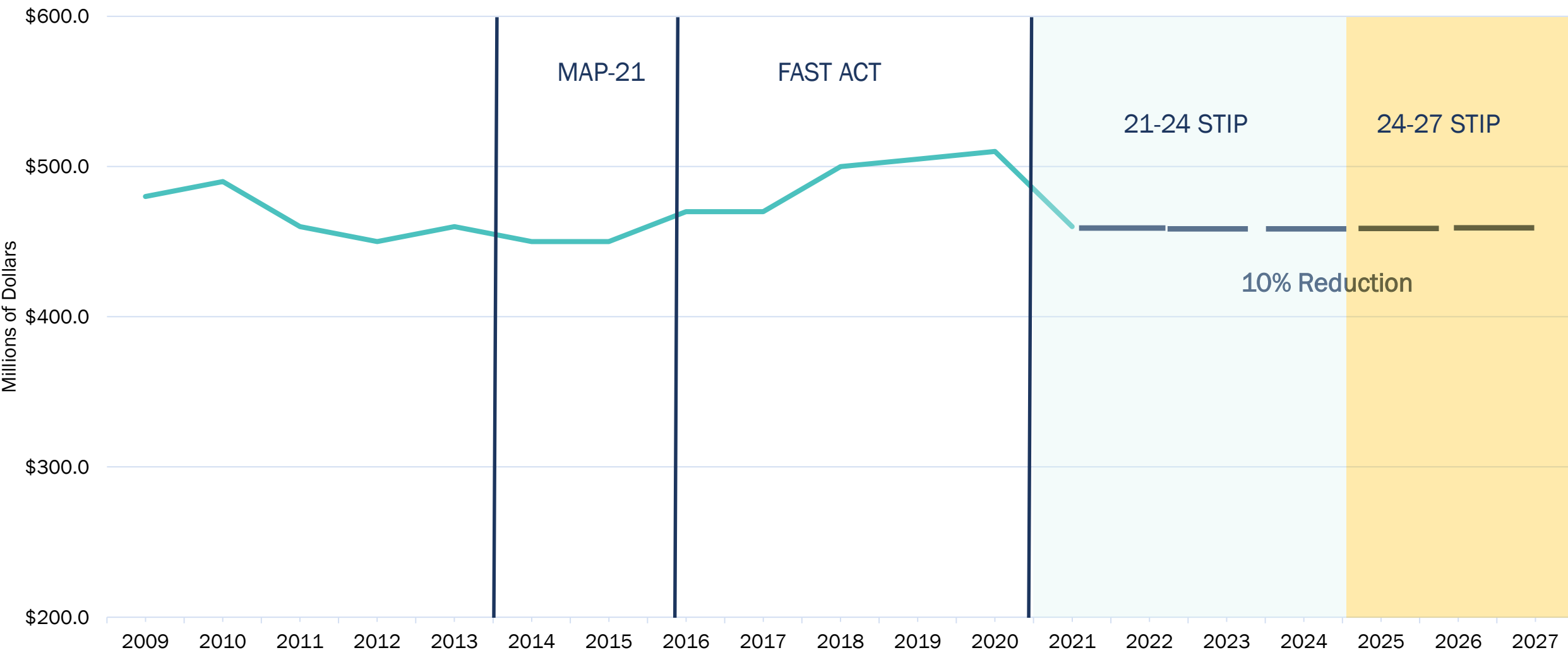
How much should we allocate to transit and bicycle/pedestrian?
What are the priorities within each mode?



Fix-It

How much should we spend on each type of asset?

January: Planning for Additional Federal Funding



A worker in a blue safety suit and hard hat is positioned on a blue lift bucket, working on a steel bridge structure. The background is a dense forest of green trees. The entire image has a dark blue overlay.

Public Input Overview

STIP Public Engagement and Input Opportunities in Phase II

- Advisory committee discussions on funding scenarios
- Online open house for public comment on funding scenarios
- Webinar on November 2 for public comment opportunity
- Encouraging stakeholders to weigh in through letters to the OTC



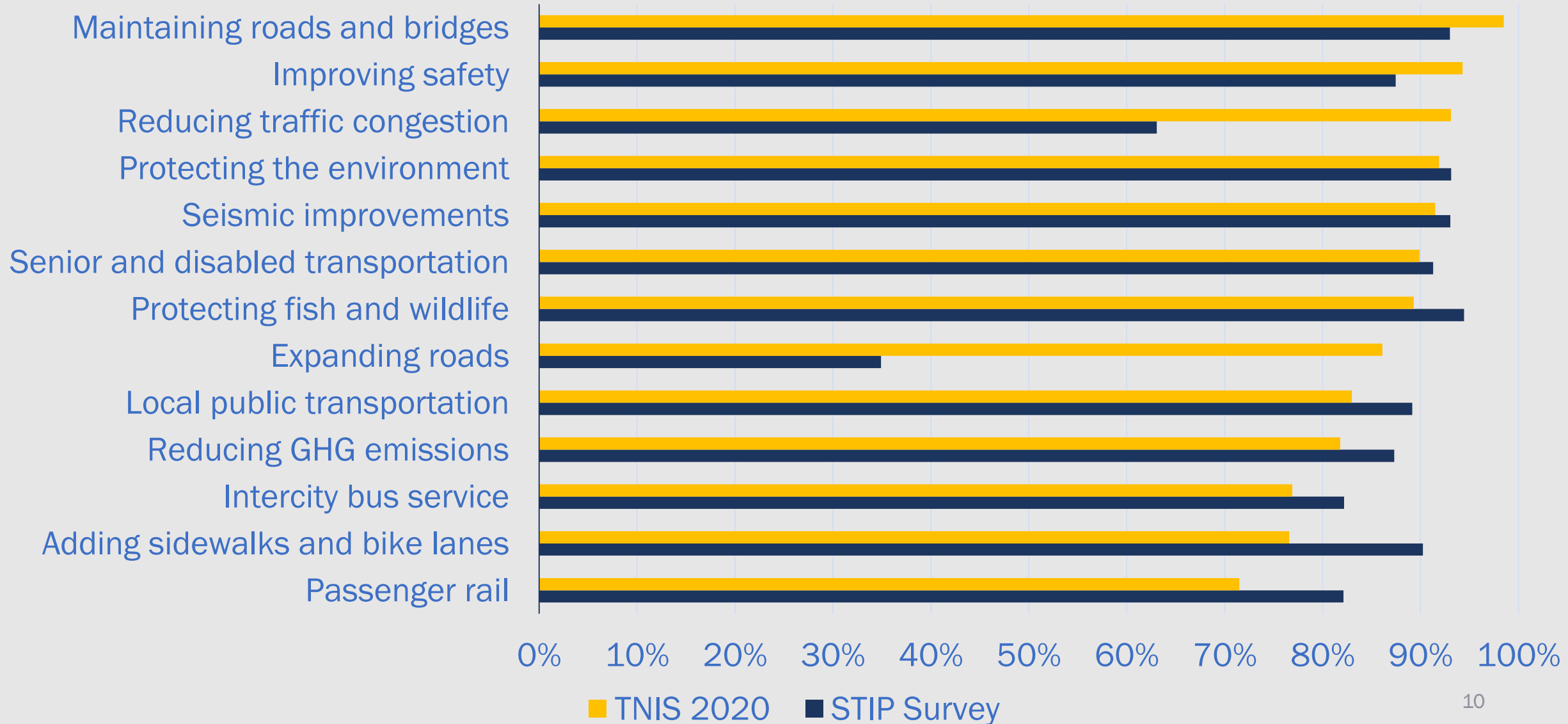
Themes of Public Input

- Support to increase Non-Highway funding to advance equity, address climate, and enhance accessibility and mobility for all
- Support for Fix-It investments and reluctance to cut spending on bridge & pavement preservation to avoid accelerating system deterioration
- Support for Enhance Highway investments to reduce congestion and help economy



Spending Priorities in the 2024-2027 STIP

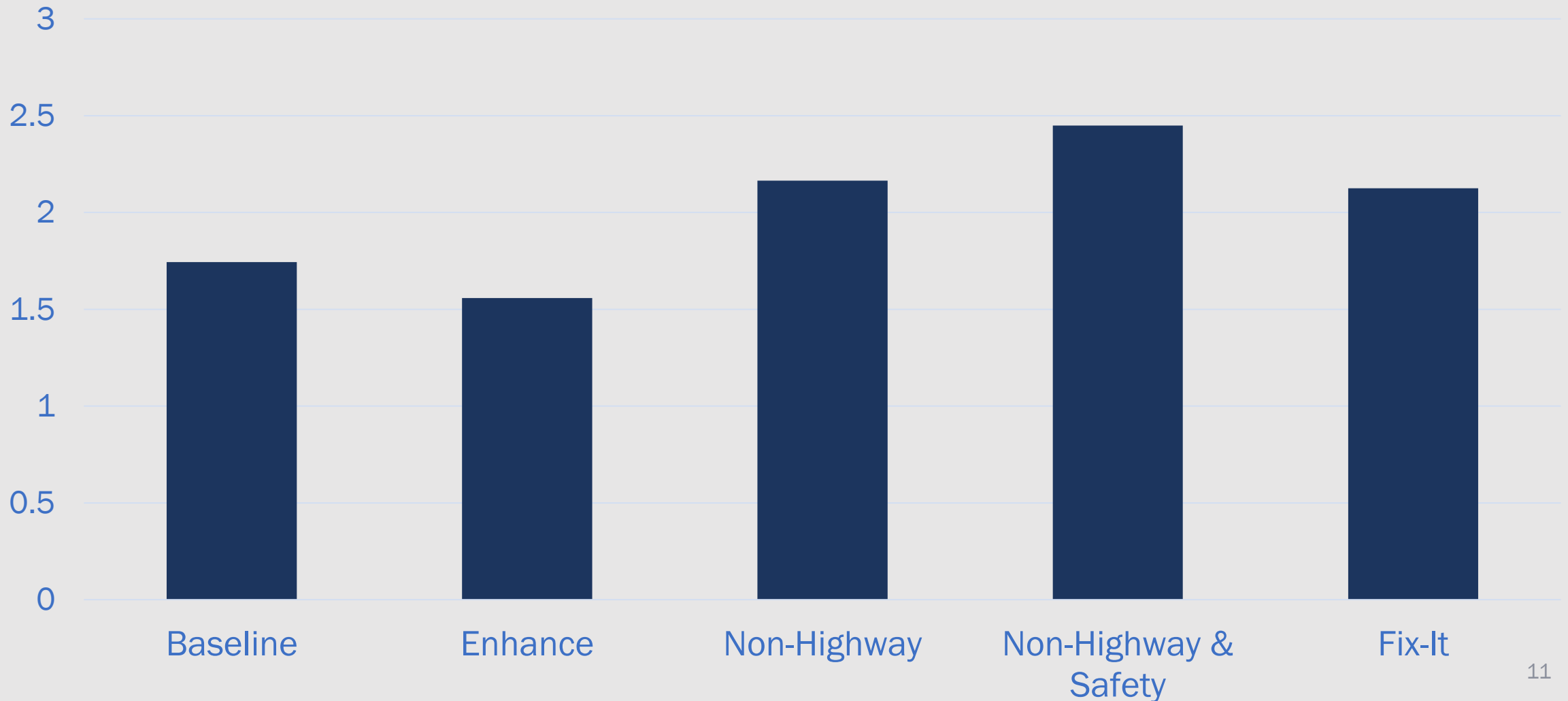
Percent Saying the Area is Somewhat or Very Important



Online Open House: Scenario Rankings

Which option would best help advance Oregon's transportation goals?

0-4 scale, higher numbers show stronger support



Online Open House: Key Themes in Comments

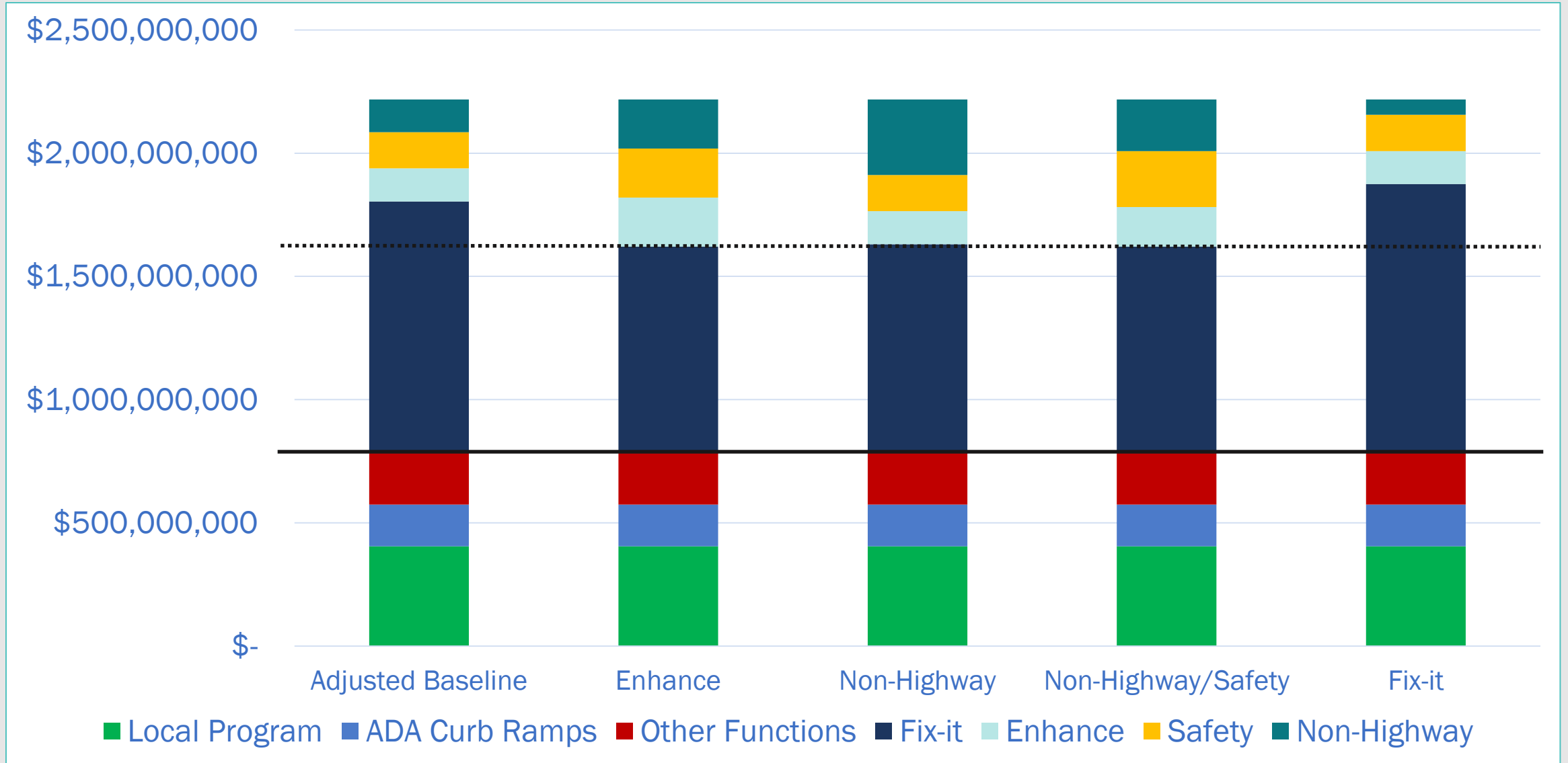
- Address climate change (59)
- Focus on preservation and safety (39)
- Prioritize safety (33)
- Prioritize non-highway improvements (27)
- Prioritize public transit and rail (22)
- Focus on bicycle/pedestrian projects (23)



A worker in a red safety suit and hard hat is positioned on a blue lift bucket, working on a steel bridge structure. The background is a dense forest of green trees. The entire image has a blue tint.

Scenario Discussion & Decision

2024-2027 STIP Initial Scenarios



Tradeoffs – Scenario Results Relative to Adjusted Baseline

IMPACT OF SCENARIO FUNDING LEVELS ACROSS DESIRED OUTCOME AREAS	ADJUSTED BASELINE	S1 ENHANCE	S2 NON-HIGHWAY	S3 SAFETY/ NON-HIGHWAY	S4 FIX-IT
	+6 FIX-IT (-7% NON-HIGHWAY)	+271% ENHANCE +35% NON-HIGHWAY +35% SAFETY (-15% FIX-IT)	+103% NON-HIGHWAY (-14% FIX-IT)	+103% ENHANCE +55% SAFETY +42% NON-HIGHWAY (-15% FIX-IT)	+14% FIX-IT (-51% NON-HIGHWAY)
CLIMATE CHANGE - GHG MITIGATION	D- Most trips drive alone & in low MPG cars				
CLIMATE CHANGE - ADAPTATION/ RESILIENCE	C- Slow progress with preservation projects				
CONGESTION RELIEF	B- Select, legislatively funded bottleneck projects in development				
SOCIAL EQUITY	C- Few low cost travel options				
MULTIMODAL MOBILITY	D Many connectivity gaps				
SAFETY	B Focus on fatalities and serious injuries				
STATE OF GOOD REPAIR	C Several assets and areas deteriorating				

Note: Changes to program funding levels are relative to 2021-2024 STIP funding; Enhance Highway funding calculations exclude HB 2017 earmarked funds

Note: All changes to fix-it funding levels account for the \$120M reduction for 2021-2024 ADA requirements

New Proposed Hybrid Scenarios

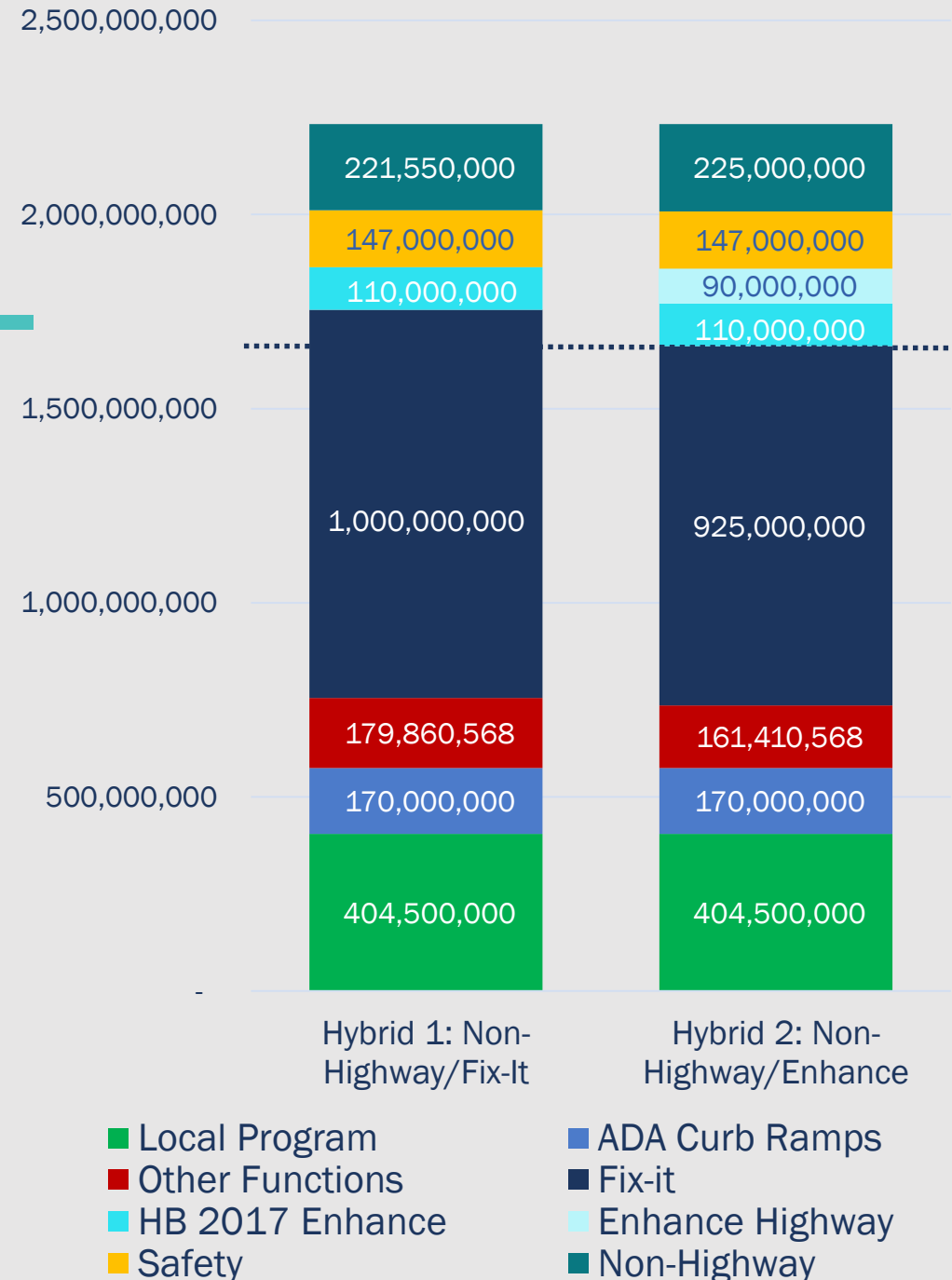
CHANGES IN FUNDING RELATIVE TO 2021-2024 STIP FUNDING

PROGRAM FUNDING CATEGORY	HYBRID 1: NON-HIGHWAY/FIX-IT	HYBRID 2; NON-HIGHWAY/ENHANCE
FIX-IT	▲ 4%	▼ 5%
ENHANCE HIGHWAY (DISCRETIONARY)	▼ 100%	▲ 275%
NON-HIGHWAY	▲ 40%	▲ 42%
SAFETY	=	=
LOCAL	=	=
ADA CURB RAMPS	=	=

Both Hybrid Scenarios maintain funding levels reflected in the Adjusted Baseline Scenario for these program funding categories

Note: Changes to program funding levels are relative to 2021-2024 STIP funding; Enhance Highway funding calculations exclude HB 2017 earmarked funds

Note: All changes to fix-it funding levels account for the \$120M reduction for 2021-2024 ADA requirements



- Local Program
- ADA Curb Ramps
- Other Functions
- Fix-it
- HB 2017 Enhance
- Enhance Highway
- Safety
- Non-Highway

Tradeoffs – considerations when evaluating STIP funding scenarios

Program funding categories are distinct, but not siloed

Fix-it

Enhance

Safety

Non-Highway

70% of projects are funded by more than one of these programs

Safety is engrained throughout ODOT investments

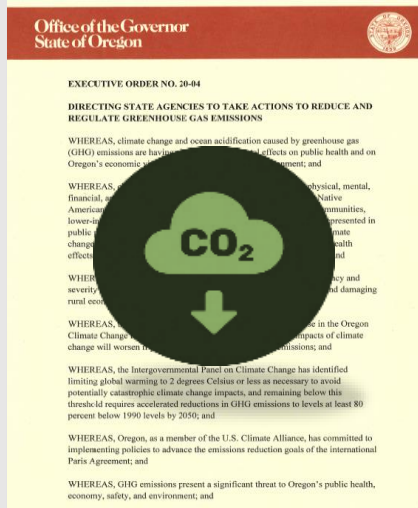
At least \$0.60 of every \$1.00 spent in any program funding category benefits safety



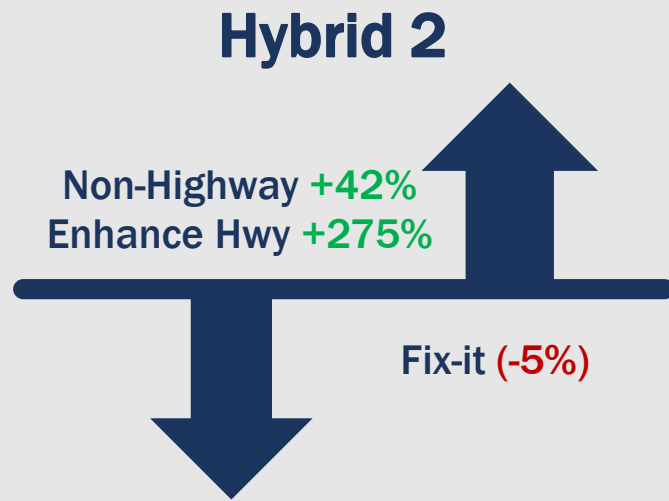
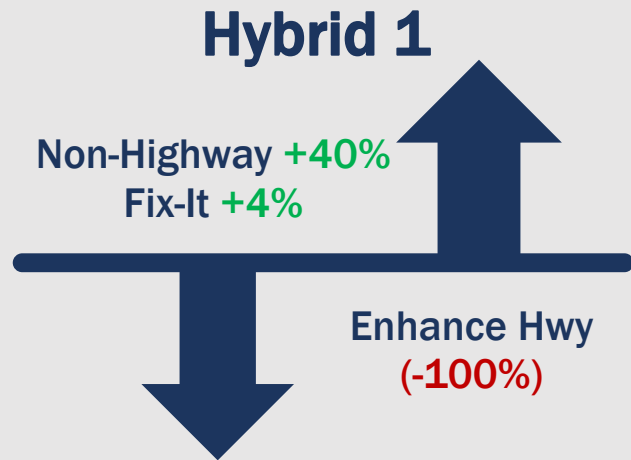
Impacts on GHG Emissions Mitigation

The OTC is required to consider GHG emissions in STIP decisions

- The scenario results in this presentation were developed by the Climate Office and show which scenarios will reduce GHG emissions (green boxes in tradeoff charts)
- After the OTC determines program allocations, the Climate Office will inform project selection and report on GHG totals in the final STIP
- Analysis will show additional opportunities, but different actions are needed to reduce GHG



Summary Results – Hybrid Scenarios



IMPACT OF SCENARIO FUNDING LEVELS ACROSS DESIRED OUTCOME AREAS			
	ADJUSTED BASELINE	HYBRID 1: NON-HIGHWAY/ FIX-IT	HYBRID 2: NON-HIGHWAY/ ENHANCE
CLIMATE CHANGE - GHG MITIGATION	D- Most trips drive alone & in low MPG cars	Slight GHG reductions anticipated <i>(performs 2nd best overall behind non-highway scenario)</i>	No emission reductions Non-highway and enhance offset <i>(performs 2nd worst behind fix-it scenario and same as baseline)</i>
CLIMATE CHANGE - ADAPTATION/ RESILIENCE	C- Slow progress with preservation projects	Slight, marginal decline <i>(performs roughly same as the baseline and better than enhance and non-highway scenarios)</i>	Fewer adaptation projects <i>(marginal decline from baseline but still better than enhance and non-highway scenarios)</i>
CONGESTION RELIEF	B- Select, legislatively funded bottleneck projects in development	Less resources for bottleneck projects but is offset some by multimodal projects <i>(overall performance is similar to baseline)</i>	Some funding for critical bottlenecks <i>(performs best overall for congestion)</i>
SOCIAL EQUITY	C- Few low cost travel options	Slight increase in access for all users <i>(does not perform as well as non-highway scenarios but better than enhance, baseline and fix-it scenarios)</i>	Slight increase in access for all users <i>(does not perform as well as non-highway scenarios but better than enhance, baseline and fix-it scenarios)</i>
MULTIMODAL MOBILITY	D Many connectivity gaps	Small increase in bikeways, walkways, TDM programs, etc. <i>(does not perform as well as non-highway scenarios but better than enhance, baseline and fix-it scenarios)</i>	Small increase in bikeways, walkways, TDM programs, etc. <i>(does not perform as well as non-highway scenarios but better than enhance, baseline and fix-it scenarios)</i>
SAFETY	B Focus on fatalities and serious injuries	No change from baseline <i>(safety funding flat, consistent with baseline and 21-24 STIP)</i>	No change from baseline <i>(safety funding flat, consistent with baseline and 21-24 STIP)</i>
STATE OF GOOD REPAIR	C Several assets and areas deteriorating	Consistent with baseline <i>(Funding consistent with 21-24 STIP; expect continued system decline)</i>	Small decline <i>(decline from baseline but not as much as enhance and non-highway scenarios; slightly more rapid decline)</i>

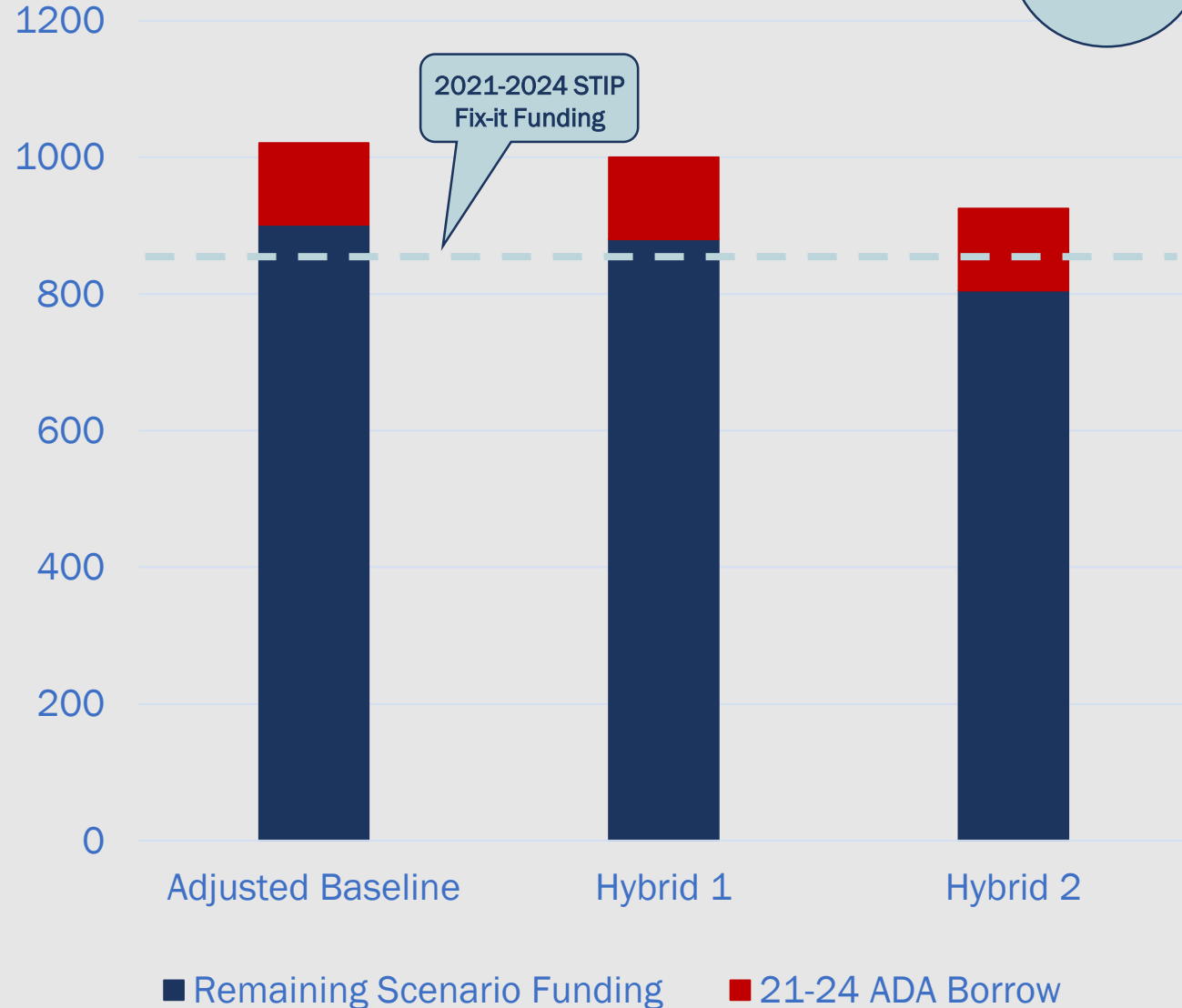
Overall, hybrids help to lessen hit to Fix-It and show directionality for other outcomes

Tradeoffs – Impacts of Hybrid Scenarios on SOGR

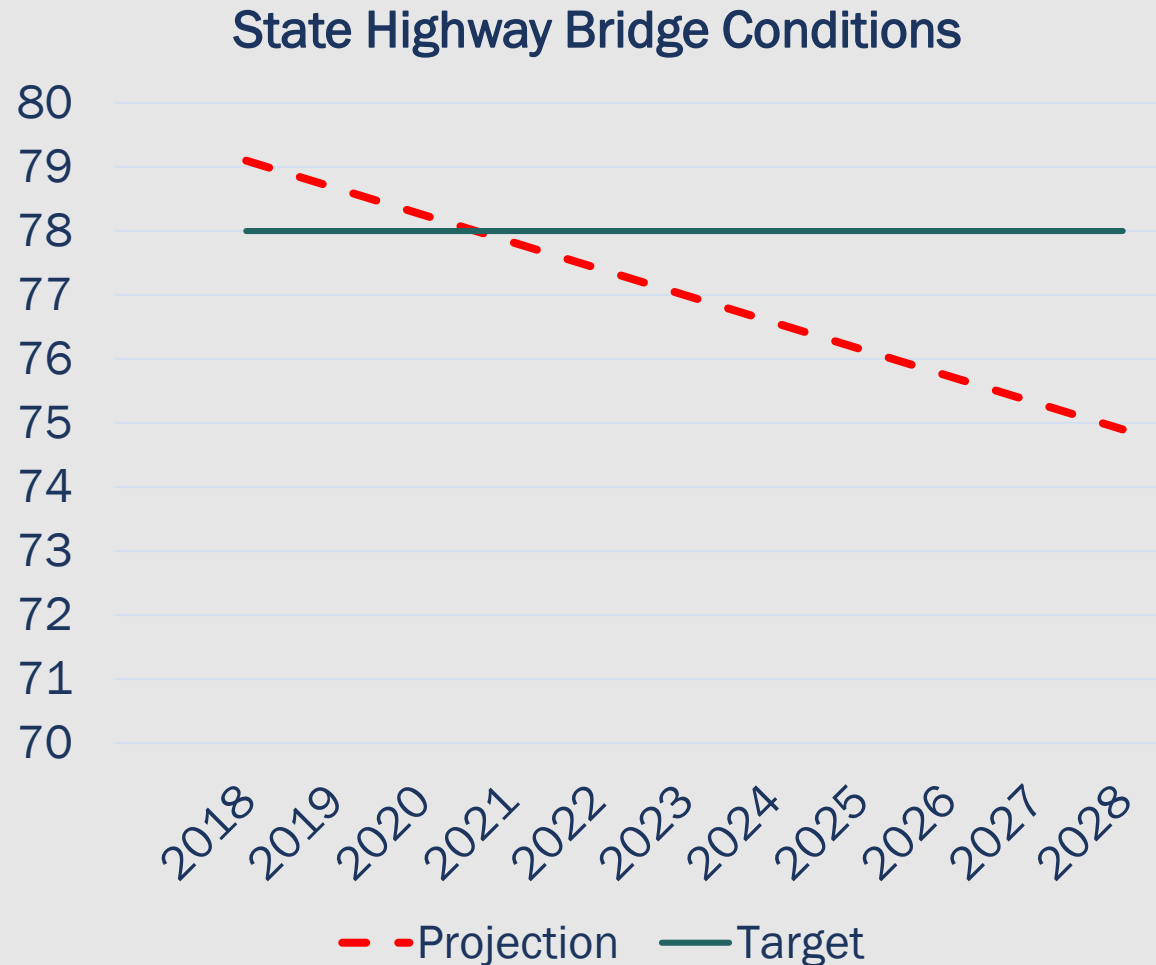


	FIX-IT	ADJUSTMENT FOR ADA
2021-2024 FUNDING	\$848	\$848
2024-2027 ADJUSTED BASELINE (AB)	\$1021	\$901
CHANGES RELATIVE TO 2021-2024	20% Increase	6% Increase
HYBRID 1	\$1000	\$880
CHANGES RELATIVE TO 2021-2024	18% Increase	4% Increase
HYBRID 2	\$925	\$805
CHANGES RELATIVE TO 2021-2024	9% Increase	5% Decrease

* REFERENCED \$ AMOUNTS IN MILLIONS



Tradeoffs – State of Good Repair Under Hybrid 1



Bridges

- 900 year bridge replacement cycle
- Continue making “throw-away” repairs to bridges that should be replaced
- Bridges off Priority Corridors limited for heavy loads in near term

Pavements

- 50 year paving cycle- average pavement life is 25 years with patching
- Conditions off Priority Corridors decline due to very few paving projects

Tradeoffs— State of Good Repair Under Hybrid 2

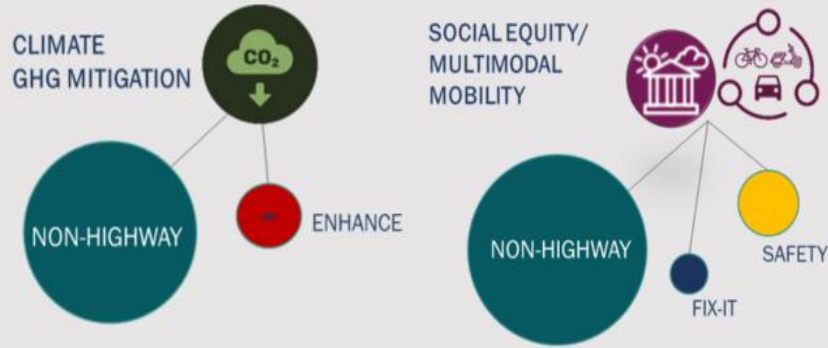
- Adds to backlog of work; conditions decline faster
- Even more throw-away work for bridges
- Load postings on bridges accelerate
- Maintenance on some rural highways ceases
- Users will notice rougher roads primarily on low-volume highways
- Negative impacts on resilience and climate adaptation across all programs



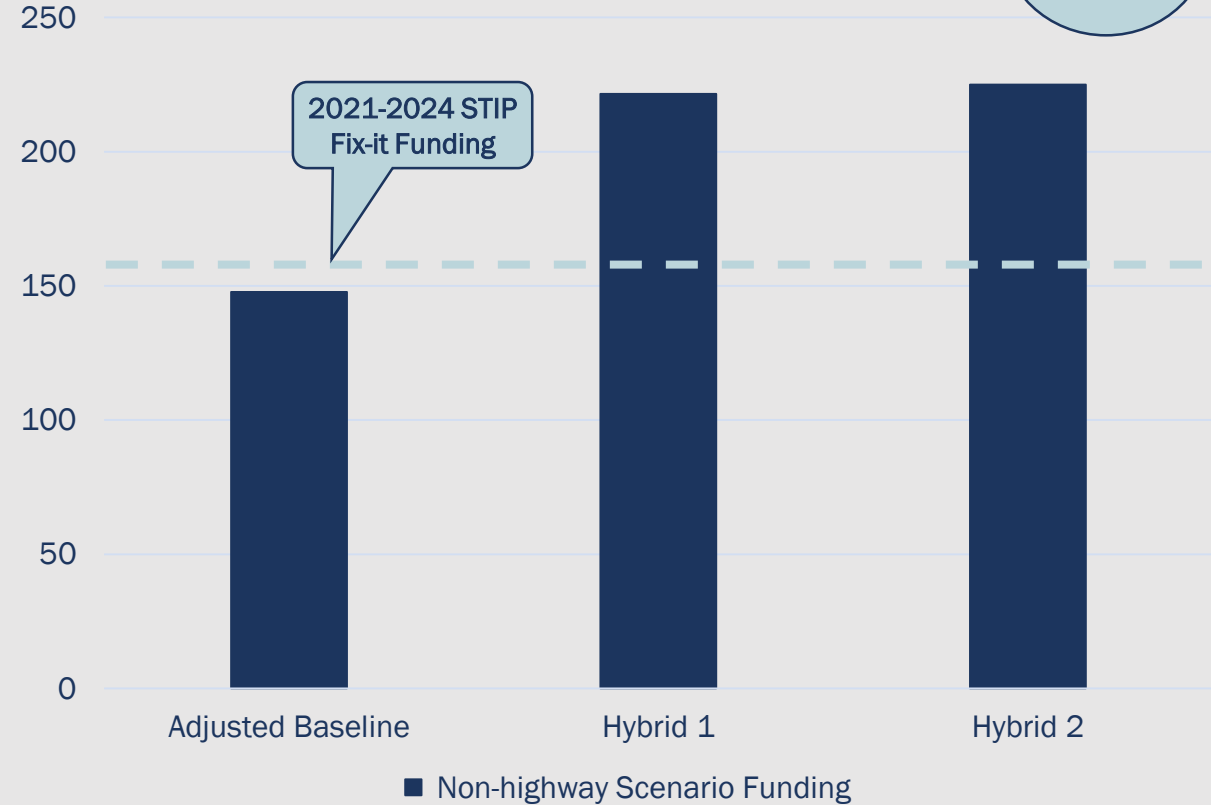
Tradeoffs – Impacts of Hybrid Scenarios on Other Outcomes



- Getting to different outcomes will require changes in decision-making
- Increased investment in non-highway most benefits Climate Change GHG Mitigation, Multimodal Mobility, and Social Equity outcomes



- Needs far outweigh available funds; top among historically underfunded outcome areas, include:
 - Climate Change GHG Mitigation
 - Multimodal Mobility and Social Equity



HYBRID 1

40% increase to non-highway funding, 100% decrease to enhance highway funding; maintaining status quo 21-24 funding for fix-it (4% increase)

IMPACTS:

- Slight reductions to GHG emissions anticipated
- Increased access for all users
- Increase in bikeways, walkways, and TDM programs

HYBRID 2

275% Increase to enhance highway funding, 42% increase to non-highway funding; 5% decrease from status quo 21-24 fix-it funding

IMPACTS:

- GHG emissions reductions gained in Hybrid 1 offset by increased Enhance Highway in Hybrid 2
- Some funding available to address critical bottlenecks
- Increased access for all users
- Increase in bikeways, walkways, and TDM programs

Possible Modifications – Hybrid 2B and Hybrid 3

CHANGES IN FUNDING-LEVELS RELATIVE TO 2021-2024 STIP (DOLLAR AMOUNTS SHOWN IN MILLIONS)

CATEGORY	21-24 STIP*	ADJUSTED BASELINE		HYBRID 1		HYBRID 2-A		HYBRID 2-B		HYBRID 3	
FIX-IT**	\$850	▲ 6%	\$902	▲ 4%	\$880	▼ 5%	\$805	▼ 5%	\$805	▼ 32%	\$579
ENHANCE HWY DISCRETIONARY	\$24	=	\$24	▼ 100%	\$0	▲ 275%	\$90	▲ 192%	\$70	▲ 400%	\$120
NON-HIGHWAY	\$158	▼ 6%	\$148	▲ 40%	\$221.5	▲ 42%	\$225	▲ 55%	\$245	▲ 86%	\$294
SAFETY	\$147	=	\$147	=	\$147	=	\$147	=	\$147	▲ 55%	\$228

*Initial funding allocation approved by OTC in December 2017; ADA curb ramps were funded in Non-Highway and Fix-it categories

**Fix-it Funding Adjusted to account for borrowing funds for 2021-2024 ADA needs

IMPACT OF SCENARIO FUNDING LEVELS ACROSS DESIRED OUTCOME AREAS

	ADJUSTED BASELINE	HYBRID 1: NON-HIGHWAY/ FIX-IT	HYBRID 2A: NON-HIGHWAY/ ENHANCE	HYBRID 2B: NON-HIGHWAY/ ENHANCE	HYBRID 3: SAFETY/NON-HIGHWAY + ENHANCE
GHG	D- Most trips drive alone & in low MPG cars	Slight GHG reductions anticipated <i>(does not perform as well as non-highway scenarios but better than enhance, baseline and fix-it scenarios)</i>	No emission reductions Non-highway and enhance offset <i>(performs 2nd worst behind fix-it scenario and same as baseline)</i>	Slight GHG reductions anticipated <i>(does not perform as well as non-highway scenarios but better than enhance, baseline and fix-it scenarios)</i>	Slight GHG reductions anticipated <i>(performs 2nd best overall behind non-highway scenario)</i>
ADAPTATION/ RESILIENCE	C- Slow progress with preservation projects	Slight, marginal decline <i>(performs roughly same as the baseline and better than enhance and non-highway scenarios)</i>	Fewer adaptation projects <i>(marginal decline from baseline but still better than enhance and non-highway scenarios)</i>	Fewer adaptation projects <i>(marginal decline from baseline but still better than enhance and non-highway scenarios)</i>	Less resilient system <i>(significant cut in Fix-it funding means fewer overall projects that address resiliency needs; performs worst overall)</i>
CONGESTION	B- Legislatively funded bottleneck projects	Less resources for bottleneck projects but is offset some by multimodal projects <i>(overall performance is similar to baseline)</i>	Some funding for critical bottlenecks <i>(performs 2nd best overall for congestion)</i>	Modest funding for critical bottlenecks <i>(small increase in funding to address critical bottlenecks)</i>	Start to address critical bottlenecks <i>(performs best overall with increase in funding to support critical bottlenecks)</i>
EQUITY	C- Few low cost travel options	Slight increase in access for all users <i>(does not perform as well as non-highway scenarios but better than enhance, baseline and fix-it scenarios)</i>	Slight increase in access for all users <i>(does not perform as well as non-highway scenarios but better than enhance, baseline and fix-it scenarios)</i>	Slight increase in access for all users <i>(performs 2nd best overall behind non-highway scenario)</i>	Increase in access for all users <i>(performs 2nd best overall closely behind non-highway scenario)</i>
MULTIMODAL	D Many connectivity gaps	Small increase in bikeways, walkways, TDM programs, etc. <i>(does not perform as well as non-highway scenarios but better than enhance, baseline and fix-it scenarios)</i>	Small increase in bikeways, walkways, TDM programs, etc. <i>(does not perform as well as non-highway scenarios but better than enhance, baseline and fix-it scenarios)</i>	Small increase in bikeways, walkways, TDM programs, etc. <i>(performs 3rd best overall behind non-highway scenario, and hybrid 3)</i>	Cuts timeframe to complete the biking and walking system in half <i>(performs 2nd best overall closely behind non-highway scenario)</i>
SAFETY	B Focus on fatalities and serious injuries	No change from baseline <i>(safety funding flat, consistent with baseline and 21-24 STIP)</i>	No change from baseline <i>(safety funding flat, consistent with baseline and 21-24 STIP)</i>	No change from baseline <i>(safety funding flat, consistent with baseline and 21-24 STIP)</i>	More targeted safety investments <i>(targeted safety investments to fatalities and serious injuries. Tied for best overall safety performance with Scenario 3)</i>
SOCR	C Several assets and areas deteriorating	Consistent with baseline <i>(Funding consistent with 21-24 STIP; expect continued system decline)</i>	Small decline <i>(decline from baseline but not as much as enhance and non-highway scenarios; slightly more rapid decline)</i>	Small decline <i>(decline from baseline but not as much as enhance and non-highway scenarios; slightly more rapid decline)</i>	Rapid decline in conditions <i>(decline of system conditions significantly worsens and would not be able to meet KPMs by roughly 2024.)</i>

NEW

	ADJUSTED BASELINE	S1 ENHANCE	S2 NON-HIGHWAY	S3 SAFETY/ NON-HIGHWAY	S4 FIX-IT	HYBRID 1 NON-HIGHWAY/ FIX-IT	HYBRID 2A: NON-HIGHWAY/ ENHANCE	HYBRID 2B: NON-HIGHWAY/ ENHANCE	HYBRID 3: SAFETY/NON-HIGHWAY + ENHANCE
	+6 FIX-IT (-7% NON-HWY)	+271% ENHANCE +35% NON-HWY +35% SAFETY (-15% FIX-IT)	+103% NON-HWY (-14% FIX-IT)	+103% ENHANCE +55% SAFETY +42% NON-HWY (-15% FIX-IT)	+14% FIX-IT (-51% NON-HWY)	+40% NON-HWY +4% FIX-IT (-100% ENHANCE)	+275% ENHANCE +42% NON-HWY (-5% FIX-IT)	+192% ENHANCE +55% NON-HWY (-5% FIX-IT)	+400% ENHANCE +55% SAFETY +86% NON-HWY (-32% FIX-IT)
GHG	D-								
ADAPTATION/ RESILIENCE	C-								
CONGESTION	B-								
EQUITY	C-								
MULTIMODAL	D								
SAFETY	B								
SOGR	C								

Note: Changes to program funding levels are relative to 2021-2024 STIP funding; Enhance Highway funding calculations exclude HB 2017 earmarked funds
Note: All changes to fix-it funding levels account for the \$120M reduction for 2021-2024 ADA requirements

A worker in a blue safety suit and hard hat is positioned on a blue lift bucket, working on a steel bridge structure. The background is a dense forest of green trees. The scene is overlaid with a semi-transparent blue filter.

Discussion & Decision

Funding for Hybrid Scenarios

CATEGORY	2021-2024 STIP*	ADJUSTED BASELINE	HYBRID 1: NON-HIGHWAY/FIX-IT	HYBRID 2: NON-HIGHWAY/ENHANCE
Local Program	406,781,419	404,500,000	404,500,000	404,500,000
ADA Curb Ramps	—*	170,000,000	170,000,000	170,000,000
Other Functions	158,850,000	207,850,000	179,860,568	161,410,568
Fix-it	850,000,000	901,860,568**	880,000,000**	805,000,000**
Enhance Highway HB 2017	662,750,000	110,000,000	110,000,000	110,000,000
Enhance Highway	24,000,000	24,000,000	0	90,000,000
Safety	146,850,000	147,000,000	147,000,000	147,000,000
Non-Highway	158,286,568*	147,700,000	221,550,000	225,000,000
Total	2,407,348,248	2,112,910,568	2,112,910,568	2,112,910,568

*Initial funding allocation approved by OTC in December 2017; ADA curb ramps were funded in Non-Highway and Fix-it categories

**Adjusted for borrowing \$120 million from Fix-It to cover ADA needs in the 2021-2024 STIP

Funding for Hybrid Scenarios

CHANGES IN FUNDING-LEVELS RELATIVE TO 2021-2024 STIP (DOLLAR AMOUNTS SHOWN IN MILLIONS)

PROGRAM FUNDING CATEGORY	2021-2024 STIP FUNDING*	ADJUSTED BASELINE		S1 - ENHANCE		S2 - NON-HIGHWAY		S3 - SAFETY/ NON-HIGHWAY		S4 - FIX-IT		HYBRID 1		HYBRID 2	
		% Change	Amount	% Change	Amount	% Change	Amount	% Change	Amount	% Change	Amount	% Change	Amount	% Change	Amount
FIX-IT**	\$850	▲ 6%	\$902	▼ 15%	\$719	▼ 14%	\$728	▼ 15%	\$719	▲ 14%	\$972	▲ 4%	\$880	▼ 5%	\$805
ENHANCE	\$24	=	\$24	▲ 270%	\$89	=	\$24	▲ 103%	\$50	=	\$24	▼ 100%	\$0	▲ 275%	\$90
NON-HIGHWAY	\$158	▼ 6%	\$148	▲ 35%	\$214	▲ 103%	\$321	▲ 42%	\$224	▼ 51%	\$77	▲ 40%	\$221.5	▲ 42%	\$225
SAFETY	\$147	=	\$147	▲ 35%	\$199	=	\$147	▲ 55%	\$227.5	=	\$147	=	\$147	=	\$147

*Initial funding allocation approved by OTC in December 2017; ADA curb ramps were funded in Non-Highway and Fix-it categories

**Fix-it Funding Adjusted to account for borrowing funds for 2021-2024 ADA needs

Fix-It Priority Corridors

- Major highways that carry most traffic– particularly freight– and connect most population centers
- Receive priority for Fix-It investments

