



NORTH CAROLINA
Department of Transportation

2024-2033 STIP Development

How we got here and where we go

April 2022

Strategic Transportation Investments Law

Projects Submitted

By MPOs, RPOs, and NCDOT Division Engineers

**Statewide Mobility
40% of Funds**

Address Significant Congestion and Bottlenecks

- Selection based on 100% Data
- Projects selected prior to Local Input

**Regional Impact
(30%) of Funds**

Improve Connectivity within Regions

- Selection based on 70% Data & 30% Local Input
- Funding based on population within each Region (7)

**Division Needs
(30%) of Funds**

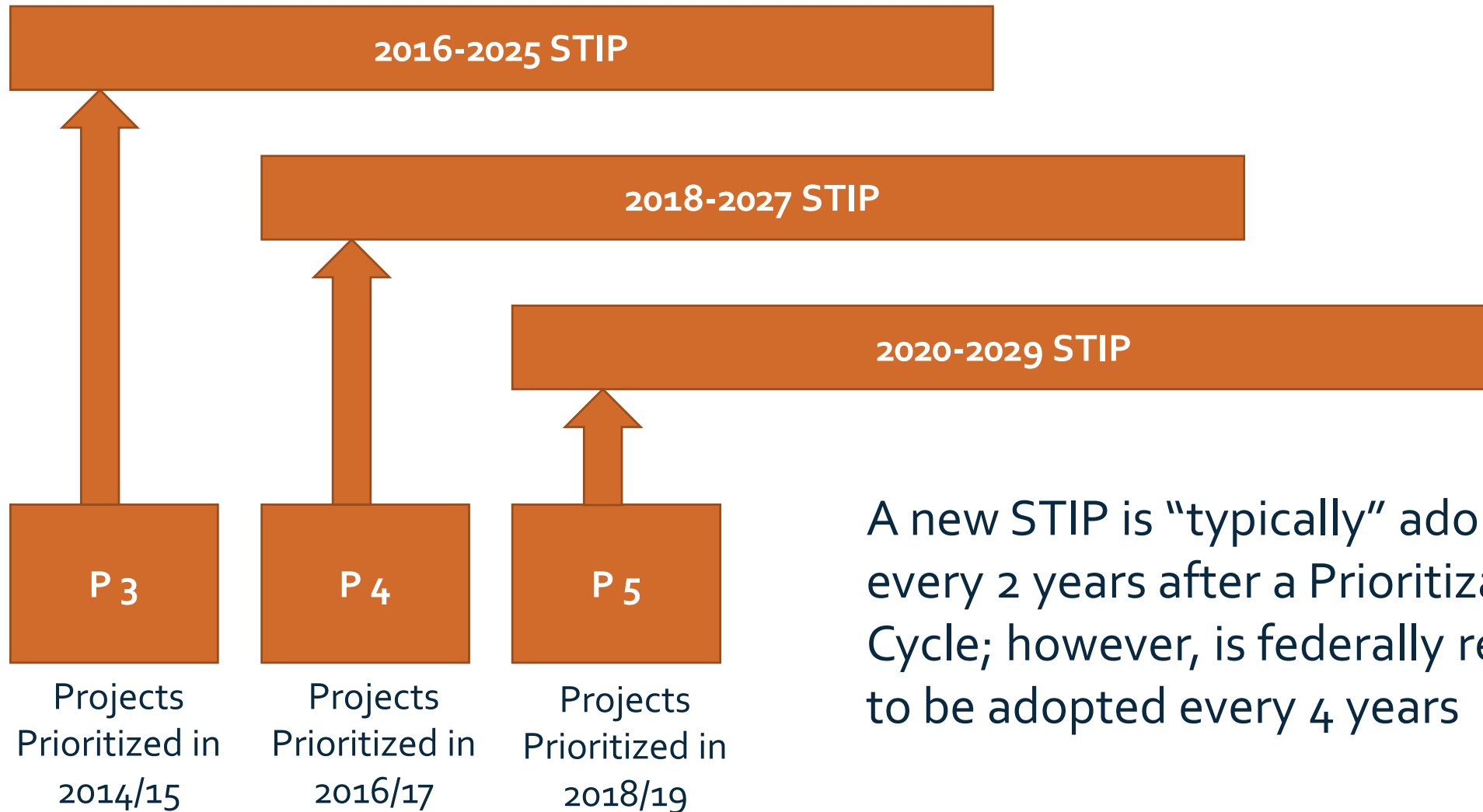
Address Local Needs

- Selection based on 50% Data & 50% Local Input
- Funding based on an equal share for each NCDOT Division (14)

Strategic Transportation Investments Law



Previous STIPs Created Under STI Law



How We Got Here

STIP Budget / Project Cost Increases

Pre-COVID – Storm response and legal settlements depleted cash

COVID – Revenues affected



~\$2B total estimated decrease in 2020-2029 STIP budget

>\$3B in cost increases between September 2019 and June 2020

-Emphasized the need to improve accuracy of NCDOT's cost estimation practices

Cost Estimation Improvement Process (CEIP)

Major Findings:

- GIS-based Cost Estimation Tool results often low
- Right of way, utilities, construction estimates not updated regularly or distributed consistently

Key Recommendations:

- Cost estimates for highway projects in the STIP will be based on Express Designs or better (engineering analysis performed)
- Cost estimates updated minimum of every 2 years
- Ensure appropriate contingencies are accounted for at all stages as projects go through the project development process to account for unknowns

Key Items

- Refreshed 1,000+ estimates in the STIP
- Most of the 22 STI funding buckets substantially overprogrammed
- Utilized Workgroup to develop a process forward
- Passing of federal Infrastructure Investment and Jobs Act (IIJA)
 - Bi-Partisan Infrastructure Law (BIL)
- Passing of North Carolina state budget
- Inflation adjustments by NC Board of Transportation

2024-2033 STIP Funding Availability for Committed Projects

Statewide Mobility	
Available Funding	Programming Status
\$10.6B	\$3.36B Over

Regional Impact		
Region	Available Funding	Programming Status
A (D1 & D4)	\$647.5M	\$383.2M Over
B (D2 & D3)	\$919.2M	\$391.2M Over
C (D5 & D6)	\$1.78B	\$297.1M Over
D (D7 & D9)	\$1.33B	\$596.7M Over
E (D8 & D10)	\$1.67B	\$756.5M Over
F (D11 & D12)	\$881.0M	\$455.7M Over
G (D13 & D14)	\$676.1M	\$982.2M Over
REG Total: \$3.86B Over		

Division Needs		
Division	Available Funding	Programming Status
1	\$569.7M	\$129.5M Over
2	\$569.7M	\$190.3M Over
3	\$569.7M	\$77.3M Under
4	\$569.7M	\$223.2M Under
5	\$569.7M	\$172.4M Over
6	\$569.7M	\$87.4M Under
7	\$569.7M	\$65.4M Under
8	\$569.7M	\$85.3M Over
9	\$569.7M	\$31.6M Under
10	\$569.7M	\$68.8M Over
11	\$569.7M	\$102.4M Under
12	\$569.7M	\$234.0M Over
13	\$569.7M	\$325.7M Over
14	\$569.7M	\$88.2M Over
DIV Total: \$706.9M Over		

Includes estimated funding from Infrastructure and Investment Jobs Act (IIJA)

As of January 25, 2022. Available Funding reflects accounting for 3% inflation. Programming Status Amounts are compared to 100% of budget.

Visualizing Funding - How It's Supposed To Work

TEN YEAR BUDGET DOCUMENT

STIP	1	2	3	4	5	6	7	8	9	10
Statewide Mobility			About \$10.5 Billion							
Regional Impact			About \$8 Billion							
Division Needs			About \$8 Billion							

Visualizing Funding - How It's Supposed To Work

STIP	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Statewide Mobility	COMMITTED FUNDING TO TRANSPORTATION PROJECTS						NON-COMMITTED FUNDING: Subject to Re-Prioritization			
Regional Impact										
Division Needs										

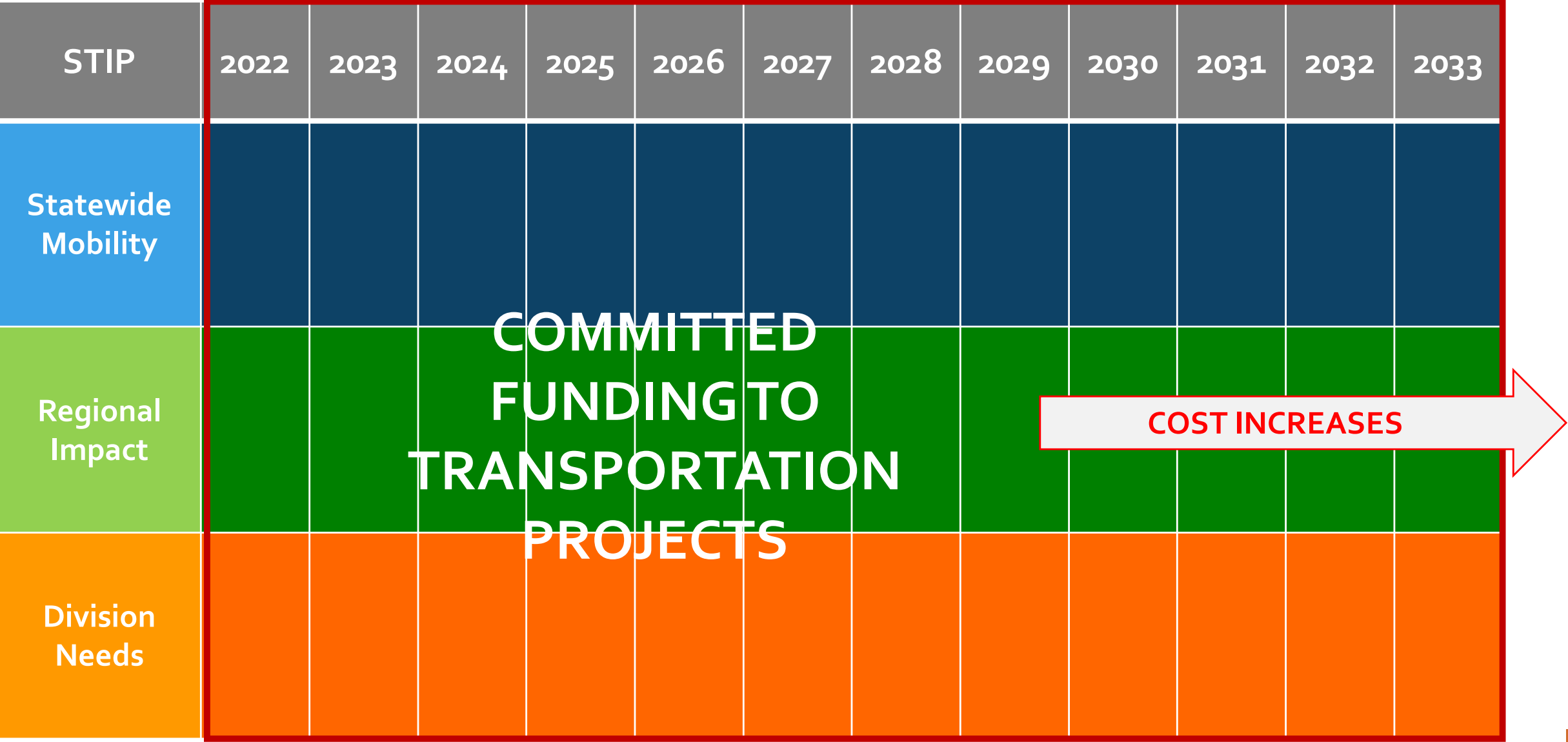
Visualizing Funding – What Has Happened

STIP	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Statewide Mobility										
Regional Impact										
Division Needs										

COMMITTED FUNDING TO TRANSPORTATION PROJECTS

COST INCREASES

Visualizing Funding – What Continues to Happen



Where We Go From Here

Fundamental Insights

- Programming (planning) issue, not a cash issue
 - Cash balance over \$2B
 - 2020-2023 federal STIP remains fiscally constrained
 - At this time, no impact to pre-2024 project lettings
- Coordination with local governments
 - MPOs/RPOs
- Initial Draft 2024-2033 STIP released in May 2022
 - Draft 2024-2033 STIP finalized by December 2022

Goals / Task

Overall goals with the revitalized P6 Workgroup

- Develop trustworthy and dependable STIP (fiscally constrained)
- Produce 2024-2033 STIP using existing STIP projects (w/transparency)
- Have an opportunity to fund new projects in P7 scoring (all 22 categories)
- Ensure process is grounded in state/federal requirements

STIP DEVELOPMENT METHOD



Process for 2024-2033 STIP Development

Step 1 – Start from scratch – build next STIP from existing 2020-2029 STIP funded projects (no new P6 evaluated projects)

Step 2 – Develop list of “Delivery projects” – first funded based on upcoming let dates, right-of-way purchases, and grants

Step 3 – Determine which of the remaining 2020-2029 funded projects remain in STIP: Seniority Approach (P3-P4-P5)

Notes:

- Projects will retain STIP funding as budget allows per category
- Projects with funding removed will be re-evaluated in P7
- Previously committed projects that maintain funding may also have to be re-evaluated in P7 scoring

Project Evaluation Method

Seniority Approach (P3-P4-P5)

- First in, last out concept
- Based on when project obtained “committed status” in a previous STIP
- Funds projects with highest scores from each cycle until budgets are expended
- Flexibility (swap/cascading) opportunities

Project	Prioritization Round	Score	Selection Order
A	P ₃	90	#1
B	P ₃	70	#2
C	P ₄	95	#3
D	P ₅	95	#4

Flexibility Option

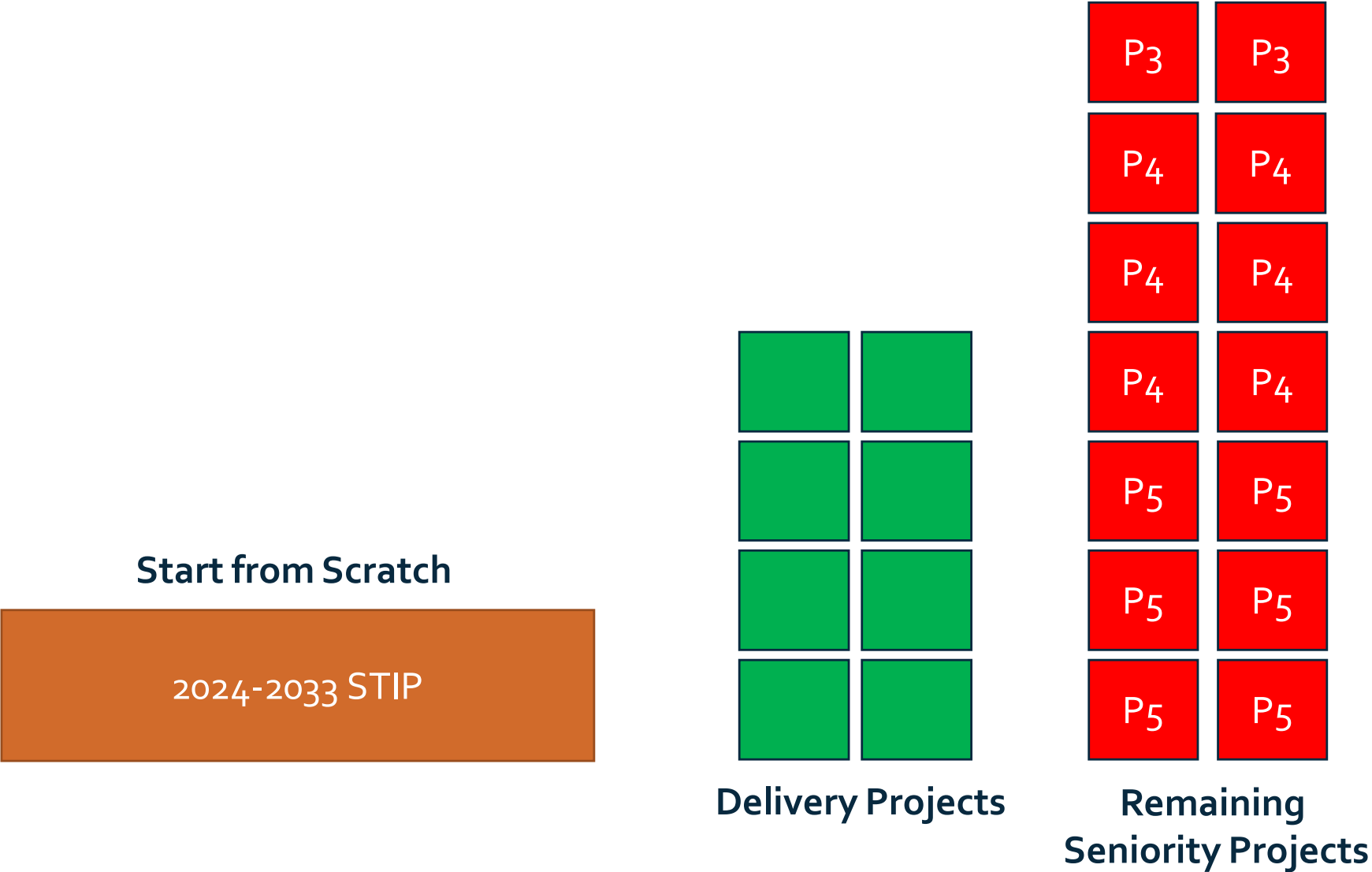
NCDOT will allow flexibility once initial Draft 2024-2033 STIP is programmed

- Project schedules can be swapped
- Projects that aren't selected for funding can be swapped with projects selected for funding
- Schedules of projects swapped in may be different than schedules of projects swapped out

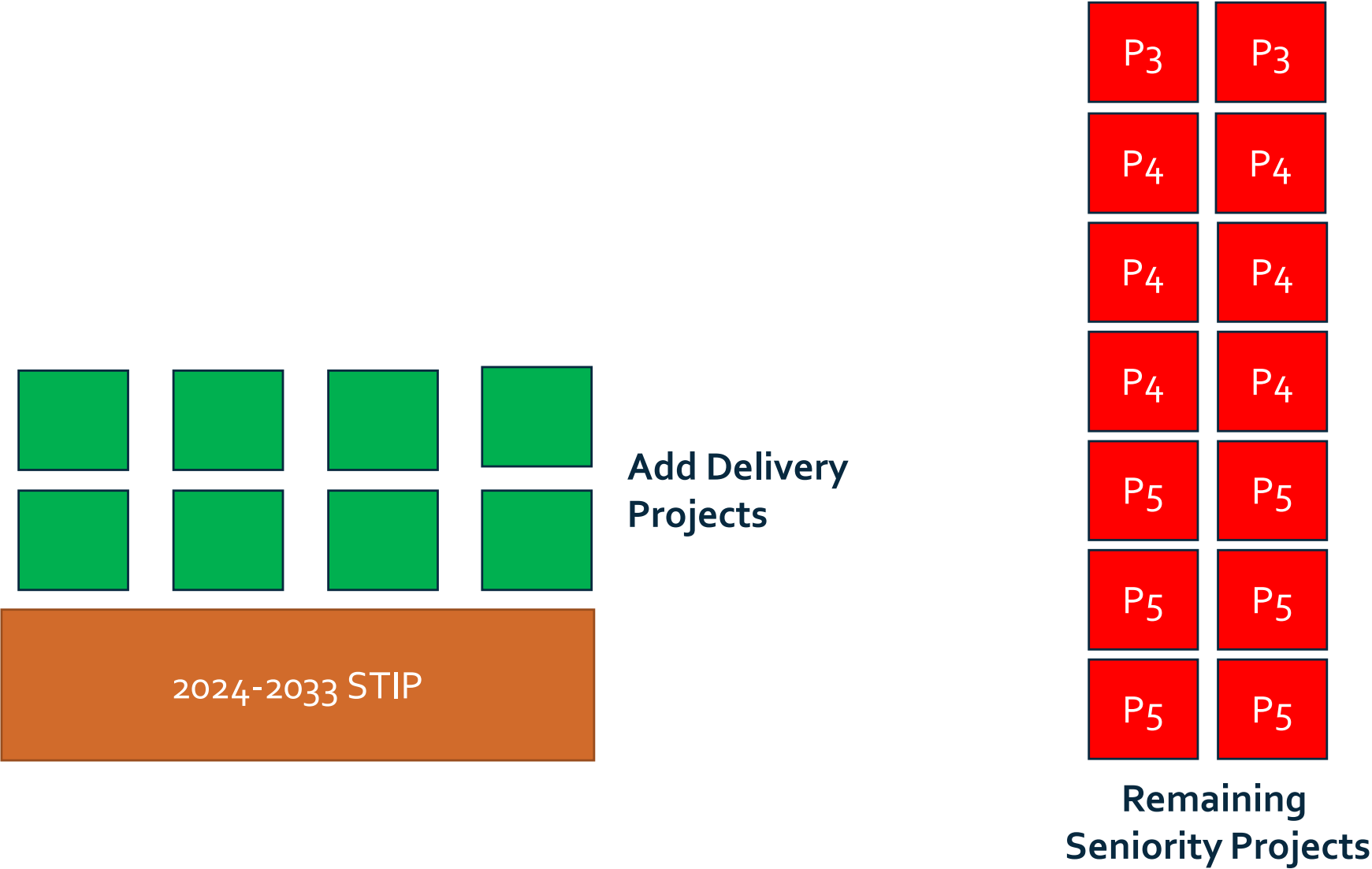
Parameters:

1. All swaps must be agreed to by NCDOT and all affected MPO/RPO(s) where project is located
2. Cost of project(s) swapped in must be less than 110% of cost of project(s) being swapped out
3. Swaps should generally occur within same STI funding category
4. Swaps between modes allowed if normalization requirements are still met
5. Justification for any swaps must be documented, which will be made public
6. Swaps of Alternate Criteria projects are not allowed

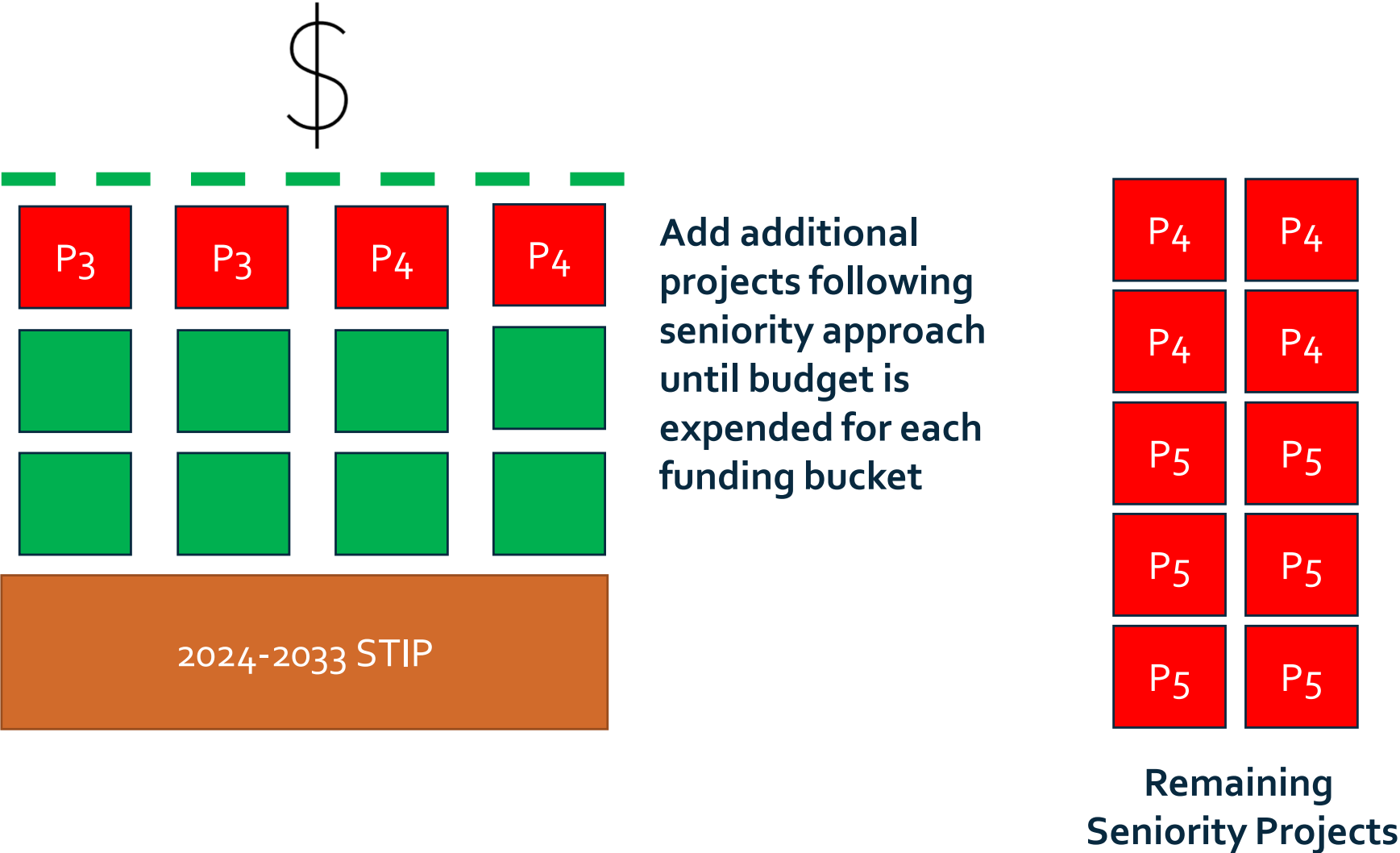
2024-2033 STIP Development – Visual



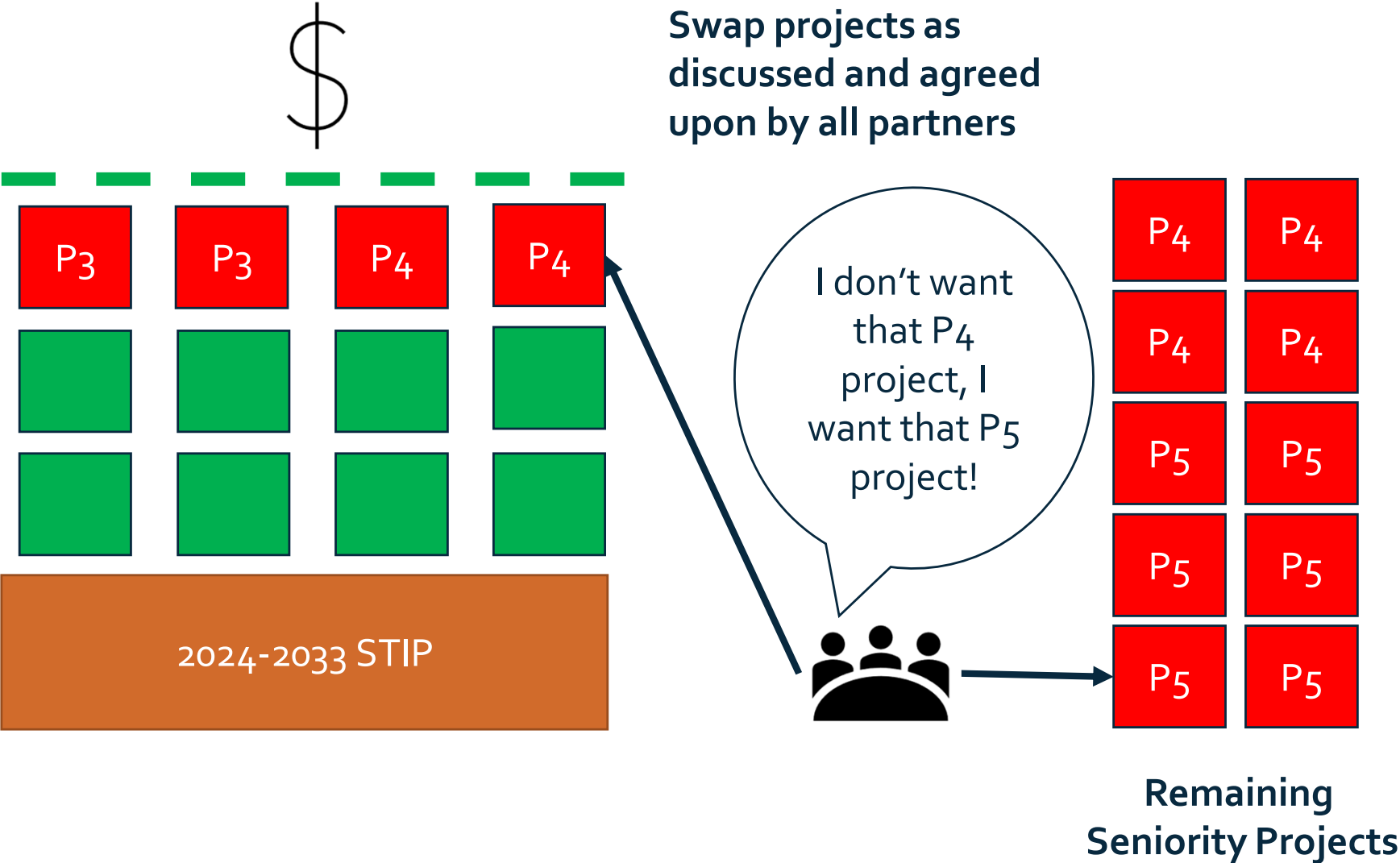
2024-2033 STIP Development – Visual



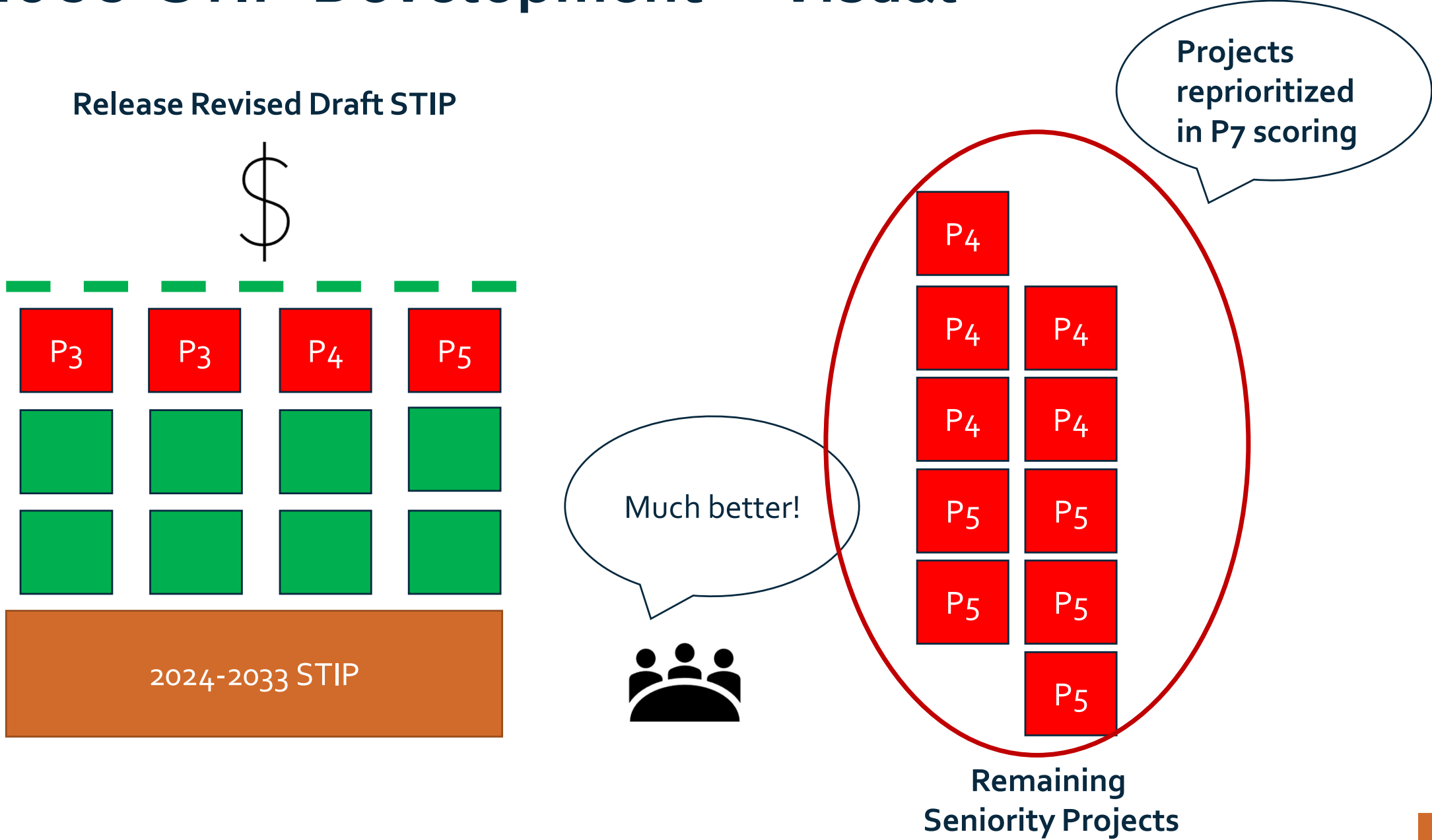
2024-2033 STIP Development – Visual



2024-2033 STIP Development – Visual



2024-2033 STIP Development – Visual



Future Project “Commitments”

- Workgroup recommends that projects beyond the first 5-years of the STIP, would require reprioritization
 - Projects Right-of-Way or Construction funding in the first 5-years does not have to recompete
- NC Board of Transportation has yet to concur with this recommendation

STIP Format Change

STIP Format Change

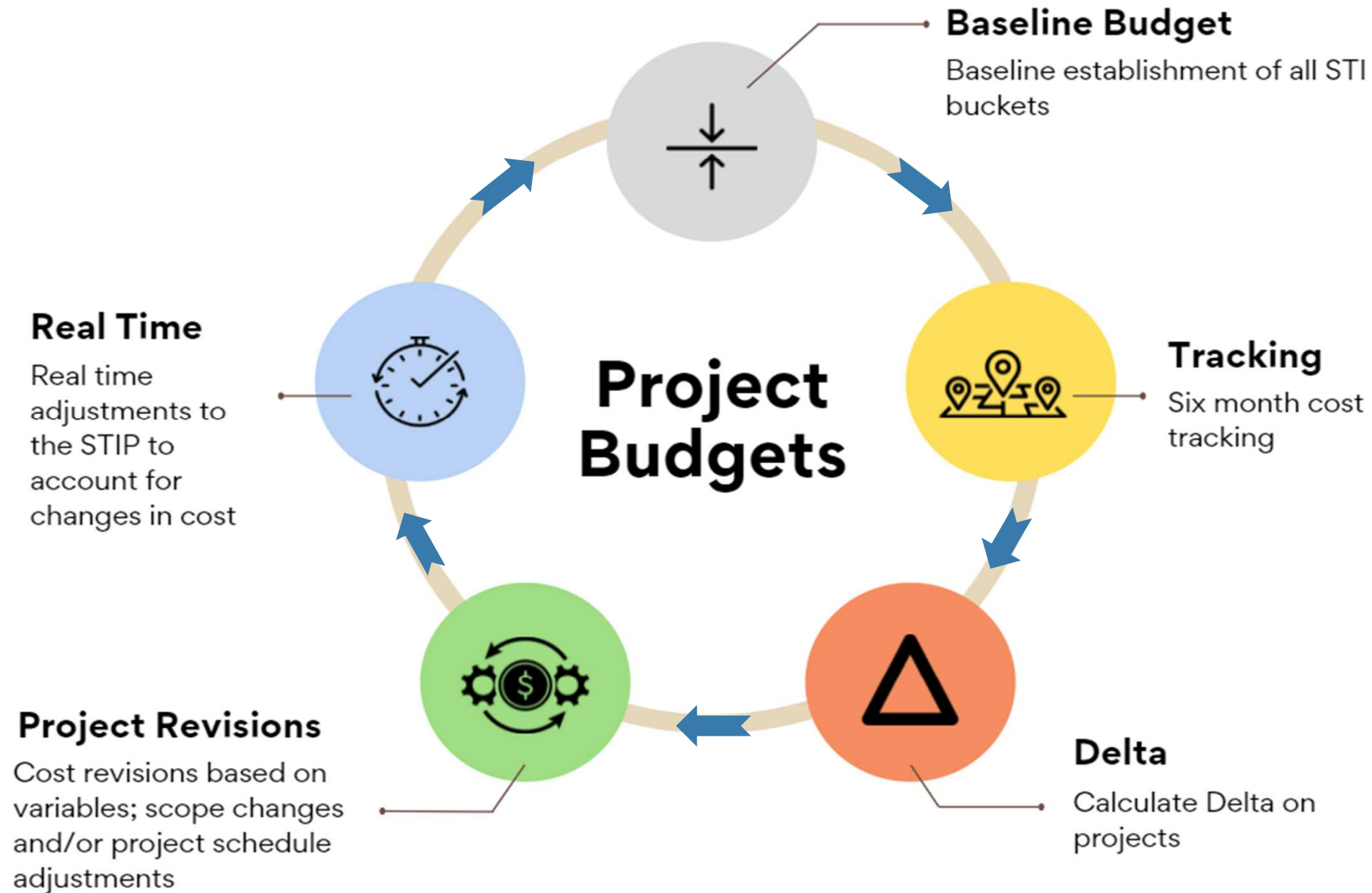
- Draft STIP released in spreadsheet form
 - Easier to sort
 - Easier to see funded projects and schedules in your area
- Non-committed projects shown as “WILL BE REPRIORITIZED”
 - Non-committed projects will not show a ROW or CON year
- Projects with funding removed will also be shown as “WILL BE REPRIORITIZED”
- Set up to print on 11x17 landscape

2024-2033 STIP Format – Excel-based

BASIC PROJECT INFORMATION						PRIORITIZATION INFORMATION					FISCAL YEAR PROJECT PHASE SCHEDULED TO START							
COUNTY(S)	ROUTE	DESCRIPTION	MODE	DIVISION(S)	MPOs/RPOs	PROJECT ID	STI CATEGORY FUNDED	CURRENT PRIORITIZATION STATUS	ELIGIBLE FOR SWAP	FUNDING SOURCE (SEE FUNDING SOURCES TAB FOR MORE INFO)	RIGHT-OF-WAY PROJECTED SCHEDULE	STI FUNDS NEEDED FOR RIGHT-OF-WAY	UTILITIES PROJECTED SCHEDULE	STI FUNDS NEEDED FOR UTILITIES	CONSTRUCTION PROJECTED SCHEDULE	STI FUNDS NEEDED FOR CONSTRUCTION	TOTAL STI FUNDS	COMMENT
ALAMANCE	BURLINGTON- ALAMANCE REGIONAL AIRPORT (BUY)	RUNWAY EXTENSION.	AVIATION	7	BURLINGTON-GRAHAM MPO	AV-8446	DIVISION 7	SCHEDULED FOR DELIVERY	YES	L, T	2024	\$1,200,000					\$1,200,000	
ALAMANCE	US 31 (COLUMBUS ROAD)	SR 5158 (MEMPHIS ROAD) / OLIVE LANE INTERSECTION. INSTALL TRAFFIC SIGNAL AND ADD TURN LANES.	HIGHWAY	7	BURLINGTON-GRAHAM MPO	U-7489	REGION D	SCHEDULED FOR DELIVERY	YES	T	2025	\$600,000	2025	\$400,000	2027	\$1,100,000	\$2,100,000	
BUNCOMBE	I-70	SR 6234 (2ND AVENUE) - EXIT 276. CONSTRUCT INTERCHANGE IMPROVEMENTS.	HIGHWAY	13	FRENCH BROAD RIVER MPO	I-6246	REGION G	WILL BE REPRIORITIZED	YES	NHP	FUNDED FOR PRELIMINARY ENGINEERING ONLY	\$2,660,000	FUNDED FOR PRELIMINARY ENGINEERING ONLY	\$500,000	FUNDED FOR PRELIMINARY ENGINEERING ONLY	\$5,200,000	\$8,360,000	
BUNCOMBE	I-70	NC 25 (HIGH CLIFF BOULEVARD) - EXIT 278 TO SR 6532 (HOLCOMBE AVENUE). CONSTRUCT AUXILIARY LANES.	HIGHWAY	13	FRENCH BROAD RIVER MPO	I-6912	DIVISION 13	SCHEDULED FOR DELIVERY	YES	NHP	2023	\$2,500,000	2023	\$1,100,000	2025	\$9,600,000	\$13,200,000	
BUNCOMBE	SR 6452 (BRUGHS MILL ROAD)	US 219 TO NC 815 (CRIPPLE CREEK ROAD) WIDEN TO MULTI-LANES.	HIGHWAY	13	FRENCH BROAD RIVER MPO	U-6498	DIVISION 13	SCHEDULED FOR DELIVERY	YES	BGANY	2027	\$43,200,000	2027	\$5,600,000	2029	\$23,600,000	\$72,400,000	
CABARRUS	VARIOUS	WRIGHT ROAD, DEPOT ST TO SHADY PINE LANE. CONSTRUCT SIDEWALK AND BIKE LANES.	HIGHWAY	10	CABARRUS-ROWAN MPO	EB-9845	DIVISION 10	SCHEDULED FOR DELIVERY	YES	CMAQ, L, BGANY	2023	\$1,200,000			2024	\$2,650,000	\$3,850,000	
CABARRUS	US 127	REPLACE BRIDGE 120987 AND BRIDGE 120985 OVER DICKENS BRANCH.	HIGHWAY	10	CABARRUS-ROWAN MPO	B-8012	REGION E	SCHEDULED FOR DELIVERY	NO	NHPB	2023	\$750,000	2023	\$625,000	2024	\$9,800,000	\$11,175,000	
CLEVELAND, RUTHERFORD	US 33 FULLERTON BYPASS	EAST OF NC 234 TO EAST OF NC 25. GRADING, STRUCTURES, AND PAVING.	HIGHWAY	12, 13	GASTON-CLEVELAND-LINCOLN MPO, FOOTHILLS RPO	R-6727C	REGION F	SCHEDULED FOR DELIVERY	NO	T					2020	\$51,420,000	\$51,420,000	BUILD NC BOND FUNDING: \$PE, PAYBACK 2021-2035 (FY 2&3 SALE); \$11.336M FOR C PAYBACK FY 2020-2034 (FY 2 SALE); \$28.609M FOR CON, I 2021-2035 (YR 2&3 SALE).
CUMBERLAND	SR 6504 (WILLIS CREEK ROAD)	PLEASANT HILL ROAD TO SR 7878 (CRUMPLER RD). UPGRADE ROADWAY.	HIGHWAY	6	FAYETTEVILLE AREA MPO	U-6807	DIVISION 6	SCHEDULED FOR DELIVERY	YES	T	2028	\$8,652,000	2028	\$8,080,000	2030	\$12,600,000	\$29,332,000	
DURHAM	I-70	PORTER ROAD TO WEST OF NC 59. PAVEMENT REHABILITATION.	HIGHWAY	5	DURHAM-CHAPEL HILL-CARRBORO MPO	I-6933	STATEWIDE MOBILITY	SCHEDULED FOR DELIVERY	NO	NHPIM					2026	\$12,167,000	\$12,167,000	
DURHAM	I-70	US 79. INTERCHANGE IMPROVEMENTS.	HIGHWAY	5	DURHAM-CHAPEL HILL-CARRBORO MPO	U-7465B	STATEWIDE MOBILITY	WILL BE REPRIORITIZED	YES	NHP	FUNDED FOR PRELIMINARY ENGINEERING ONLY	\$91,472,000	FUNDED FOR PRELIMINARY ENGINEERING ONLY	\$638,000	FUNDED FOR PRELIMINARY ENGINEERING ONLY	\$81,302,000	\$173,412,000	
DURHAM	US 79	NC 265 TO RIDGEMONT AVENUE. CONSTRUCT OPERATIONAL IMPROVEMENTS.	HIGHWAY	5	DURHAM-CHAPEL HILL-CARRBORO MPO	U-6118	REGION C	WILL BE REPRIORITIZED	YES	T	FUNDED FOR PRELIMINARY ENGINEERING ONLY	\$450,000	FUNDED FOR PRELIMINARY ENGINEERING ONLY	\$250,000	FUNDED FOR PRELIMINARY ENGINEERING ONLY	\$2,325,000	\$3,025,000	
HERTFORD	NC 10	NORTHAMPTON COUNTY LINE TO MEHERRIN RIVER.	HIGHWAY	1	PEANUT BELT RPO	R-7256A	DIVISION 1	SCHEDULED FOR DELIVERY	NO	T	2023	\$350,000	2023	\$7,850,000	2023	\$29,600,000	\$37,800,000	
HERTFORD	NC 10	MEHERRIN RIVER TO US 258.	HIGHWAY	1	PEANUT BELT RPO	R-7256B	DIVISION 1	SCHEDULED FOR DELIVERY	YES	T	2023	\$7,025,000	2023	\$8,750,000	2025	\$18,500,000	\$34,275,000	

Project Budgets

Project Budgets: Real Time Cycle



Next Steps

2024-2033 STIP Next Steps / Schedule

- Initial Draft STIP (developed following Delivery Projects & Seniority Approach) will be released in early May 2022
 - Spreadsheet of funded projects and schedules
- STIP coordination meetings with MPO/RPOs upon request
- Project swaps due to STIP managers Friday September 30th with agreement by MPO/RPO and NCDOT Division staff
- Finalized draft presented to Board of Transportation by December 2022
- Anticipated adoption of 2024-2033 STIP in Summer 2023

Prioritization Next Steps and Schedule

- P7 Workgroup will likely begin Fall 2022
- P7 should generate the 2026-2035 STIP
 - Return to two-year Prioritization/STIP cycle
- Anticipated P7 submittal window: Summer 2023
- Anticipated P7 quantitative scores and 2026-2035 Statewide Mobility programming: Spring 2024

Questions
