



Draft Arizona State Freight Plan

State Transportation Board Agenda Item 6

October 21, 2022

October 6, 2022





Presentation Outline



- Recent Actions and Key Steps
- Review of Process and Proposed Freight Investment Plan
- October 6 Study Session - Follow-up
- Questions, Comments and further Board Direction

Recent Actions and Key Steps

FAC Meeting to Produce FAC Recommendations (Late August) - **Completed**



ADOT Formulates *Draft* Plan (Early September) - **Completed**



State Transportation Board Review / Comments – Study Session (September - October) - **Guidance Provided**



USDOT Review/Comments and Public/Stakeholder Review/Comments (September – October) - **In Progress**

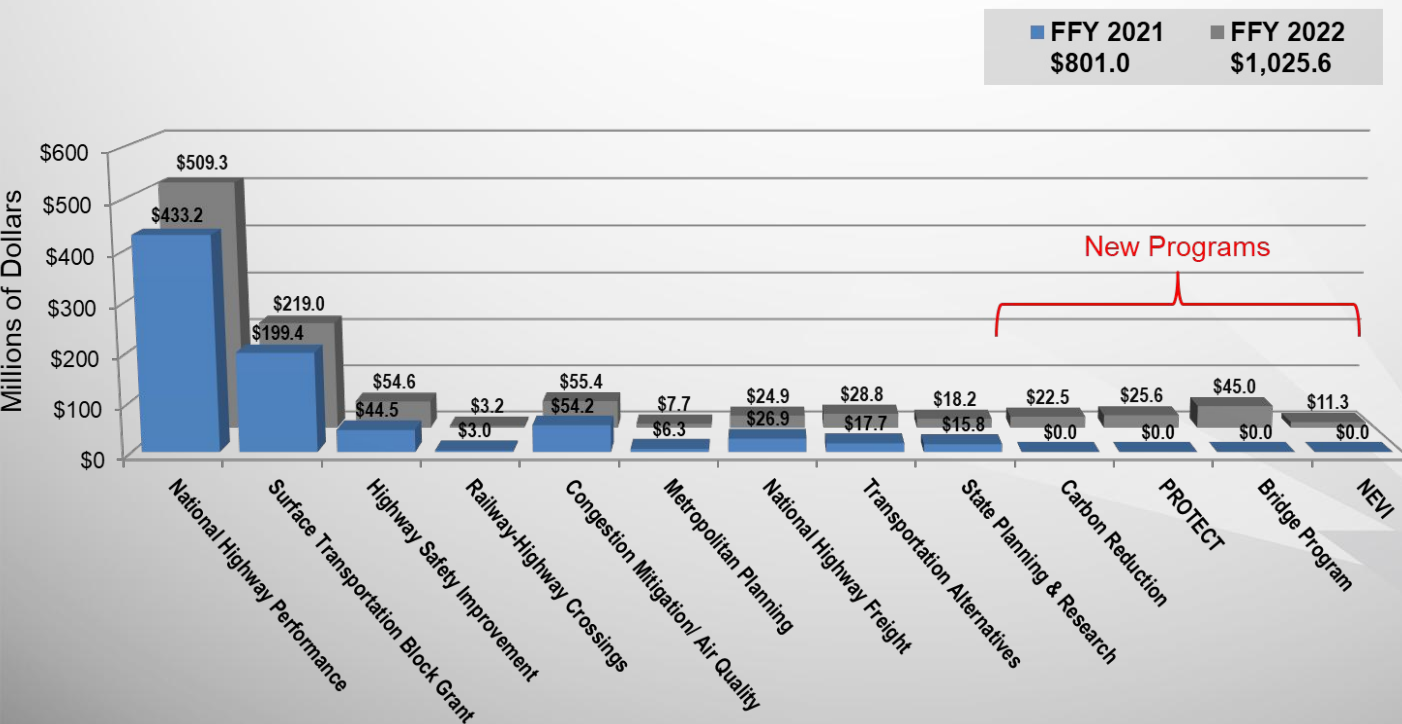


State Transportation Board - Further Guidance and Endorsement of *Final* Plan (October – November)



USDOT Approval of final Arizona Freight Plan (November)

FAST v. IJIA Apportionment Comparison



Funding and Eligible Projects



- Approximately \$125 million over 5 years (about \$25 million / fiscal year)
- Subject to Obligation Limitation (no new added spending authority)
- Freight Funding can only be used for projects in the approved Freight Plan
- Funding available for all phases (i.e. Planning through Construction)
- Eligible Projects include (see 23 USC 167 for full list):
 - Highway and bridge projects
 - Intelligent transportation systems, traffic signal optimization, & ramp metering
 - Railway-highway grade separation
 - Geometric improvements to interchanges and ramps
 - Additional road capacity to address highway freight bottlenecks
 - Truck parking, truck-only lanes, climbing and runaway truck lanes, shoulders



Truck Parking



- Eligible for federal Freight funding
- Still important...perhaps growing in importance
- How much funding to set aside for truck parking vs. infrastructure projects?
- Appropriate criteria used to prioritize truck parking improvements
 - Will use/update 2019 truck parking study and use results of current rest area study
 - The update to the truck parking study should take the form of a Truck Parking ***Plan***, developed in coordination with the Arizona Trucking Association and the overall FAC, and should take advantage of the following ***new and emerging resources***, to include:
 - Information available from the National Coalition on Truck Parking
 - The new Truck Parking Development ***Handbook***, just released by the national Coalition on Sept 30
 - Ideas from other states' freight plans and truck parking strategies currently under development

Truck Parking Projects Since 2019 Truck Parking Study

Route	Mile Post	Rest Area Name	Spaces Before	New Spaces	Total Spaces	Status
I-40	235	Meteor Crater EB	32	25	57	Completed and open to traffic
I-40	235	Meteor Crater WB	31	33	64	Completed and open to traffic
I-8	85	Sentinel EB	12	2	14	Under constr., open to truck traffic only. Completion by 2023
I-8	85	Sentinel WB	13	2	15	Under constr., open to truck traffic only. Completion by 2023
I-10	53	Bouse Wash EB	13	8	21	Completed and open to traffic
I-10	53	Bouse Wash WB	14	8	22	Completed and open to traffic
I-40	23	Haviland EB	7	22	29	Completed and open to traffic
I-40	23	Haviland WB	7	16	23	Completed and open to traffic
I-17	252	Sunset Point	28	4	32	Under construction, 9/27 open for truck parking only
I-17	296	McGuireville NB	20	0	20	In design, scheduled to begin construction 2023
TOTAL				120		

Steps in the Freight Plan Prioritization Process

- Reviewed 2017 prioritization framework – determination to use the same project Scoring System for 2022 plan update
- Reviewed the project ranking in the 2017 plan
- Identified which 2017 Plan projects have been completed
- Overlaid the remaining projects and current issues
- Updated data/criteria for the remaining projects
- Ranked the remaining (19) projects
 - Identified projects that are in progress, but needing additional funding
 - Identified projects with high cost as infeasible (due to limited Freight funding)
- Note: A separate process was used for the consideration of truck parking projects

19 Highest Rated Freight Projects

Status (2022)	(2022 Rank)	Route	MP	Issue Segment	Project Option / Description	Est Cost \$M (2021)
Not in 5-Yr Program	1	I-10	143-145	I-10 at I-17 Traffic System Interchange (The Stack)	The Stack System Interchange Improvements	234.4
In 5-Yr Program; partially completed; likely added \$ need	2	I-10	134-160	From L101 to L202 (Santan Freeway) within Phoenix Metro area	"Broadway Curve" Project: From I-17 Split to SR 202L Santan from milepost 149 to 159 (10 miles). Add GPL in each direction; add HOV lanes; new direct HOV lane to SR-143; 3 ped bridges; reconstruct SR-143/Hohokam Expressway, Salt River Bridge and Broadway Rd Bridge; new collector-distributor roads between Baseline and 40th St.	908.1 (Broadway Curve component is 808)
In 5-Yr Program; possible added \$ need	3	I-40	48	I-40 at US 93 - Kingman area; #1 rated project from 2017 Plan	I-40/US93 W Kingman System Interchange Improvements	101.4
Not in 5-Yr Program	4	I-10	145-147	I-10 at SR 202L and SR 51 Traffic System Interchange (The Mini-Stack)	I-10/SR202L/SR 51 System Interchange Improvements	351.5
In 5-Yr Program	5	I-10	160-187	From SR 202L to East of SR 387	I-10 Gila River Indian Community Area Widening	221.5
Two interchange projects in 5-Yr Program	6	I-17	194-215	From I-10 to L101 within Phoenix Metro area	I-17 Phoenix Urban Area Improvements	703.1
Not in 5-Yr Program	7	I-40	195	I-40 (EB to NB system ramp at I-40/I-17/SR 89 interchange)	I-40/I-17 System Interchange Improvements	96.1
Partially in 5-Yr Program; added \$ need	8	I-10	260-274	I-10 east of I-19	Tucson Area I-10 Widening Project. I-10 from Alvernon Way to Valencia & I-10/SR210 Interchange (Widening & T.I.) - in program for CN - FY27; Country Club and Kino TI projects are also priorities in the corridor.	2179.5

Status (2022)	(2022 Rank)	Route	MP	Issue Segment	Project Option / Description	Est Cost \$M (2021)
Not in 5-Yr Program	9	I-10	259	I-10 at I-19 Traffic System Interchange	I-10/I-19 System Interchange Improvements	97.3
Irvington TI in 5-Yr Program; Added \$ need	10	I-19	92-102	I-19 between I-10 and Valencia Road (south of Tucson)	I-19 Tucson Area Widening and TI Improvements; Irvington TI is a priority in the corridor	732.4
Not in 5-Yr Program	11	US 89	418-421	US 89 Within Flagstaff, north of I-40	SR 89/I-40 System Interchange Improvements	34
Partially (1 mile widening) in 5-Yr Program; \$ need	12	SR 69	287-290	SR 69, East of Prescott area	SR 69 East of Prescott ITS Improvements; Signal optimization; DMS; variable speed limits; raised median (from ADOT CPS)	3.9
In 5-Yr Program for \$16.5M; added \$ need	13	I-10	331	I-10 at US 191 (Cochise TI) - #2 rated project from 2017 Plan	I-10/US 191 System Interchange Improvements (interim)Widen and upgrade Railroad Overpass, Replace existing bridge with a three span bridge 2 12' lanes with 10' shoulders. Drainage improvement.	41.0
Not in 5-Yr Program	14	US 60	243-255	US 60 within Globe area	Globe Area Freight Improvements: EB/WB Passing lane and freight deceleration/turning lane	8
In 5-Yr Program	15	I-10	63	US 191	US 191 System Interchange Improvements (interchange and RR underpass); East Willcox T.I.	5.6
Not in 5-Yr Program	16	SR 260	339-342	SR 260, West of Show Low to East of SR 73	SR 260 Show Low Area Intersection Improvements: Improve intersection at Deuce of Clubs; replace with roundabout	9.4
Not in 5-Yr Program	17	I-17	299-305	I-17 between AZ 179 to Stoneman Lake Road	I-17 Stoneman Lake Area Climbing Lane and ITS Improvements	27.1
Not in 5-Yr Program	18	US 60	198.7-211	US 60 between SR 88 and SR 79	US 60 Access Controlled Freeway Extension	287.1
Not in 5-Yr Program	19	US 60	345-348	US 60 Passing Lane: Westbound	US 60 Passing Lane – Show Low area	6

ADOT's Recommended 2022 Freight Investment Plan (Draft)

(Approx. \$125M Available)

Project Rank *	Freight Benefit Rank	Route	Issue Segment	Project	NHFP (\$M)	Freight Benefit %	Est. Program FY
				Truck Parking	50.00		2023 -2027
				Planning/Research	2.00		2023
2	18	I-10	MP 149-159	Broadway Curve	27.00	14.8%	2023
8	7	I-10	MP 260-274	Country Club T.I. or Kino T.I.	4.50	22.4%	2024
10	25	I-19	MP 92-102	Irvington T.I.	5.00	8.8%	2024
12	21	SR 69	MP 287-290	ITS Improvements & Raised Median	3.90	13.1%	2027-2028
13	2	I-10	MP 331	I-10 at US191 Cochise T.I. (2017 Freight Plan)	24.75	54.0%	2024
14	15	US 60	MP 243-255	Passing lane & freight decel/turn lane - Globe	8.00	16.0%	2027-2028
				TOTAL	125.15		

Note: Projects with overall rank of #3, 5, and 15 (not shown above) are funded in current 5-Year Program; projects with overall rank #1, 4, 6, 7, 9, 11, 17 and 18 have costs too high for limited/remaining Freight funding; #16 needs further study.

Potential Truck Parking Projects (Costs in \$K for Year of Expenditure)

Projects		Exist. 2022	Deficient 2022	Max Add	FY23	FY24	FY25	FY26	FY27	Total
Truck Parking Plan (Update 2019 Plan)					\$300 Plan					
Parks & Christensen RAs (Truck Parking Only)					\$100 Design	\$1,500 Const				
Sacaton Rest Area	EB	21	-7	8	\$300 Bundle Project Assessments	\$2,901 Design/ Const				
	WB	18	-5	9						
Texas Canyon Rest Area	EB	21	-44	8		\$2,000 Bundle Design	\$2,056 Const			
	WB	22	-51	4						
San Simon Rest Area	EB	18	-25	6				\$4,421 Const		
	WB	18	-28	6						
Bouse Wash Rest Area	EB	27	-16	0				\$4,122 Const		
	WB	20	-11	8						
Total				49	\$700	\$6,401	\$2,056	\$4,421	\$4,122	\$17,700

Notes:

Estimates are based on the maximum number of truck parking spaces that can be added within the current ROW and without reconstructing buildings.

Further study needs to be conducted to determine alternative site layouts, expansion opportunities, and identify overflow lot locations.

ADOT's Top 5 Climbing Lane Needs (Hwys Eligible for Freight \$) *

Rank *	ADOT District	Route & Direction	Issue Segment	Project Location	% Trucks; Bridge Info	Design Cost Est. **	Constr Cost Est. **	Total Cost Est. **
1	NC	I-40 EB	MP 188-190	West of Flagstaff	31% trucks	\$100,000	\$3,600,000	\$3,700,000
2	NW	I-17 SB	MP 281-285	North of SR 169	16% trucks	\$200,000	\$7,200,000	\$7,400,000
3	NC	I-17 NB	MP 307-311	North of SR 179	11% trucks	\$200,000	\$7,200,000	\$7,400,000
4	NW	I-40 EB	MP 47-49	South of Kingman	42% trucks; 1 bridge	\$100,000	\$3,600,000	\$3,700,000
5	NC	I-17 SB	MP 316-318	North of SR 179	17% trucks; 1 bridge	\$100,000	\$3,600,000	\$3,700,000
				TOTAL		\$700,000	\$25,200,000	\$25,900,000

* Information Source is 2015 Climbing and Passing Lane Prioritization Study; Further Study/Scoping would be needed

** Cost estimates based on current projects in 5-Yr program; estimate does not include bridge-related costs or environmental costs

For Further Action/Study

- Update 2019 Truck Parking Study (as a **Plan**) as soon as feasible
 - Use the updated Truck Parking *Plan* to guide truck parking project identification associated with the 2022 state freight plan and to inform the development of the 2026 state freight plan.
 - Take full advantage of additional resources available from national coalitions, ATA and FHWA
 - Consider relevant findings from the ongoing Rest Area Study in the new Truck Parking Plan.
- Examine new bottleneck findings from the 2022 Freight Plan to inform future planning, including development of the 2026 Freight Plan. (Consider bottlenecks due to congestion and other restrictions.)
- Pursue strategy recommendations from the 2022 Freight Plan as prudent to fulfill federal & state priorities.
- **Consider an update to the 2015 Climbing & Passing Lane Study to identify potential freight benefit projects.**
- Initiate more regular FAC interaction to mainstream freight planning more robustly into the overall statewide planning process. (This includes involvement in the new Truck Parking Plan.)
- Pursue additional study recommendations from the State Transportation Board.

Questions

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