BIPARTISAN INFRASTRUCTURE LAW:
WHAT IT MEANS FOR VERMONT TRANSPORTATION

Vermont Legislative
JOINT FISCAL OFFICE

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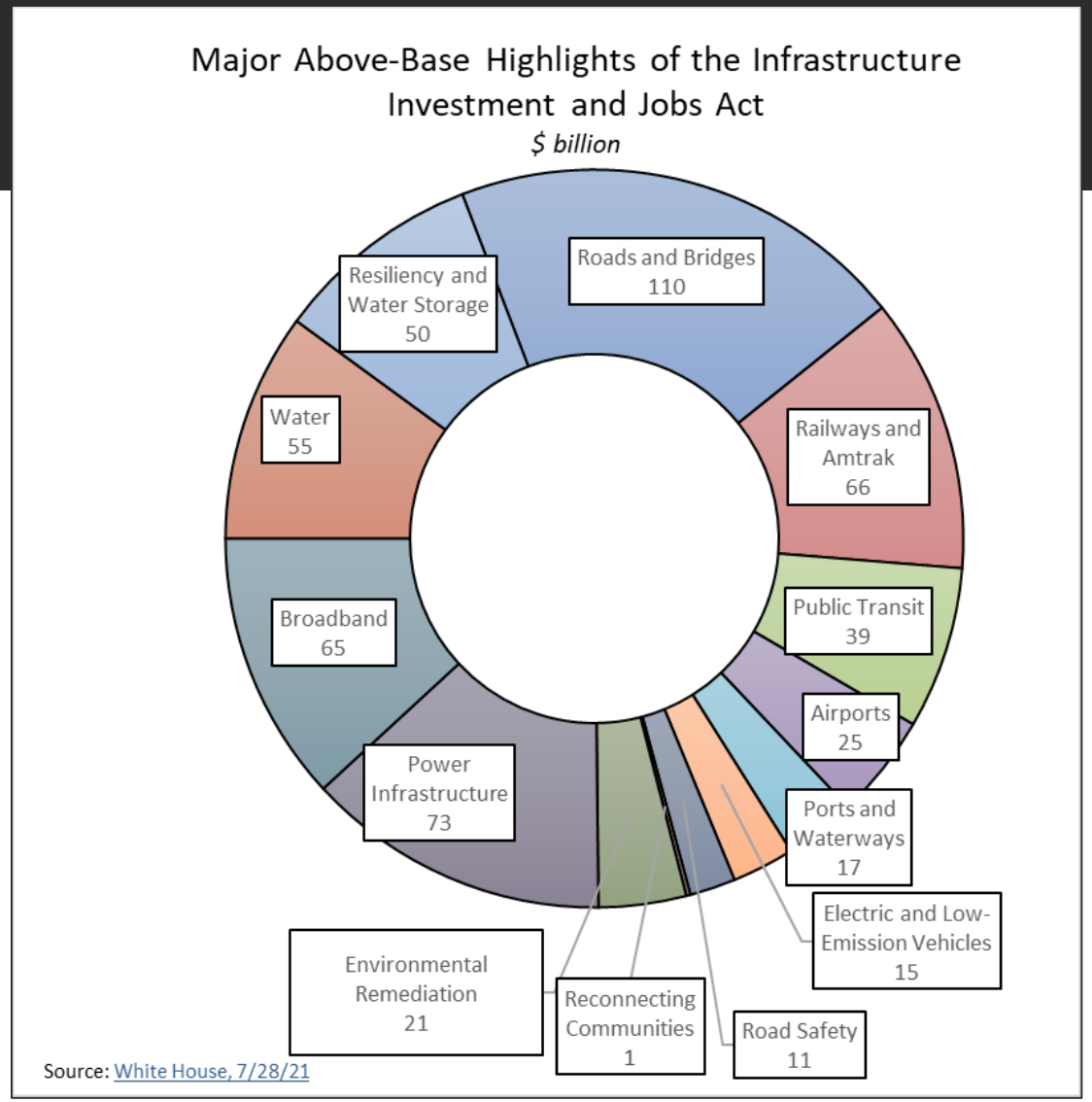
WHAT'S IN THE BILL?

- The $1.2 trillion **Infrastructure Investment and Jobs Act (IIJA),** aka **"Bipartisan Infrastructure Bill"**
- Contains multi-year surface transportation reauthorization, drinking water/wastewater, energy infrastructure acts ("base" funding).
- Also contains **$550 billion of *NEW* funding over a 5 year period**:
  - $284 billion for transportation
  - $243 billion for utility infrastructure and resilience
    - Broadband
    - Disaster mitigation & resiliency
    - Energy
    - Cyber-security
    - Water
  - $21 billion for environmental remediation
- Funds support specific activities, usually via reimbursements – not a more "discretionary" up-front lump sum like CARES Act or ARPA. Every program has (or will soon have) its own rules and regulations



WHAT'S IN THE BILL?

- The IIJA is significantly scaled down from original $2.6 trillion proposal.
- Despite the narrower scope, infrastructure is far broader than transportation!
  - Broadband
  - Water and waste water
  - Power infrastructure
  - Resiliency
  - Cyber security
  - Environmental remediation
- Although scaled down, the IIJA includes significant investments in carbon reduction, climate resilience, and electric vehicles.

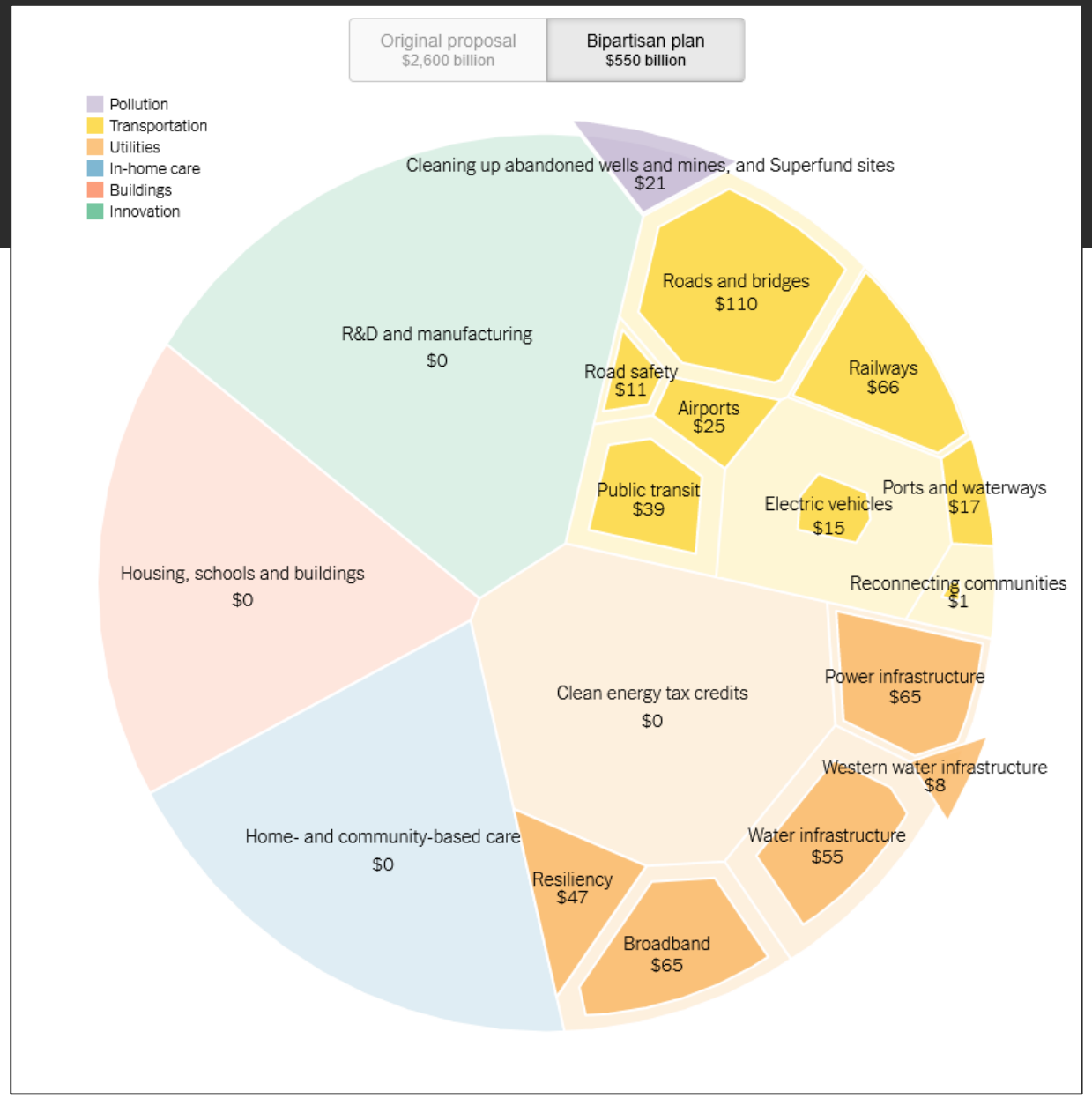


Chart from The New York Times, 8/10/21

TRANSPORTATION HIGHLIGHTS

- **$110 billion above base for roads and bridges.**
- **$11 billion above base for highway, pedestrian, and pipeline safety.**

Federal-Aid Highways:

- FHWA formula funds: $273 billion/5 years
  - FFY22 funds are approx. 20% higher than FFY21.
  - FFY26 funds are approx. 30% higher than FFY21.
- Includes 2 new FHWA formula programs:
  - Carbon Reduction: $6.42 billion
  - PROTECT: $8.8 billion (includes competitive)

$40 billion for bridges:

- Bridge Formula Funds: $27.5 billion
  - $45 million/yr state minimum for 5 years ($225 million total)
- Competitive Grants: $12.5 billion
  - 50% for large projects ($50M+)
  - States and local govt's eligible.

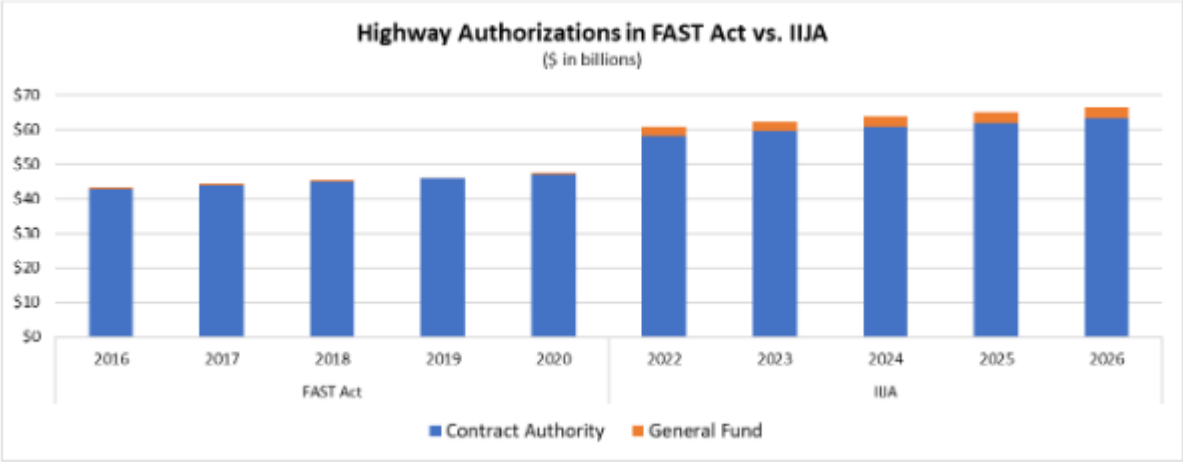


Chart from FFIS Issue Brief 21-10 on Highway Funding

TRANSPORTATION HIGHLIGHTS

- **Rail - $66 billion (new)**
  - $22 billion to Amtrak: $16 billion for national network, $6 billion for Northeast Corridor.
  - $36 billion for Federal-State Partnership for Intercity Passenger Rail Grants (competitive). $24 billion for Northeast Corridor modernization, $12 billion for intercity rail service.
  - $5 billion for Consolidated Rail Infrastructure and Safety Improvements (CRISI) – competitive rail improvement and safety grants
  - $3 billion for railroad grade crossing safety (competitive)
- **Airports - $25 billion (new)**
  - $15 billion for Airport Improvement Program. *Expected VT Share: $28 million/5 years (mostly for BTV)*
  - $5 billion for terminals
  - $5 billion for FAA facilities.
- **Ports and Waterways - $17 billion (new)**

TRANSPORTATION CLIMATE HIGHLIGHTS

- **Clean School Buses & Ferries - $7.5 billion**
  - Includes $5 billion for zero-emission and clean school buses (competitive, up to 100% federal)
- **Electric Vehicle (EV) Charging - $7.5 billion**
  - Formula funds - $5 billion. *Expected VT Share: $21 million/5 years*
  - Competitive grants - $2.5 billion
  - EV infrastructure also added as eligible STBG use
- **Public Transit - $39 billion in new funding.** *Expected VT Share: $83 million/5 years, an increase of $22 million over the FAST Act.*
  - $5.25 billion for Low-No Competitive Grants for zero-emission or low-emission transit buses.
- **FHWA Carbon Reduction:** *NEW* formula program - $6.4 billion/5 years. *Expected VT Share: $33 million.*
  - Eligible projects include traffic monitoring and management, public transportation, trail facilities, intelligent transportation systems, replacing street lighting/signals, and development of a carbon reduction strategy.
  - Funds may support the deployment of publicly accessible EV infrastructure and purchase/lease of zero-emission equipment.
  - Guidance not issued yet.
- **FHWA PROTECT:** *NEW* formula program - $7.3 billion/5 years. *Expected VT Share: $37 million.*
  - Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (climate resilience). Guidance not issued yet.

NATIONWIDE HIGHWAY FUNDING

Division A Highway Trust Fund Contract Authority, FY 2022-2026
($ in millions)

Program	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total	New Program	Formula/ Competitive	Federal Share	States Eligible
Federal-Aid Highways	$52,488	$53,538	$54,609	$55,701	$56,815	$273,150				
National Highway Performance Program	*28,439*	*29,008*	*29,588*	*30,180*	*30,784*	*148,000*		F	80% generally	X
Surface Transportation Block Grant	*13,835*	*14,112*	*14,394*	*14,682*	*14,976*	*72,000*		F	80% generally	X
Highway Safety Improvement Program 1/	*2,983*	*3,048*	*3,114*	*3,181*	*3,249*	*15,575*		F	90%	X
Railway-Highway Crossings (HSIP set-aside)	*245*	*245*	*245*	*245*	*245*	*1,225*		F	100%	X
Congenstion Mitigation and Air Quality	*2,536*	*2,587*	*2,639*	*2,692*	*2,746*	*13,200*		F	80% generally	X
National Highway Freight Program	*1,374*	*1,401*	*1,429*	*1,458*	*1,487*	*7,150*		F	80% generally	X
Carbon Reduction Program	*1,234*	*1,258*	*1,283*	*1,309*	*1,335*	*6,420*	X	F	80% generally	X
Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) Program	*1,403*	*1,431*	*1,459*	*1,489*	*1,518*	*7,300*	X	F	80% generally	X
Metropolitan Transportation Planning	*438*	*447*	*456*	*465*	*474*	*2,280*		F	80% generally	X
Transportation Infrastructure Finance and Innovation	250	250	250	250	250	1,250		C	N/A	X
Tribal Transportation Program	578	590	602	613	628	3,012		F	100%	
Federal Lands Transportation Program	422	430	439	448	456	2,195		N/A	100%	
Federal Lands Access Program	286	292	297	304	309	1,488		F	Up to 100%	X
Territorial and Puerto Rico Highway Program	219	224	228	233	237	1,141				
Puerto Rico Highway Program	*173*	*177*	*180*	*184*	*187*	*901*		*F*	*80% generally*	
Territorial Highway Program	*46*	*47*	*48*	*49*	*50*	*240*		*F*	*100%*	
Nationally Significant Freight and Highway Projects (INFRA Grants) 2/	1,000	1,000	1,000	900	900	4,800		C	60-80%	X
Bridge Investment Program 2/	600	640	650	675	700	3,265	X	C	50-80%	X
Tribal Transportation Facility Bridge	*16*	*18*	*20*	*22*	*24*	*100*		*F*	*100%*	
Congestion Relief Program	50	50	50	50	50	250	X	C	80%	X
Charging and Fueling Infrastructure Grants	300	400	500	600	700	2,500	X	C	80%	X
Community Grants	*150*	*200*	*250*	*300*	*350*	*1,250*	*X*	*C*	*80%*	*X*
Rural Surface Transportation Grant Program	300	350	400	450	500	2,000	X	C	80% generally	X
PROTECT competitive grants	250	250	300	300	300	1,400				
Planning Grants	*25*	*25*	*30*	*30*	*30*	*140*	*X*	*C*	*100%*	*X*
Resilience Improvement Grants	*175*	*175*	*210*	*210*	*210*	*980*	*X*	*C*	*80% generally*	*X*
Community Resilience and Evacuation Route Grants	*25*	*25*	*30*	*30*	*30*	*140*	*X*	*C*	*80% generally*	*X*
At-risk Coastal Infrastructure Grants	*25*	*25*	*30*	*30*	*30*	*140*	*X*	*C*	*80% generally*	*X*
Reduction of Truck Emissions at Port Facilities	50	50	50	50	50	250	X	C	80%	N/S
Nationally Significant Federal Lands and Tribal Projects 2/	55	55	55	55	55	275				
Federal Lands Facilities	*28*	*28*	*28*	*28*	*28*	*138*		*C*	*90%*	*X*
Tribal Facilities	*28*	*28*	*28*	*28*	*28*	*138*		*C*	*100%*	
Construction of Ferry Boats and Ferry Terminal Facilities	110	112	114	116	118	570		F	80-85%	X
Safe Routes to School 3/	-	-	-	-	-	-		F	80-90%	X
Pilot Programs:										
Wildlife Crossings Pilot Program	60	65	70	75	80	350	X	C	N/S	X
Prioritization Process Pilot Program	10	10	10	10	10	50	X	C	N/S	X
Reconnecting Communities Pilot Program	95	98	100	102	105	500				
Planning Grants	*30*	*30*	*30*	*30*	*30*	*150*	*X*	*C*	*80%*	*X*
Capital Construction Grants	*65*	*68*	*70*	*72*	*75*	*350*	*X*	*C*	*50%*	*X*
Transfer and Sale of Toll Credits	-	-	-	-	-	-	X	C	N/A	X
Research Programs:										
Highway Research and Development Program	147	147	147	147	147	735				
Strategic Innovation for Revenue Collection	*15*	*15*	*15*	*15*	*15*	*75*	*X*	*C*	*70-80%*	*X*
National Motor Vehicle Per-Mile User Fee Pilot	*10*	*10*	*10*	*10*	*10*	*50*	*X*	*N/A*	*N/A*	
Technology and Innovation Deployment Program	110	110	110	110	110	550				
Accelerated Implementation and Deployment of Pavement Technologies	*12*	*12*	*12*	*12*	*12*	*60*		*N/S*	*80%*	*N/S*
Accelerated Implementation and Deployment of Advanced Digital Construction Management Systems	*20*	*20*	*20*	*20*	*20*	*100*	*X*	*N/S*	*80%*	*N/S*
Advanced Transportation Technologies and Innovative Mobility Deployment 4/	-	-	-	-	-	-		*C*	*80%*	*X*
Training and Education	25	25	26	26	26	128	N/A	N/A	N/A	N/A
Intelligent Transportation Systems Program	110	110	110	110	110	550		N/S	80%	X
University Transportation Centers Program	80	81	81	82	82	405		C	50%	
Bureau of Tranportation Statistics	26	26	27	27	27	133		N/A	N/A	N/A
Administrative Expenses	491	501	511	521	531	2,555				
Transportation Access Pilot Program 5/	-	-	-	-	-	-	*X*	*C*	*N/S*	*X*
Total FHWA Contract Authority	**$58,112**	**$59,404**	**$60,735**	**$61,953**	**$63,296**	**$303,500**				

Chart from FFIS Issue Brief 21-10 on Highway Funding

- $303.5 billion of Highway Trust Fund contract authority (FFY2022-2026).
- The vast majority of funds (90%) allocated to state via Federal-aid Highway formula
  - Includes 2 new programs for Carbon Reduction and PROTECT (resilience)
- Many new competitive programs that state are eligible for:
  - Bridge investments
  - Congestion relief
  - Charging and fueling infrastructure
  - PROTECT/climate resilience
  - Numerous pilot programs
- Take note of match requirements!

NATIONWIDE HIGHWAY FUNDING (CONT'D)

Division A Highway General Fund Authorizations, FY 2022-2026
($ in millions)

Program 1/	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total	New Program	Formula/ Competitive	Federal Share	States Eligible
Bridge Investment Program	$600	$640	$650	$675	$700	$3,265	X	C	50-80%	X
Nationally Significant Federal Lands and Tribal Projects	300	300	300	300	300	1,500				
Federal Lands Facilities	*150*	*150*	*150*	*150*	*150*	*750*		*C*	*90%*	*X*
Tribal Facilities	*150*	*150*	*150*	*150*	*150*	*750*		*C*	*100%*	
Healthy Streets Program	100	100	100	100	100	500	X	C	80-100%	X
Transportation Resilience and Adaptation Centers of Excellence	100	100	100	100	100	500	X	C	50%	
Open Challenge and Research Proposal Pilot Program	15	15	15	15	15	75	X	C	80%	X
Nationally Significant Freight and Highway Projects (INFRA Grants)	1,000	1,100	1,200	1,300	1,400	6,000		C	60-80%	X
Tribal High Priority Projects Program	30	30	30	30	30	150		C	100%	
Stopping Threats on Pedestrians	5	5	5	5	5	25	X	C	Up to 100%	X
Appalachian Regional Commission	200	200	200	200	200	1,000				
High-speed Broadband Deployment Initiative	*20*	*20*	*20*	*20*	*20*	*100*		*C*	*50-80%*	*X*
Appalachian Regional Energy Hub Initiative	*5*	*5*	*5*	*5*	*5*	*25*	*X*	*C*	*50-80%*	*X*
Denali Access System Program	20	20	20	20	20	100		N/A	80% generally	
Invasive Plant Elimination Program	50	50	50	50	50	250	X	C	50-75%	X
Pollinator-friendly Practices on Roadsides and Highway Rights-of-Way	2	2	2	2	2	10	X	C	100%	X
Active Transportation Infrastructure Investment Program	200	200	200	200	200	1,000	X	C	80-100%	X
Research Programs:										
Data Integration Pilot Program	3	3	3	3	3	13	X	N/S	N/S	N/S
Emerging Technology Research Pilot Program	5	5	5	5	5	25	X	N/S	N/S	N/S
Total	**$2,630**	**$2,770**	**$2,880**	**$3,005**	**$3,130**	**$14,413**				

1/ Funding for authorizations in this table will be determined by the annual appropriations process, although some listed programs receive advance appropriations through Division J of the bill.

Advance Appropriations for the Federal Highway Administration
($ in millions)

Program	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total	New Program	Formula/ Competitive	Federal Share	States Eligible
Bridge Investment Program	$5,500	$5,500	$5,500	$5,500	$5,500	$27,500	X	F	80-100%	X
Bridge Investment Program 1/	1,847	1,847	1,847	1,847	1,847	9,235	X	C	50-80%	X
National Electric Vehicle Formula Program	1,000	1,000	1,000	1,000	1,000	5,000	X	F	80%	X
Nationally Significant Freight and Highway Projects (INFRA) 1/	640	640	640	640	640	3,200		C	60%	X
Reduction of Truck Emissions at Port Facilities Program 1/	30	30	30	30	30	150	X	C	80%	N/S
University Transportation Centers Program 1/	19	19	19	19	19	95		C	50%	
Reconnecting Communities Pilot Program Planning Grants 1/	20	20	20	20	20	100	X	C	80%	X
Reconnecting Communities Pilot Program Capital Construction Grants 1/	80	80	80	80	80	400	X	C	50%	X
Construction of Ferry Boats and Ferry Terminal Facilities Program 1/	68	68	68	68	68	342		F	80%	X
Appalachian Development Highway System	250	250	250	250	250	1,250		F	80%	X
Total	**$9,454**	**$9,454**	**$9,454**	**$9,454**	**$9,454**	**$47,272**				

1/ These programs also receive contract authority in FYs 2022-2026.

- $14.4 billion of federal General Fund authorizations (FFY2022-2026) mostly for competitive grants, some of which will need to be supported through future appropriations.
- $47.3 billion of advance appropriations for certain programs (FFY2022-2026).
  - Bridge Formula program ($27.5B)
  - EV Formula program ($5B)
- Take note of match requirements!

Charts from FFIS Issue Brief 21-10 on Highway Funding. Additional charts are available on the JFO website.

HOW FEDERAL TRANSPORTATION FUNDING WORKS

- **Surface transportation programs are typically *authorized* on a multi-year basis:**
  - ISTEA (1991)
  - TEA-21 (1998)
  - SAFETEA-LU (2005)
  - MAP-21 (2012)
  - FAST Act (2015)
  - IIJA (2021)

- Stop-gap extensions to authorizations frequently occur. Most recently, the FAST Act was extended for a year in 2020 (and again for a few months this fall). Extensions keep programs going and money flowing but present challenges to long-term planning.

- Surface transportation authorizations legally allow the programs to operate and provide contract authority to obligate funds from the Highway Trust Fund. Authorizations establish the upper limits of funding made available to a program. Apportioned formula funds typically available for obligation October 1.
  - Obligation = federal government promises to cover the cost.
  - Obligation limits (ceilings) may be imposed by Congress to control expenditures and limit how much contract authority can be obligated in a given year.

- However, some programs may require a second piece of legislation (appropriations act) to actually fund the activities – and appropriations may be lower than the authorized levels. This is particularly relevant to programs not funded by the Highway Trust Fund. The IIJA contained advanced appropriations for some authorized activities but not for all.

HOW FEDERAL TRANSPORTATION FUNDING WORKS

- **Additional federal funding requires additional non-federal match. Most federal transportation funding typically requires a 20% non-federal cost share (10% for most interstate work), with some exceptions.**
  - Match requirement and project eligibility often depend on “what the project is” and “where it is.”
  - Examples: A $5 million bridge project on the federal-aid highway network (e.g. a state highway) requires $1 million of non-federal funds to match $4 million of federal funds. A $5 million bridge project on the interstate network requires $500,000 of non-federal funds to match $4.5 million of federal funds.

- **The state apportionments/allocations do not represent a lump sum of money received in advance – rather, they represent an amount of contract authority available to the state to obligate and draw down on a reimbursement basis.**
  - As a project is underway, the state pays the bills and the federal government reimburses the state for its share of the cost.
  - Federal transportation funds can typically be obligated several years after the year in which the funds are apportioned.
    - Example: FHWA formula funds can typically be drawn down up to 3 years after the year they are made available.

- **Flexible financing tools exist: Some formula funds can be “flexed” between programs. Tapered match can shift the federal share of progress payments as long as the total cost share for the entire project is consistent with guidelines.**

- **Do not think of federal funding as “use or lose” by June 30th. Instead, also think over a multi-year time period.**
  - Most of the federal funds are “project driven” and projects take time (multiple years). Projects also advance at different rates, and have different costs, which is why AOT appropriations and expenditures fluctuate from year to year.
  - The current and upcoming Transportation Programs will include federal funds apportioned in prior years.
  - Remember – the federal fiscal year (Oct 1 – Sept 30) does not align with the state fiscal year (July 1 –June 30).

MAJOR FHWA FORMULA FUNDS
(LINKS TO EXISTING FAST ACT WEBSITES)

- **National Highway Performance Program (NHPP):**
  - Funds a wide range of activities to support the condition and performance of the National Highway System.
- **Surface Transportation Block Grant (STBG)**
  - Most flexible pot of money – but still has restrictions
  - Projects to preserve and improve Federal-aid highways, bridge and tunnel projects, bike/ped infrastructure, transit capital projects, etc.
  - EV charging infrastructure now an eligible activity.
- **Congestion Mitigation and Air Quality (CMAQ)**
  - Flexible funds to help meet requirements of Clean Air Act, reduce congestion, improve air quality.
  - Shared micromobility (e.g. bike share, scooters) and purchase of medium- or heavy-duty zero emission vehicles now eligible.
- **National Highway Freight Program (NHFP):**
  - Highway-focused formula funding for use on freight-related projects.
- **Highway Safety Improvement Program (HSIP)**
  - Railway-Highway Grade Crossing Set-Aside
  - Reduce traffic fatalities and serious injuries on all public roads.
- **Metropolitan Planning Program (MPP)**
- **Carbon Reduction (NEW!)**
- **PROTECT (NEW!) – Climate resilience**

- Set-asides exist for some programs. For example:
  - 2% of NHPP, STBG, HSIP, CMAQ, and NHFP for planning and research
  - STBG set-asides for Transportation Alternatives, off-system bridges, population-based geographic distributions.
- Funds may be flexed between certain programs with some restrictions.
- Some activities can be funded through multiple different funding streams.
- Live links are provided to existing FAST Act website but do not reflect changes made in the IIJA. FHWA materials will be updated in the near future.

WHAT DOES IT MEAN FOR VERMONT?

EXPECTED FUNDING FOR VERMONT

- **At least $2.2 billion expected from formula funds:**
  - $1.4 billion through federal-aid highway formula funds (over 5 years) – a $324M increase over FAST Act
  - $225 million for bridge replacement and repairs (over 5 years)
  - $21 million for electric vehicle charging infrastructure (over 5 years) = *110 to 130 fast chargers.*
  - At least $100 million for broadband
  - $83 million for public transit (over 5 years)
  - $355 million for water infrastructure (over 5 years)
  - $28 million for airport infrastructure development (over 5 years)
- In addition to these formula estimates, Vermont will be eligible to apply for a wide range of competitive grants to fund specific projects and initiatives.
- IIJA = approx. 53% increase in surface transportation funding vs. FAST Act.

Estimates from FFIS, US DOT, and The White House

EXPECTED FHWA FORMULA FUNDING FOR VERMONT

Vermont Apportionments ($000)	FAST Act					IIJA					
Federal Fiscal Year	FY2016	FY2017	FY2018	FY2019	FY2020	**FY2022**	**FY2023**	**FY2024**	**FY2025**	**FY2026**	**TOTAL FY22-26**
Federal-Aid Highways											
National Highway Performance Program	115,607	118,172	120,419	122,902	125,460	145,250	148,159	151,126	154,152	157,239	**755,926**
Surface Transportation Block Grant	57,790	59,146	60,406	61,485	62,835	70,753	72,168	73,611	75,084	76,585	**368,201**
Highway Safety Improvement Program	11,561	11,818	12,040	12,257	12,506	15,266	15,596	15,933	16,277	16,627	**79,699**
Rail-Highway Crossings (HSIP Set-Aside)	1,125	1,150	1,175	1,200	1,225	1,225	1,225	1,225	1,225	1,225	**6,125**
Congestion Mitigation and Air Quality	11,800	12,062	12,291	12,516	12,771	12,907	13,165	13,429	13,697	13,971	**67,169**
Metropolitan Transportation Planning	2,088	2,130	2,175	2,221	2,273	2,765	2,821	2,877	2,935	2,993	**14,391**
National Highway Freight Program	5,898	5,642	6,154	6,924	7,693	7,039	7,179	7,323	7,469	7,619	**36,629**
Carbon Reduction Program						6,309	6,435	6,564	6,695	6,829	**32,832**
Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT)						7,174	7,317	7,463	7,613	7,765	**37,332**
	205,868	210,119	214,660	219,505	224,762	**268,688**	**274,065**	**279,551**	**285,147**	**290,853**	**1,398,304**

Chart by JFO based on estimates from FFIS

ESTIMATED MATCH REQUIREMENTS

Vermont Formula Funding Estimates - IIJA									
Federal Fiscal Year ($ thousand)	FFY2021 (base)	FFY2022	FFY2023	FFY2024	FFY2025	FFY2026	TOTAL FFY22-26	New Program	Federal Share
Federal-Aid Highways									
National Highway Performance Program	$124	$145,250	$148,159	$151,126	$154,152	$157,239	$755,927		80-100% generally
Surface Transportation Block Grant	65	70,753	72,168	73,611	75,084	76,585	368,201		80% generally
Highway Safety Improvement Program	12	15,266	15,596	15,933	16,277	16,627	79,699		90%
Rail-Highway Crossings (HSIP Set-Aside)	1	1,225	1,225	1,225	1,225	1,225	6,125		100%
Congestion Mitigation and Air Quality	13	12,907	13,165	13,429	13,697	13,971	67,170		80% generally
Metropolitan Transportation Planning	2	2,765	2,821	2,877	2,935	2,993	14,392		80% generally
National Highway Freight Program	8	7,039	7,179	7,323	7,469	7,619	36,629		90% generally
Carbon Reduction Program	0	6,309	6,435	6,564	6,695	6,829	32,831	Y	80% generally
Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT)	0	7,174	7,317	7,463	7,613	7,765	$37,332	Y	80-90% generally
Total Federal-Aid Highway Formula Funds	**225,000**	**268,688**	**274,065**	**279,551**	**285,147**	**290,853**	**1,398,304**		
Above FFY21 Base		*43,688*	*49,065*	*54,551*	*60,147*	*65,853*	273,304		
Additional Required Match (17.5%)		*9,267*	*10,408*	*11,571*	*12,758*	*13,969*	*57,974*		
Additional Required Match (20%)		*10,922*	*12,266*	*13,638*	*15,037*	*16,463*	*68,326*		
Bridge Formula Funding									
Total Formula Estimate		**45,000**	**45,000**	**45,000**	**45,000**	**45,000**	**225,000**	Y	80-100%
15% Off-System Set Aside (100% federal)		6,750	6,750	6,750	6,750	6,750	33,750		
Less 15% Off-System Set Aside		**38,250**	**38,250**	**38,250**	**38,250**	**38,250**	**191,250**		80-100%
Additional Required Match (17.5%)		*8,114*	*8,114*	*8,114*	*8,114*	*8,114*	*40,568*		
Additional Required Match (20%)		*9,563*	*9,563*	*9,563*	*9,563*	*9,563*	*47,813*		
Transit Formula Grants									
	$ 12,100	**15,890**	**16,213**	**16,637**	**16,981**	**17,413**	**83,135**		50%-80% generally
Above FFY21 Base		*3,790*	*4,113*	*4,537*	*4,881*	*5,313*	*22,634*		
Additional Required Match (20%)		*948*	*1,028*	*1,134*	*1,220*	*1,328*	*5,659*		
EV Charging		**4,200**	**4,200**	**4,200**	**4,200**	**4,200**	**21,000**	Y	80% generally
Additional Required Match (20%)		*1,050*	*1,050*	*1,050*	*1,050*	*1,050*	*5,250*		
TOTAL EST. ADDITIONAL MATCH REQUIREMENT (LOW)		19,378.3	20,599.6	21,869.3	23,142.3	24,460.7	**109,450.3**		**Assumes 17.5% FHWA, Bridge; $1M/yr for EV**
TOTAL EST. ADDITIONAL MATCH REQUIREMENT (HIGH)		22,482.0	23,907.0	25,384.5	26,869.5	28,404.0	**127,047.0**		**Assumes 20% FHWA, Bridge; $1M/yr for EV**
Most federal funds are available for expenditure for several years after the FFY in which they are made available. Therefore, non-federal match requirements per fiscal year are estimates only and may not reflect the fiscal year of actual expenditure.									
Data from FFIS based on preliminary estimates as of November 2021									
Apportionments may be subject to annual obligation limits based on availability of appropriations.									

Chart by JFO based on estimates from FFIS

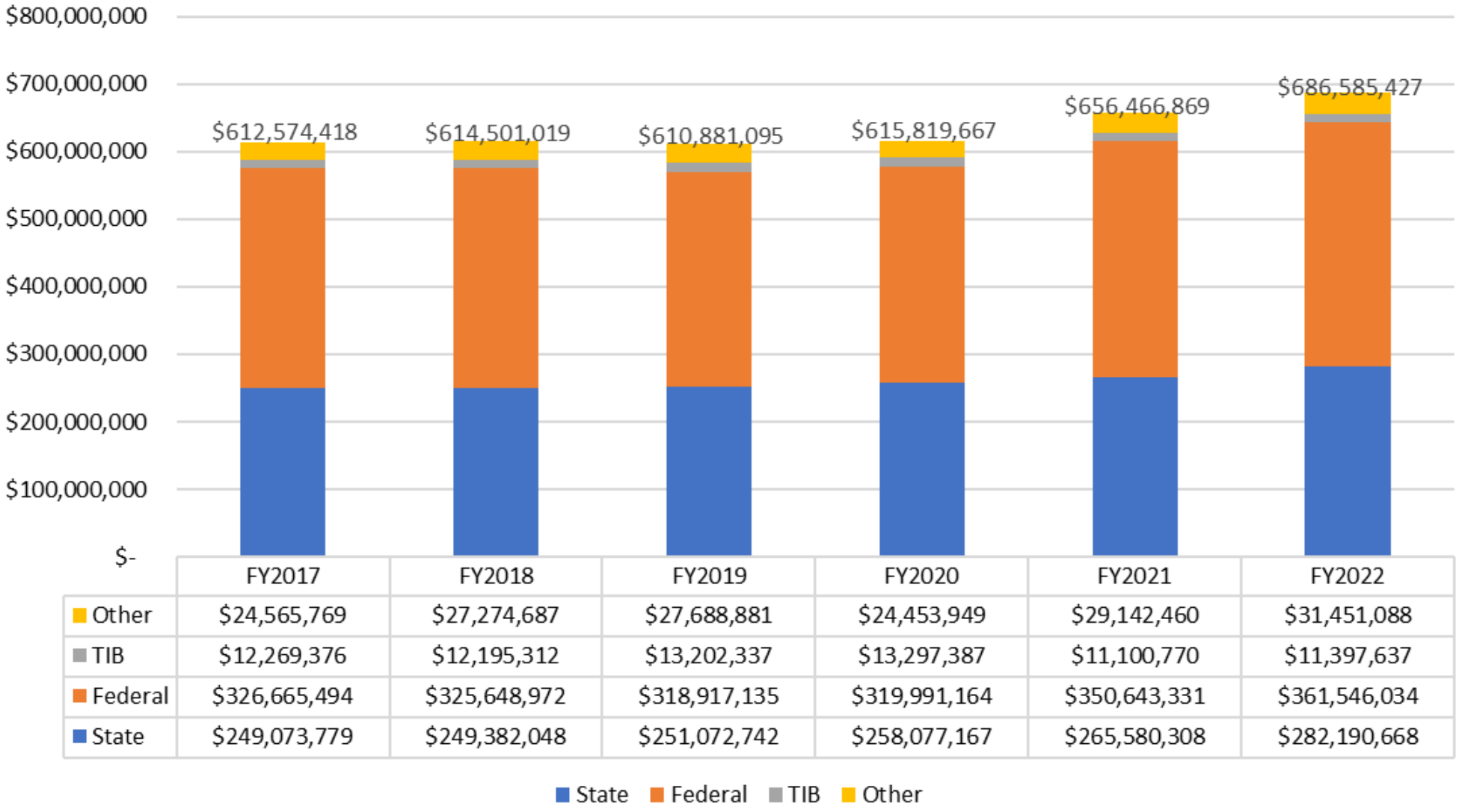
- Additional formula funds alone could require $109 million - $127 million of *additional* match.
- Timing of match often does <u>not</u> align with the federal fiscal year in which the contract authority is authorized.
  - Project driven
  - Most federal funds are available for obligation up to 3 years after the year they are authorized.

SAMPLE OF COMPETITIVE OPPORTUNITIES

Competitive Grants	Total Funding	Description
Safe Streets for All	$5 billion	New - Local govt's advance "vision zero" plans and improvements.
RAISE Grants	$15 billion	Expanded – Support surface transportation projects of local/regional significance
INFRA Grants	$14 billion	Expanded – Freight infrastructure for projects of regional or national significance.
FTA Low-No Grants	$5.6 billion	Expanded – Purchase/lease zero-emission and low-emission transit buses and related facilities.
FTA Buses and Bus Facilities	$2 billion	Expanded – Replace/rehab/purchase buses and related equipment/facilities, including technical changes to modify low or no emission vehicles or facilities.
Capital Investment Grants	$23 billion	Expanded – New high capacity transit projects
FAA Terminal Program	$5 billion	New – Airport terminal development and other landside projects.
MEGA Projects	$15 billion	New – Multi-modal, multi-jurisdictional projects of national or regional significance.
PROTECT	$8.7 billion	New - $7.3B in formula funds, plus $1.4B in competitive grants to increase resilience of transportation system.

SAMPLE OF COMPETITIVE OPPORTUNITIES

Competitive Grants	Total Funding	Description
Port Infrastructure Development	$2.25 billion	Expanded – Port infrastructure and waterway investments
5307 Ferry Program	$150 million	Existing - $30M/yr for passenger ferries that serve urbanized areas
Electric or Low Emitting Ferry Program	$500 million	New – Transition passenger ferries to low or zero emission
Rural Ferry Program	$2 billion	New – Provides funds to states to support essential ferry service in rural areas.
FHWA Nationally Significant Bridges	$12.5 billion	New – Rehab/replace bridges – large projects plus bundling of smaller projects
FTA All Station Accessibility	$1.75 billion	New – Funds accessibility upgrades to transit and commuter rail stations
Charging and Fueling Infrastructure	Up to $2.5 billion	New – Funds convenient charging where people live, work, and shop
Reconnecting Communities Pilot	$1 billion	New – Planning/design/demolition/reconstruction of street grids, parks, or other infrastructure
SMART Grants	$1 billion	New – A programmed competition to deliver grants to states, locals, and tribes for projects that improve safety and efficiency.
Capital Investment Grants	$23 billion	Expanded – New high capacity transit projects
Rural Surface Transportation Grant Program	$2 billion	New – Improve/expand surface transportation infrastructure in rural areas, increasing connectivity, improve safety/reliability of movement.



	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
Other	$24,565,769	$27,274,687	$27,688,881	$24,453,949	$29,142,460	$31,451,088
TIB	$12,269,376	$12,195,312	$13,202,337	$13,297,387	$11,100,770	$11,397,637
Federal	$326,665,494	$325,648,972	$318,917,135	$319,991,164	$350,643,331	$361,546,034
State	$249,073,779	$249,382,048	$251,072,742	$258,077,167	$265,580,308	$282,190,668

Chart by JFO

STATE REVENUE FORECAST

- **The COVID-19 pandemic significantly impacted Vermont's state transportation revenues.**
  - "User fees" fund a large share of transportation systems. But all of a sudden, those systems saw drastically fewer "users." There are limits to how far operations can be "scaled down" to respond to decreased demand/lower revenues.
  - Working from home, travel restrictions, curtailment of economic activity
  - Weak demand for motor fuels = lower gas tax and assessment revenue
- **Fortunately, federal actions have helped the situation:**
  - Stimulus funding led to strong consumer demand for new and used vehicles, which led to historically strong Purchase & Use Tax collections.
  - Federal pandemic relief provided funds at 100% federal share to assist transit, airports (primarily BTV), and surface transportation activities. Funds helped offset losses of revenue related to the pandemic.

Federal COVID-19 Transportation Funding Received by Vermont				
	CARES Act	CRRSAA	ARPA	**Total by Agency**
FAA (Airports)	$9,000,000	$4,133,430	$7,922,733	**$21,056,163**
FHWA		$50,360,938		**$50,360,938**
FTA (Transit)	$21,009,964	$29,296,274	$14,926,882	**$65,233,120**
Total by Bill	**$30,009,964**	**$83,790,642**	**$22,849,615**	**$136,650,221**

Chart by JFO

STATE REVENUE FORECAST

- In FY2021, state transportation revenues (T-Fund plus TIB Fund) ended up “less bad” than the first two post-pandemic forecasts expected – this is mostly due to the strong Purchase & Use Tax offsetting the weak gas tax.
  - FY2020 collections were $21.4 million below the pre-pandemic forecast.
  - FY2021 collections were $9.1 million below the pre-pandemic forecast.
  - FY2022 collections FYTD (July – Nov) are nearly on target for the current revenue forecast (-$318,501, or -0.3% below target):
    - Gasoline revenues are -$1.48 million (-4.4%) below target.
    - Purchase & Use revenues are +$1.40 million (+3.7%) above target.
- Upgraded revenue forecasts and management steps taken by AOT have led to a projected T-Fund surplus at the end of FY2022 of $23.3 million (prior to any BAA adjustments). This surplus can carry over into future years.
- However, state transportation revenue growth is projected to be essentially “flat” in the years beyond FY2023.
- We will want to pay very careful attention to how gas taxes and purchase and use taxes trend in the near-term future:
  - How does demand for fuels rebound given the trajectory of the pandemic and retail gas prices?
  - What will demand and inventory look like for vehicle purchases?
  - JFO tracks transportation revenues monthly and updates spreadsheets on the JFO website under Subjects > Transportation

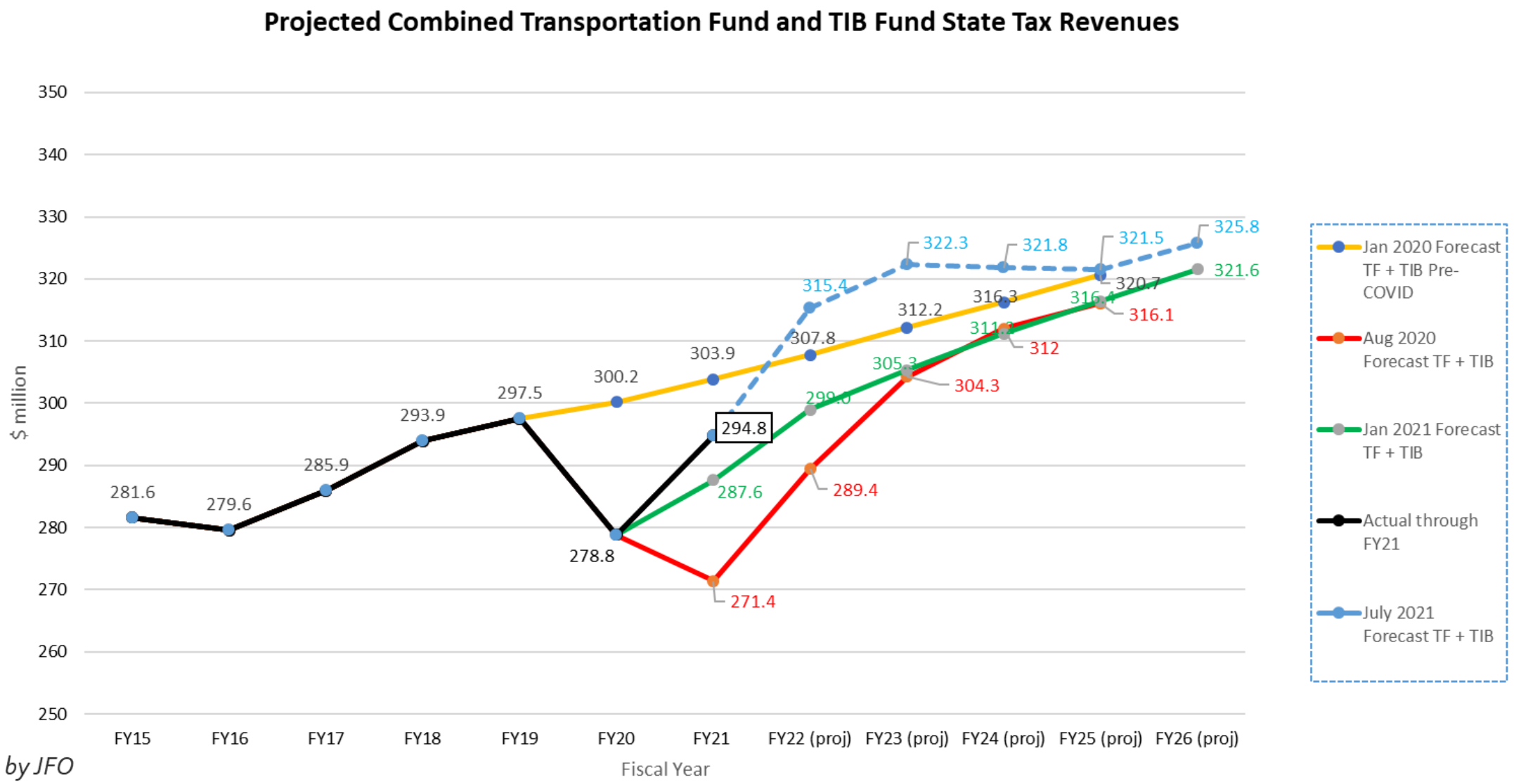
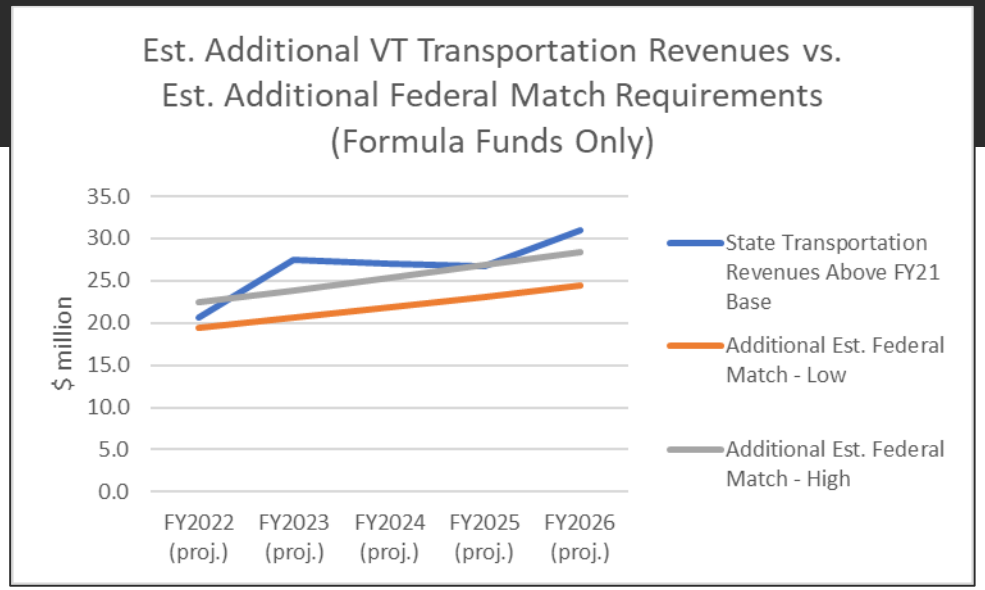

Projected Combined Transportation Fund and TIB Fund State Tax Revenues
350
340
330
320
310
300
290
280
270
260
250
$ million
281.6
279.6
285.9
293.9
297.5
278.8
294.8
300.2
303.9
307.8
312.2
316.3
320.7
315.4
322.3
321.8
321.5
325.8
321.6
287.6
299.0
305.3
311.2
316.4
271.4
289.4
304.3
312
316.1
FY15
FY16
FY17
FY18
FY19
FY20
FY21
FY22 (proj)
FY23 (proj)
FY24 (proj)
FY25 (proj)
FY26 (proj)
Fiscal Year
Jan 2020 Forecast TF + TIB Pre-COVID
Aug 2020 Forecast TF + TIB
Jan 2021 Forecast TF + TIB
Actual through FY21
July 2021 Forecast TF + TIB

Chart by JFO

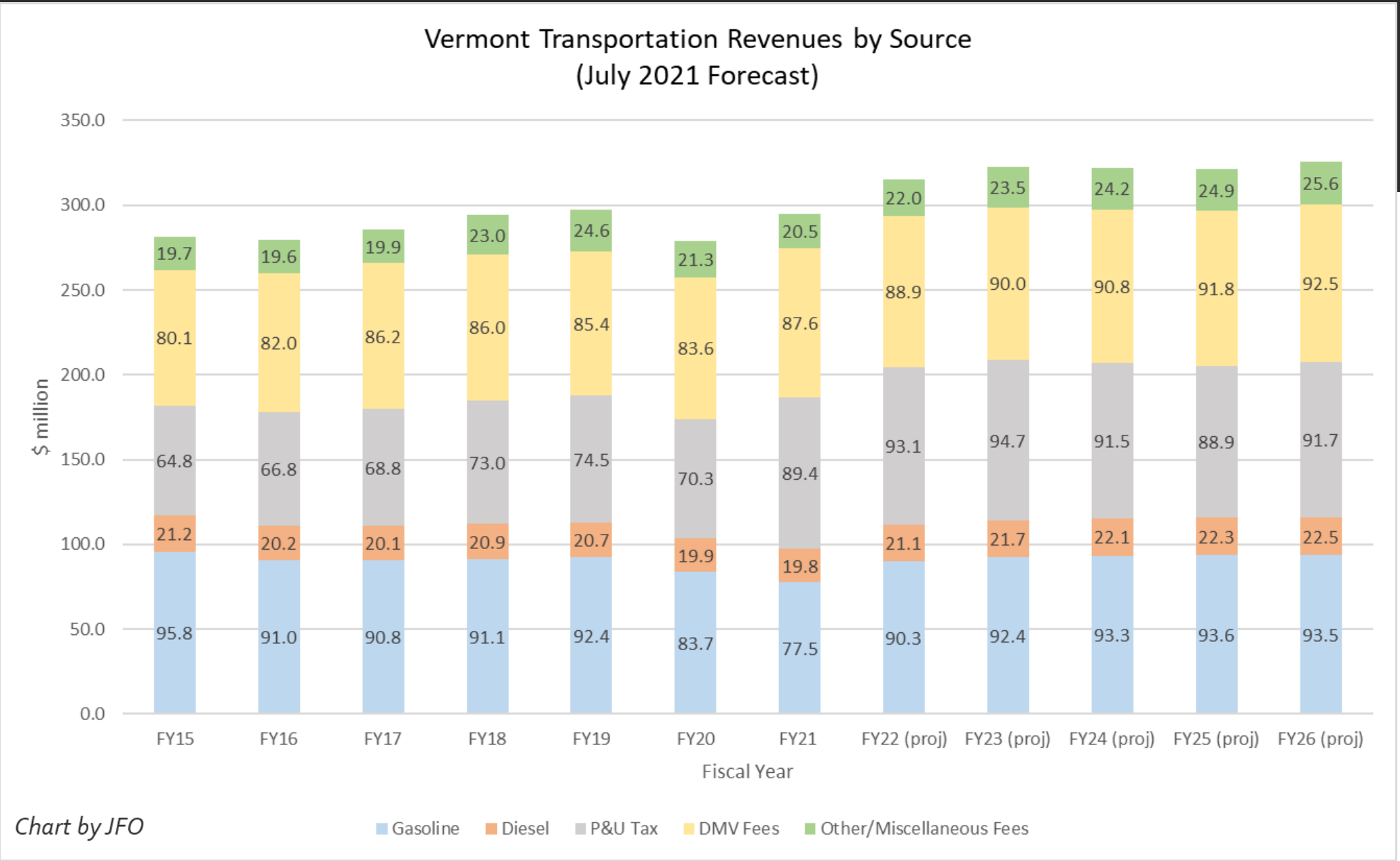
REVENUE FORECAST



- **Higher match requirements for formula funds alone could consume most of the additional forecasted state transportation revenues in the next few years.**
  - From FY2022-2026, the T-Fund and TIB (combined) are forecasted to bring in $132.8 million of cumulative additional revenue above FY2021 levels. (FY2021 revenues were $9.1 million below pre-pandemic forecast for FY2021).
  - Revenues are forecasted to be essentially "flat" beyond FY2023.
  - Additional federal funds could easily require $109.5 million (low estimate) to $127.1 million (high estimate) of additional non-federal match to draw down.
  - Actual requirements will vary by fiscal year:
    - Federal fiscal year does not correspond to state fiscal year
    - Project timelines vary
    - Federal funds can be obligated and spent down over several years.
- What about competitive grant matches?
- Remember – meeting formula match requirements is not the only growth pressure on state transportation revenues!
  - Salaries, benefits
  - Inflation
  - Future increases in non-AOT uses of T-Fund revenue?

July 2021 Consensus Revenue Forecast								
$ millions	**FY2019 (act)**	**FY2020 (act)**	**FY2021 (act)**	**FY2022 (proj.)**	**FY2023 (proj.)**	**FY2024 (proj.)**	**FY2025 (proj.)**	**FY2026 (proj.)**
Forecasted TF Revenue	280.9	264.1	282.7	298.4	305.2	304.1	303.2	307.0
Forecasted TIB Revenue	16.6	14.7	12.1	17.0	17.1	17.7	18.3	18.8
Total:	**297.5**	**278.8**	**294.8**	**315.4**	**322.3**	**321.8**	**321.5**	**325.8**
Increase above FY21 Level				*20.6*	*27.5*	*27.0*	*26.7*	*31.0*
Growth from Prior Year				*7.0%*	*2.2%*	*-0.2%*	*-0.1%*	*1.3%*
Additional Federal Match Estimates (by FFY)								
Low estimate				19.4	20.6	21.9	23.1	24.5
High estimate				22.5	23.9	25.4	26.9	28.4

Table and chart by JFO from Consensus Revenue Forecasts


Vermont Transportation Revenues by Source
(July 2021 Forecast)
350.0
300.0
250.0
200.0
150.0
100.0
50.0
0.0
$ million
19.7
19.6
19.9
23.0
24.6
21.3
20.5
22.0
23.5
24.2
24.9
25.6
80.1
82.0
86.2
86.0
85.4
83.6
87.6
88.9
90.0
90.8
91.8
92.5
64.8
66.8
68.8
73.0
74.5
70.3
89.4
93.1
94.7
91.5
88.9
91.7
21.2
20.2
20.1
20.9
20.7
19.9
19.8
21.1
21.7
22.1
22.3
22.5
95.8
91.0
90.8
91.1
92.4
83.7
77.5
90.3
92.4
93.3
93.6
93.5
FY15
FY16
FY17
FY18
FY19
FY20
FY21
FY22 (proj)
FY23 (proj)
FY24 (proj)
FY25 (proj)
FY26 (proj)
Fiscal Year
Chart by JFO
Gasoline
Diesel
P&U Tax
DMV Fees
Other/Miscellaneous Fees

KEY CONSIDERATIONS AND CONCERNS

- State's ability to meet its future match requirements (particularly beyond FY2023).
  - How are state revenues trending as Vermont continues to recover from the pandemic?
  - Strategic use of scarce state funds to leverage federal funds in order to maximize investment/impact.
  - Need to meet match requirements for anticipated competitive grants, not just formula funds.
  - Understand opportunity costs of using state/federal funds to do X instead of Y.
- Inflation eroding the purchasing power of additional funds.
- Labor costs and workforce availability (internal and external)
- Contractor availability and capacity
- Supply chain challenges
- What will happen with the broader economy post-COVID? Interest rates, fuel prices, discretionary income, consumer purchasing, travel, etc.
- Volume and timing of projects in the pipeline
- As we have seen from other large federal funding bills, it takes some time for the agencies to issue revised guidance, FAQs, stand up new grant programs, issue funding awards, etc. This uncertainty coincides with states putting their SFY2023 budgets together. Expect some adjustments between what we think now and what we'll know a year from now – it's part of the process.
- Oh, and let's make sure Congress fully appropriates (funds) all of the authorizations in the IIJA!

RESOURCES

IIJA Summary Materials on JFO website: https://ljfo.vermont.gov/subjects/covid-19-documents/infrastructure-investment-and-jobs-act-federal-public-law-no-11

White House Fact Sheet on Electric Vehicle Charging Action Plan (Dec 13, 2021): https://www.whitehouse.gov/briefing-room/statements-releases/2021/12/13/fact-sheet-the-biden-harris-electric-vehicle-charging-action-plan/

FHWA “Funding Federal-aid Highways” – January 2017: https://www.fhwa.dot.gov/policy/olsp/fundingfederalaid/FFAH_2017.pdf

Need a good 30-minute podcast for your drive home from Montpelier? AASHTO podcast (Dec 7, 2021): https://podcast.aashtoresource.org/1246739/9632327-infrastructure-bill-update