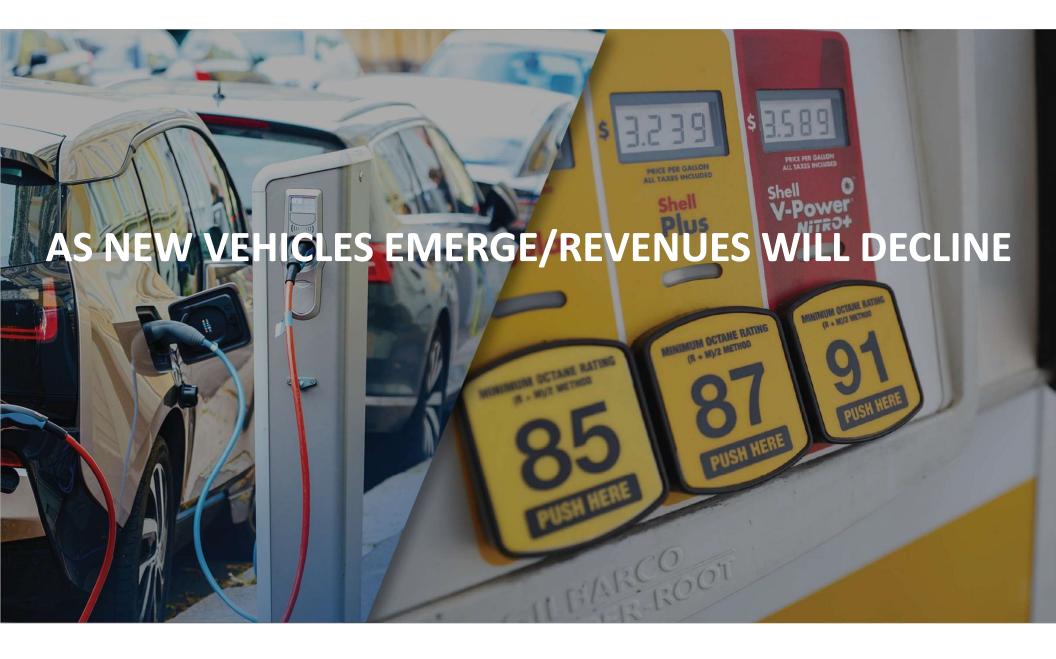
Impact of EV and Hydrogen Vehicles to the State Highway Fund January 27, 2022





40% of vehicles may be electric by 2050



Vehicle Registrations in Kansas

Total Registered Vehicles	1,970,913
Total Electric and Hybrid Vehicles	6,763
Electric Vehicles	3,679
Hybrid Vehicles	3,084

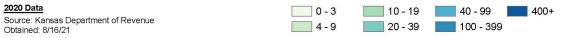
Registration Fees in Kansas

Electric Vehicles	\$50
Electric-hybrid & Plug-in hybrid vehicles	\$100

Info as of 11.30.21

······											_			
7 CHEYENNE	RAV	4 VLINS	0 DECATUR	4 NORTON	3 PHILLIPS	0 SMITH	1 JEWELL	3 REPUBLIC	2 WASHINGTON	2 MARSHALL	0	2 BROWN	3 DONIPHA	N
6 SHERMAN		3	1	0	1	0	5 MITCHELL	2 CLOUD	1	Enter	6 WATOMIE JA	3 CKSON	2 CHISON 21 2	
	ТНО	MAS	SHERIDAN	GRAHAM	ROOKS	OSBORNE		2	CLAY	≏ਘਾ	A		EFFERSON 4	76
0		1	0	2	19	6	1 LINCOLN	2 OTTAWA	6	8 BEARY	4 WABAUNSEE	86 SHAWNEE	254	1615
WALLACE	LOGAN	GC	OVE	TREGO	ELLIS	BUODEL		50	Ľ,		1		DOUGLAS	JOHNSON
1	0	0	3	3	2 RUSH	RUSSELL 2	1 ELLSWORTH	SALINE 39	DICKINSON	6 MORRIS		8 OSAGE	10 FRANKLIN	22 MIAMI
GREELEY	WICHITA	SCOTT	LANE	IESS ·=·	3	BARTON	7 RICE	MCPHERSON	4	4	LYON	9	2	4
6	3	11	[PAWNEE	0	51	9 HARVEY		CHASE	i	COFFEY	ANDERSON	LINN
HAMILTON	KEARNY	FINNEY	<u>,</u>		1	STAFFORD					3	3	1	2
	+		2	45	EDWARDS		RENO			94		WOODSON	ALLEN	BOURBON
2 STANTON	0	0	GRAY	15 FORD	0	1 PRATT	8	410 SEDGWICK	BUTLER	-	GREENWOOD	5	2	4
	GRANT	HASKELL	i,	1	KIOWA		KINGMAN				0	WILSON	NEOSHO	CRAWFORD
3	1	4	1	5	1	0	4	4		11	2	9	7	2
IORTON	STEVENS	SEWARD	MEADE	CLARK	COMANCHE	BARBER	HARPER	SUMNER	COWLEY		CHAUTAUQUA	MONTGOMERY	LABETTE	CHEROKEE

All-Electric Vehicles and Plug-In Electric Vehicles Registered by County



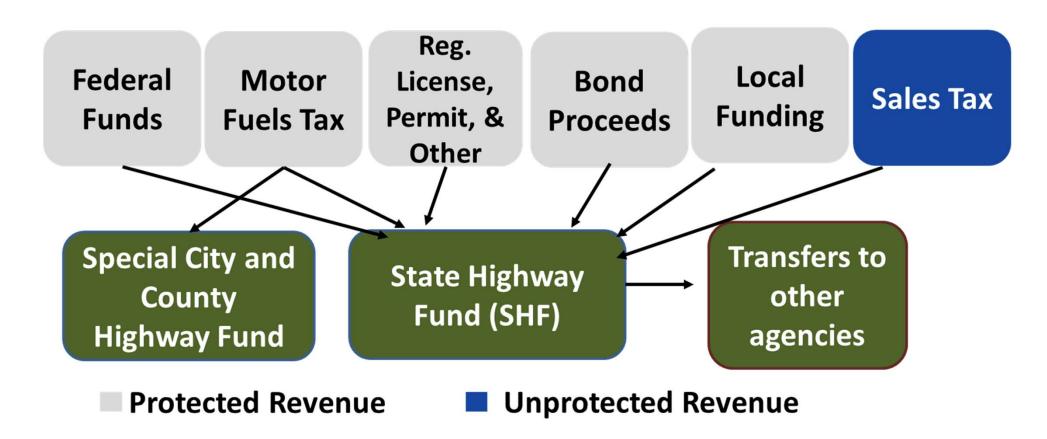
PREPARED BY THE KANSAS DEPARTMENT OF TRANSPORTATION BUREAU OF TRANSPORTATION PLANNING Date Created: Wednesday, August 25, 2021 KDOT makes no warranties, guarantees, or representations for accuracy of



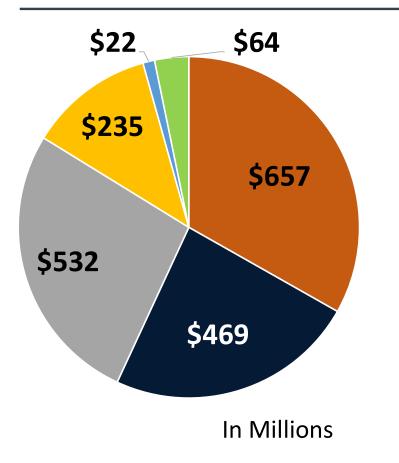
No vehicles registered as hydrogen in Kansas.

No hydrogen fueling stations in Kansas – currently only in California and Hawaii

How does Kansas fund transportation?

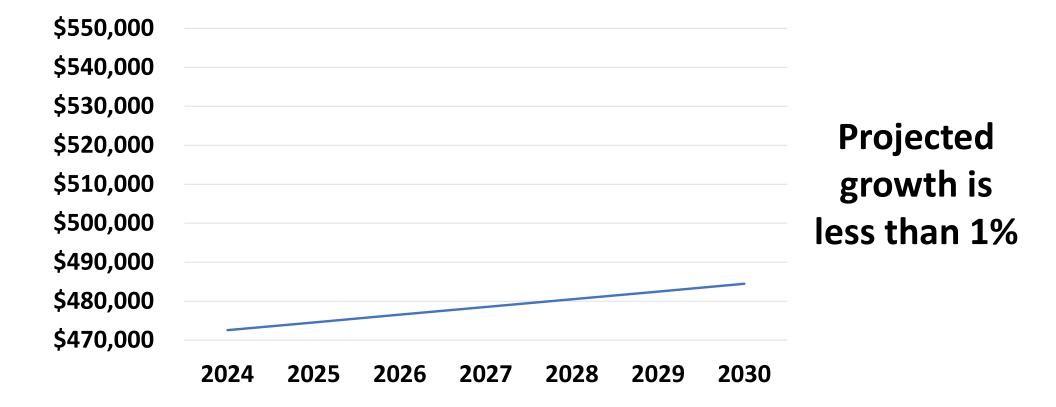


FY 2022 Revenue Sources – (All Funds)

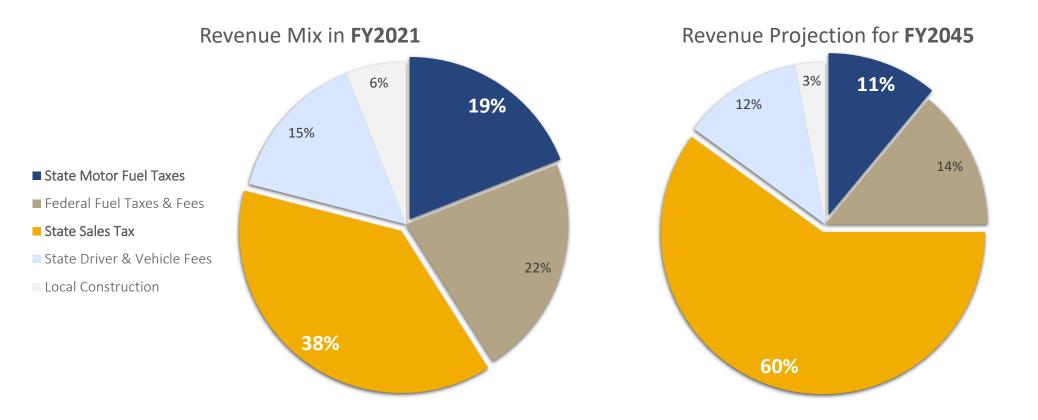


- Sales Tax 33%
- Motor Fuel Tax 24%
- Federal Funds 27%
- Registration and License 12%
- Local 1%
- Other 3%

Motor Fuel Tax Revenue Projections



Transportation Funding is Changing



What are other states doing?

- Many implemented increased registration fees
- Many exploring a Road Usage Charge (RUC) through pilots and studies
- Vermont looked at adding a tax on electricity used to charge EVs at public charging stations
- Colorado and Pennsylvania are considering a flat tax on all Ecommerce transactions, at the point of sale

What are other states doing, cont.

In Utah, owners of electric and hybrid vehicles have two options:

- Pay an alternative fuel flat fee during annual vehicle registration
 - Electric \$123
 - Plug-in Hybrid \$53.25
 - Gas Hybrid \$20.50

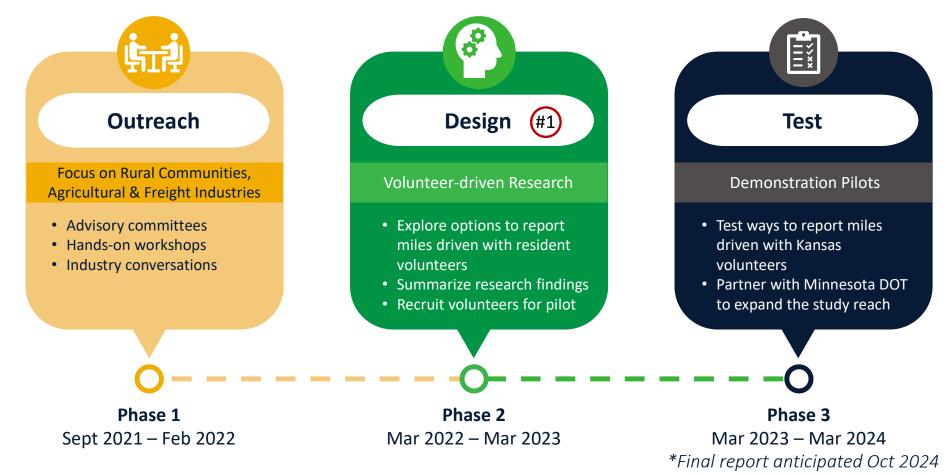
<u>OR</u>

- Enroll in the Road Usage Charge program
 - Charged 1.5 cents per mile up to the alternative fuel flat fee amount.
 - Depending on the number of miles driven, people may pay less by enrolling in Utah's Road Usage Charge program.

What is KDOT doing: Adding a Midwest perspective



MIDWEST ROAD USAGE CHARGE (RUC) STUDY



BIL funds Annual Funding Increase **HIGHWAYS: \$89 million** Federal-aid highway funding **Discretionary BRIDGES: \$45 million** Grant Funds targeted for bridges in poor/fair condition. **Programs ELECTRIC VEHICLE INFRASTRUCTURE: \$8 million** Charging infrastructure, education & outreach **RURAL TRANSIT: \$3.7 million** KDOT administers rural transit funds TOTAL \$145.7 million

\$2.5 Billion in Discretionary Grants for EV Charging

> \$1.25 B for Community Grants

- > Prioritizes:
 - Rural areas
 - Low/Moderate income neighborhoods
 - Communities with lowratio of private parking spaces or high ratio of multi-unit dwellings



Initial EV effort: funded by VW Settlement Strategic locations

Project Sponsor	Station Location
Mitten, Inc.	I-70: Oakley – Mitten's Travel Center
Triplett, Inc.	I-70: WaKeeney – 24/7 Travel Store
Francis Energy LLC	I-70: Russell – Fossil Station Convenience Store
Triplett, Inc.	I-70: Abilene – 24/7 Travel Store
Triplett, Inc.	I-70: Maple Hill – 24/7 Travel Store
Francis Energy LLC	I-35: Matfield Green service area – EZ Go #73
Francis Energy LLC	I-35: Belle Plaine service area – EZ Go #75



Thanks to local utilities for supporting these projects

This is a step forward, but more work remains

BIL Focus:

- Focus on providing charging infrastructure for long-trips,
 - Established corridors
- Making sure all communities have access to infrastructure

More work needed:

- How to we make residentialcharging easier, more feasible to more people
- New to this, more partnerships needed.



Questions around the future of gas tax

- Privacy
- Cost to collect
- National, regional, local systems interoperability
- EV and hybrid incentives
- Manufacturers required to sell
- Urban and rural equity
- Ease of use
- Change is hard
- Induction charging
- New technologies



Thank you for thinking about the future because it's messy

