Nevada Sustainable Transportation Funding Strategies Project

Advisory Working Group Meeting

March 8, 2022

Meeting location:

Las Vegas Valley Water District
1001 South Valley View Boulevard
Las Vegas, Nevada

Welcome and Roll Call

Public comment period

Approval of the minutes from January 11, 2022, meeting

Preview of the day and future meeting topics

Looking ahead, each AWG meeting has an overall objective, with specific agenda items and outcomes to support that objective.

For March 8, 2022, AWG Meeting:

- Consider the role that land use can play in creating a more sustainable transportation system
- Review sample revenue groupings best able to meet the AWG's guiding principles
- Identify the short-list of feasible revenue options for more detailed analysis on administrative costs and timelines to implement.
- Information for members to present Nevada Sustainable Transportation Funding study

For April 12, 2022, AWG Meeting:

- Land use and transportation: potential findings, and specific revenue and growth management tools that could be employed
- Proposed revenue mechanisms for further AWG discussion and shaping
- Identify time frames for transportation funding options, and identify issues that must be addressed before mechanisms can be implemented
- Review and feedback on short "findings" statements

Full AWG in person: Reno

For June 12, 2022, AWG Meeting:

- Findings statements (revised based on AWG feedback)
- Draft recommendations for AWG consideration and possible adoption
- Process and schedule for final report-drafting and adoption

Two locations:
Carson City & Las Vegas

Preview of today's meeting

Meeting objective: *identify sketch-level preferred options for further analysis*

- Communicating the purpose and need for this study to AWG constituencies and other stakeholders
- The role of land use in creating a sustainable transportation system (part 1 of 2)
- Review three sample revenue packages as a starting point for AWG discussion and changes
- Select preferred revenue options for the next stage of analysis

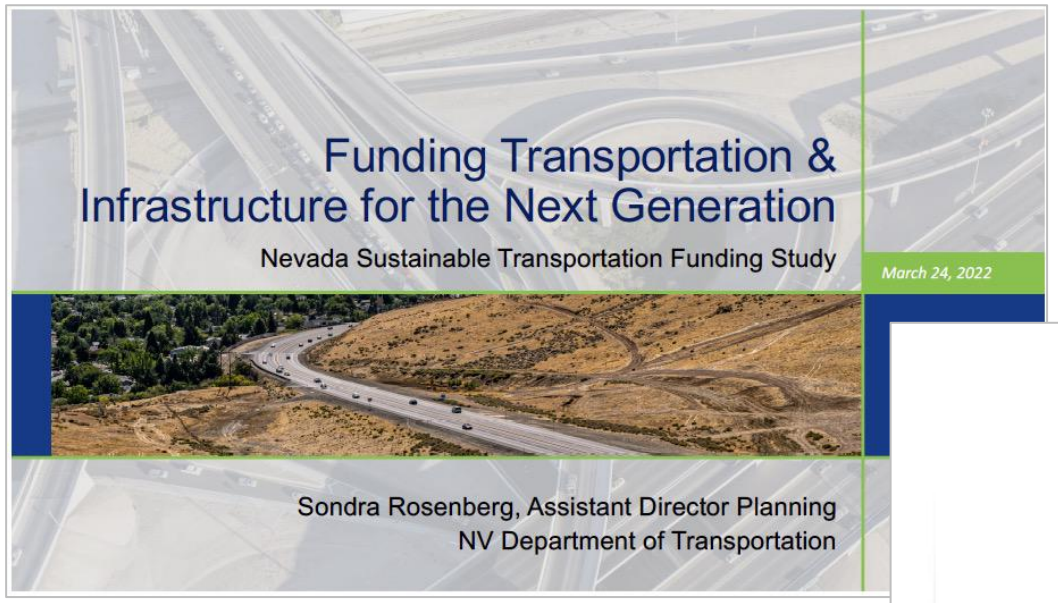
Communicating this project's purpose to AWG constituencies and other stakeholders

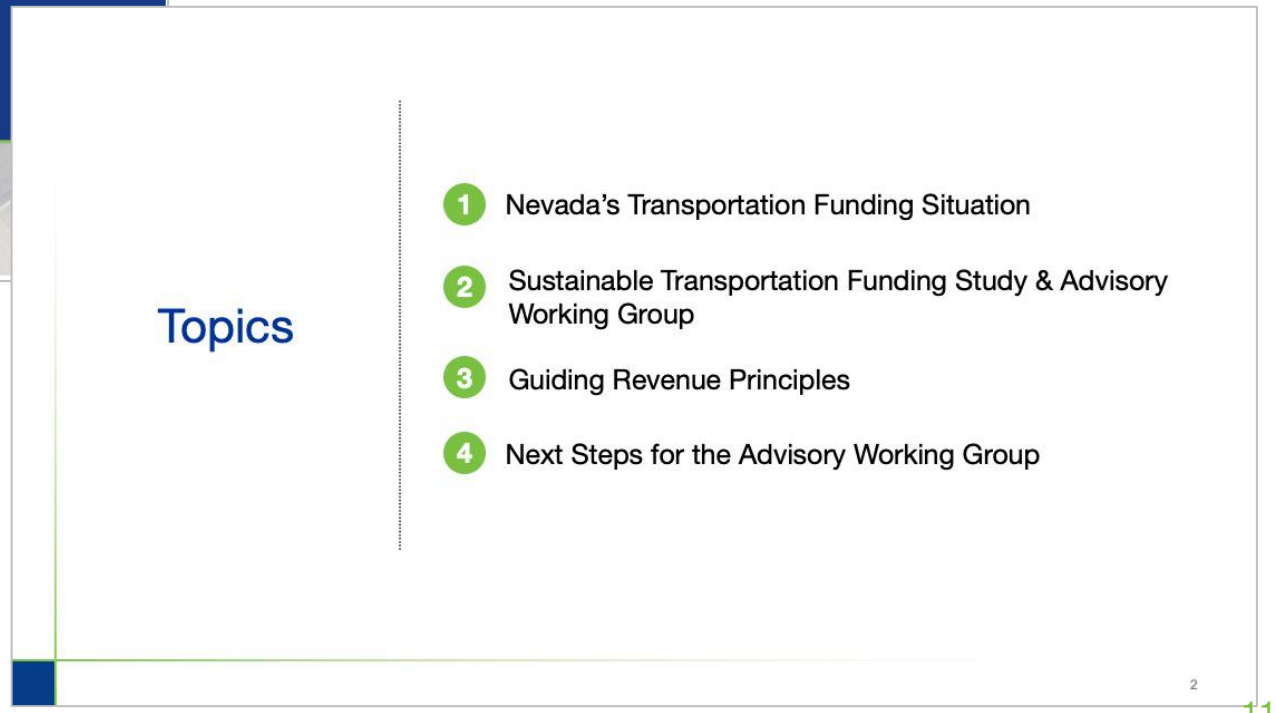
We need your participation:

- The AWG was established as an independent study oversight group as directed by the Legislature.
- Assist in securing presentation opportunities (Dates/times/audiences)
- Serve as the Point of Contact for your organization and for one-on-one meetings
- Provide or assist with presentations
- Serve as the conduit between your entity and the AWG's Consulting Team (Kami)

POC: Kami Dempsey – kami@acnevada.com / 702-526-3666

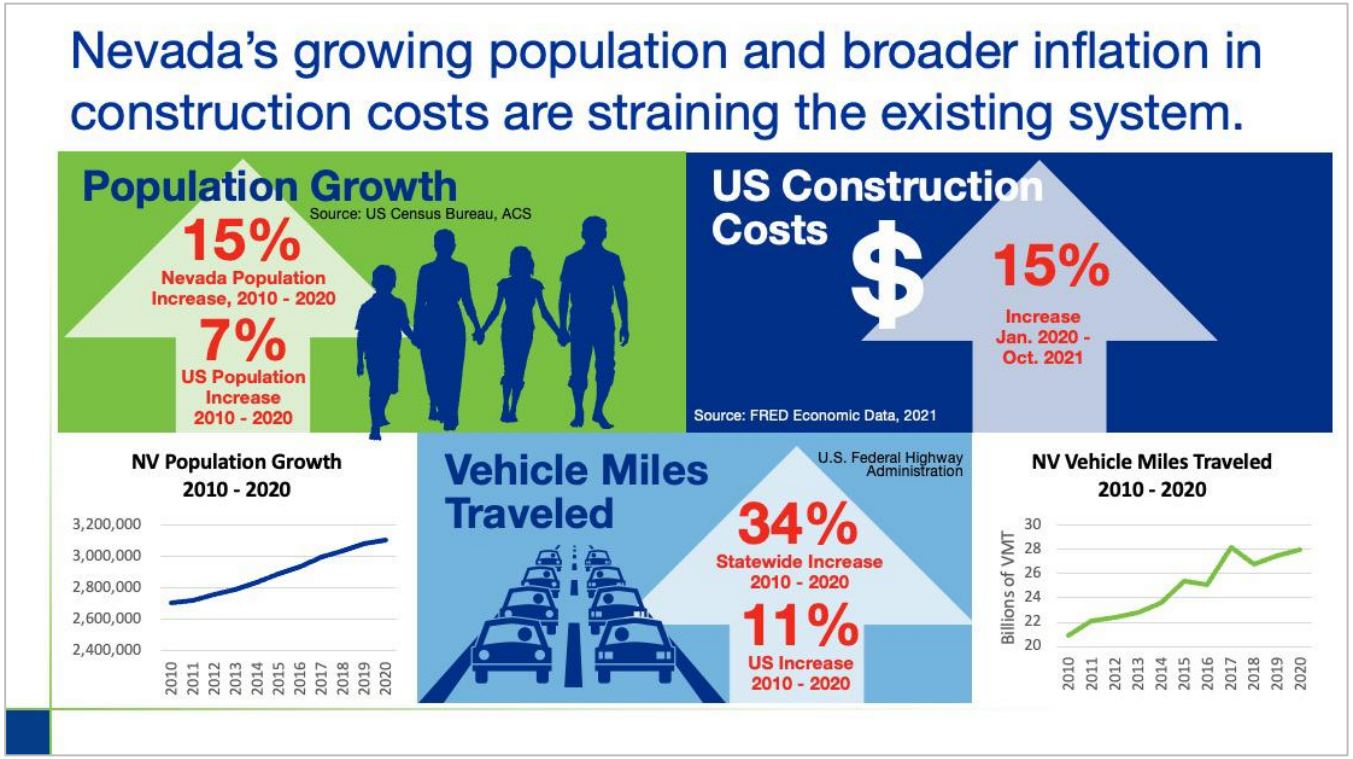
Presentation to stakeholders (quick view)

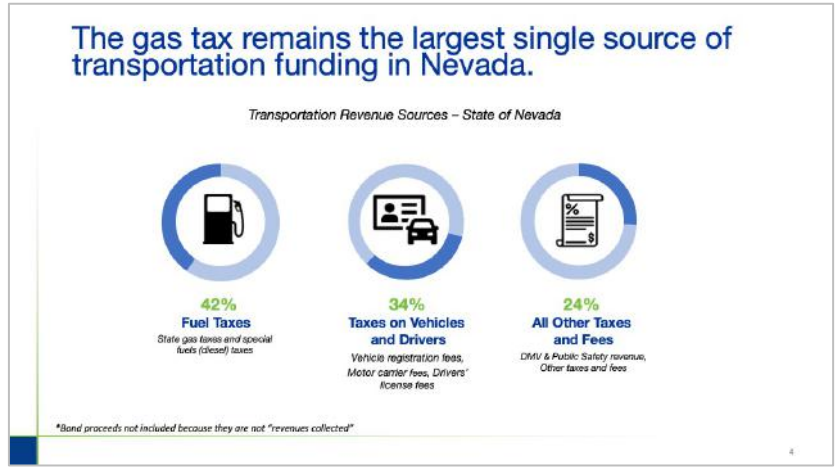


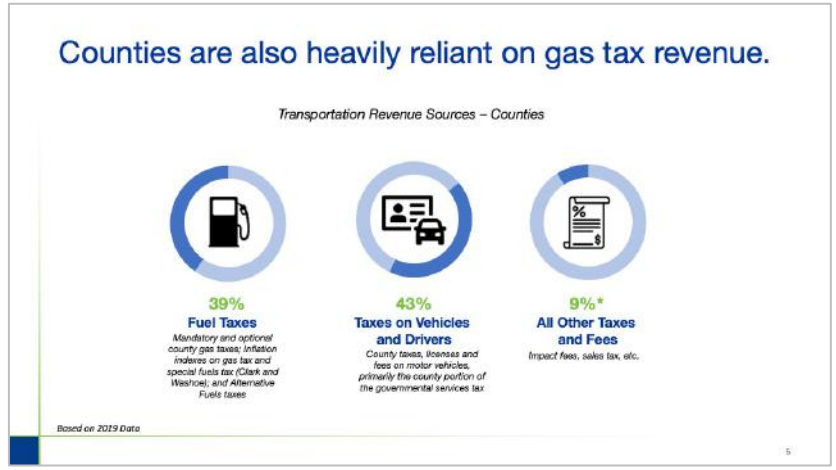


AB 413 – Legislative direction for this study

Transportation trends, forces at play, and heavy reliance on fuel taxes



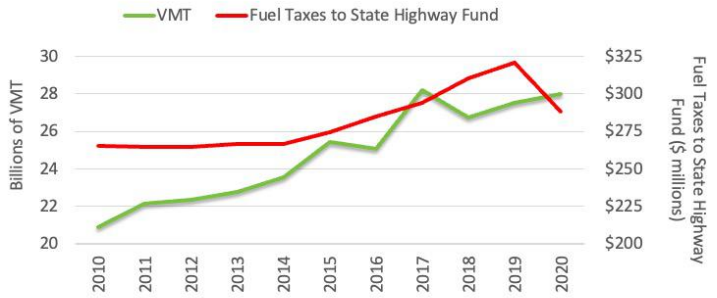




Problem: State Highway Fund revenue is not keeping pace with system costs and demand for transportation

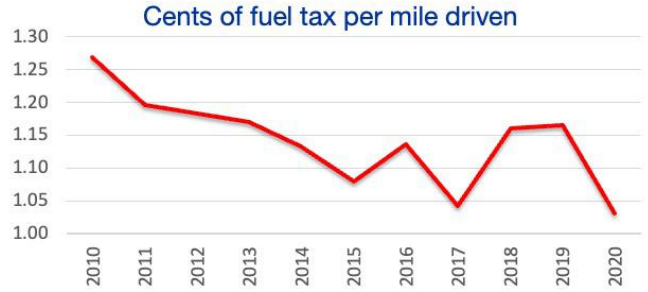
Transportation revenue is not keeping pace with the system costs and demands.

State and federal gas tax rates have not been increased since the early 1990's.



The erosion in gas tax revenue will accelerate as more vehicles use less gasoline (or no gas at all).

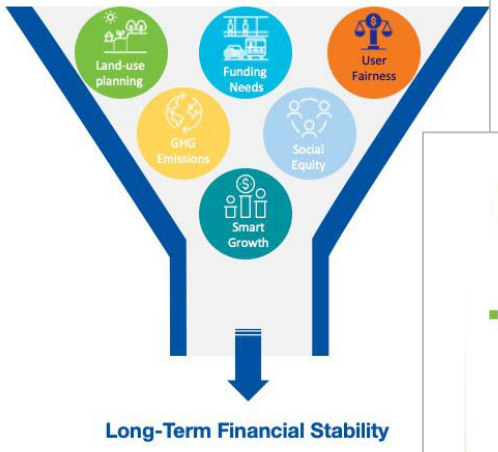
A new generation of drivers, vehicles, technologies, and fuel sources has arrived. A next-generation funding method is needed to pay for the roads.



AB 413 directs a Sustainable Transportation Funding study and creates the Advisory Working Group

Legislature directed NDOT to conduct an in-depth study of sustainable transportation funding.

- Assembly Bill 413 (2021) directs the Nevada DOT to convene an Advisory Working Group (AWG) to study transportation needs of the state and recommend sustainable funding options.
- The momentum behind this AWG traces to SCR3 from 2019, which directed a study on transportation funding and electric vehicles.



Legislative study:

- An examination of the financial sustainability of the **State Highway Fund** must be undertaken and the recommendations must be included in the final report due to the Legislature by December 31, 2022. This must include an assessment of at least **two alternative transportation funding approaches** that have been identified.
- **Consistent with AB 413,** new approaches to **multimodal** transportation funding **for all users** must take into account the need to improve **social equity, user equity,** and reduce **GHG emissions.** Finally, the role that **land use and smart growth** strategies can play must be considered.

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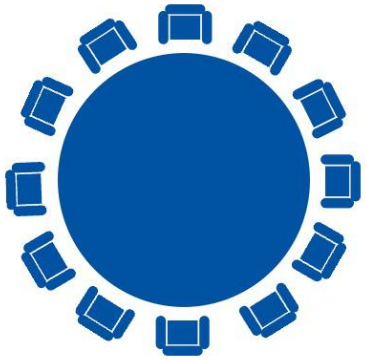
The 29-member AWG represents diverse Nevada interests and industry sectors. Formal meetings are scheduled to conclude by mid-year 2022.

Advisory Working Group Membership: 29 members

Organizations and Expertise Identified in AB 413:

- Metropolitan planning organizations;
- Environmental agencies and organizations;
- Clean energy;
- Tax policy expertise;
- Local, county, tribal, state and federal agencies with expertise in transportation and clean energy;
- The Chairs of the Nevada Senate and Assembly Standing Committees on Growth and Infrastructure;
- Organized labor;
- Local chambers of commerce;
- The Nevada Resort Association;
- Entities that represent or promote the interests of minority groups in Nevada.



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Meeting schedule & objectives

Each AWG meeting has an overall objective, with specific agenda items and outcomes to support that objective and reach key project milestones.

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The AWG adopted seven critical measures (or Guiding Principles) to help determine which revenue options are most promising for future transportation funding.

AWG's Transportation Revenue Guiding Principles

What are they and how were they determined?

- Aspirational outcomes
- Serve as a "ruler" to measure how different funding mechanisms perform (i.e., the degree to which the revenue mechanisms can achieve the desired outcomes)
- AWG members crafted and unanimously adopted these in November 2021.

Guiding Principles for Future Transportation Revenue Sources

Alone or in combination, transportation revenue sources should be capable of:

Financial Sustainability: Yielding sufficient revenue that correlates with ongoing maintenance needs; and demand for future transportation needs, regardless of changes in population, vehicle technologies, ownership, travel patterns, fuel sources, or consumer spending.

Sufficiency: Generating sufficient revenue over targeted investment timeframes for existing and future transportation infrastructure needs.

User Equity: Recovering a proportionate share of the costs from those who use the transportation network.

Social Equity: Improving the distributional impact on historically underserved communities and low-income households.

Flexibility: Funding a wide range of transportation-related projects, programs, or priorities across various agencies to meet the needs of system users across all modes.

Greenhouse Gas Emissions: Aligning with state transportation GHG reduction goals.

Transparency/ Efficiency and Ease of Compliance: Simple to explain, with awareness of how funds are used, cost-effective, and readily administered at statewide and local levels.

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A comprehensive list of 25+ options have been analyzed. Only a handful will be selected for further analysis and possible recommendations.

Revenue mechanisms being analyzed:

Fuel taxes

1. Increase rate of flat per-gallon excise tax
2. Add inflation index to flat per-gallon excise tax rate
3. Add fuel efficiency index to flat per-gallon excise tax
4. Add sales tax based on price of fuel
5. Add variable-rate excise tax based on price of fuel

Vehicle fees

6. Increase basic license fee
7. Increase value-based rate of governmental services tax
8. Add fee based on vehicle weight
9. Add fee based on vehicle fuel economy rating
10. Add fee based on vehicle engine type
11. Add fee based on vehicle age

Usage-based fees

Direct

12. Add a distance-based charge for light-duty vehicles
13. Add a weight-distance-based charge for medium- and heavy-duty vehicles

Indirect

14. Add a tax on batteries
15. Add a tax on tires
16. Add a tax on EV electricity consumed

Other

17. Value added tax on goods movement
18. Parcel delivery fees
19. Ride-share surcharges
20. Cordon charges in urban areas
21. Carbon tax
22. Street utility fee
23. ~~Payroll tax~~ (as of 1/11/22)
24. Land use impact fee
25. General funds

More information:

www.NVTransportationFuture.org **info@NVTransportationFuture.org**

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Role of Land Use in Creating a Sustainable Transportation System

SB 413 requires the AWG to study "[t]he role of land use and smart growth strategies in reducing transportation emissions and improving system efficiency and equity."

Goals

- **A** Provide a high-level understanding of the link between land use and sustainable transportation
- **B** What are the constraints Nevada law places on land use regulation?
- **C** Examples from two other states
- **D** Successful land use planning
- **E** Open up for conversation

Land use impact fees: primarily a local option

What is an Impact Fee?

- A one-time capital charge imposed on developers to help fund the capital cost of the additional public services, infrastructure, or transportation facilities necessitated by, and attributable to, new development.

How might they work in Nevada?

- State-level impact fees to mitigate impacts specific to the state's highway facilities have not been implemented in Nevada.
- Local governments have the option of imposing impact fees. NRS 278B.160.
- They can be formulated as revenue-generating fees or as disincentives for certain types of development.
- No impact fee assessment is likely to be sufficiently robust to generate substantial revenue for the statewide transportation system.

How can impact fees be spent?

Under Nevada law, an "impact fee" is a charge imposed by a local government on new development to finance the costs of a capital improvement or facility expansion necessitated by and attributable to the new development. NRS 278B.050.

- The fee may only be imposed by a "local government", i.e. a city or county. NRS 278B.160.
- The fee may include costs for land, professional services, construction. NRS 278B.160.
- The law states what the fees may not be used for: (1) public facilities that are not part of a capital improvement plan; (2) repair or maintenance of existing or new capital improvements or expansions; (3) improvements to meet more stringent regulatory standards; (4) upgrades to better service existing development; (5) administrative costs of local governments; or (6) debt. NRS 278B.280.

An impact fee generally only allows the state to "recoup" the money needed for the capital improvement necessitated by the development project: cost of construction, professional fees, land...

An impact fee is not the same as a "tax for the improvement of transportation" permitted under NRS 278.710.

A tax for improvement of transportation

Nevada law also allows a county board of commissioners to enact an ordinance imposing a *tax for the improvement of transportation* for new residential, commercial, industrial and other development. NRS 278.710.

- Only counties permitted to enact this type of tax/fee.
- Statute provides framework for rate-setting.
- Generally, revenue derived from the tax must be spent on projects "related to the construction and maintenance of sidewalks, streets, avenues, boulevards, highways and other public rights-of-way used primarily for *vehicular traffic*" within the boundaries of that county, or debt service which funds those projects.

How is land use and transportation related?

Linking transportation and land use refers to the process of guiding development and expansion of communities with the goal of better coordination of land use and transportation that accommodates pedestrian and bike safety, mobility, enhances public transportation service, improves road network connectivity, and includes a multi-modal approach to transportation. Thus, the choices a community makes about land use affect the viability of transportation options, which makes the link between land use policy as a critical part of any conversation about sustainable transportation.

Creating Sustainable Communities

- Mix land uses
- Take advantage of compact building design
- Create housing opportunities and choices
- Create walkable communities
- Foster distinctive, attractive communities with a strong sense of place
- Preserve open space, farmland, natural beauty, and critical environmental areas
- Strengthen and direct development toward existing communities
- Provide a variety of transportation choices
- Make development decisions predictable, fair, and cost-effective
- Encourage community and stakeholder collaboration in development decisions

Land Use Law in Nevada

Nevada law limits the state role in land use planning:

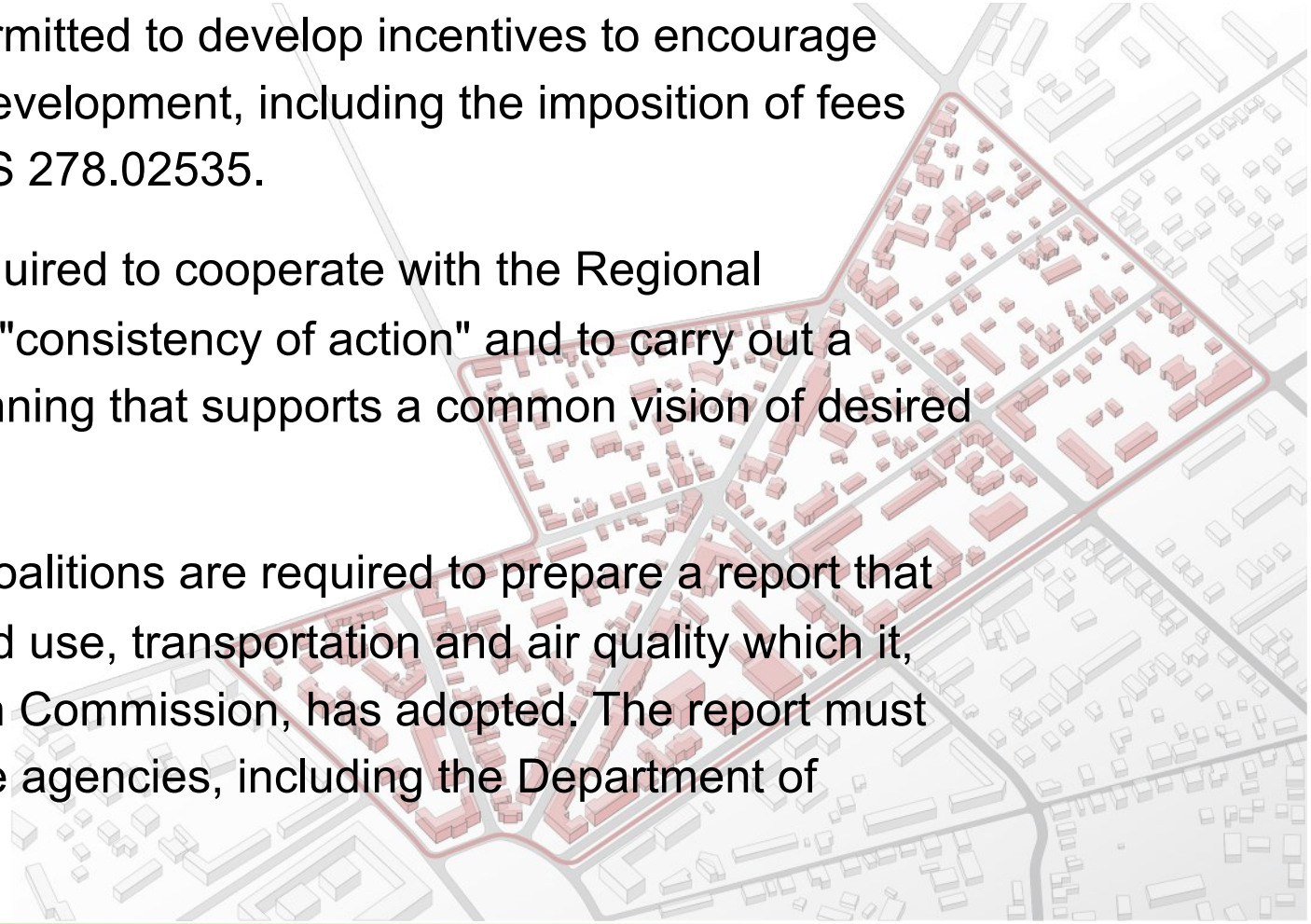
"State participation in land use planning should be limited to coordination of information and data, the acquisition and use of federal lands within the State, providing land use planning assistance in areas of critical environmental concern . . ., and providing assistance in resolving inconsistencies between the land use plans of local governmental entities." NRS 321.640.

State law reserves the development and implementation of planning to local governments and sets out the requirements for those plans:

- Different requirements for counties with populations of < 100,000; 100,000-700,000; and 700,000+
- Regional planning is conducted at the county and local level.
- Counties are required to form a Regional Planning Coalition and cities and towns are required to form Planning Commissions, which are responsible for the development of comprehensive regional and local plans, respectively.
- These comprehensive plans are developed to provide for the "orderly management of the growth of the region for a period of . . . 20 years," NRS 278.02528 et seq.
- "[G]oals, policies . . . and other documents relating to . . . land use and development . . . and transportation," amongst other things, must be included in these plans, which must be approved by the governing boards of these governmental entities. The Regional Transportation Commission is permitted to administer the approved plans.

Land Use Law in Nevada (continued)

- The Regional Planning Coalition is permitted to develop incentives to encourage affordable housing and high-density development, including the imposition of fees for the extension of infrastructure. NRS 278.02535.
- The Regional Planning Coalition is required to cooperate with the Regional Transportation Commission to ensure "consistency of action" and to carry out a program of integrated, long-range planning that supports a common vision of desired future conditions. NRS 278.02584(1).
- Every two years, Regional Planning Coalitions are required to prepare a report that summarizes the policies related to land use, transportation and air quality which it, along with the Regional Transportation Commission, has adopted. The report must be submitted to regional and statewide agencies, including the Department of Transportation. NRS 278.02584(4).



Other State Efforts to Mitigate Unsustainable Growth

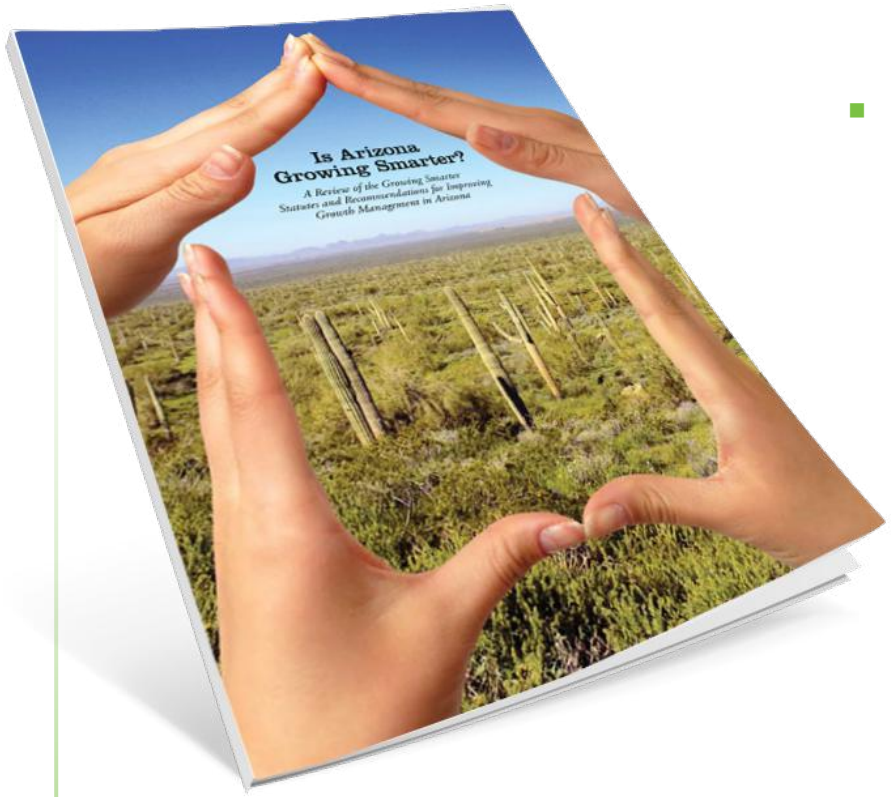
Oregon

- Sustainable land use movement began in 1973 with the passage of landmark legislation: Senate Bill 100.
- Planning in Oregon is conducted at the local level; however state law requires cities and counties to adopt comprehensive plans that meet mandatory state standards--19 statewide planning goals that deal with land use, development, housing, transportation, and conservation of natural resources.
- The Land Conservation and Development Commission develops these goals, which express state policy on land use issues.
- To help local governments develop strong plans, the goals are accompanied by guidelines, which are suggestions about how a goal may be applied in the planning context.
- There is a strong emphasis on coordination -- keeping plans and programs consistent with each other, with the goals, and with other local plans.
- To facilitate coordination, Oregon provides a Model Development Code for local governments to follow https://www.oregon.gov/lcd/TGM/Pages/Model-Code.aspx

Other State Efforts to Mitigate Unsustainable Growth

Arizona

- In 1998, the AZ Legislature enacted the Growing Smarter Act.
- This legislation was an attempt to create an urban growth management framework by strengthening land use processes, providing for open space preservation and added for new elements for municipal and county plans
- The law established the Growing Smarter Commission to make recommendations on long-term urban growth issues. Specifically, the legislation:
  - Increased the level of public participation in the development and implementation of local plans;
  - Increased the scope of plans by requiring new, growth-related elements in the plan; and,
  - Strengthened the implementation power of local plans. While the legislation prompted more cities and towns to adopt plans, it appears that the plans do not provide sufficiently specific policies, objectives and metrics by which to measure the plans effectiveness in mitigating growth.
- The Growing Smarter Commission submitted recommendations in 2000, which led to the enactment of the Growing Smarter Plus Act in 2001.



https://sonoraninstitute.org/files/pdf/is-arizona-growing-smarter-growing-smarter-statues-and-recommendations-for-improving-growth-management-in-arizona-10022008.pdf

Arizona

- The Growing Smarter Plus Act:
  - Large and fast-growing cities are to obtain voter approval of their general plans at least once every ten years
  - Cities and counties are to exchange plans prior to adoption to encourage regional coordination;
  - Authorizes cities and counties to designate service area limits beyond which services and infrastructure are not provided at public expense;
  - Permits counties to impose development fees consistent with municipal development fee statutes;
  - Allows cities to create infill incentive districts and plans that could include expedited process incentives;
  - Establishes a development rights program to purchase, lease or transfer development rights of private lands.

Themes of Effective Land Use Policies and Reform Efforts

- Developing stronger land use planning regimes involves participation from many diverse stakeholders and constituency groups--from transportation to economic development to environmental to housing, and more.
- A land use reform effort should create a strong, compelling and comprehensive vision for the community (state) that involves strong stakeholder and public participation.
- Effective land use policy is comprehensive in scope and does not involve individual or "one-off" policies.
- Integration, coordination and collaboration of plans is key. Otherwise, entities are creating their plans and policies in isolation.
- Effective and sustainable land use regulation involves strong, measurable implementation guidelines, metrics, and evaluation methods.
- Financial or other incentives may be helpful, even needed, in order for local governments to implement policy prescribed at the state level.
- Regular evaluation of effectiveness of state and local policy is important to making progress on key policy goals.
- Continual education of community members and policymakers about the importance of sustainable land use planning is important.
- Entities (commissions, councils, working groups) to specifically study a region's land use patterns and policies have been helpful in enacting land use policy reforms

Responses to Questions from January 11, 2022, AWG Meeting

In January, AWG members had questions or requested additional information.

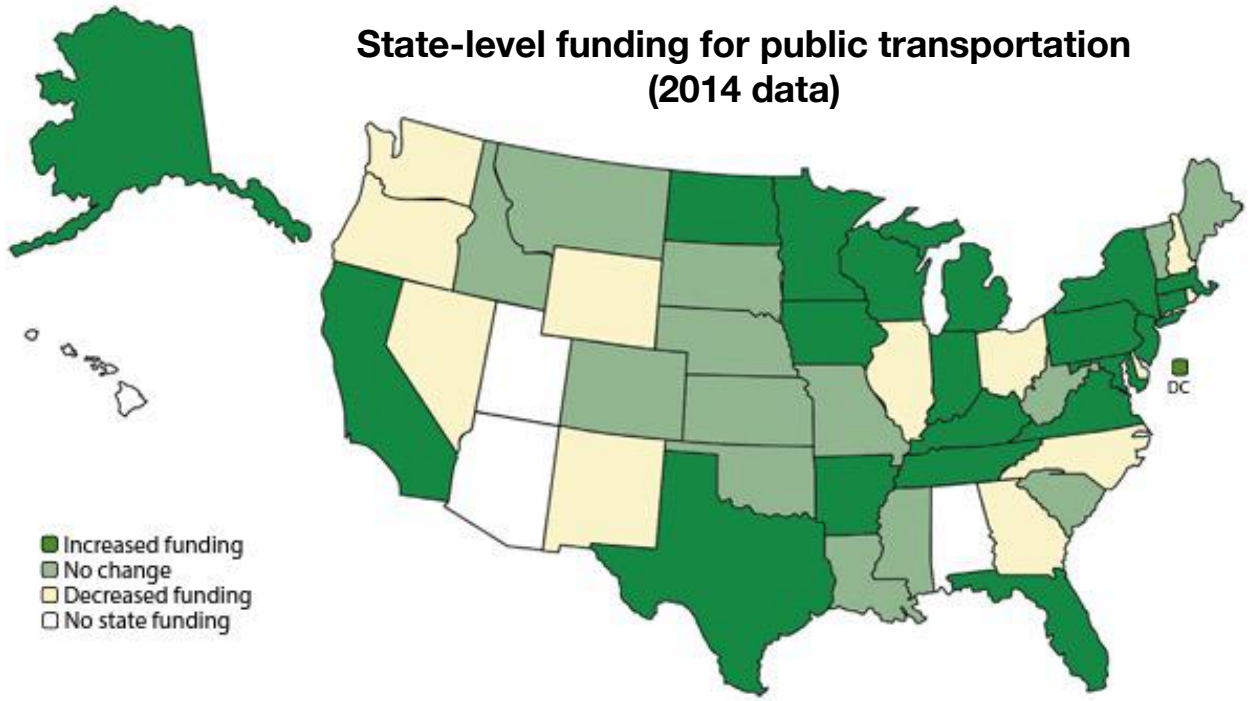
Requests for information and questions raised:

1. In Nevada, what are the constraints on how revenue from impact fees can be spent?
2. How many states provide general funds to support local transit systems?
3. How much money could be raised by indexing the full gas tax statewide (state and federal component)?
4. Instead of requiring high-MPG vehicles to pay an increased vehicle registration fee, what effect if an increased fee is instead applied to low-MPG vehicles so that drivers are incentivized to upgrade to more fuel-efficient vehicles?
5. Is there any information or have studies been conducted on whether an increased registration fee on electric vehicles negatively impacts consumer adoption of those vehicles?
6. How would a tax on electricity dispensed at EV charging stations perform under the AWG criteria?
7. How will Colorado's new parcel delivery fee be implemented?

2. How many states provide tax disbursements to support local transit systems?

Response:

- One-third of states *operate* a transit system.
- All but four states provide some level of state funding for public transportation.
- Half of all states can use their state gas tax revenue to support public transportation.
- Nevada is one of 24 of states that constitutionally restrict the expenditure of gas tax revenue to highway purposes – which does not include transit.
- At least 25 states have enacted special fees or taxes (other than the gas tax) specifically for public transportation purposes.
- Nevada has no specific statewide tax or fee mechanism that provides funding to transit agencies.



Source: Adapted from AASHTO's Survey of State Funding for Public Transportation, 2014.

2. How many states provide tax disbursements to support local transit systems, *continued*…

Response:

Additional research is being conducted by the RTC of Southern Nevada…

3. How much money could be raised by indexing the full gas tax statewide (state and federal)?

Response:

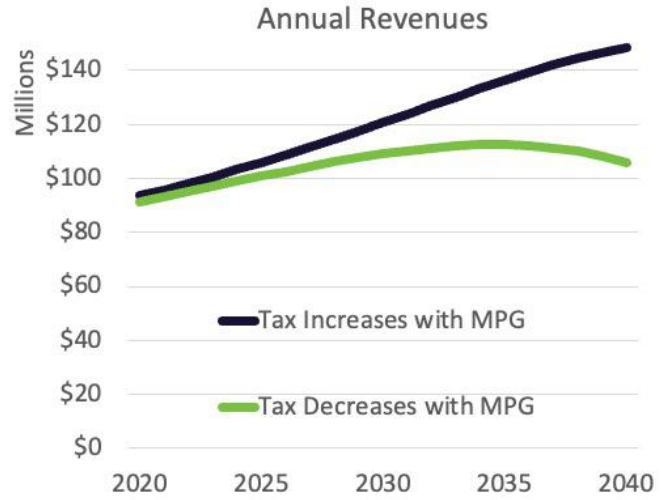
If fuel revenue indexing is implemented in those areas of the state where this mechanism does not already exist, and if both the state and federal gasoline and diesel taxes are indexed to inflation, it would generate estimated revenues shown below:

$1.5m in year 1
$3.0m in year 2
$4.6m in year 3
$6.2m in year 4
$7.8m in year 5
$9.5m in year 6

4. Instead of requiring EVs or high-MPG vehicles to pay an increased vehicle registration fee, what effect if an increased fee is instead applied to *lower*-MPG vehicles so drivers are incentivized to upgrade to more fuel-efficient models?

Response:

- An annual tax based on EPA-rated MPG that features higher tax rates for low MPG vehicles mimics the fuel tax, but without any relationship to usage.
- Over time, as vehicle fuel economy increases, revenue will decline.
- MPG is positively associated with income, meaning an inverse MPG tax will disproportionately impact low-income households.
- The chart at right depicts two opposite tax schedules, each designed to generate approximately $100 million in 2021.



MPG Range	Increasing Tax Rate	Decreasing Tax Rate
<20	$30	$45
20-30	$40	$35
30-40	$50	$25
40-50	$60	$15
>50	$70	$5

5. How would an increased registration fee impact consumer adoption of electric vehicles?

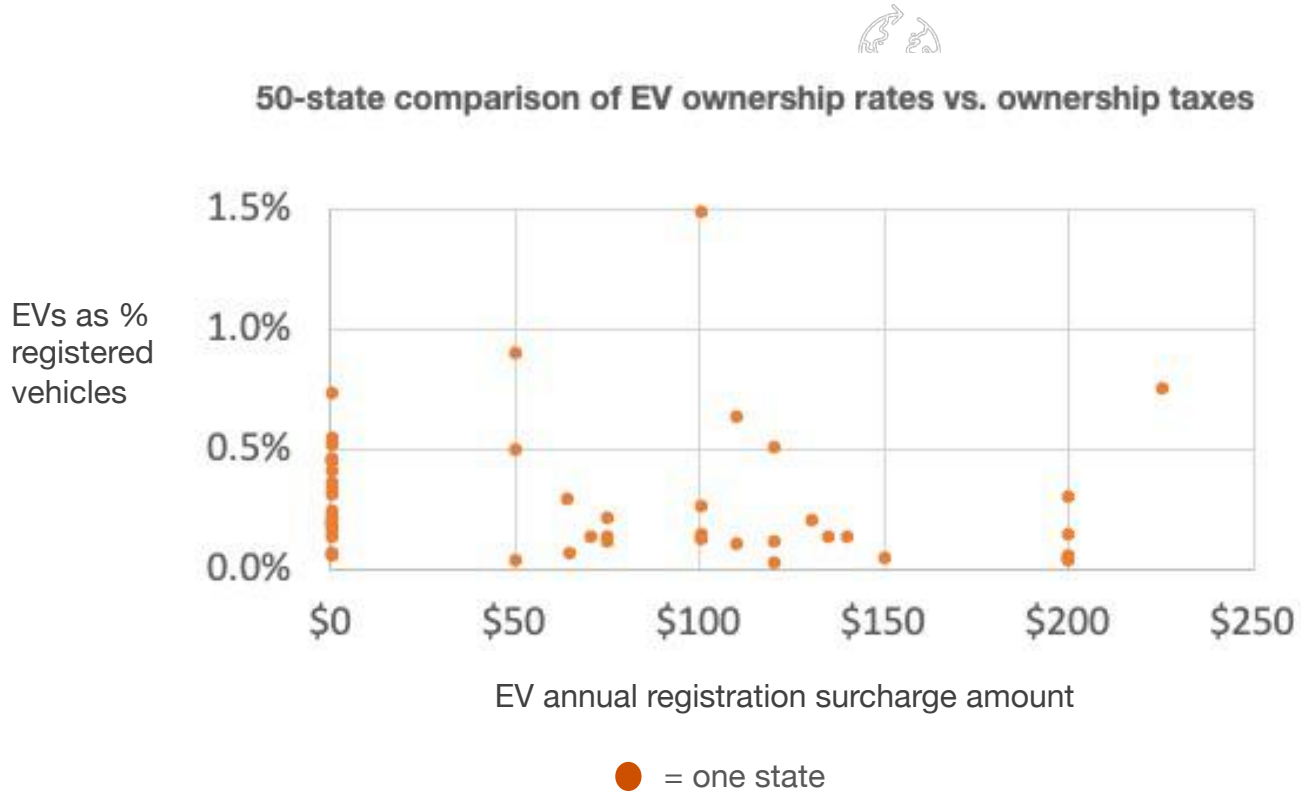
Response:

Little empirical data/research exists on the *causal* relationship between special registration surcharges on electric vehicles and whether these EV fees negatively impact purchases. Most existing information on this subject is based on *correlations*, inferences and stated preferences of people who already purchased an EV.

- In January, Georgia was mentioned as one of the 28 states that enacted a registration surcharge on EVs. The number of EVs sold the following year did drop by 83%, but this was attributed to Georgia eliminating its $5,000 state tax credit for the purchase of a new EV.

- In recommending to the legislature that California adopt a road usage charge instead of surcharges on EVs, a 2019 UC-Davis study found that an EV fee may detract from market adoption by 10 – 20%.

- 2020 data (most recent available) shows no statistical correlation between EV adoption rates and registration surcharges (see graph at right).



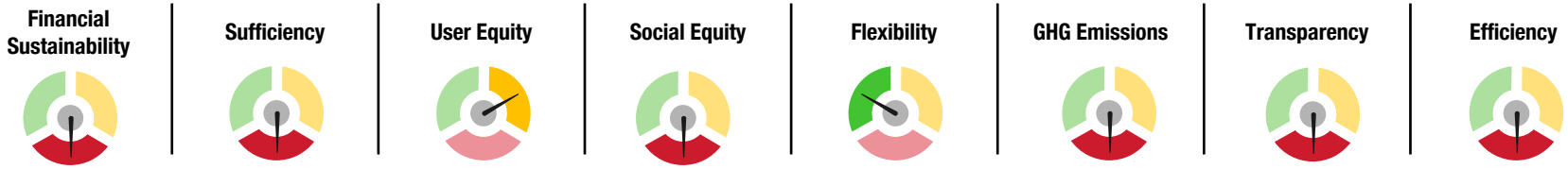
6. How would a tax on electricity dispensed at public EV charging stations perform?

Response:

To date, two states (Oklahoma and Iowa) have passed legislation to impose a tax on electricity dispensed at publicly-accessible EV charging stations. A third state, Vermont, passed legislation to study the concept before moving forward.

Issues and challenges:

- **Financial:** only ~ 20% of EV charging occurs at public charging stations. Therefore, ~ 80% of electric miles would be untaxed.
- **User-pays:** many EV drivers rarely use public charging stations. A potential large segment of roadway users would be untaxed.
- **Social equity:** people lacking at-home chargers who are reliant on public chargers would pay disproportionately more for driving: renters, multifamily residences, homeowners without garages, and those who cannot afford to install their own at-home charger.
- **Transparency:** business models and operating agreements for public charging stations may not enable EV drivers to see the tax or to understand how it relates to their miles driven.
- **Efficiency:** many public stations offer free charging to EV drivers; other stations were installed and operate under fixed price agreements. If station owners/operators are taxed, they many not be able to pass the cost along to drivers. Conversely, if the intent is to directly tax drivers at the point-of-sale, only a minority of public charging stations are capable of charging drivers by the kWh (i.e., electricity dispensed).



7. How will Colorado's new parcel delivery fee be implemented?

Response:

Retail deliveries (raises $1.2 billion over 10 years): A 27-cent delivery fee will apply to orders — including those made online — for goods and most other items subject to Colorado's sales tax, including restaurant food.

- The new fee will be assessed on the purchaser but collected by the retailer – same as for the state's sales tax.
- The fee will only apply to *tangible* personal property
- Retailers will remit the fee proceeds along with their sales tax proceeds to Colorado's Department of Revenue.
- Colorado's Department of Revenue will retain a portion of the fees to pay for the cost to collect, administer and enforce the fees.

Short break

Potential revenue mechanisms: sample groupings

Members requested an easier way to view the results of the updated ratings, on a single page.

7	Increase value-based rate of governmental services tax
12	Add a distance-based charge for light-duty vehicles
20	Cordon charges in urban areas
11	Add fee based on vehicle age
13	Add a weight-distance-based charge for medium- and heavy-duty vehicles
18	Parcel delivery fees
22	Street utility fee
8	Add fee based on vehicle weight
10	Add fee based on vehicle engine type
19	Ride-share surcharges

3	Add fuel efficiency index to flat per-gallon excise tax
14	Add a tax on EV batteries
21	Carbon tax
24	Land use impact fees
25	General funds

1	Increase flat rate of per-gallon excise tax (gasoline and diesel)
6	Increase basic license fee
9	Add fee based on vehicle fuel economy rating
15	Add a tax on tires
16	Add a tax on EV electricity consumed
17	Value added tax on goods movement

2	Add inflation index to flat per-gallon excise tax rate
5	Add variable-rate excise tax based on price of fuel
23	Payroll tax
4	Add sales tax based on price of fuel

Status of revenue options after discussion at AWG's January 2022 meeting:

Under consideration for statewide revenue

- Increase rate of flat per-gallon excise tax
- Add inflation index to flat per-gallon excise tax rate
- Add fuel efficiency index to flat per-gallon excise tax
- Add sales tax based on price of fuel
- Add variable-rate excise tax based on price of fuel
- Carbon tax
- Increase value-based rate of governmental services tax (GST)
- Increase the basic vehicle license fee
- Add fee based on vehicle weight
- Add fee based on vehicle fuel economy rating
- Add fee based on vehicle age
- Distance-based charge for light-duty vehicles
- Parcel delivery fee

Better suited as local revenue source

- Street utility fee
- Cordon charge in urbanized areas
- Ride-share surcharges+
- Land use impact fees+

In reserve (for now)

- Ride-share surcharges+
- Add a tax on tires
- Add fee based on vehicle engine type
- Land use impact fees+

Very little support

- Weight-distance-based charged for medium- and heavy-duty vehicles
- Taxes on electricity consumed by electric vehicles
- Add a tax on EV batteries

Eliminated (to be confirmed)

- ~~Payroll tax~~
- ~~Income tax~~ [n/a]
- General fund transfers [n/a]
- ~~Value added tax on goods movement~~

Key:
+ appears in two categories

● ● ● ● = Guiding Principles composite rating

STATE HIGHWAY FUNDING SOURCES	Near-term	Long-term
Primary options (Capable of generating significant revenue relative to the investment levels needed)		
Supplemental options (Capable of contributing some revenue relative to the investment levels needed)		

*Flexible revenue mechanisms – can be used for any transportation purpose

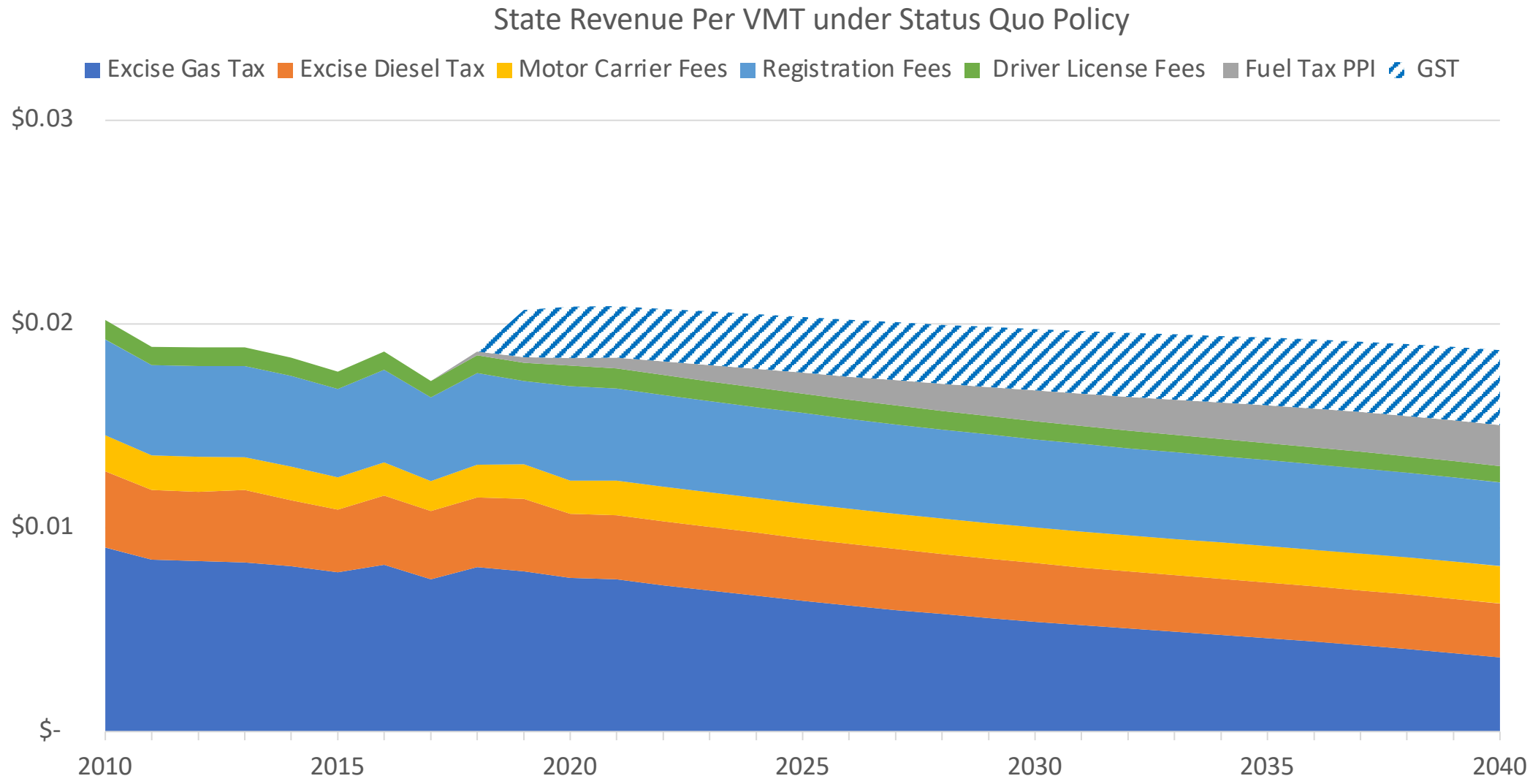
STATE HIGHWAY FUNDING SOURCES	Near-term	Long-term
Primary options (Capable of generating significant revenue relative to the investment levels needed)	■ Increase rate of flat per-gallon excise tax ■ Increase value-based rate of governmental services tax (GST)* ■ Carbon tax*	■ Add fee based on vehicle fuel economy rating ■ Add fee based on vehicle engine type ■ Distance-based charge for light-duty vehicles ■ Street utility fee* ~~■ Value added tax on goods movement~~
Supplemental options (Capable of contributing some revenue relative to the investment levels needed)	■ Add inflation index to flat per-gallon excise tax rate ■ Add fuel efficiency index to flat per-gallon excise tax ■ Add sales tax based on price of fuel ■ Add variable-rate excise tax based on price of fuel ■ Increase the basic vehicle license fee ■ Add fee based on vehicle weight ■ Add a tax on tires* ■ Ride-share surcharges*	■ Parcel delivery fee* ■ Cordon charge in urbanized areas* ■ Land use impact fees ■ Taxes on electricity consumed by electric vehicles ■ Add a tax on EV batteries ~~■ Payroll tax~~

*Flexible revenue mechanisms – can be used for any transportation purpose

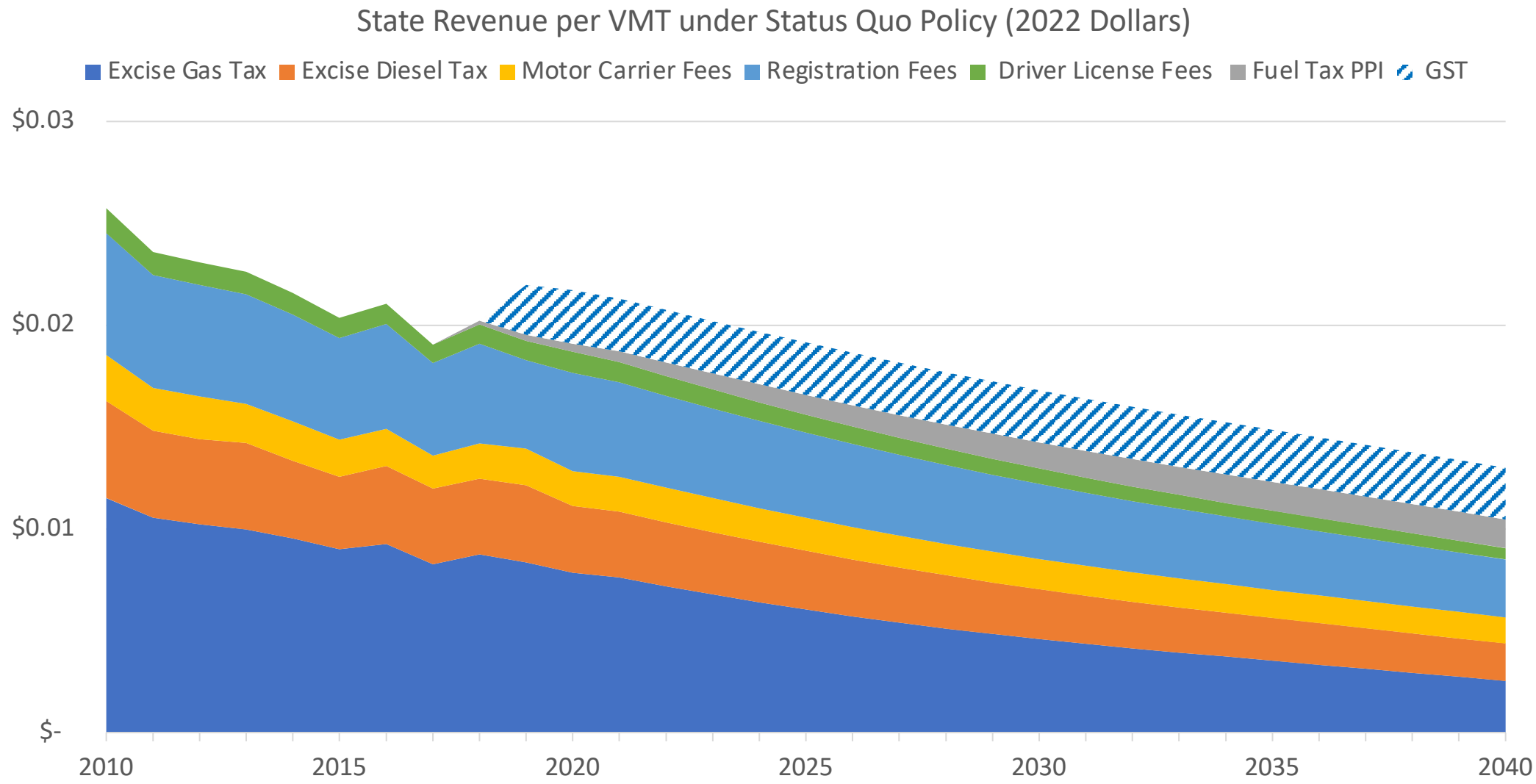
The project team created three sample revenue packages for AWG consideration.

	Sample 1	Sample 2	Sample 3
Near term funding:	■ Gas tax increase, plus 1 cent/yr. for 6 years (renewable) ■ Model year-based vehicle registration fee increase	■ Phased in gas tax increase, indexed to fleet fuel efficiency ■ Basic vehicle registration fee increase	■ Gas tax increase, indexed to inflation and fleet fuel efficiency ■ Registration fee increase based on vehicle MPG
Flexible funding sources:	■ GST increase earmarked for transportation ■ Shipping and delivery fee	■ Increase in Transportation Connection (rideshare) tax ■ Tax on auto parts	■ Carbon tax on motor fuels
Longer-term sustainable funding:	■ Gradual transition to a road usage charge for light duty vehicles	■ Gradual transition to a road usage charge for light duty vehicles	■ Road usage charge on *non-gas* light duty vehicles

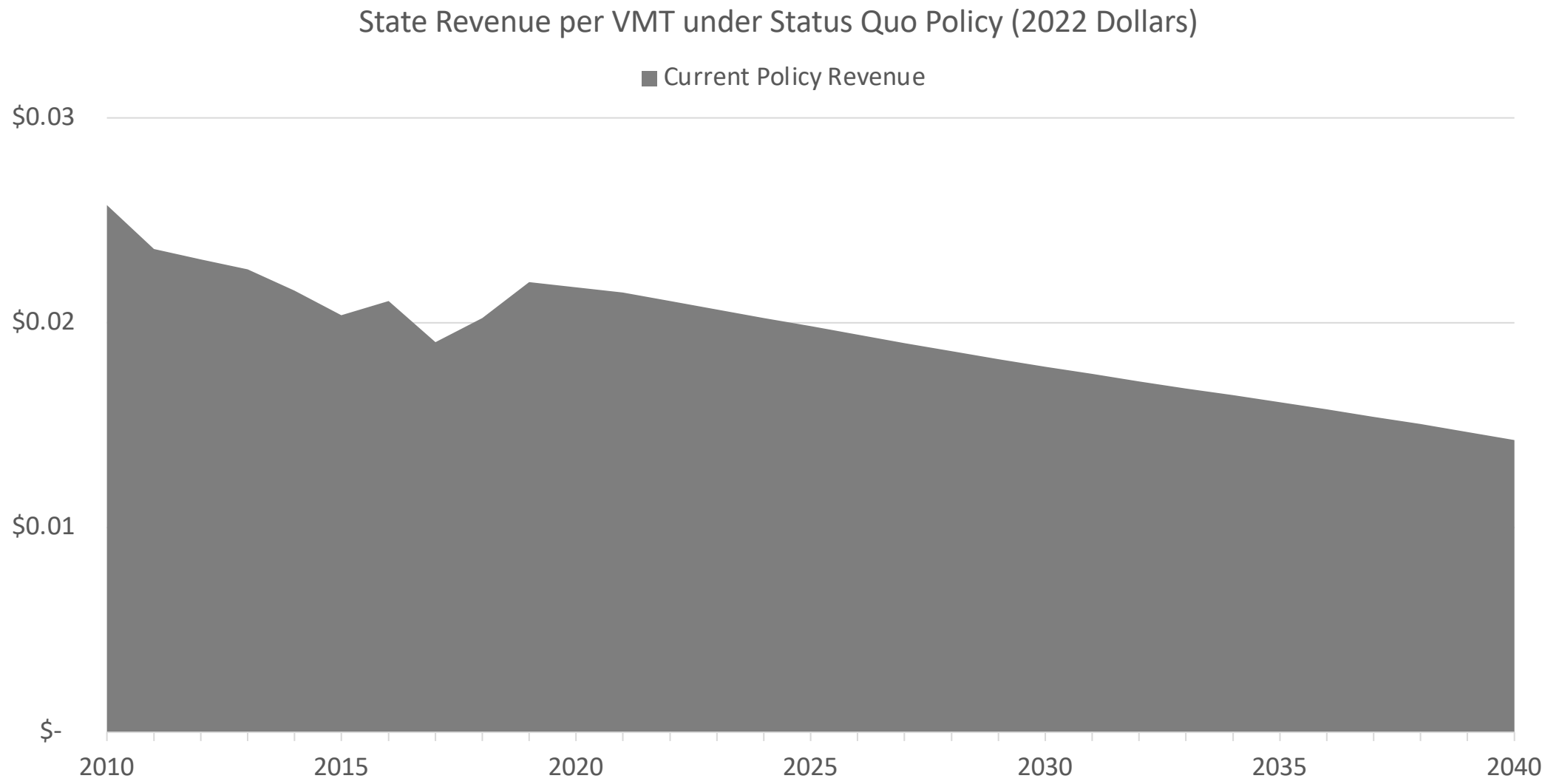
State sources of transportation revenue currently generate about 2.1 cents for each mile driven by vehicles on Nevada's roads



When taking inflation into account, revenue per mile driven is expected to continue a decline that began in 2010



When taking inflation into account, revenue per mile driven is expected to continue a decline that began in 2010



Sample Package 1: ~$621M new revenue per year by 2029 ($317 million flexible)

State highway funding – *near term*	Advantages	Est. Revenue
Statewide fuel tax increase – 10 cents + 1 cent per year thereafter		
An initial 10 cent increase in the statewide gas tax. Thereafter, the fuel tax rate (both gasoline and diesel) will be increased by 1 cent every year. The 1 cent per year must be renewed by the legislature or voters every 6 years.	• Dime increase in gas tax at a time when gas prices are rising (not an advantage right now) • Since Clark and Washoe already have FRI, the 1 cent annual increase mimics an index. Must be renewed by the legislature or voters every 6 years.	$140m in year 1 $154m in year 2 $168m in year 3 $182m in year 4 $196m in year 5 $210m in year 6
Model Year-based vehicle registration fee		
An *additional* vehicle registration fee ("roadway equalization fee") is assessed on vehicles based on model year (MY). The MY categories correlate to major changes in CAFE standards: MY 2017 – 2025 would pay $45 roadway equalization fee. MY 2009 -2016 vehicles would pay $27, or 40% less, matching the CAFE standard differential. Vehicles older than model year 2009 would pay $15, as these vehicles are more likely to be owned by lower-income households, driven less miles, and are gradually disappearing from the vehicle fleet.	• The fee levels correlate to years when CAFE standards were increased, reinforcing philosophy that higher MPG vehicles should contribute proportionately for the roadways. • All newer vehicles pay a bit more – not just EVs and hybrids. Addresses concerns that EVs are being unfairly singled out for special taxes. • Best for social equity, as lower income households tend to own older vehicles.	$82m in year 1 $84m in year 2 $86m in year 3 $89m in year 4 $91m in year 5 $93m in year 6

Sample Package 1: ~$621M new revenue per year by 2029 ($317 million flexible)

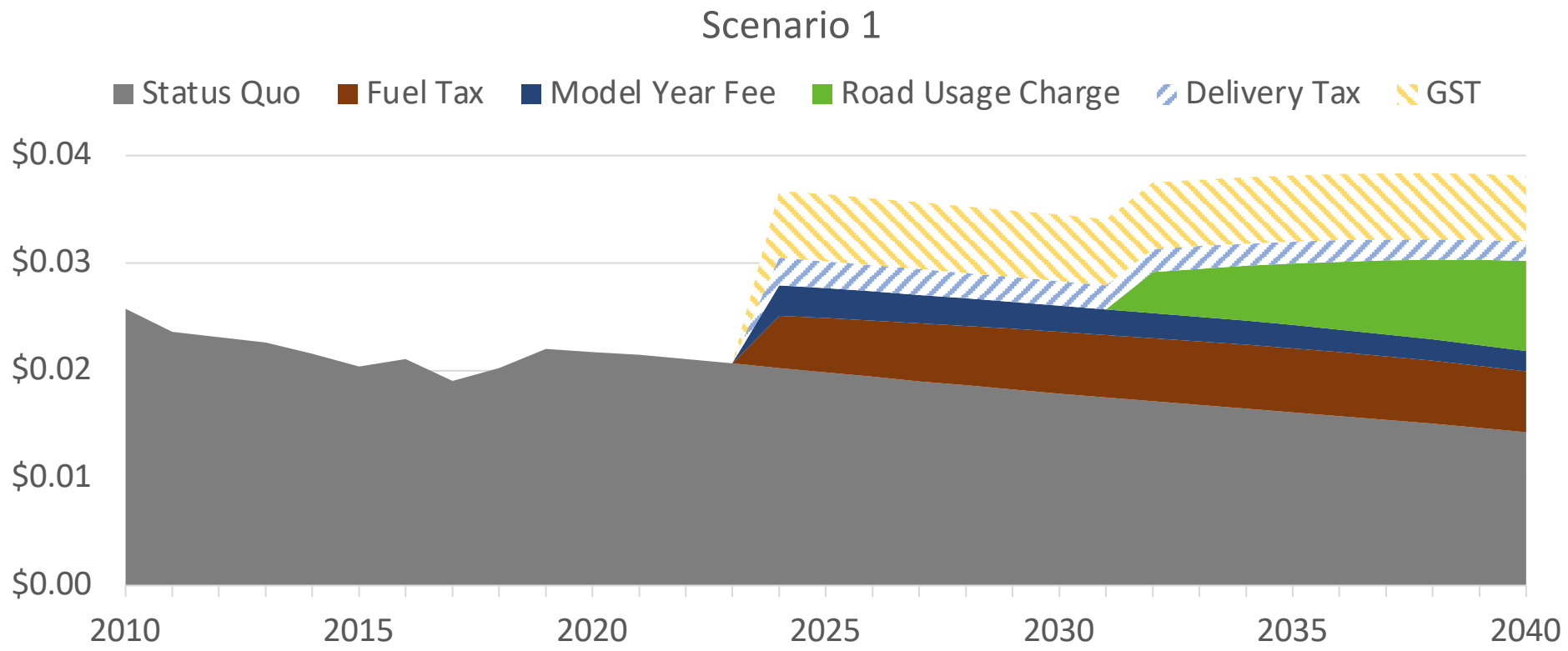
Highway or Flexible transportation funding	Advantages	Est. Revenue
Dedicated increase in GST		
An additional 0.2% increase in the statewide GST, statutorily dedicated for statewide transportation needs, including multimodal programs such as safe-routes-to-schools and transit assistance grant programs.	• A special 0.2% increase in the GST just for transportation projects is less likely to be diverted to the state's General Fund. • Significant flexible funds are raised for statewide purposes. "Flexible" can also include roadway improvements when warranted. • If this revenue source is pledged for repayment of capital construction bonds (roadway or other), it cannot be diverted other purposes.	$179m in year 1 $189m in year 2 $198m in year 3 $209m in year 4 $219m in year 5 $231m in year 6
Shipping and delivery fee		
A transportation fee of 50 cents would be collected from sellers of goods (including food services) that are delivered to Nevada addresses. For goods delivered in a zero-emission vehicle, the fee is reduced to 25 cents.	• Makes the goods seller the point of taxation (just like sales taxes) • Responds to concerns that e-commerce is overburdening roadways and not paying fair share • 50% discount if goods are delivered by ZEV • Very similar to Colorado's recently-enacted fee	$67m per year

Sample Package 1: ~$621M new revenue per year by 2029 ($317 million flexible)

Gas tax replacement – long term	Advantages	Est. Revenue
Road usage charge – light duty vehicles		
Research the feasibility of RUC for light-duty vehicles in Nevada as a long-term replacement to the gas tax and to the roadway equalization fee (proposed above). Research must address critical policy, administrative, and financial issues. Tap into federal funds to conduct the research and testing. Report results by December 2026.	• Allows deeper investigation of the benefit/cost of a RUC system in Nevada, while allowing several other states to push ahead, taking on the first-mover risks and providing a pathway for other states. • Near-term revenue stabilization is provided from the Model Year vehicle fee increase, buying some time to research and test RUC in a way that makes sense for Nevada.	Assuming half a penny per mile starting in 2032, increasing by 0.1c per mile annually thereafter $165m in 2032; $549m per year by 2040

Summary of Sample 1

- Raises over $600m in new revenue by Year 6
- Over half is “flexible” funding
- Lays groundwork for continued NDOT work on future replacement for gas taxes



Sample Package 2: ~$466M new revenue per year by 2029 ($69 million flexible)

State highway funding – near term	Advantages	Est. Revenue
Statewide fuel tax increase – 6 cents + 6 cents + 6 cents		
Statewide fuel tax rate (both gasoline and diesel) will be increased by 6 cents for three years, for a total increase of 18 cents	• A slight increase, spread out to alleviate the immediate impact of an upfront 12 cent increase, but limits increases to just three years (no unending tax increases). • Although per-mile revenue is quickly eroding, the gas tax still can provide a substantial and immediate influx of revenue	$84m in year 1 $168m in year 2 $252m in year 3 $252m in year 4 $252m in year 5 $253m in year 6
Statewide fleet fuel efficiency index		
Fuel tax would be indexed to the average fuel efficiency of all light duty vehicles and increase accordingly. Revenue must be spent on roadway projects.	• In lieu of indexing to CPI, indexing to fleet fuel efficiency links the related concepts of increasing fleet fuel efficiency and declining funds • Indexing to fuel efficiency is not already in place in parts of the state and could therefore be implemented statewide.	$4m in year 1 $10m in year 2 $16m in year 3 $21m in year 4 $26m in year 5 $30m in year 6
Increase base vehicle registration fee		
The current base license fee would increase from $33 to $75.	• Represents a modest increase in a fee that is tied to roadway usage. • This is not a new tax, but one people are familiar with.	$105-120m per year

Sample Package 2: ~$466M new revenue per year by 2029 ($69 million flexible)

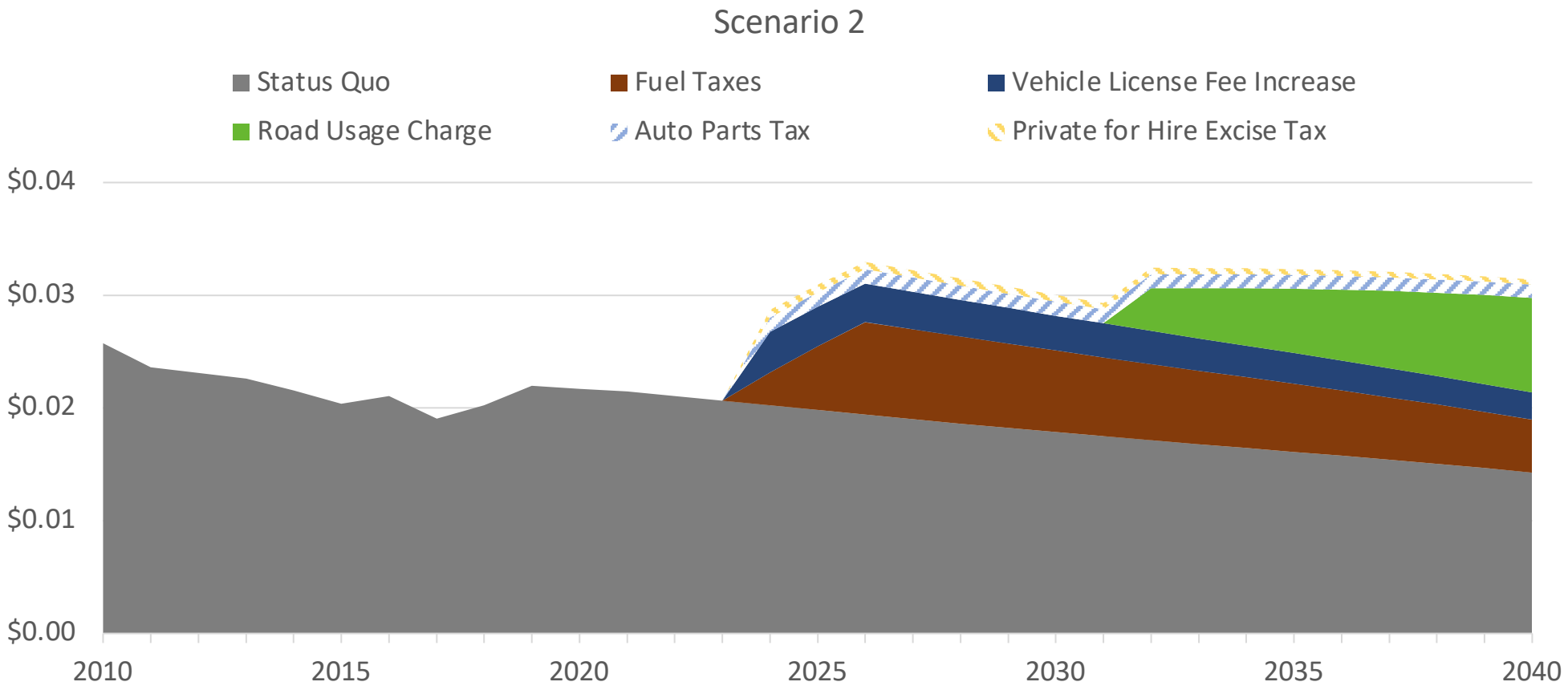
Flexible transportation funding	Advantages	Est. Revenue
Increase in Transportation Connection Tax		
An additional 2% surcharge would be added on all rideshare and taxicab trips.	• Links the increase in ride sharing to increased number of vehicles on the roads. • Ride sharing is often used by visitors, providing a way to export some of the tax burden.	$25m per year on average
Tax on auto parts		
A 2% tax would be levied on the purchase of auto parts such as tires, motor oil, EV batteries.	• This is a tax on items directly related to the use of roads. • At 2%, the tax on safety-related items such as tires is much lower than a flat fee of, say, $50 tire, which could deter drivers from replacing worn tires, causing safety issues on roadways.	$55m per year on average

Sample Package 2: ~$466M new revenue per year by 2029 ($69 million flexible)

Gas tax replacement – long term	Advantages	Est. Revenue
Road usage charge – light duty vehicles Research the feasibility of RUC for light-duty vehicles in Nevada as a long-term replacement to the gas tax. Research must address critical policy, administrative, and financial issues. Tap into federal funds to conduct the research and testing. Report results by December 2026.	• Allows deeper investigation of the benefit/cost of a RUC system in Nevada, while allowing several other states to push ahead, taking on the first-mover risks and providing a pathway for other states. • Near-term revenue stabilization is provided from the Model Year vehicle fee increase, buying some time to research and test RUC in a way that makes sense for Nevada.	Assuming half a penny per mile starting in 2032, increasing by 0.1c per mile annually thereafter. $165m in 2032; $549m per year by 2040

Summary of Sample 2

- Raises about $466 million in new revenue per year by Year 6
- About $69 million is “flexible” funding
- Lays groundwork for continued NDOT work on future replacement for gas taxes



Sample Package 3: ~$509M new revenue per year by 2029 ($140 million flexible)

State highway funding – near term	Advantages	Est. Revenue
Statewide fuel tax increase and indexing to fuel efficiency and inflation statewide		
Statewide fuel tax rate (both gasoline and diesel) will be increased by 15 cents in year 1, with the full amount of the increase indexed to inflation and vehicle fleet fuel economy	• Raises substantial revenue quickly and in alignment with environmental priorities to increase the cost of fossil fuel.	$214m in year 1 $223m in year 2 $233m in year 3 $242m in year 4 $251m in year 5 $259m in year 6
Registration fee increase based on vehicle MPG		
An additional registration fee of $30 for each light-duty vehicle with a Combined City/Highway MPG rating below 20 MPG; $40 for vehicles between 20-30 MPG; $50 for vehicles 30-40 MPG; and $60 for vehicles above 40 MPG.	• Similar to a road usage charge, this “dials up” over time to stay in alignment with near-term environmental priorities and addresses user equity of gas/hybrid vehicles that pay little in gas tax.	$109m in year 6 $111m in year 7 $114m in year 8 $117m in year 9 $119m in year 10

Sample Package 3: ~$509M new revenue per year by 2029 ($140 million flexible)

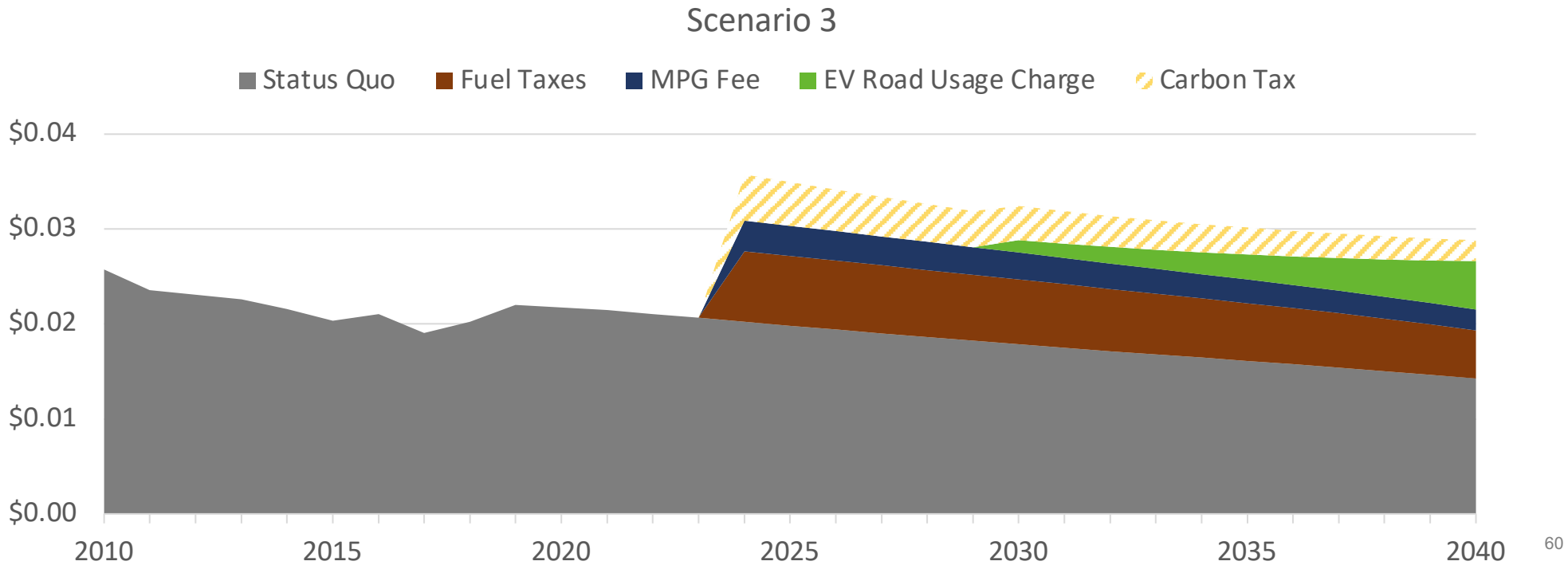
State highway funding – near term	Advantages	Est. Revenue
Carbon tax		
A carbon tax of $40 per metric ton would be applied to motor fuels.	• This is effectively another form of fuel taxation but more clearly labeled to align with environmental priorities. flexible funding source. • Unlike fuel taxes, this revenue mechanism is a flexible source of funding.	$140m in year 1 $140m in year 2 $140m in year 3 $140m in year 4 $140m in year 5 $140m in year 6

Sample Package 3: ~$509M new revenue per year by 2029 ($140 million flexible)

Gas tax replacement – long term	Advantages	Est. Revenue
Road usage charge for non-gasoline vehicles		
A per-mile road usage charge (RUC) would be applied to all non-gasoline vehicles (i.e., electric drive vehicles). The per-mile rate would increase in proportion to falling gas tax revenue collections.	• Preserves the user pay principle of fuel taxes for the longer term. This will not be ready for at least 5 years, but by introducing a RUC on EVs after an initialization period, this avoids compromising environmental priorities while balancing social and user equity against the gas and carbon tax increases..	Assuming 3c per mile on EVs starting in 2030 (year 7): $51m in year 7 $62m in year 8 $75m in year 9 $91m in year 10

Summary of Sample 3

- Raises about $509 million in new revenue per year by Year 6, of which $140m is flexible (carbon tax)
- Dials up as new revenue sources come online
- Creates mechanisms that assess revenue from vehicles in three distinct ways: fuel tax from low-MPG vehicles, MPG-based flat fee for high-MPG vehicles, and per-mile fees for vehicles that don't use fuel. This allows the legislature to balance environmental, user equity, and social equity priorities.



Lunch break

LUNCH HOUR HANDOUT

Status of revenue options after discussion at AWG's January 2022 meeting:

Under consideration for statewide revenue

- Increase rate of flat per-gallon excise tax
- Add inflation index to flat per-gallon excise tax rate
- Add fuel efficiency index to flat per-gallon excise tax
- Add sales tax based on price of fuel
- Add variable-rate excise tax based on price of fuel
- Carbon tax
- Increase value-based rate of governmental services tax (GST)
- Increase the basic vehicle license fee
- Add fee based on vehicle weight
- Add fee based on vehicle fuel economy rating
- Add fee based on vehicle age
- Distance-based charge for light-duty vehicles
- Parcel delivery fee

Better suited as local revenue source

- Street utility fee
- Cordon charge in urbanized areas
- Ride-share surcharges+
- Land use impact fees+

In reserve (for now)

- Ride-share surcharges+
- Add a tax on tires
- Add fee based on vehicle engine type
- Land use impact fees+

Very little support

- Weight-distance-based charged for medium- and heavy-duty vehicles
- Taxes on electricity consumed by electric vehicles
- Add a tax on EV batteries

Eliminated (to be confirmed)

- ~~Payroll tax~~
- ~~Income tax~~ [n/a]
- General fund transfers [n/a]
- ~~Value added tax on goods movement~~

Key:
+ appears in two categories

● ● ● ● = Guiding Principles composite rating

LUNCH HOUR HANDOUT

STATE HIGHWAY FUNDING SOURCES	Near-term	Long-term
Primary options (Capable of generating significant revenue relative to the investment levels needed)	■ Increase rate of flat per-gallon excise tax ■ Increase value-based rate of governmental services tax (GST)* ■ Carbon tax*	■ Add fee based on vehicle fuel economy rating ■ Add fee based on vehicle engine type ■ Distance-based charge for light-duty vehicles ■ Street utility fee* ■ ~~Value added tax on goods movement~~
Supplemental options (Capable of contributing some revenue relative to the investment levels needed)	■ Add inflation index to flat per-gallon excise tax rate ■ Add fuel efficiency index to flat per-gallon excise tax ■ Add sales tax based on price of fuel ■ Add variable-rate excise tax based on price of fuel ■ Increase the basic vehicle license fee ■ Add fee based on vehicle weight ■ Add a tax on tires* ■ Ride-share surcharges*	■ Parcel delivery fee* ■ Cordon charge in urbanized areas* ■ Land use impact fees ■ Taxes on electricity consumed by electric vehicles ■ Add a tax on EV batteries ■ ~~Payroll tax~~

*Flexible revenue mechanisms – can be used for any transportation purpose

Continued discussion of sample groupings

Short-listing revenue options for further detailed analysis

AB 413 – Legislative direction for this study

The Advisory Working Group shall study during the 2021-2022 interim:

(a) The needs of all users of different modes of transportation, including bicyclists, pedestrians, drivers of motor vehicles and public transit users;
(b) Social and user transportation equity;
(c) The reduction of greenhouse gas emissions;
(d) The sustainability of the State Highway Fund including, without limitation, an analysis of the Natural Resources Defense Council funding model presented to the Legislative Committee on Energy on August 24, 2020, and Utah's Road Usage Charge Program; and
(e) The role of land use and smart growth strategies in reducing transportation emissions and improving system efficiency and equity.

AWG's transportation funding challenge (or charter, adopted August 2021)

- An examination of the financial sustainability of the **State Highway Fund** must be undertaken and the recommendations must be included in the final report due to the Legislature by December 31, 2022. This must include an assessment of at least **two alternative transportation funding approaches** that have been identified.

- **Consistent with AB 413,** new approaches to **multimodal** transportation funding **for all users** must take into account the need to improve **social equity, user equity,** and reduce **GHG emissions.** Finally, the role that **land use and smart growth** strategies can play must be considered.

The home stretch

- ✓ **August 2021**: explored the magnitude of the transportation funding challenge.
- ✓ **September 2021**: AWG decided what's important in a transportation funding system (Guiding Principles).
- ✓ **November 2021**: took inventory of current revenue sources, and what's likely to happen in the future.
- ✓ **January 2022**: analyzed and discussed a wide range of future revenue options.

March 2022: identify preferred revenue options for further analysis.

April 2022: adjust revenue options to ensure funding adequacy and flexibility.

June 2022: identify findings and recommendations on revenue mechanisms for inclusion in the final report.

Problem Statement(s): breaking it down into bite-sized pieces

1. **Current statewide transportation funding <u>methods</u>…**
   a) …do not provide adequate funding to meet NDOT's *existing and near-term* needs
      Solution: increase SHF funding *levels now*
   b) …lead to declining revenue and a growing gap between resources and needs for the State Highway Fund (SHF)
      Solution: adopt new SHF funding mechanisms for the future
   c) …do not provide adequate support for state investment in *non-highway modes*
      Solution: increase funding levels and/or adopt new funding mechanisms available for *non-highway transportation purposes*

2. **Current statewide <u>policy</u>…**
   a) …does not address opportunities for land use interventions at the *state level* that could reduce long-term transportation needs and address GHG emissions.
   b) …does not provide sufficient tools for land use interventions at the *local level* that could reduce long-term transportation needs and address GHG emissions.
      Solution: identify possible *new approaches to land use management*

Issue #1: Mechanisms to stabilize/increase SHF funding levels in the near term (over the next 6 years)

Question 1: What are the most appropriate mechanisms to address this issue?
Question 2: How should these mechanisms be balanced?

Question 3: Considering the mechanisms and desired balance, what rates generate revenue levels to address near-term SHF needs?

Issue #2: Mechanisms to create sustainable SHF funding in the longer-term (beyond 6 years)

Question 1: What are the most appropriate mechanisms to address this issue?
Question 2: How should these mechanisms be balanced?

Question 3: Considering the mechanisms and desired balance, what rates generate revenue levels to address long-term SHF needs?

Issue #3: Mechanisms to fund non-highway needs- now and in the future

Question 1: What are the most appropriate mechanisms to address this issue?
Question 2: How should these mechanisms be balanced?

Question 3: Considering the mechanisms and desired balance, what rates generate revenue levels to address non-highway needs?

Issue #4: Utilize land use to influence future transportation needs

Question 1: How should statewide land use issues be addressed?
Question 2: What are the most appropriate land use policies to consider at the state level?

Question 3: What local land use policymaking tools should the state consider?

STATE HIGHWAY FUNDING SOURCES	Near-term	Long-term
Primary options (Capable of generating significant revenue relative to the investment levels needed)	■ Increase rate of flat per-gallon excise tax ■ Increase value-based rate of governmental services tax (GST)* ■ Carbon tax*	■ Add fee based on vehicle fuel economy rating ■ Add fee based on vehicle engine type ■ Distance-based charge for light-duty vehicles ■ Street utility fee* ■ ~~Value added tax on goods movement~~
Supplemental options (Capable of contributing some revenue relative to the investment levels needed)	■ Add inflation index to flat per-gallon excise tax rate ■ Add fuel efficiency index to flat per-gallon excise tax ■ Add sales tax based on price of fuel ■ Add variable-rate excise tax based on price of fuel ■ Increase the basic vehicle license fee ■ Add fee based on vehicle weight ■ Add a tax on tires* ■ Ride-share surcharges*	■ Parcel delivery fee* ■ Cordon charge in urbanized areas* ■ Land use impact fees ■ ~~Taxes on electricity consumed by electric vehicles~~ ■ ~~Add a tax on EV batteries~~ ■ ~~Payroll tax~~

*Flexible revenue mechanisms – can be used for any transportation purpose

Short break

Short-listing the revenue options for further detailed analysis, *continued…*

Public comment period

Adjourned.

See you April 12, 2022!

Backup slides – only if needed.

Communications & Outreach: Stakeholder Engagement

Purpose: to provide informational updates to broader audiences about the AWG, its purpose, principles, and timeline.

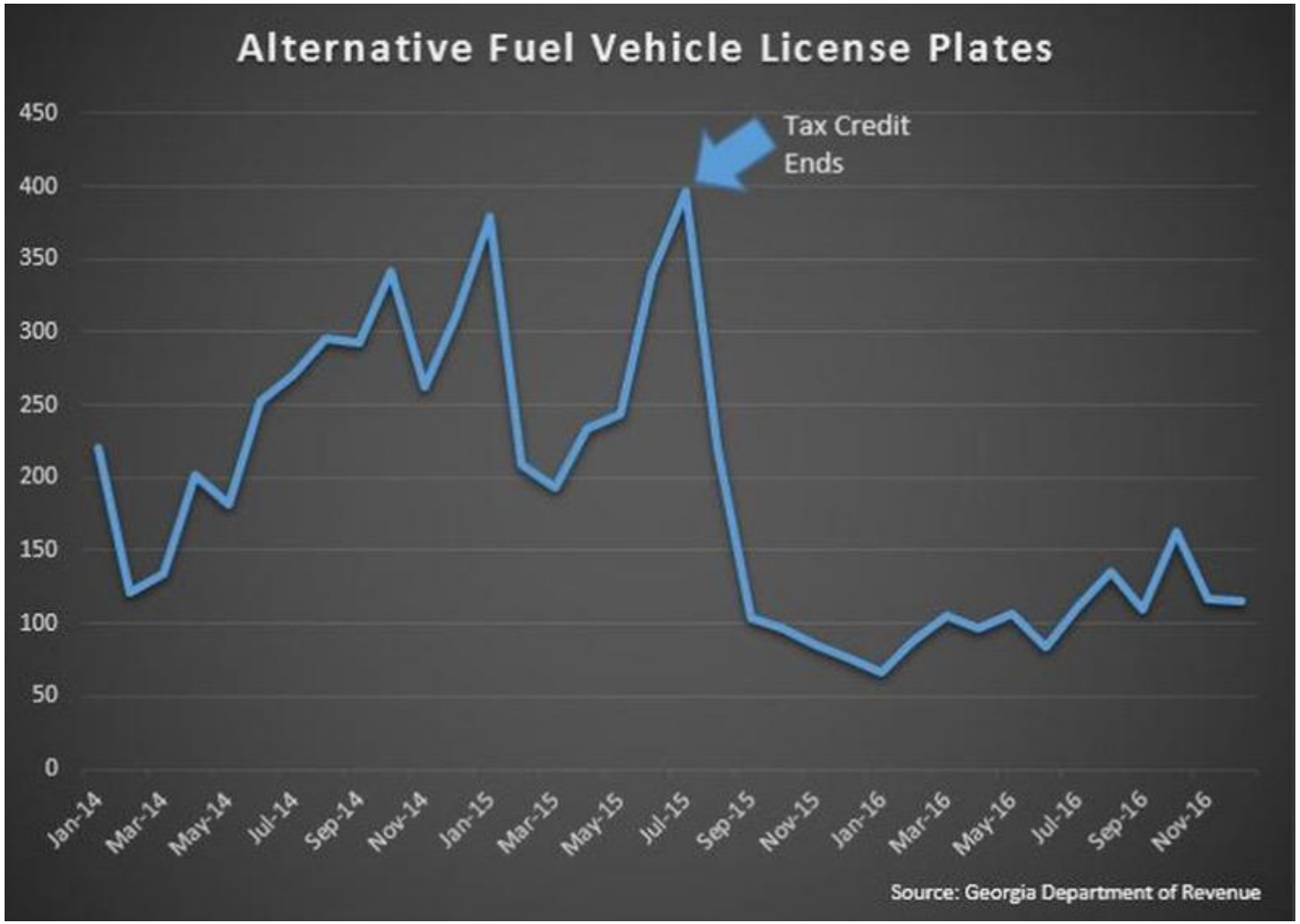
Engagements are intended to:
- Alert constituencies about the Legislative Directive
- Public Meetings also available on YouTube
- Public Comment is welcomed at the meetings

Engagements are NOT intended to:
- Require any action by a local agency – purely informational
- Become a public forum for Tax/Fee Policy Discussion – this is reserved for the 2023 Legislature

Presentations are tiered:
- Tier 1 – Transportation Admin & Boards
- Tier 2 – Local government Admin & Boards
- Tier 3 – Community groups & organizations

Stakeholder outreach

Source:
Atlanta Journal Constitution,
January 12, 2017



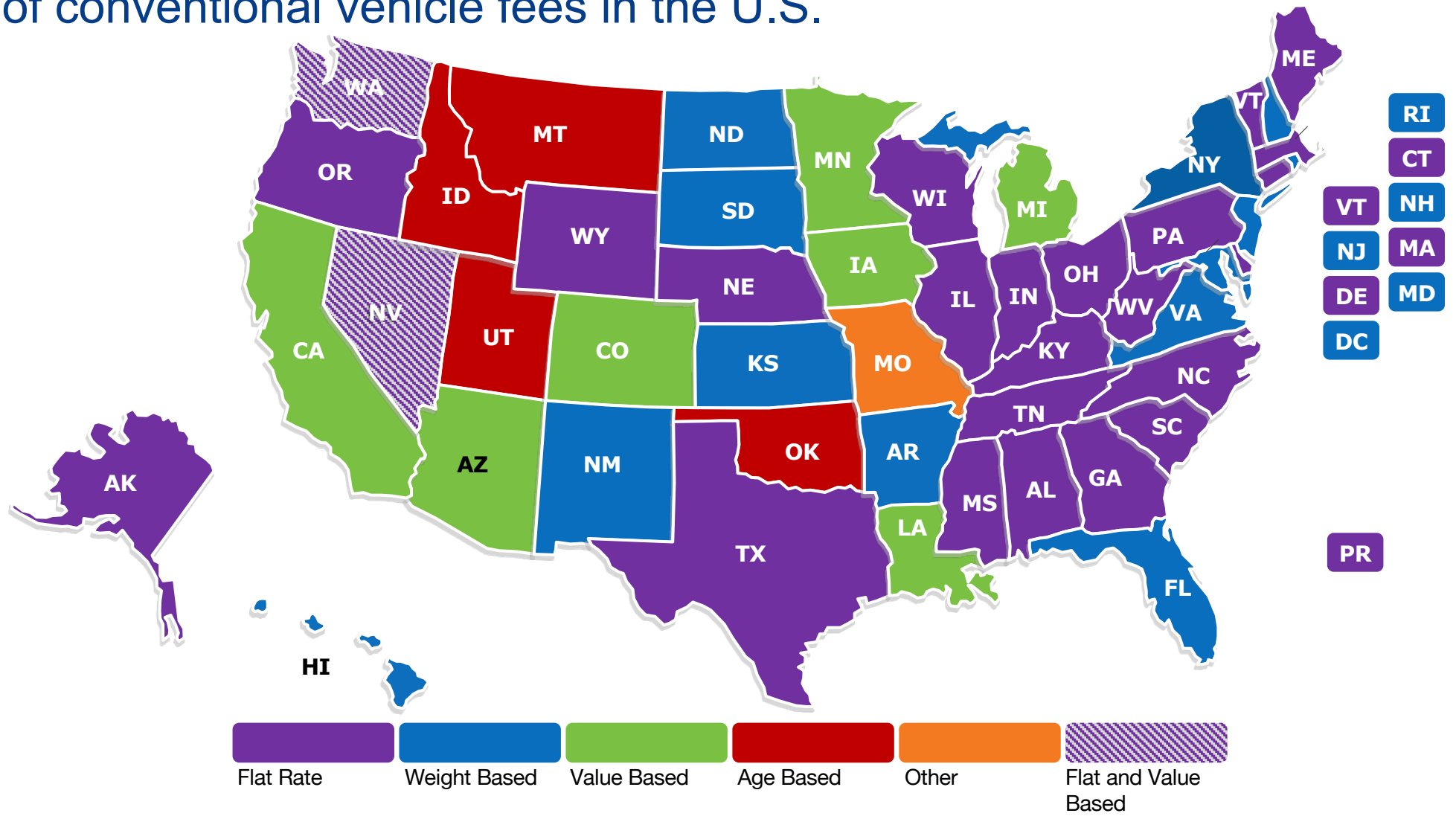
MOTOR FUEL TAXES

Fuel tax rate formulas and points of taxation vary, but the purpose is to recover costs proportional to usage

Type of fuel tax	Description	Examples
Flat per-gallon excise fuel tax	The most common form of fuel taxation, flat per-gallon excise taxes impose a tax that does not vary unless the rate is adjusted by legislation. At the federal level, the gasoline tax has been 18.4 cents per gallon since 1993 (24.4 cents per gallon for special fuels).	Federal + all 50 states
Excise tax with inflation index on per-gallon rate	Although the precise statutory constructions vary, inflation-indexed fuel taxes effectively adjust the flat per-gallon excise fuel tax rate by increasing automatically it in proportion to a measure of inflation such as consumer price index (CPI) or producer price index (PPI).	AL, DC, FL, GA, IL, IN, MD, MI, NV (Clark & Washoe only), NY, NC, RI, UT, VA
Variable-rate tax based on the price of fuel	Variable-rate taxes based on the price of fuel can be considered a hybrid between per-gallon excise taxes and sales taxes. The tax is formulated as a per-gallon tax rate (rather than a percent of price), but the rate itself is updated periodically based on fuel prices.	AR, CA, CT, KY, MD, NE, NJ, NY, OH, PA, UT, VT, WV
Excise tax with fuel efficiency index on per-gallon rate	In 2016, Georgia became the first state to automatically adjust its per-gallon fuel tax rate automatically for fleet fuel economy. Georgia also has an inflation index.	GA
County-option fuel taxes	Several states allow counties and/or municipalities to impose fuel taxes distinct from the state fuel tax. Typically, the tax is collected from the distributor on taxes destined for fueling stations in the subject county. County fuel taxes, as in Florida and Nevada, can have variable rates.	FL, HI, IL, NV, OR
Sales tax on fuel	Distinct from variable-rate excise taxes, several states impose a general retail sales tax on fuel. However, revenue from these sales taxes are not dedicated to transportation.	HI, IL, IN

VEHICLE RELATED FEES

Map of conventional vehicle fees in the U.S.

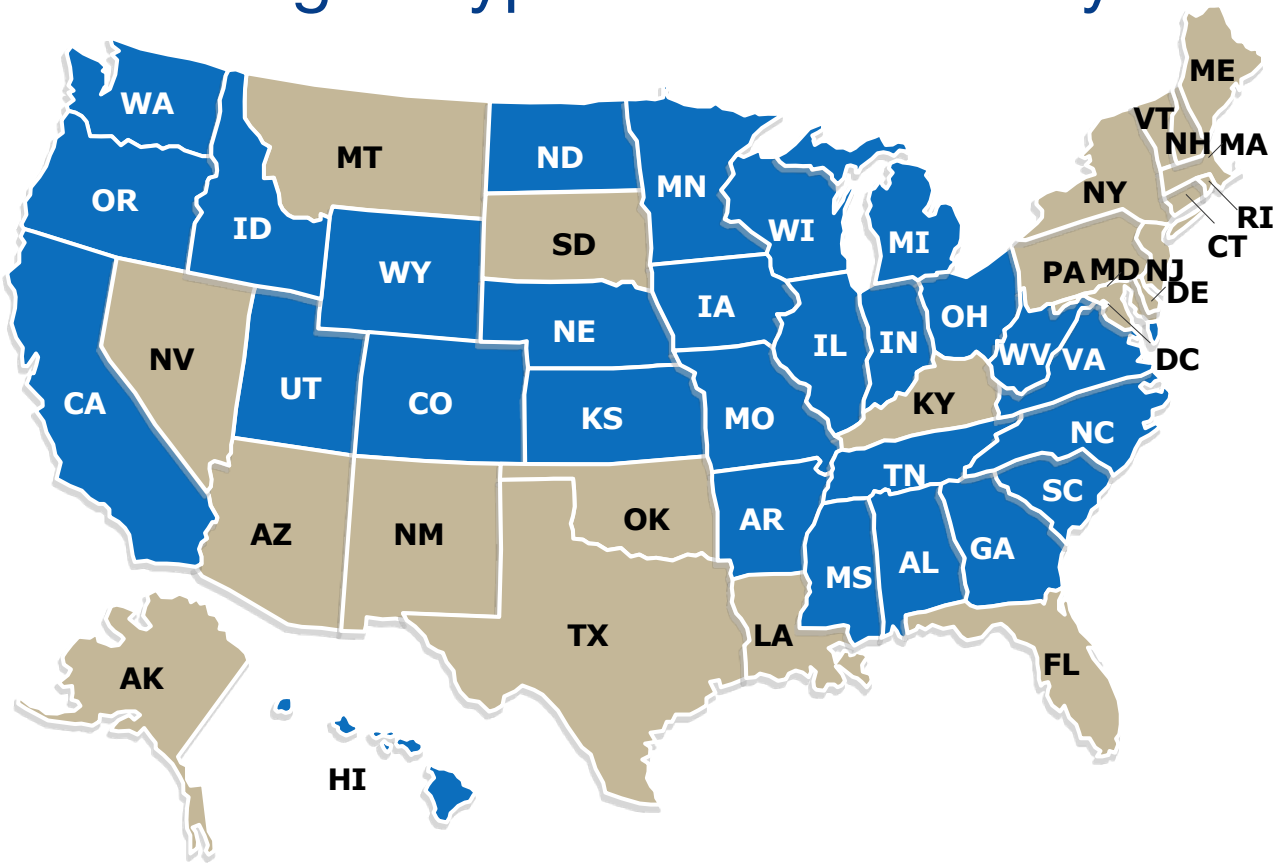


VEHICLE RELATED FEES

Increasingly, vehicle fees are based on engine type or fuel economy

As of early 2021, 28 states have enacted special fees for plug-in electric vehicles (EVs), and of these half also assess fees on plug-in hybrid vehicles and/or hybrid vehicles. The fees range from $50 in Colorado and Hawaii to $225 for electric vehicles in Washington. The fees, typically assessed at annual registration, are designed to compensate for the loss of fuel tax revenue represented by road usage of these vehicles. However, several states assess an additional EV fee to support the construction of charging stations.

Oregon is the first state to adopt a tiered registration fee based on miles per gallon (MPG), based on the rationale that higher MPG vehicle owners should pay more to make up for road usage costs they avoid by paying less gas tax. Vehicles under 20 MPG pay $61 per year, while vehicles 20-39 MPG pay an additional $10 per year ($71 total), vehicles 40 MPG and higher pay a $15 surcharge per year ($76 total), and all-electric vehicles pay a $92 surcharge per year ($153 total). Electric vehicles and vehicles rated 40 MPG and higher enjoy a lower cost of registration ($43, $18 less than the base charge) per year if they enroll in the state's distance-based charging program. Missouri and New Hampshire have also explored tiered registration fees based on MPG, but neither has enacted the policy.



INDIRECT USAGE FEES

Several states have examined indirect usage fees on driving

Indirect usage fees are fees that attempt correlate taxes with the amount of road consumption (driving). Fuel taxes are the most notable indirect usage fee, since they have historically served as a proxy for road usage taxes, at a lower cost to assess than taxing drivers directly for actual road usage. Like fuel taxes, fees on batteries, tires, and electricity have been proposed as indirect usage fees since they represent essential vehicle components for driving.

Batteries: California assesses a $1 fee on the sale of lead-acid batteries to finance the clean up of lead battery acid recycling facilities. However, no state taxes car batteries (whether internal combustion or electric) to fund transportation. Electric or hybrid vehicles could theoretically be taxed based upon the presence of battery technology or based on battery capacity.

Tires: Many states assess a tax on the sale of tires at the time of purchase primarily to fund tire recycling and disposal, ranging from $0.25 to $5 per tire. States that tax tires (other than general retail sales taxes) charge flat rates or vary rate based upon tire weight or diameter. The federal government applies the tax only on heavy truck tires as a funding mechanism for the federal Highway Trust Fund.

Electricity: Oklahoma and Iowa have both enacted a tax on electricity, measured in kilowatt-hours (kWh) at electric vehicle charging stations. The purpose of these taxes is to assess road usage fees on EVs. In Oklahoma, the tax applies only on public charging stations, ostensibly to capture revenue from EVs visiting from other states, under the presumption that resident EV owners charge their vehicles primarily at their homes and business. In Iowa, the tax applies to all non-residential EV chargers. Oklahoma will charge 3 cents per kWh, while Iowa will charge 2.6 cents per kWh.