### Nevada Sustainable Transportation Funding Strategies Project

# **Advisory Working Group Meeting**

January 11, 2022

Meeting locations (with live video connection):

Nevada Department of Transportation Headquarters Building 3<sup>rd</sup> Floor Conference Room 1263 S. Stewart St Carson City, Nevada Nevada Department of Transportation District I Headquarters Conference Room 123 East Washington Ave Las Vegas, Nevada AWG January 11 Meeting Welcome and roll call

## **Welcome and Roll Call**

AWG January 11 Meeting Public comments

# **Public comment period**

Minutes from November 2021 AWG meeting

# Approval of the minutes from November 9, 2021, meeting

AWG January 11 Meeting Agenda preview

Preview of the day and future meeting topics



Agenda preview

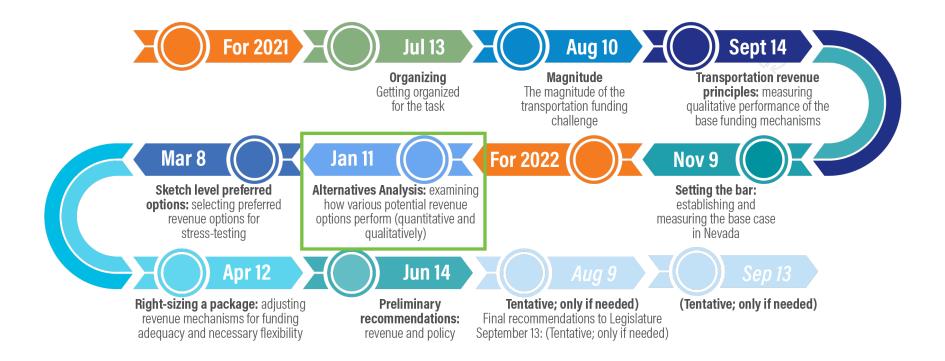
### Preview of today's meeting

**Theme**: alternatives analysis – reviewing how various funding mechanisms perform, and selecting the best options for further consideration

- Federal funding update from NDOT
- Reporting on research results of revenue options added to the comprehensive list during the November 9 AWG meeting
- Reviewing the financial analysis and qualitative ratings for each of the 25 potential revenue options
- Selecting the most promising revenue options for statewide transportation funding (cutting down from the 25+ list)
- Presentation on this study's communications and outreach efforts

Future meeting topics and objectives

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



# **Update:** Federal transportation funding for Nevada

# November 2021: President Biden signs Infrastructure Investment and Jobs Act (IIJA)

Nationwide, IIJA provides \$550 billion in infrastructure over five years (2022 – 2026):

Infrastructure bill includes funding for roads, bridges, transit, water, resilience, and broadband

### **Anticipated new federal funding for Nevada**

Nevada is expected to receive approximately **\$3.2 billion in transportation-related funding:** 

- \$462 million in transit
- \$2.7 billion in Highway-related programs
  - Existing highway
     programs: \$2.4 billion
  - New formula
     programs: \$385 million

Total highway formula funding estimates by state over the next 5 years



# Although more detail is still needed, early estimates show moderate increases to NDOT's highway program

- NDOT estimates the 2022 funding increase to our programs to be approximately 20% increase in federal funds, or 10% increase to our overall capital budget.
- Over the life of the bill, NDOT anticipates an additional ~ \$100 M per year in federal funding spread of multiple programs.

# IIJA also includes approximately 15 grant programs – most of which are new

- It will take time for the Biden administration to provide further program guidance to states.
- NDOT will provide an update to the AWG this Spring 2022, once further details are available.

AWG January 11 Meeting

New additions to the list: legal & policy implications

# Legal & policy considerations for newlynominated transportation revenue funding options

New additions to the list: legal & policy implications

# In November, AWG members requested additional information on five (5) revenue mechanisms that had not been analyzed previously.

### Potential revenue mechanisms:

- Tolling public highways in Nevada
- State-level development impact fees
- Payroll taxes
- Income taxes in Nevada
- Transportation utility fees



New additions to the list: legal & policy implications

### **Tolling: considerations for Nevada**

Three potential limitations to tolling exist in the state: federally-imposed limitations, state constitutional limitations, and state statutory limitations.

### **1. Federal limitations:**

Tolling of federal-aid highways is generally prohibited under federal law. Two primary exceptions exist, subject to USDOT approval:

- Tolling new capacity, reconstruction of roadways, or replacement of capital facilities; and
- Tolling HOV lanes, otherwise referred to as HOT (High-Occupancy Tolling) lanes



New additions to the list: legal & policy implications

### **Tolling: considerations for Nevada**

### 2. State constitutional limitations:

Art. 9, Sec. 5 of the Nevada Constitution requires revenue collected from license or registration fees, or fuel tax, to be used for construction and maintenance of state highways.

- In the 2009 session, the Legislature considered SB 206, which would have permitted private companies to operate toll roads in the state. A legal opinion by Legislative Counsel found that the Constitution likely prohibits a potential private toll operator from directly collecting any revenue from a toll road. Instead, should a private company operate a toll road, the revenue would need to be deposited into the State Highway Fund first.
- This interpretation of Art. 9, Sec. 5 of the Nevada Constitution effectively regulates how toll revenue must be deposited but does not explicitly prohibit tolling highways in Nevada.

New additions to the list: legal & policy implications

### **Tolling: considerations for Nevada**

### 3. State statutory limitations:

- Nevada's statutory limitations on tolling are more restrictive than federal law or lawyers' interpretations of the Nevada constitutional provisions. However, statutory law is easier to amend than what is required to amend the Nevada constitution.
- Current state law permits the Nevada DOT to authorize a person to develop, construct, improve, maintain or operate of a transportation facility; however, a "transportation facility" specifically excludes a toll bridge or road. NRS 338.161. See NRS 408.5471.
- To overcome this statutory hurdle, the law could be amended to remove the exclusion and specifically include a toll facility as a transportation facility the Nevada DOT is authorized to permit.

New additions to the list: legal & policy implications

### **Tolling public highways in Nevada: conclusions**

- Nevada could pursue an exception to tolling of federal-aid highways by tolling additional capacity, reconstruction or replacement of facilities; however, it is unlikely that any federal-aid highway can be tolled for the purposes of raising revenues to fund the broader highway system in Nevada.
- Tolling could be implemented on non-federal-aid highways (i.e., state-funded) highways; however, tolling those facilities is unlikely to raise sufficiently robust revenue to provide sustainable funding for the statewide transportation system.
- While the Nevada statute states that the DOT is not permitted to authorize "a person" to construct a toll facility, the statute is unclear as to whether NDOT itself or, for example, a tolling agency could operate one.

New additions to the list: legal & policy implications

### State-level impact fees on new development: primarily a local option

At last count, 36 states have enacted development impact fees, including Nevada. This option is limited to consideration of *transportation-related impact fees*, rather than impact fees for parks, schools, etc.

### 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.
- 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.



New additions to the list: legal & policy implications

### Payroll taxes for transportation: could they be used for statewide funding?

### What are payroll taxes?

- Federal, state or local taxes levied on wages or salaries, generally paid by the employer and used for specific programs (such as unemployment insurance).
- Nevada levies a Modified Business Tax (also called General Business Tax) on all businesses. The amount paid varies depending on the size of the payroll. There are also industry-specific payroll taxes, including taxes for businesses in the financial and mining industries.

### Payroll taxes are not used widely for statewide transportation funding

- In Nevada, no payroll taxes are imposed for transportation purposes.
- At the federal level, and in some states, payroll taxes are used to induce certain transportation behavior, such as commuting.
- Where payroll taxes are used for transportation, they tend to be imposed locally.



New additions to the list: legal & policy implications

### State income taxes for transportation: a high degree of difficulty

### Where is the income tax used for transportation?

- Income taxes are not generally used to fund transportation.
- Only a handful of states, including Michigan and Oklahoma, use a portion of state income tax revenue for transportation. Indiana allows a local-option income tax to fund approved public transportation projects. Maryland uses its corporate income tax for transportation purposes.

### Nevada's Constitution prohibits income taxes.

- In 1988, voters approved a constitutional amendment prohibiting a state income tax, 82% to 18%. As
  required by the Constitution, the same amendment appeared on the 1990 general election ballot and was
  again approved overwhelmingly, 72% to 28%,
- Article 10, section 1(9) of the Nevada Constitution states that "[n]o income tax shall be levied upon the wages of personal income of natural persons."

### Is using the income tax an option in Nevada?

- Only if the Nevada Constitution is amended in one of two ways: (1) The Legislature must pass the proposed amendment in two consecutive legislative sessions (i.e., in 2023 and 2025). If this occurs, a majority of voters must then approve the amendment in a general election.
- (2) Citizen-initiated amendment: A citizen-initiated constitutional amendment requires a majority of voters in two consecutive general elections. This is how the amendment prohibiting an income tax in Nevada was adopted in 1990.

New additions to the list: legal & policy implications

### Transportation utility fees: a revenue option used by local governments

### What is a transportation utility fee?

- A governmental charge on residents and businesses based on their estimated use of the system.
- Can be based on the number of parking spaces, square footage, gross floor area, or number of people using or occupying real property.
- In each case, the method of calculating the transportation utility fees are *proxies* for actual system usage – much in the way that gasoline consumption is a proxy for actual roadway usage.



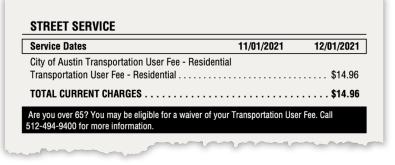


U.S. electricity network

U.S. highway network

### **Drawbacks and considerations:**

- The methods of calculating (or approximating) roadway usage may not closely reflect how a ratepayer in fact uses the transportation system.
- If a property tax also funds transportation, some people might feel it's a "double-charged" for ownership of their property.
- Courts strictly scrutinize whether these are truly proprietary charges, or just a novel approach to collect additional property taxes.



City of Austin Utility Bill

Short break

## **Short break**

Overview of revenue options analysis

# **Revenue options, Part I: overview of staff's assessment of financial and qualitative performance**

Overview of revenue options analysis

### **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.

#### Overview of revenue options analysis

### **Revenue mechanisms analyzed**



- 1. Increase rate of flat per-gallon excise tax
- 2. Add inflation index to flat per-gallon excise tax rate
- 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



- 6. Increase basic license fee
- 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

### <u>Direct</u>

- 12. Add a distance-based charge for light-duty vehicles
- Add a weight-distancebased charge for medium- and heavyduty vehicles

### <u>Indirect</u>

- 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
- 24. Land use impact fees

### AWG January 11 Meeting Overview of revenue options analysis

### Methodology for revenue option evaluation against the Guiding Principles

### **Quantitative methods:**

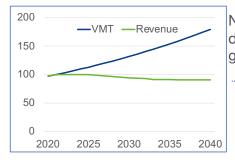
- Rate required to raise statewide revenue (\$100 million in 2021)
- Reasonableness of the rate
- Revenue generation potential over 20 years, measured by net present value at a 4% discount rate

### **Qualitative methods:**

- Considers the financial analysis
- · Consultant team's experience with these revenue options

Overview of revenue options analysis

### 1. Increase rate of flat per-gallon excise tax



### **Financial Sustainability and Sufficiency**

An additional rate of \$0.072 per gallon of diesel and gasoline would generate \$100 million in 2021. This translates to a net present value of \$1.23 billion through 2040 at a 4% discount rate. This mechanism generates revenue that decline relative to demand for road usage, reaching 89% less in 2040.

### Nevada's state fuel taxes includes 17.3 cents per gallon on gasoline and 27 cents per gallon on diesel, dedicated to the State Highway Fund. Increasing the rate of these existing per-gallon fuel excise taxes would generate additional revenue.

### **User equity**

Fuel taxes historically captured a share of revenue from users in an equitable manner. However, as the distribution of vehicle fuel economy grows, the share of contributions made through fuel taxes varies widely.

### Social equity

Vehicle fuel economy increases with income. Lowerincome vehicle owners bear a greater share of fuel tax increases on average, per mile driven.

#### Flexibility

This revenue source is subject to constitutional restrictions on spending.

### **GHG** emissions

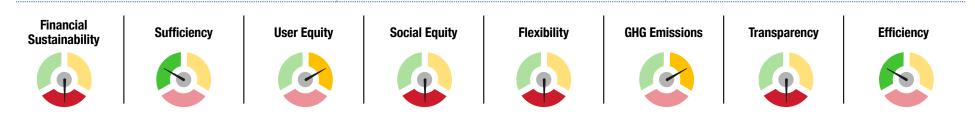
Excise fuel taxes alone historically have not significantly discouraged fuel consumption.

#### Transparency

Fuel taxes are invisible to end consumers.

#### Efficiency

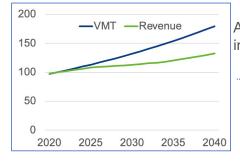
Fuel taxes are among the least costly to collect, with 2% of revenue going to fuel distributors and overall costs of administration less than 4%.



Mechanism is capable of strong alignment with guiding principle Acchanism is capable of some alignment with guiding principle

Overview of revenue options analysis

### 2. Add inflation index to flat per-gallon fuel excise tax rate



### **Financial Sustainability and Sufficiency**

An inflation index averaging 2% per year on top of a \$0.072 per gallon excise tax would result in a rate of \$0.104 per gallon by 2040. This translates to a net present value of \$1.496 billion through 2040 at a 4% discount rate. This mechanism generates revenue that increases but slower than demand for road usage, reaching 47% less in 2040.

### Although county fuel taxes contain inflation indices, Nevada's state fuel taxes do not. Adding one would increase the rate of the existing excise taxes each year to generate additional revenue.

### **User equity**

As the distribution of vehicle fuel economy increases, the share of contributions through fuel taxes changes. An inflation index shifts the share increasingly to lower MPG vehicles.

### Social equity

Vehicle fuel economy increases with income. Lower-income households bear an increasing share of indexed fuel taxes per mile driven.

### Flexibility

This revenue source is subject to constitutional restrictions on spending.

### **GHG** emissions

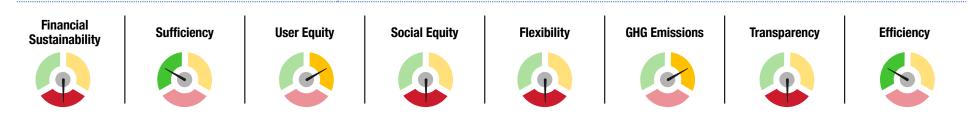
Excise fuel taxes with an inflation index historically have not significantly discouraged fuel consúmption.

#### Transparency

Fuel taxes are invisible to end consumers.

### Efficiency

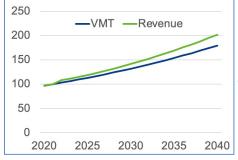
Fuel taxes are among the least costly to collect, with 2% of revenue going to fuel distributors and overall costs of administration less than 4%.



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Overview of revenue options analysis

### 3. Add vehicle fuel economy index to flat per-gallon fuel excise tax rate



### **Financial Sustainability and Sufficiency**

A vehicle fuel economy index ranging from 3-5% per year on top of the \$0.072 per gallon tax would increase the per gallon rate to \$0.157 by 2040. This results in a net present value of \$1,888 billion through 2040 at a 4% discount rate. Indexing fuel prices to fuel economy generates revenues faster than the demand for road usage, exceeding demand by 22% by 2040.

Georgia is the only state that currently indexes fuel taxes to vehicle efficiency. It uses 2014 as the baseline year and multiplies the excise tax by the increase in average fuel economy. Adding an index on fuel economy would increase the rate of fuel taxation along with increasing fuel economy.

#### **User equity**

As the distribution of vehicle fuel economy increases, the share of contributions through fuel taxes changes. An inflation index shifts the share increasingly to lower MPG vehicles.

#### Social equity

Vehicle fuel economy increases with income. Lower-income households bear an increasing share of indexed fuel taxes per mile driven.

#### Flexibility

This revenue source is subject to constitutional restrictions on spending.

### **GHG** emissions

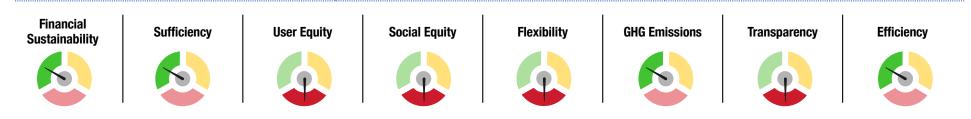
Excise fuel taxes historically have not discouraged fuel consumption. However, indexing rates to vehicle efficiency could place a sufficiently high burden on some vehicles to discourage their usage.

#### Transparency

Fuel taxes are invisible to end consumers.

### Efficiency

Fuel taxes are among the least costly to collect, with 2% of revenue going to fuel distributors and overall costs of administration less than 4%.



Overview of revenue options analysis

### 4. Add sales tax on the price of fuel



### **Financial Sustainability and Sufficiency**

A 2.3% sales tax on the spot price of gasoline as of December 2021 (approximately \$3.07 per gallon) would generate \$100 million in 2021. This translates to a net present value of \$1.112 billion through 2040 at a 4% discount rate. Revenue would not keep pace with road usage, reaching 87% lower by 2040.

A sales tax applied at the point of purchase would generate additional revenue on top of a per-gallon excise tax. However, the amount generated would fluctuate with the price of fuel. There could be sharp spikes or declines as oil, and therefore gasoline and diesel prices at the pump, fluctuate.

### **User equity**

As the distribution of vehicle fuel economy increases, the share of contributions through fuel taxes varies. A sales tax would place a greater burden on lower MPG vehicles.

### Social equity

Vehicle fuel economy increases with income. Lowerincome households bear a heavier tax incidence.

### Flexibility

Although excise taxes on fuel are subject to constitutional restrictions, it is unclear whether a sales tax would be subject to the same constraints, especially if it differs from the state's general sales tax rate.

### **GHG** emissions

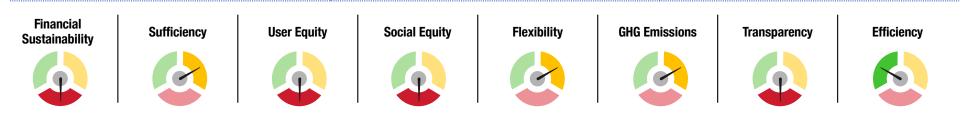
Like fuel excise taxes, sales taxes generally are not designed to be punitive or to discourage consumption of the product being taxed.

### Transparency

Fuel taxes are invisible to end consumers.

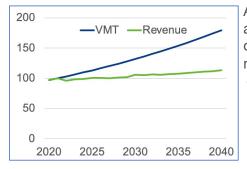
### Efficiency

Fuel taxes are among the least costly to collect, with 2% of revenue going to fuel distributors and overall costs of administration less than 4%.



Overview of revenue options analysis

### 5. Add variable-rate excise tax based on the price of fuel



### **Financial Sustainability and Sufficiency**

A 2.9% variable-rate excise tax on based on the 2021 average price of fuel of approximately \$2.50 would generate \$100 million in 2021. This translates to a net present value of \$1.364 billion through 2040 at a 4% discount rate. Revenue would not keep pace with road usage, reaching 66% lower by 2040.

A variable-rate excise tax is similar to a sales tax in that it applies to the price of fuel. However, rather than applying to the spot price, the tax is set periodically, for example yearly, based on the average price of fuel over the preceding year or the expected average price over the coming year. This approach has the effect of moderating spikes and sharp declines in revenue although they can still occur.

### **User equity**

As the distribution of vehicle fuel economy increases, the share of contributions through fuel taxes varies. A variable-rate excise tax would place a greater burden on lower MPG vehicles.

### Social equity

Vehicle fuel economy increases with income. Lowerincome households bear a heavier tax incidence.

### Flexibility

Although excise taxes on fuel are subject to constitutional restrictions, it is unclear whether a variable-rate tax would be subject to the same constraints, especially if it differs from the state's general sales tax rate.

### **GHG** emissions

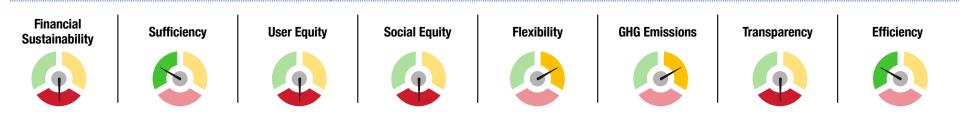
Like fuel excise taxes, variable-rate taxes generally are not designed to be punitive or to discouráge consumption of the product being taxed.

### Transparency

Fuel taxes are invisible to end consumers.

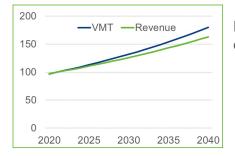
### Efficiency

Fuel taxes are among the least costly to collect, with 2% of revenue going to fuel distributors and overall costs of administration less than 4%.



Overview of revenue options analysis

### 6. Increase basic vehicle registration fee for passenger vehicles



### Financial Sustainability and Sufficiency

A \$40 additional basic registration fee per vehicle would generate \$100 million in 2021. This translates to a net present value of \$1.665 billion through 2040 at a 4% discount rate. The fee tracks relatively closely with the increase in road usage, with indexed revenues being 17% lower in 2040 than VMT.

### Passenger vehicles currently pay \$33 per year for basic registration. A blanket fee increase for all passenger cars is a common means to collect revenue. This mechanism would not impact commercial vehicles.

#### **User equity**

The tax is somewhat equitable on a user basis since it falls evenly on all vehicles: however, it does not consider usage.

### Social equity

Since the rate is fixed across all vehicles the incidence falls heaviest on those with the lowest incomes.

### Flexibility

This revenue source is subject to constitutional restrictions on spending.

### **GHG** emissions

An increase in the basic vehicle license fee would not have an impact on GHG emissions since it does not vary with fuel consumption.

#### Transparency

Flat licensing fees are transparent and easy to understand since the fee is paid directly by customers.

#### Efficiency

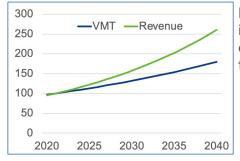
Assessing a license fee is costlier than the fuel tax since it requires individual transactions. However, since it occurs as part of the existing vehicle registration process, the marginal cost includes transaction costs (credit card fees of about 3%).



Mechanism is capable of strong alignment with guiding principle Acchanism is capable of some alignment with guiding principle

Overview of revenue options analysis

### 7. Increase vehicle value-based rate of governmental services tax (GST)



### Financial Sustainability and Sufficiency

The current GST is about 0.7% of the value of the entire state vehicle fleet. Increasing that to 0.82% would generate \$100 million in 2021 and a net present value of \$2.129 billion through 2040 at a 4% discount rate. This mechanism increases revenue faster than road usage. reaching 81% higher by 2040.

Nevada assesses a value-based "governmental services tax" on vehicles at 4% of the DMV Valuation, which is 35% of the manufacturer's suggested retail price (MSRP). Statutes provide a depreciation schedule based on vehicle age. The amount of revenue generated could be increased by increasing the tax rate, increasing the DMV Valuation percentage, or reducing the depreciation schedule.

#### **User equity**

Value-based vehicle taxes capture revenue from users of the system, but do not correlate to system usage.

### Social equity

Vehicle value-based taxes tend to perform well along lines of social equity since lower-income households tend to own older (therefore more depreciated) vehicles and lower-value vehicles.

### Flexibility

This revenue source is not subject to constitutional restrictions on spending. Currently the vast majority is dedicated to uses other than transportation spendina.

### **GHG** emissions

Zero-emission vehicles tend to be newer and more costly than other vehicles. Value-based taxes will result in higher tax incidence on owners and purchasers of such vehicles.

### Transparency

Although transparent, the method of calculating vehicle value can be difficult to explain, resulting in guestions and complaints from customers.

### Efficiency

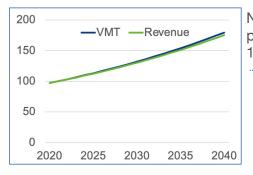
Assessing a vehicle value-based license fee is costlier than the fuel tax since it requires individual transactions. However, since it occurs as part of the existing vehicle registration process, the marginal cost includes transaction costs (credit card fees of about 3%).



Mechanism is capable of strong alignment with guiding principle Acchanism is capable of some alignment with guiding principle

Overview of revenue options analysis

### 8. Add fee based on vehicle weight



### **Financial Sustainability and Sufficiency**

Although difficult to estimate precise revenues from weight fees, it is estimated that an acrossthe-board rate increase of about 30% would yield \$100 million in revenues in 2021. Assuming an annual growth rate of 3%, this would generate a net present value of about \$1.727 billion through 2040 and would nearly track with road usage.

Nevada assesses a weight-based registration fee on vehicles ranging from \$33 to vehicles under 6.000 pounds to \$1,360 for the heaviest vehicles. Increasing the schedule of weight-based fees on vehicles over 10,000 pounds would generate additional revenue.

### **User equity**

Weight-based registration fees directly assess users of the system. Since weight is a factor in road usage costs, weight-based fees better capture user costs than flat fees or value-based taxes.

### Social equity

Typically heavier commercial vehicles bear the largest share of weight-based registration fees. These costs are passed on to end consumers in the form of higher prices.

### Flexibility

This revenue source is subject to constitutional restrictions on spending.

### **GHG** emissions

Zero-emission vehicles tend to weigh more than gasoline counterparts due to the weight of batteries, and would therefore bear a higher share of costs.

### Transparency

Weight-based fees are transparent and easy to understand since they are paid directly by customers.

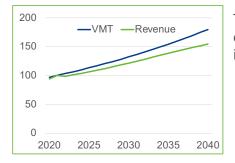
### Efficiency

Assessing a weight-based license fee is costlier than the fuel tax since it requires individual transactions. However, since it occurs as part of the existing vehicle registration process, the marginal cost includes transaction costs (credit card fees of about 3%).



Overview of revenue options analysis

### 9. Add fee based on vehicle fuel economy rating



#### **Financial Sustainability and Sufficiency**

Assessing a fee of \$30 for vehicles rated at less that 20 MPG, \$40 for 20-29 MPG, \$50 for 30-39 MPG, \$60 for 40-59 MPG, and \$100 for vehicles over 100 MPG would generate \$100 million in 2021 and a net present value of \$1.600 billion through 2040 when discounted at 4%. This mechanism lags VMT by 25% in 2040.

This type of fee assesses a higher rate on vehicles with a higher EPA-rated miles per gallon. The fee can be coarse, with higher fees for vehicles in a range of MPG ratings, or fine, with a graduated rate for each increment of MPG. Where implemented this fee intends to work in conjunction with fuel taxes.

#### **User equity**

Alone this form of registration fee results in disparate contributions based on a vehicle factor that has nothing to do with roadway usage or impacts. However, in conjunction with a fuel tax, this type of fee can counteract revenue axes losses among vehicles that are not contributing through fuel taxation.

#### Social equity

Since more efficient vehicles are typically new, this fee would be somewhat progressive in its incidence.

### Flexibility

This revenue source is subject to constitutional restrictions on spending.

### **GHG** emissions

By itself, this mechanism creates a small but clear disincentive to adoption of cleaner vehicles.

### Transparency

Although transparent to the end customer, the method of determining MPG can be difficult to explain and individual results vary widely from EPA ratings, resulting in guestions and complaints from customers.

#### Efficiency

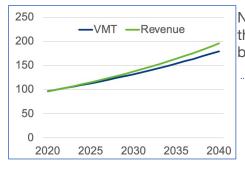
Assessing an MPG-based fee could occur as part of the existing vehicle registration process. but in addition to transaction costs (credit card fees of about 3%), it would require DMV to determine MPG of each vehicle, data which is not readily available for all makes and models.



Mechanism is capable of strong alignment with guiding principle Acchanism is capable of some alignment with guiding principle

Overview of revenue options analysis

#### 10. Add fee based on vehicle engine type



#### **Financial Sustainability and Sufficiency**

Charging \$100 for EVs would generate very little revenue in 2021 given the small population of EVs currently. A \$100 surcharge on EVs coupled with a \$39.13 surcharge on all other passenger vehicles would generate \$100 million in 2021 and \$1.870 billion through 2040, discounted at 4%. Revenue outpaces VMT by 43% in 2040.

Nearly 30 states have enacted annual registration surcharges on electric and/or hybrid vehicles to counteract the impact of increasing adoption of such vehicles on fuel tax revenues. Nevada could enact a similar fee based on engine type, namely a surcharge on electric vehicles.

#### **User equity**

The tax is somewhat equitable since it increases costs for vehicles with the lowest operating expenses.

#### Social equity

Since more EVs are typically newer, this fee would be somewhat progressive in its incidence.

#### Flexibility

This revenue source is subject to constitutional restrictions on spending.

#### **GHG** emissions

Charging an increasing rate base upon a vehicle's efficiency would disincentivize EV adoption. increasing GHG emissions.

#### Transparency

Licensing fees are transparent since the fee is paid directly.

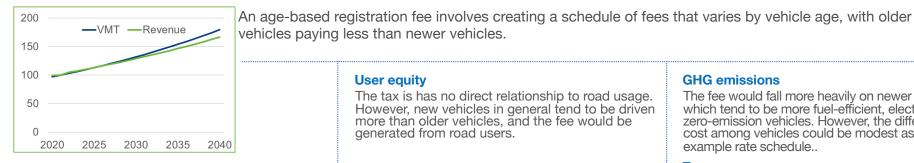
#### Efficiency

Assessing an engine type-based surcharge requires accurate collection of engine type data, but otherwise the cost is modest, amounting to additional transaction costs (e.g., credit card fees approximately 3%).



Overview of revenue options analysis

#### 11. Add fee based on vehicle age



#### **Financial Sustainability and Sufficiency**

Assessing a fee of \$55 for vehicle less than 5 years old, \$45 for vehicles between 5 and 10, \$35 for vehicles 10 to 15, \$25 for vehicles 15-20 and \$15 for vehicles greater than 20 years of age would generate \$100 million in 2021 and \$1.702 billion through 2040 when discounted at 4%. Revenue nearly tracks with road usage, reaching 13% less than VMT in 2040.

#### **User equity**

The tax is has no direct relationship to road usage. However, new vehicles in general tend to be driven more than older vehicles, and the fee would be generated from road users.

#### Social equity

Since the fee decreases with vehicle age, the incidence would fall less on owners of older vehicles. which tend to be lower-income households.

#### Flexibility

This revenue source is subject to constitutional restrictions on spending.

#### **GHG** emissions

The fee would fall more heavily on newer vehicles which tend to be more fuel-efficient, electric and zero-emission vehicles. However, the difference in cost among vehicles could be modest as in the example rate schedule...

#### Transparency

Age-based fees are visible to end customers and straightforward to understand.

#### Efficiency

The marginal cost of an age-based registration fee is modest, on par with other vehicle registration surcharges given the need only to effect additional transaction costs at the time of registration.



Mechanism is capable of strong alignment with guiding principle Acchanism is capable of some alignment with guiding principle

Overview of revenue options analysis

#### 12. Road usage charge (RUC) for light vehicles



#### **Financial Sustainability and Sufficiency**

A \$0.004 per mile RUC would generate \$100 million in 2021. This generates \$1.744 billion in net present value through 2040 at a 4% discount rate. A RUC keeps pace with increases in VMT over the period since it is a direct function of VMT.

#### RUC assesses a fee based on distance traveled on the road network by light-duty vehicles. There are many methods of collecting distance traveled data and setting rates, which can vary by vehicle or owner characteristics.

#### **User equity**

RUC assesses all road users directly and in proportion to their consumption.

#### Social equity

RUC falls equally on all users per mile driven; therefore, the incidence is proportionally greater on lower income households. However, total miles driven increases with income, so the total burden falls more on higher-income households.

#### Flexibility

This revenue source is subject to constitutional restrictions on spending.

#### **GHG** emissions

RUC in its most basic form falls equally on all vehicles regardless of efficiency and is a modest fee. It is capable of aligning more directly by varying rates based on emissions.

#### Transparency

RUC is visible and simple to understand since it shows the amount charged and total miles driven, paid by end customers directly.

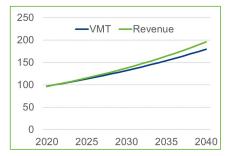
#### Efficiency

DMV collects annual miles driven data. A lowcost method of assessment would be to collect payment at the time of registration, which would incur additional transaction costs. Other methods of collecting mileage data are more costly.



Overview of revenue options analysis

#### 13. Weight-distance tax for heavy vehicles



#### **Financial Sustainability and Sufficiency**

A blended average rate of \$0.061 per mile would generate \$100 million in 2021. Through 2040 a weight-distance tax would generate \$1.829 billion in net present value at a 4% discount rate. A weight-distance tax outpaces total VMT by 16% by 2040, because truck VMT are expected to grow faster than lightduty VMT.

Three states (Oregon, New Mexico, and New York) collect weight-distance taxes for trucks over 26,000 pounds. The per-mile amount varies based on a truck's weight and number of axles. Kentucky collects a flat amount per mile driven for all trucks 60,000 pounds and over.

#### **User equity**

A weight-distance tax can assess vehicles directly and proportionally to the costs imposed on the road system based on axle-weight.

#### Social equity

A weight-distance tax is largely passed through to all consumers via increased shipping prices.

#### Flexibility

This revenue source is subject to constitutional restrictions on spending.

#### **GHG** emissions

A weight-distance tax could result in optimizing miles traveled at declared weights, thereby lowering truck emissions

#### Transparency

A weight-distance tax is visible and easy to understand since it shows the amount charged and total miles driven, paid by fleets directly.

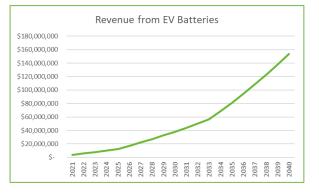
#### Efficiency

Although trucks already report miles traveled for IFTA and IRP, declaring and reporting weight and axle-counts adds complexity and cost for tax reporting and enforcement.



Overview of revenue options analysis

#### 14. Electric vehicle battery taxes



#### **Financial Sustainability and Sufficiency**

Assuming a rate of \$2 per kWh of vehicle battery capacity and a battery size of 75 kWh, a battery fee assessed annually would generate approximately \$4 million in 2021. Through 2040, a battery fee at this rate would generate \$635 million in NPV at a 4% discount rate.

Imposing an annual fee on battery size has limited revenue potential due to the reasonableness of rates. To raise significant revenues initially, the rates would be so high as to make owning an EV prohibitively expensive for most.

#### **User equity**

The fee increasing with larger batteries would mean owners who drive larger vehicles or need greater range would pay more, resulting in heavier road users paying more.

#### Social equity

The incidence of a battery fee would fall heaviest on high income households due to EVs high costs and current dominance by luxury brands.

#### Flexibility

The revenue is likely not subject to constitutional limits on its use.

#### **GHG** emissions

A fee on batteries would likely increase GHG emissions by making the purchase and operation of EVs less economical.

#### Transparency

Age-based fees would be visible to end customers and straightforward to understand.

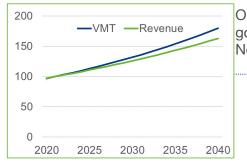
#### Efficiency

A battery fee assessed annually could be collected as part of the vehicle registration process, thus incurring additional transaction costs. However, it would also require DMV to determine battery capacity of each vehicle and associate this information to a transaction.



Overview of revenue options analysis

#### 15. Tire excise taxes



#### **Financial Sustainability and Sufficiency**

Assessing a rate of \$50 per tire and assuming every vehicle purchases four new tires every five years, a tire fee would generate \$100 million in revenues in 2021 and \$1.665 billion through 2040 discounted at 4%. Revenue does not keep pace with usage, lagging by 17% in 2040.

One revenue mechanism associated with highway usage is assessment of a per-tire excise tax. The federal government taxes heavy vehicle tires. Currently, although sales taxes apply, there is no tire excise tax in Nevada.

#### **User equity**

Given heavy road users wear out tires faster than light users, the fee would fall more heavily on those who drive more.

#### Social equity

The fee would fall equally on all users leading to a higher tax incidence on lower income individuals.

#### **Flexibility**

The revenue is likely not subject to constitutional limits on its use.

#### **GHG** emissions

The fee would have little impact on GHG emissions since it is not associated with fuel consumption.

#### Transparency

Depending on the point of collection, consumers may or may not be exposed to the surcharge.

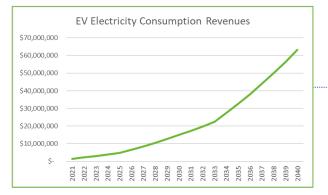
#### Efficiency

A tire fee would have a relatively low cost of collection since it could be imposed at the merchant level similar to a sales tax.



Overview of revenue options analysis

#### 16. Taxes on electricity consumed by electric vehicles



#### **Financial Sustainability and Sufficiency**

Given the low numbers of EVs, the kWh rate was set at \$0.02 which is equivalent for the average EV to a gas tax of \$0.094 per gallon on the average combustion engine vehicle. At this rate. \$1.4 million would be collected in the 2021 and \$254 million through 2040 in net present value at a 4% discount rate.

Collecting a tax on EV electricity consumed is analogous to the gas tax for internal combustion engines. To generate substantial revenue this mechanism requires separate metering of electricity used to charge electric vehicles at public charging stations and at home where most charging occurs.

#### **User equity**

Charging based on electricity consumption would approximate usage, but individual results vary widely.

#### Social equity

The fee on electricity consumption for travel would likely be greater for higher incomes since they are more likely to drive more expensive larger and heavier vehicles that would correlate with greater electricity consumption.

#### Flexibility

The revenue is likely not subject to constitutional limits on its use.

#### **GHG** emissions

It is challenging to configure a tax on electricity used in zero-emission vehicles in a way that aligns with GHG reduction goals.

#### Transparency

If the tax is collected by utilities, drivers may never notice it. If the tax is collected from end users, they may notice it but understanding declines as part of a larger utility bill.

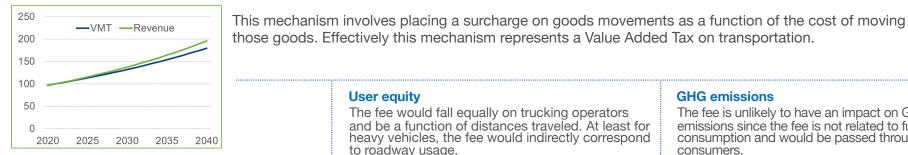
#### Efficiency

This mechanism would require the installation sub-meters at each EV charging points (including residences) and assessment of taxes on kWh by utilities metered at those locations.



Overview of revenue options analysis

#### 17. Fee on value of trucking costs



#### **Financial Sustainability and Sufficiency**

A tax rate of 2%, based on a flatbed per mile cost of \$3.07, would generate \$100 million in 2021 and \$1,829 billion through 2040 assuming a discount rate of 4%. Revenues would outpace VMT by 16% by 2040.

**User equity** The fee would fall equally on trucking operators and be a function of distances traveled. At least for heavy vehicles, the fee would indirectly correspond to roadway usage.

#### Social equity

The fee would increase the cost of shipping all goods, resulting in higher goods prices across the board.

#### Flexibility

The revenue is likely not subject to constitutional limits on its use.

#### **GHG** emissions

The fee is unlikely to have an impact on GHG emissions since the fee is not related to fuel consumption and would be passed through to consumers.

#### Transparency

Given the fee would be assessed within the supply chain and incorporated in the final cost of goods, the fee would not be apparent to eventual goods.

#### Efficiency

The fee would be difficult to assess and require significant new reporting requirements and processes likely infeasible for many operators.



Mechanism is capable of strong alignment with guiding principle Acchanism is capable of some alignment with guiding principle

Overview of revenue options analysis

#### 18. Parcel delivery fees



#### **Financial Sustainability and Sufficiency**

A per-delivery fee of about \$0.75 would generate \$100 million in 2021. The revenue mechanism would generate a net present value of \$2.040 billion through 2040 and outpaces road usage, reaching 47% higher by 2040.

This mechanism involves placing a surcharge on parcel deliveries such as USPS, FedEx, UPS and Amazon. Colorado recently enacted a fee of \$0.27 per delivery to generate additional revenue.

#### **User equity**

The fee would indirectly approximate road usage of largely medium-duty trucks, many of which are converting to electric and avoiding fuel taxes.

#### Social equity

The fee would increase the cost of direct-toconsumer shipping. The impact of this fee increase by income is indeterminate.

#### Flexibility

The revenue is likely not subject to constitutional limits on its use.

#### **GHG** emissions

A parcel delivery fee is unlikely to encourage GHG emissions reductions by itself, given it is not the driving cost of operating delivery fleets.

#### Transparency

A parcel delivery fee would be transparent only to shippers unless directly passed on to consumers at the point of purchase.

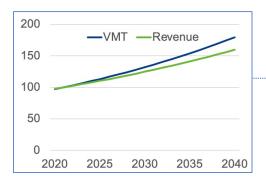
#### Efficiency

The fee would require new reporting and assessment infrastructure and could be challenging to administer across all shippers.



Overview of revenue options analysis

#### 19. For-hire service surcharges



#### **Financial Sustainability and Sufficiency**

An excise tax of approximately 11% on the price of for-hire rides would génerate approximately \$100 million in 2021. At that rate, it would generate a net present value of \$1.608 billion through 2040. It would not keep up with road usage, falling 20% below by 2040.

Nevada imposes a 3% excise tax on the value of all for-hire ride services including traditional taxis as well as services such as Uber and Lyft. The first \$5 million in revenue each biennium is deposited in the State Highway Fund and available for transportation expenditures. This mechanism would increase the excise tax rate and dedicate the revenue to transportation.

#### **User equity**

A fore-hire ride service surcharge assesses a fee based on a portion of road usage. However, it does not assess fees based on distance or empty miles of for-hire operators.

#### Social equity

There is little data available on the average income of for-hire passengers. The impact of a surcharge by income is indeterminate.

#### Flexibility

The revenue is likely not subject to constitutional limits on its use.

#### **GHG** emissions

The fee is unlikely to have an impact on GHG emissions since the fee is not related to fuel consumption and would be passed through to consumers.

#### Transparency

For-hire ride service users see the tax rate and amount on their receipts, but it is a line-item among numerous taxes, fees, and commercial surchärges.

#### Efficiency

The cost of imposing a fee increase would be marginal given the infrastructure is already in place.



Overview of revenue options analysis

#### 20. Cordon charge in congested areas



#### **Financial Sustainability and Sufficiency**

For illustration purposes, a fee of \$1.37 per trip along I-15 in downtown Las Vegas in both directions would generate \$100 million in 2021. Absent any increases in capacity, this mechanism would generate a net present value of \$1.313 billion through 2040, but would not keep up with overall road usage, falling short by 80% by 2040.

This mechanism involves assessing a fee on vehicles that enter officially-designated congested areas such Las Vegas and Reno at congested times. Such charges can take many forms, but the purpose is to use price to discourage driving and moderate traffic congestion, similar to "surge pricing" used by ride share companies.

#### **User equity**

Cordon charges would directly fall on only those users of the system causing congestion and not other users.

#### Social equity

Depending on the details of how a cordon charge is designed, it could improve social equity by improving travel times for workers, through discounts for lowincome drivers, and other mechanisms.

#### Flexibility

The revenue may be subject to constitutional limits on its use.

#### **GHG** emissions

A cordon charge can double as an emissions fee, thereby discouraging emissions and congestion that exacerbates emissions.

#### Transparency

To be effective a cordon charge must be transparent and understandable to end users. otherwise it will not have the desired effect of discouraging driving at certain places and times.

#### Efficiency

Regardless of configuration, a cordon charge requires substantial infrastructure for detecting and billing individual vehicles.



Overview of revenue options analysis

"downstream" on drivers.

#### 21. Carbon taxes



#### **Financial Sustainability and Sufficiency**

Assessing a \$38 per ton fee, translating to \$0.10 per gallon, would raise \$100 million in 2021 and a net present value of \$1.242 billion through 2040 when discounted by 4%. When indexed to VMT. revenues would lag by 95% due to declining carbon emissions.

#### **User equity**

The taxes paid would not reflect the miles traveled due to the range of fuel economies in the vehicle fleet.

No states currently have a carbon tax, although several do have cap and trade systems, most notably

"upstream" at the level of refineries and factories, "midstream" at fuel distributors (like the gas tax), or

California. A carbon tax involves assessing a fee on each ton of carbon dioxide emitted, which can be done

#### Social equity

Vehicle fuel economy increases with income. Lowerincome vehicle owners will bear a greater share of carbon taxes on average, per mile driven. However, a carbon tax can be designed to refund revenues to low-income households to offset its regressive effects.

#### Flexibility

Revenue is not subject to constitutional limits on its use.

#### **GHG** emissions

A carbon tax can have a major impact on reducing emissions by charging explicitly for and discouraging their creation.

#### **Transparency**

If assessed upstream, consumers would have little knowledge as to their costs or how their vehicle's MPG impacts their costs. If assessed downstream on consumers directly, a carbon tax could be highly transparent and even more effective at achieving reductions.

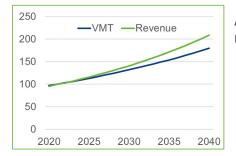
#### Efficiency

Where a carbon tax is levied would dictate the tax's efficiency. Upstream, it would likely have the same costs as the current fuel tax. If levied at the consumer level, it would have higher costs akin to



Overview of revenue options analysis

#### 22. Street (or transportation) utility fee



#### **Financial Sustainability and Sufficiency**

To estimate the financial performance of this mechanism, an annual street utility fee per household was modeled. A rate of \$80 per household per year would raise \$100 million in 2021 and \$1.881 billion through 2040 at a 4% discount rate. The mechanisms outpaces VMT growth by 29% in 2040.

#### A street utility fee would assess a statewide surcharge on residents and businesses based on the estimated road usage impacts of the property type.

#### **User equity**

A street utility fee does not bear a direct relationship to road usage and does not fall on road users.

#### Social equity

A utility fee could be constructed to reduce the perhousehold cost to multi-family units, thereby reducing the impact on low-income households and households near transit availability.

#### Flexibility

The revenue is not subject to constitutional limits on its use.

#### **GHG** emissions

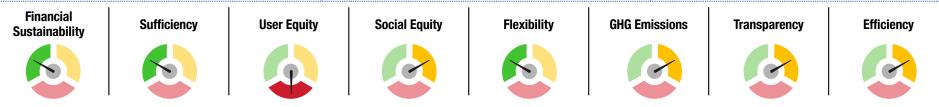
The fee does not have any connection to GHG emissions and would not alter their production. However, the fee could be constructed to impose higher rates for land uses that generate more traffic.

#### Transparency

The tax would likely be transparent if it appeared with other annually assessed taxes, although perhaps difficult for end customers to understand if bundled with other taxes, fees, and utility charges...

#### Efficiency

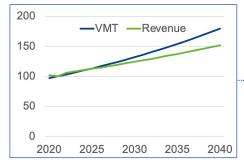
A street utility fee would be most efficiently collected as part of an existing mechanism such as property taxes or utilities, neither or which are assessed by the state. This would require an additional layer of coordination.



Mechanism is capable of strong alignment with guiding principle Acchanism is capable of some alignment with guiding principle

Overview of revenue options analysis

#### 23. Statewide employer payroll tax



#### **Financial Sustainability and Sufficiency**

A tax of 0.2% on wages statewide would generate approximately \$100 million in 2021. At a discount rate of 4%, the tax would collect \$1.637 billion through 2040. However, the tax would not outpace VMT, lagging by 28% in 2040.

A statewide payroll tax would collect payments from employers as a function of wages paid, similar to the current Modified Business Tax in Nevada. Employers would pay a tax based on total wages, although currently in Nevada taxable wages are those about \$50,000. Oregon is an example of a state that generates transportation revenue via a statewide payroll tax for transit, currently at 0.1%.

#### **User equity**

A payroll tax does not fall directly or indirectly on road users and bears no relationship to road usage.

#### Social equity

The tax would fall equally as a portion of all wages earned, making it a regressive source of taxation. Rates could not be varied by income due to the prohibition on collecting income tax from individuals.

#### Flexibility

The revenue is not subject to constitutional limits on its use.

#### **GHG** emissions

The tax would have no ability to impact on GHG emissions since it would not have any relationship to their formation.

#### Transparency

The tax would be visible to employers, may be visible to employees (appearing as a line item on pay stubs), and invisible to road users.

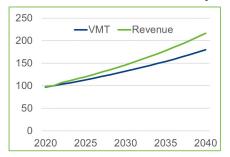
#### Efficiency

A state payroll tax could utilize the same mechanism as unemployment insurance; however it is unclear whether the Department of Employment, Training and Rehabilitation, which currently collects premiums, would be capable of implementing such changes.



Overview of revenue options analysis

#### 24. Land use impact fee



#### **Financial Sustainability and Sufficiency**

Assuming a tax rate of 1% and an annual growth rate in the construction sector of 4%, the tax would generate \$100 million in 2021 and a net present value of \$1.952 billion through 2040 at a 4% discount rate. Revenue outpaces VMT given the faster expected relative growth of the development sector, reaching 37% higher in 2040.

A land use impact fee is imposed on developers based on the expected impacts of development on the transportation system. To approximate the performance of such a revenue mechanism, a statewide tax was assumed as a percentage of the overall spend on construction in the State of Nevada.

#### **User equity**

Impact fees have no direct relationship to road usage, and costs would not fall on road users directly or indirectly.

#### Social equity

The tax would be absorbed as a cost of doing business by developers and passed on to tenants and purchasers of property. Depending on the nature of a given development, abatements could allow for discounts or exemptions for developments targeted at low-income households.

#### Flexibility

The revenue is not subject to constitutional limits on its use.

#### **GHG** emissions

Depending on its formulation, the tax could be used to discourage developments that result in GHG emissions.

#### Transparency

End users would not discern or understand the tax.

#### Efficiency

A land use impact fee could be complex and costly to administer given the disparate number and type of developers and the lack of clarity around valuation of what gets taxed.

| Financial<br>Sustainability | Sufficiency | User Equity | Social Equity | Flexibility | GHG Emissions | Transparency | Efficiency |
|-----------------------------|-------------|-------------|---------------|-------------|---------------|--------------|------------|
|                             |             |             |               |             |               |              |            |

Mechanism is capable of strong alignment with guiding principle Acchanism is capable of some alignment with guiding principle

Discussion of revenue evaluation and ratings

## **Revenue options, Part II: AWG discussion and refinement of ratings**

Lunch break

Lunch break

53

Discussion of revenue evaluation and ratings

# **Continued discussion of revenue options ratings**

AWG January 11 Meeting Possible categories and groupings

## Sorting the revenue options

#### AWG November 9 Meeting Recent Transportation Funding Initiatives from Other States

#### **Observations from recent state transportation funding measures**

- Provisions to address both near-term and longer-term needs. Several measures increased existing taxes or fees while also enacting provisions to provide longer-term funding sustainability.
- More states are indexing to inflation. Indexing was prominent for existing taxes (like the gas tax), but also applied to newly-created taxes and fees.
- Multiple revenue sources. While a few states narrowly increased existing gas taxes, those states that enacted comprehensive revenue packages included multiple revenue sources – not just an increase in a single source.
- "Flexible" revenue sources. Many states included revenue sources capable of funding non-highway projects, like public transportation, bicycle, and pedestrian facilities.
- Addressing the evolution of the vehicle fleet. While specifics varied, several measures contained provisions to collect revenue from high-MPG and/or alternative fuel vehicles. Registration surcharges were common, but in some cases, were paired with major investments supporting electrification (*e.g.*, Colorado). Some states directed development of usage-based charges as an alternative to special EV fees.

#### AWG November 9 Meeting Recent Transportation Funding Initiatives from Other States

#### **Considerations for Nevada's future transportation revenue sources:**

- Identify the specific investment horizon to be solved for, then match sources that are best fits.
- Consider techniques for keeping pace with inflation.
- Propose a combination of revenue sources rather than trying to create a "perfect" new mechanism.
- "Flexible" revenue can be achieved in several ways including redirection of general revenues.
- Sustainable funding requires future-proofing against the evolving vehicle fleet.

AWG January 11 Meeting Sorting through the revenue options

#### **Considerations:**

- □ Is the expected revenue amount sufficient to serve as a primary state funding source, or better is it better as a "supplemental" funding source?
- □ Is the revenue collection mechanism well-established and able to provide immediate funding, or is it better suited as a viable *future* funding option?

| Type of funding mechanism | Immediate | Future |
|---------------------------|-----------|--------|
| Primary                   |           |        |
| Supplemental              |           |        |

Does the revenue mechanism provide some type of buffer against inflation, or would the legislature need to make regular adjustments to the rate?

AWG January 11 Meeting Sorting through the revenue options

## Strawman Groupings: revenue sources proposed for further consideration

#### Significant\* statewide sources:

- Immediate funding options:
- Longer-term funding options:

#### Supplemental<sup>+</sup> statewide sources:

- Flexible funding options:
- Policy-driven funding options (e.g., alleviates local impacts, addresses GHG emission):

\*Refers to the total expected revenue yield – total amount. +Refers to smaller-yielding revenue sources

Short-listing revenue options for further analysis

# Short-listing the revenue options for further detailed analysis

Short break

## **Short break**

AWG January 11 Meeting Communications strategy and outreach

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



#### **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



#### We need your participation:

- The AWG was established as an independent group as directed by the Legislature.
- Assist in securing presentation opportunities (Dates/times/audiences)
- Serve as the Point of Contact for your Governing Agency 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

AWG January 11 Meeting Public comments

## **Public comment period**

Adjourn

## Adjourned.

## See you March 8, 2022!

Adjourn

## **Backup slides – only if needed.**

AWG November 9 Meeting Recent Transportation Funding Initiatives from Other States

### **Transportation funding trends**

In the last 15 years, states have recognized the pending decline in motor fuel tax revenue collections that will come with emerging vehicle technologies and new transportation fuel sources.



#### AWG November 9 Meeting Models for Distance-based Charging

## Status of road usage charging efforts nationally

Three states have enacted small-scale programs for electric, plug-in hybrid, hybrid, and or high-MPG vehicles. Ten more have conducted public pilots, with several others involved in research.

