

Background Information for AWG Meeting #7

Nevada Sustainable Transportation Funding Advisory Work Group

April 12, 2022

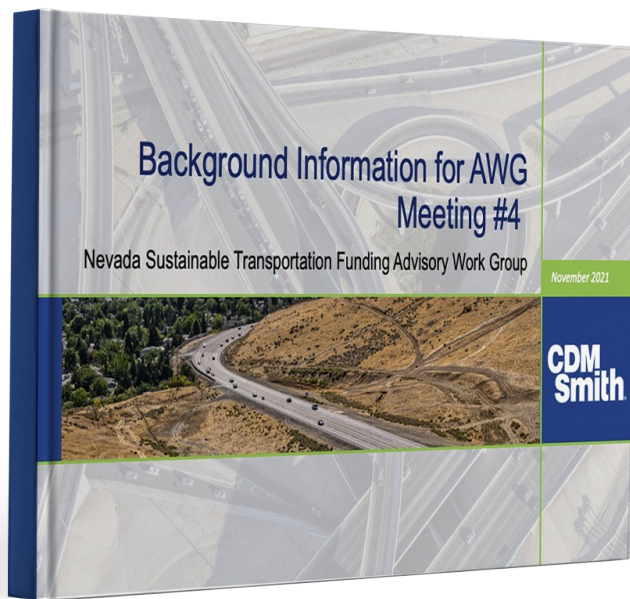


**CDM
Smith**

Contents

- 1 Advisory Working Group meeting roadmap**
Meeting schedule and key milestones to complete the AWG's study and recommendations to the Nevada legislature.
- 2 Land-use and Transportation: options for AWG consideration**
As requested by the AWG, this section includes information on possible land-use reform policies Nevada may consider; the composition and scope of a land-use commission; and examples from two states that have initiated land-use commissions.
- 3 Results of further analysis of short-listed revenue options**
Includes annual and 10-year revenue yields at given rates; qualitative analysis relative to the AWG's Guiding Principles; opportunities to improve revenue performance, and issues that must be addressed.
- 4 UPDATED for April AWG Meeting: new sample revenue packages**
Based on AWG discussion from March, the project team developed new groupings of revenue mechanisms to help focus AWG deliberation and decision-making. comparative analysis against base case (status quo), Utah's RUC program, and an NRDC-proposed funding model.

How to use this briefing book



This briefing book is provided to Advisory Working Group members as background for the April 12, 2022, meeting. These materials are aligned with the Agenda for the meeting and provide background information on several of the topics to be reviewed and discussed.

During the meeting, slide presentations will summarize each of these topics (but not repeat everything), so it will be helpful to read the content of the briefing book prior to the meeting.

The project team is happy to answer any questions that arise prior to or during the meeting (info@NVtransportationfuture.org.)



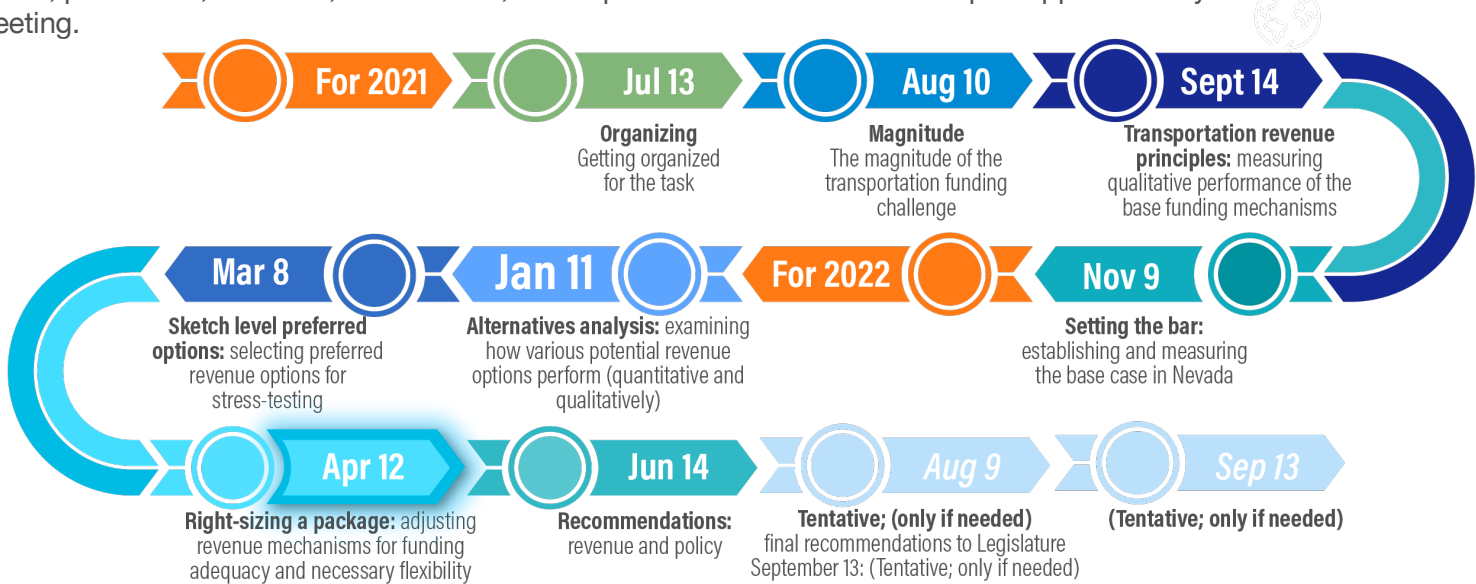
Section 1

**Advisory Working Group
Meeting Roadmap**

AWG MEETINGS

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

The meeting information provided below is a roadmap of what is planned for coverage. Meetings that are several months out are planned only in low-fidelity, keeping the agenda more open to respond to issues raised during earlier meetings, or to adjust to new information. More detailed agendas, presenters, activities, action items, and expected outcomes are developed approximately 8 weeks in advance of the scheduled meeting.



REMAINING MEETING SCHEDULE

Depending on progress, the April and June meetings may be supplemented with a mid-summer check-in meeting, and a final meeting in September.

The remaining AWG meetings (April and June 2022) are outlined below, illustrating the meeting topics, activities, and expected outcomes. Depending on progress in April and June, an additional meeting (or virtual meeting) may be necessary to finalize final recommendations in August or September.

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 issues that must be addressed before mechanisms can be implemented
- Review and feedback of short "findings" statements

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

HOLD: Online-only, August 9, 2022, AWG Meeting (2 hours, updates only)

- Review of findings, conclusions, draft recommendations
- Solicit feedback from AWG members on draft

HOLD: FINAL AWG Meeting, September 14, 2022:

- Review, discuss, and approve final report and recommendations



Section 2

Land-Use & Transportation: options for AWG consideration

AB 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.”

A

Which land-use reforms should Nevada consider?

B

What land-use reform efforts are going on in other states?

C

What would a land-use commission study and who would serve on it?

RECAPTURING PREVIOUS LAND USE TOPICS

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, in order to achieve broader policy goals.
- 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**, does not involve individual or "one-off" policies, and is generally more effective when administered by larger governmental bodies
- **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, for local governments to implement policy prescribed at the state level.
- Regular evaluation of **effectiveness and interplay 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.



CONSIDERATIONS FOR LAND-USE POLICIES

Which policy reforms might Nevada consider?

- Permitting accessory dwelling units (ADUs)
- Developing, expanding and incentivizing mixed-use zoning
- Reducing or eliminating minimum lot sizes
- Allowing high-density development in most zones
- Removing density limitations in some zones
- Expanding geographic availability of transit
- Expanding frequency and regularity of transit
- Reducing or eliminating parking minimums
- Incentives for housing, mixed use, active ground floors, structured parking
- Evaluating design standards
- Evaluating zoning heights
- Developing, restoring or enhancing historic districts
- Evaluating the effectiveness of rules regarding nonconforming development
- Increasing the availability of affordable housing
- Imposing impact fees to offset infrastructure cost or incentivize alternative growth
- Evaluating how land use and growth strategies have impacted underserved communities
- Assessing local plans' impact on state infrastructure assets



HIGHLIGHTS OF LAND-USE REFORMS

Land-use commissions in other states: **Maine**

Maine formed a special legislative commission "To Increase Housing Opportunities in Maine by Studying Zoning and Land Use Restrictions." The Commission's directives were detailed and included a general purpose and specific duties. The Commission reported out [its findings](#) in December 2021.

These findings resulted in legislation, which passed out of committee in February 2022 with bipartisan support. While the legislation focuses on expanding housing opportunities, many of the objectives around efficient land use are similar to the AWG's charge around improving the transportation system and reducing emissions.

1. Prohibits municipalities from restricting the construction or development of housing in certain cases
2. Establishes a board responsible for reviewing municipal housing development permit decisions
3. Prohibits municipalities from adopting any ordinance that caps the number of building or development permits each year for any kind of residential dwellings
4. Provides for technical assistance, grants and incentive programs to municipalities for the purposes of developing and implementing zoning and land use ordinances
5. Requires affordable housing developments to be built at certain densities
6. Increases the number of dwelling units, including ADUs, permitted to be built on certain property

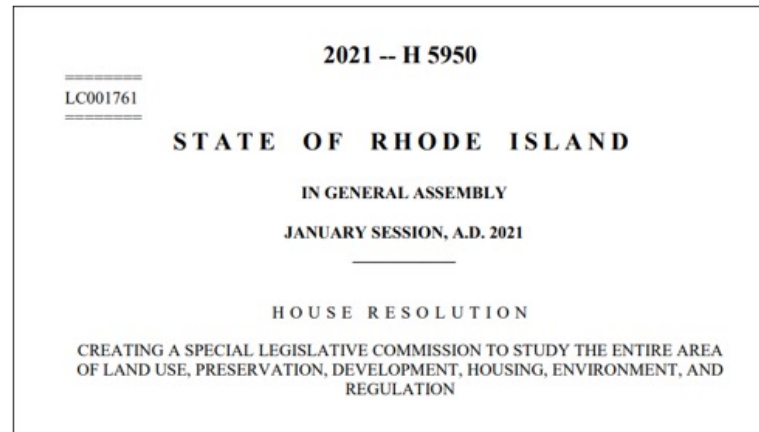


HIGHLIGHTS OF LAND-USE REFORMS

Land-use commissions in other states: **Rhode Island**

The Rhode Island House of Representatives formed a special House commission to "undertake a comprehensive study and broad-based review . . . of land use, preservation, development, housing, environment and regulation . . ." to provide recommendations that will allow the state to ensure sustainable growth in the future.

The Commission must report its findings and recommendations by April 30, 2022. Follow the Commission's work [here](#).



LAND-USE COMMISSIONS

Potential areas of study for a land-use commission: generally

- The purpose of any commission should be to undertake a comprehensive study and a broad review of land use policy in Nevada.
- Identifying certain policy areas for review may be helpful:
 - Land preservation, production, and development;
 - Availability and affordability of housing;
 - Environmental regulations;
 - Tax policy;
 - Existing and future transportation needs;
 - Energy and water policy;
 - Agriculture;
 - Tourism;
 - Economic development goals;
 - Various other state laws and regulations, including the role each level of government plays in land use planning
- A commission may be broad in scope or include specific goals, such as reducing vehicle miles traveled, preserving open space, or creating affordable housing options near service centers.
- A commission should provide recommendations that would enable the state to promote land use that allows for sustainable and equitable economic growth.

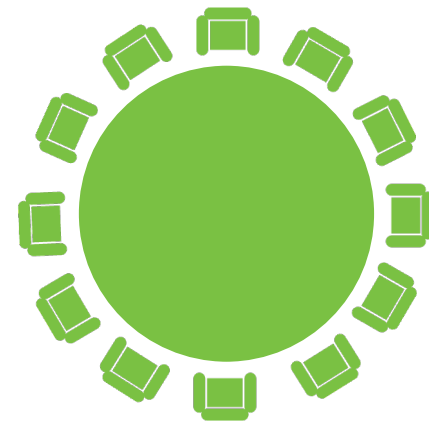


LAND-USE COMMISSIONS

Potential membership of a land-use commission

Participation can vary by state and specific purpose; however, representation generally includes:

- Legislators, Governor's Office
- State housing authority and/or housing board commissioners
- State environmental agency
- State business agency
- Statewide planner, regional planning organization, municipal planners, members of a city zoning board
- Representative from real estate/residential development industry
- Representative from the agricultural industry
- Representative from the building trades industries
- Statewide transportation group/transit provider
- Environmental groups
- Organizations promoting civil rights, racial justice or racial equity
- Individuals or organizations who understand issues related to accessibility and equity of land-use regulations and procedures for vulnerable, historically disenfranchised populations
- Attorney with land-use expertise
- Statewide advocate for affordable housing
- Statewide advocate for smart growth policies and projects
- Organization that advocates for low-income or middle-income renters or homeowners





Section 3

**Further analysis of remaining revenue options for
AWG consideration**

REMAINING OPTIONS: NEAR AND LONGER TERM

Based on AWG discussion at the March 2022 meeting, six revenue mechanisms had strong support to move forward for more detailed analysis.

During the March 2022 AWG meeting, members participated in a group exercise designed to narrow the long list of potential transportation revenue options to a smaller set for further analysis and deliberations. This process did not involve endorsements of any one or multiple mechanisms. The six revenue mechanisms highlighted below are further broken down into two categories: near-term sources of state funding – meaning, these mechanisms could be implemented without much (or any) set-up time; and mid- or longer-term mechanisms. Of the five near-term options, all but increasing the state fuel tax, are also identified as mid- or longer-term options.

Near-term remaining options to research

Consensus or strong support for:

- Increased fuel excise tax rate
- Increased value-based GST (*F*)
- Parcel delivery fee (*F*)
- Increased base-vehicle licensing fee
- Inflation indexing on per-gallon excise fuel tax

Continue research (but not as a current state funding option)

Consensus or strong support to research:

- Street utility fee
- Carbon tax (*various forms*) (*F*)

Mid-or-longer term remaining options to research

Consensus or strong support for:

- Light vehicle RUC (*various forms*)
- Increased value-based GST (*F*)
- Parcel delivery fee (*F*)
- Increased base vehicle licensing fee
- Inflation index on per-gallon excise fuel tax

Continue research on *policy issues* that may impact future funding requirements or revenue:

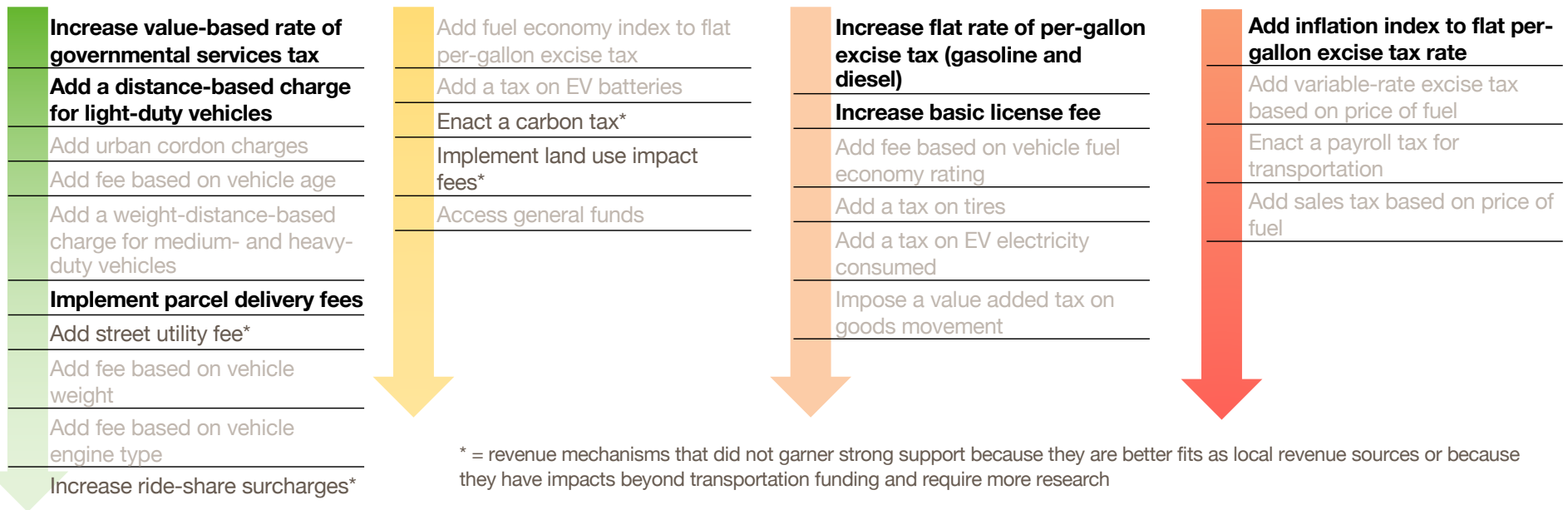
- Land use and transportation
- Private sector partnerships in revenue collection

F = flexible funding source

COMPOSITE RATINGS FOR SHORTLISTED REVENUE MECHANISMS

The AWG’s shortlist of revenue options includes some top performers, while other options’ performance could be improved with adjustments.

The generalized rankings below are identical to those published in the March 2022 Briefing Book (i.e., after AWG made adjustments). Each of these rankings treat all Guiding Principles equally – no principle is more important than another (even if in practice, some principles might be considered “pass/fail”). Furthermore, the rankings consider the revenue mechanisms in their most basic form – before applying policy or operational adjustments that could improve performance.



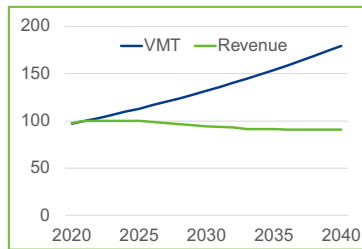
NEAR-TERM OPTIONS

NEAR-TERM OPTIONS

- Increase fuel excise tax rate
- Increase value-based GST (flexible transportation uses)
- Implement parcel delivery fees (flexible transportation uses)
- Increase base-vehicle licensing fee
- Add inflation index to flat per-gallon excise tax rate

NEAR-TERM OPTIONS

Increase the rate of flat per-gallon excise tax *(page 1 of 2)*



Raising the existing fuel tax:

Nevada’s state fuel tax currently raises revenue dedicated to the State Highway Fund at the rates of 17.3 cents per gallon of gasoline and 26.5 cents per gallon of diesel. Expenditures are restricted to highway-related purposes under the Nevada Constitution.

An increase of 7.2 cents per gallon for both diesel and gasoline would have generated \$100 million in additional revenue 2021. This translates to a net present value of \$1.23 billion through 2040 at a 4% discount rate. This mechanism generates revenue that declines relative to demand for road usage, reaching 89% less in 2040.

The table below illustrate additional revenue that could be generated annually by increasing the fuel tax (gasoline and diesel) by the amounts indicated. This analysis assumes “year 1” is 2025.

Increase amount (millions):

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	10-year total
1 cent	\$14.0	\$14.0	\$14.0	\$14.0	\$14.0	\$14.1	\$14.1	\$14.2	\$14.3	\$14.3	\$141.1
2 cents	\$28.0	\$28.0	\$28.0	\$28.0	\$28.1	\$28.2	\$28.3	\$28.4	\$28.5	\$28.7	\$282.1
3 cents	\$41.9	\$41.9	\$42.0	\$42.0	\$42.1	\$42.3	\$42.4	\$42.6	\$42.8	\$43.0	\$423.2
4 cents	\$55.9	\$55.9	\$56.0	\$56.1	\$56.2	\$56.4	\$56.6	\$56.8	\$57.1	\$57.4	\$564.2
5 cents	\$69.9	\$69.9	\$70.0	\$70.1	\$70.2	\$70.4	\$70.7	\$71.0	\$71.4	\$71.7	\$705.3
6 cents	\$83.9	\$83.9	\$83.9	\$84.1	\$84.3	\$84.5	\$84.9	\$85.2	\$85.6	\$86.1	\$846.3
7 cents	\$97.9	\$97.9	\$97.9	\$98.1	\$98.3	\$98.6	\$99.0	\$99.4	\$99.9	\$100.4	\$987.4
8 cents	\$111.8	\$111.8	\$111.9	\$112.1	\$112.4	\$112.7	\$113.1	\$113.6	\$114.2	\$114.8	\$1,128.4
9 cents	\$125.8	\$125.8	\$125.9	\$126.1	\$126.4	\$126.8	\$127.3	\$127.8	\$128.4	\$129.1	\$1,269.5
10 cents	\$139.8	\$139.8	\$139.9	\$140.1	\$140.4	\$140.9	\$141.4	\$142.0	\$142.7	\$143.5	\$1,410.5
15 cents	\$209.7	\$209.7	\$209.9	\$210.2	\$210.7	\$211.3	\$212.1	\$213.0	\$214.1	\$215.2	\$2,115.7
20 cents	\$279.6	\$279.6	\$279.8	\$280.2	\$280.9	\$281.8	\$282.8	\$284.0	\$285.4	\$286.9	\$2,821.0

NEAR-TERM OPTIONS

Increase the rate of flat per-gallon excise tax (page 2 of 2)

How it works:

The fuel tax is collected by distributors, with the tax rate applied upon removal of fuel from terminal racks. Heavy vehicles report tax-paid fuel through IFTA quarterly and reconcile payments based on location of miles driven by jurisdiction. Increasing the rate of the state excise tax is relatively trivial to implement.

**Opportunities to improve performance:**▶ **Flexibility**

Sidewalks and other pavement-related improvements might be allowable if clarifying legal advice is provided by the Nevada Attorney General's office.

▶ **Transparency**

The gas tax is not detailed on any receipt end customers receive when buying fuel. Many people believe that taxes paid rise along with the price of gasoline, as is the case with ad valorem taxes like sales tax. Posting the per gallon fuel tax rate at the pump and/or detailing fuel taxes paid on purchase receipts could improve transparency.

▶ **GHG emissions**

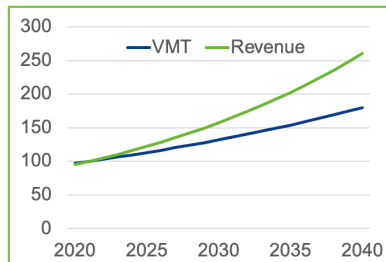
Research indicates that the demand for fuel is inelastic to small and/or short-term price increases. A meaningful demand reduction is achieved only through sustained high retail prices of gasoline due to fluctuations in the price of oil, but a similar effect can also be achieved through sufficiently high rates of taxation.

Issues that must be addressed:

- **How can the additional revenue from a fuel tax increase be sustained given declining fuel consumption?** While still an efficient and substantial producer of revenue for roadway purposes in the near term, excise (per-gallon) fuel taxes will decline over time as fuel consumption declines.
- **How can fuel tax increases be accomplished in the face of sharp increases in the underlying price of gasoline:** it is difficult to increase the flat per-gallon tax at a time when consumers are paying 25-30% more for fuel than they were only 6 months ago. An increase in the gas tax must consider timing and phasing: when is the best time to increase the tax, and would a phase-in of that increase help?
- **How can electric vehicles pay for road usage?** Taxation of motor fuels does not allow for vehicles that consume roads using other forms of motive power to contribute.
- **How can the user-pays principle be preserved?** Public utilities such as electricity and water recover costs of service from consumers in direct proportion to their usage and impacts on the system. The motor fuel tax was a reasonable indirect approximation for roadway usage for 75 years, but since the advent of more fuel-efficient vehicles, the amount a driver pays for the same roadway mile driven can vary greatly based on the type of vehicle.
- **How can disparate impacts to lower income and rural drivers be addressed?** Studies show that lower-income households tend to own older, less-fuel efficient vehicles. This is also true for rural residents.

NEAR-TERM OPTIONS

Increase the value-based rate of the governmental services tax (GST) *(page 1 of 2)*



Raising the vehicle value tax (GST):

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). A depreciation schedule based on vehicle age is enacted in statute. The Nevada constitution contains a proviso that specifically exempts this revenue source from being restricted to highway expenditures.

Additional revenue could be generated by increasing the tax rate; increasing the DMV valuation percentage; or reducing the depreciation schedule. The current GST is about 0.7% of the value of the entire state vehicle fleet. Increasing that by 0.12% (to 0.82%) would have generated \$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 increases in VMT (roadway usage), reaching 81% higher by 2040.

Increase amount (millions):

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	10-year total
0.05%	\$47.2	\$49.6	\$52.2	\$54.9	\$57.7	\$60.7	\$63.8	\$67.1	\$70.6	\$74.2	\$597.8
0.15%	\$94.3	\$99.2	\$104.3	\$109.7	\$115.4	\$121.3	\$127.6	\$134.2	\$141.1	\$148.4	\$1,195.7
0.20%	\$141.5	\$148.8	\$156.5	\$164.6	\$173.1	\$182.0	\$191.4	\$201.3	\$211.7	\$222.6	\$1,793.5
0.25%	\$188.7	\$198.4	\$208.7	\$219.4	\$230.8	\$242.7	\$255.2	\$268.4	\$282.3	\$296.9	\$2,391.4

NEAR-TERM OPTIONS

Increase the value-based rate of the governmental services tax (GST) *(page 2 of 2)***How it works:**

DMV calculates MSRP and depreciation, and collects the GST based on the adjusted value of each vehicle at registration renewal. An increase in rates would lead to higher taxes for motorists but would be collected in the same way.

**Opportunities to improve performance:**▶ **GHG emissions**

The current GST is levied strictly on vehicle value, regardless of usage or the emissions profile of the vehicle. To incentivize purchase of cleaner vehicles, rebates or rate discounts could be offered for ultra-low emission vehicles (ULEVs) or zero emission vehicles (ZEVs). Because this revenue source is robust (grows at a rate faster than roadway usage as measured by vehicle miles traveled), if appropriately structured, rebates or discounts could help incentivize consumer adoption of cleaner vehicles during a transitional period.

▶ **User equity**

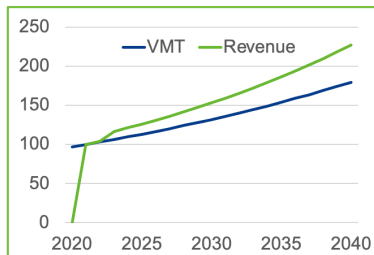
Vehicle value does not correlate with usage, making it difficult for GST to serve as a user-pay or cost recovery tool. Usage-based rate factors could be applied. Alternatively, GST could be used primarily as a flexible funding source for non-highway expenditures, making the nexus with roadway usage less relevant.

Issues that must be addressed:

- **How can GST be dedicated to transportation?** Given the history of GST diversions to other uses outside transportation, any increase in GST would benefit from mechanisms to protect the revenue for transportation purposes.
- **How can tax increases be tolerable for the average consumer?** One-time charges like GST can be burdensome for consumers to bear, especially for mechanisms levied simultaneously like GST and basic vehicle licensing fees. Tolerance helps to improve compliance, which in turn improves revenue collection.
- **How can GST retain its flexible transportation funding capabilities?** GST is protected by the Nevada constitution, which specifically exempts GST from the restriction to be spent on highway purposes.

NEAR-TERM OPTIONS

Implement a delivery fee on tangible goods *(page 1 of 2)*



Implementing a new fee on each tangible good delivered:

This mechanism involves placing a surcharge on deliveries of tangible goods to end consumers (for example, packages shipped by Amazon). Colorado recently enacted a fee of \$0.27 per delivery to generate additional revenue.

A per-delivery fee of \$0.75 would have generated about \$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 revenue mechanism would not be subject to the Nevada constitutional restriction that revenues be expended solely for highway-related purposes.

Increase amount (millions):

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	10-year total
25 cents/delivery	\$38.3	\$39.4	\$40.6	\$41.8	\$43.1	\$44.3	\$45.7	\$47.0	\$48.5	\$49.9	\$438.4
50 cents/delivery	\$76.5	\$78.8	\$81.2	\$83.6	\$86.1	\$88.7	\$91.3	\$94.1	\$96.9	\$99.8	\$876.9
75 cents/delivery	\$114.7	\$118.2	\$121.7	\$125.4	\$129.1	\$133.0	\$137.0	\$141.1	\$145.3	\$149.7	\$1,315.3
\$1 dollar/delivery	\$153.0	\$157.6	\$162.3	\$167.2	\$172.2	\$177.4	\$182.7	\$188.2	\$193.8	\$199.6	\$1,753.8

NEAR-TERM OPTIONS

Implement a delivery fee on tangible goods *(page 2 of 2)***How it works:**

A delivery fee on tangible goods would likely be structured similar to a sales tax, with the fee collected by the state from merchants, who in turn have the option or obligation of passing the fee along to consumers (purchasers).

**Opportunities to improve performance:**▶ **Efficiency**

The delivery fee could be applied and collected in the same manner as the Nevada sales tax, which is legally owed on all tangible property whether purchased from a brick-and-mortar store or ordered online. Moving the point of tax collection to the retailer instead of the shipping company takes advantage of existing invoicing, payment and tax collection infrastructure already in place.

▶ **Transparency**

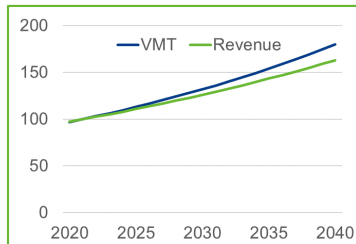
If enacted, the legislature could require the seller of the goods to specifically disclose by line item the delivery fee on the invoice or receipt provided to the consumer.

Issues that must be addressed:

- **Who pays the delivery fee?** The fee should be paid by the goods seller, but the cost could be passed on to end consumers directly and visibly, or indirectly (as is the case with the gas tax).
- **What items are subject to the fee?** As a new type of tax or fee, the legislature will need to consider the range of tangible goods subject to the fee and whether important policy reasons exist for exempting certain deliveries from the fee.
- **How can a delivery fee remain dedicated to transportation funding?** While the delivery fee is not likely subject to Nevada's constitutional provision restricting the expenditure of vehicle-related tax and fee revenue to highway purposes, the legislature may wish to appropriate the revenues to different modes – including highways. This may require the revenue to be deposited into a new, separate account outside the State Highway Fund that the legislature might need to create (if such an account does not already exist).

NEAR-TERM OPTIONS

Increase the basic vehicle license fee *(page 1 of 2)*



Increasing the license fee on passenger vehicles:

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. As currently designed, this mechanism would not impact commercial vehicles.

A \$40 additional basic registration fee per vehicle would have generated \$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.

Increase amount:

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	10-year total
\$10	\$25.4	\$26.0	\$26.7	\$27.4	\$28.1	\$28.9	\$29.6	\$30.4	\$31.2	\$32.0	\$285.6
\$20	\$50.8	\$52.1	\$53.4	\$54.8	\$56.2	\$57.7	\$59.2	\$60.7	\$62.3	\$63.9	\$571.2
\$30	\$76.1	\$78.1	\$80.1	\$82.2	\$84.4	\$86.6	\$88.8	\$91.1	\$93.5	\$95.9	\$856.8
\$42 (to \$75 total)	\$106.6	\$109.4	\$112.2	\$115.1	\$118.1	\$121.2	\$124.3	\$127.6	\$130.9	\$134.3	\$1,199.6

NEAR-TERM OPTIONS

Increase the basic vehicle license fee *(page 2 of 2)*

How it works:

The basic vehicle license fee is collected at the time of annual registration by the Nevada Department of Motor Vehicles. Increasing the fee should have little direct impact to current DMV operations or computer systems.



Opportunities to improve performance:

► Social equity

Since the fee is fixed across all vehicles the incidence falls heaviest on those with the lowest incomes. Structuring the fee so that older vehicles pay slightly less is one way to lessen the impact on lower-income households, who tend to own older vehicles.

► User equity

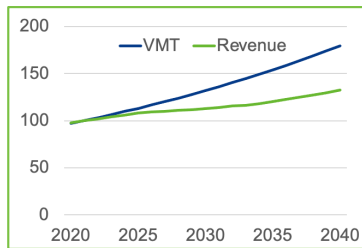
As currently proposed, the license fee increase on passenger vehicles does not consider the impacts that different weight vehicles have on public roadways. To improve user equity, the fee could include a vehicle weight component so that the heaviest vehicles pay more.

Issues that must be addressed:

- **Should all vehicles pay the same amount?** The basic vehicle licensing fee is almost by definition the same for all vehicles. However, there are some adjustments that can be made on the basis of income, other roadway taxes paid (or not paid), and other factors. These adjustments increase complexity and cost of implementation but could help to improve some of the negative features.
- **What is the cumulative impact of vehicle-related tax and fee increases?** One-time charges like vehicle license fees can be burdensome for consumers to bear, especially when considered in combination with mechanisms like GST that are levied simultaneously. Tolerance helps to improve compliance, which in turn improves revenue collection.

NEAR-TERM OPTIONS

Add inflation index to flat per-gallon fuel excise tax rate *(page 1 of 2)*



Adding an inflation index to the state's existing fuel tax:

Nevada's fuel taxes dedicated to the State Highway Fund include 17.3 cents per gallon of gasoline and 26.5 cents per gallon of diesel. Although county fuel taxes contain inflation indices, and some portion of state fuel taxes consumed in Clark County are indexed, Nevada's state fuel taxes are not indexed. Adding an inflation index to the state's fuel tax would gradually increase gasoline and diesel taxes each year to generate additional revenue.

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. The table below shows the annual revenue in millions of dollars by indexing the current state fuel taxes, assuming annual inflation of 2% over the long-term.

Inflation at 2% per year applied to current state gasoline and diesel taxes:

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	10-year total
2% inflation	\$4.8	\$9.6	\$14.6	\$19.6	\$24.9	\$30.2	\$35.8	\$41.4	\$47.3	\$53.4	\$281.5

NEAR-TERM OPTIONS

Add inflation index to flat per-gallon fuel excise tax rate *(page 2 of 2)*

How it works:

Each year, the responsible agency would apply the Street and Highway Cost Index component of the Producer Price Index (inflation index) and apply it to the prior year’s tax gasoline and diesel fuel excise tax. This inflation-adjusted rate becomes the new fuel tax rate for the year.



Opportunities to improve performance:

Issues that must be addressed:

- **Can revenue from inflation index be counted as “new revenue”?** An inflation index is intended to keep pace with the cost of construction.
- **Will caps or periodic renewals be required?** Clark County’s Fuel Revenue Index (FRI) expires after several years unless renewed by voters, whereas Washoe’s FRI does not require periodic renewal.
- **Indexing fuel tax revenue has same drawbacks as the gas tax.** Studies show that lower-income households tend to own older, less-fuel efficient vehicles. This is also true for rural residents, tends to disproportionately own less fuel-efficient vehicles.

MID- AND LONGER-TERM OPTIONS

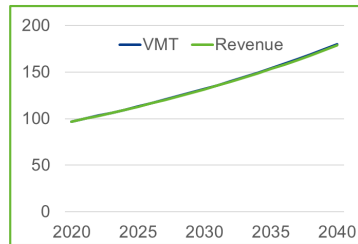
MID- AND LONGER-TERM OPTIONS

- **Light-vehicle RUC (various forms)**
- *Increase value-based GST*
- *Parcel delivery fee*
- *Increase base-vehicle licensing fee*
- *Inflation index on per-gallon excise fuel tax*

} (covered in previous section)

MID- AND LONGER-TERM OPTIONS

Road usage charge (RUC) for light vehicles *(page 1 of 2)*



Implementing a per-mile road usage charge on passenger vehicles:

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.

A 0.4 cent per mile RUC on all vehicles would have generated \$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.

The table below illustrates gross revenue generating potential of RUC beginning in year 7 (2031) at various rates, including 0.6 cents per mile (approximately equal to the portion of gasoline tax currently collected and deposited in the State Highway Fund).

Per-mile rate:

	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	10-year total
0.6 cents per mile	\$190.7	\$196.6	\$202.7	\$209.0	\$215.5	\$222.2	\$229.1	\$236.2	\$243.5	\$251.0	\$2,196.7
1 cent per mile	\$320.6	\$330.5	\$340.7	\$351.3	\$362.2	\$373.4	\$385.0	\$396.9	\$409.2	\$421.9	\$3,691.8
1.5 cents per mile	\$480.8	\$495.7	\$511.1	\$527.0	\$543.3	\$560.1	\$577.5	\$595.4	\$613.9	\$632.9	\$5,537.8
2 cents per mile	\$641.1	\$661.0	\$681.5	\$702.6	\$724.4	\$746.9	\$770.0	\$793.9	\$818.5	\$843.9	\$7,383.7
2.5 cents per mile	\$801.4	\$826.2	\$851.9	\$878.3	\$905.5	\$933.6	\$962.5	\$992.3	\$1,023.1	\$1,054.8	\$9,229.6

MID- AND LONGER-TERM OPTIONS

Road usage charge (RUC) for light vehicles *(page 2 of 2)***How it works:**

Many variations are possible for how roadway mileage could be reported, how and when RUC could be collected, which vehicles would be subject to the charges, and the rates that could be applied to different types of vehicles. In its simplest form, the DMV would collect annual miles driven data either directly or through authorized parties (e.g., annual emissions inspections). A low-cost method would be to collect payment at the time of registration. Other methods of collecting mileage data are more costly to administer.

Opportunities to improve performance:▶ **Social equity**

To address social equity, RUC could facilitate lifeline rates (targeted subsidies based on the income status of the owner). Lifeline rates are common for other public utilities. Other accommodations could be made to improve social equity, such as periodic payment plans.

▶ **GHG emissions**

RUC can align more directly with GHG emission goals by varying rates or offering targeted rate discounts based on a vehicle's emissions profile.

▶ **Efficiency**

While the first few states to enact RUC have chosen to implement systems that rely on in-vehicle technology, some states are developing low-tech, lower-cost approaches for their base RUC system. Nevada could choose a similar low-cost, low-tech approach.

**Issues that must be addressed:**

- **Will in-vehicle devices be required?** The first study of mileage charges in Nevada is over a decade old, and it made several assumptions about the use of in-vehicle GPS-enabled devices. Several states are researching and designing low- or no-tech options for RUC.
- **Impacts to rural communities:** People who live farther from population centers tend to have longer distances to travel for groceries, recreation, medical care, etc. Nevada has a unique mix of highly-urbanized, suburban and rural areas. Further research and analysis could provide details around the potential impacts to rural drivers as well as policy options that might be made to accommodate impacts.
- **Privacy protection:** Many people have concerns about the type of data required for RUC, how mileage will be reported, whether detailed location information will be required, and how information will be secured and whether it will be shared.
- **Cost impacts to Nevada DMV:** There will be some administrative and cost impacts to the Nevada DMV (assuming they are given responsibility for administering RUC). The range of potential costs and impacts is broad. As policy and system design parameters are decided, it is critical that a DMV impact analysis be conducted in parallel so that policymakers understand how their choices could impact existing DMV responsibilities and funding levels.
- **How to transition from the current gas tax system:** Switching from the current gas tax funding system to a future road usage charge system requires detailed policy, financial, legal, operational, and administrative assessment. The objective of detailed transition planning is to ensure that a RUC system is fully functional and that the financial transition is smooth, both for government and its taxpayers.



Section 4

**Updated for April 2022 AWG Meeting: Sample
revenue package options**

TWO NEW SAMPLE REVENUE PACKAGES

Working from the revenue options still being analyzed, the project team developed two new sample revenue packages to spur deliberation.

At the March 2022 AWG meeting, members were presented with three sample revenue packages that utilized a wide range of possible revenue mechanisms. Based on discussions and preferences expressed by members, the project team developed two new samples, only this time, limiting the package to the six revenue mechanisms AWG members shortlisted for further analysis and consideration. Samples A and B below are intended to stimulate discussion and help members consider variations on the shortlisted revenue mechanisms (for example, phasing in a gas tax increase, or indexing all flat-rate transportation taxes, not just the motor fuels tax).

	Sample A	Sample B
Near term funding:	<ul style="list-style-type: none"> ▪ One-time gas and diesel tax increase ▪ Basic vehicle registration fee increase ▪ Delivery fee on tangible goods ▪ GST increase, dedicated for transportation purposes 	<ul style="list-style-type: none"> ▪ Phased in gas and diesel tax increase ▪ Basic vehicle registration fee increase (staggered rates) ▪ Delivery fee on tangible goods ▪ GST transfer and permanent dedication for transportation purposes ▪ GST increase, dedicated for transportation purposes
Longer-term sustainable funding:	<ul style="list-style-type: none"> ▪ Gradual transition to a road usage charge for light-duty vehicles 	<ul style="list-style-type: none"> ▪ Gradual transition to a road usage charge for light-duty vehicles ▪ Index state gas tax, delivery fee, and road usage charge to inflation

TWO NEW SAMPLE REVENUE PACKAGES

Sample Package A: \$476 million in year 1 (\$6.5 billion over 10 years)**State highway funding – *near term*****Statewide fuel tax increase – 8 cents**

A one-time 8 cent increase in the statewide per-gallon fuel excise tax (both gasoline and diesel). This takes the portion of fuel taxes dedicated to the State Highway Fund from 17.3 to 25.3 cents per gallon of gasoline and from 26.5 to 34.5 cents per gallon of diesel.

Increase in basic vehicle license fee

A one-time \$30 increase in the basic vehicle license fee for all passenger vehicles. This takes the cost of registration from \$33 to \$63 per year.

Mid- and long-term sustainable revenue**Road usage charge – light duty vehicles**

Establish a per-mile charge for light-duty vehicles in Nevada. Research, including potential federally-funded research and testing, must address critical policy, administrative, and financial issues. Report results by December 2026. The sample package assumes a per-mile charge would be applied to all vehicles beginning in 2031 at a rate of 1 cent per mile.

Highway or Flexible transportation funding**Dedicated increase in GST**

An additional 0.2% increase in the statewide GST, statutorily dedicated for statewide transportation needs, available for all modes (highways, sidewalks, transit grants, etc.).

Delivery fee on tangible goods

A tax of 75 cents would be collected from sellers of goods (including food services) that are delivered to Nevada addresses.

TWO NEW SAMPLE REVENUE PACKAGES

Sample Package A: \$476 million in year 1 (\$6.5 billion over 10 years)

Sample Package A generates \$476 million in new revenue if implemented in 2025, growing to \$907 million in 2034, averaging \$650 million per year over the 10-year time frame.

Year	Fuel Tax	Vehicle License Fee	Road Usage Charge	Delivery Fee	GST	Total
2025	\$96	\$76	\$-	\$115	\$189	\$476
2026	\$96	\$78	\$-	\$118	\$198	\$491
2027	\$96	\$80	\$-	\$122	\$209	\$506
2028	\$96	\$82	\$-	\$125	\$219	\$523
2029	\$96	\$84	\$-	\$129	\$231	\$540
2030	\$96	\$87	\$-	\$133	\$243	\$558
2031	\$96	\$89	\$237	\$137	\$255	\$814
2032	\$96	\$91	\$247	\$141	\$268	\$844
2033	\$96	\$93	\$258	\$145	\$282	\$875
2034	\$96	\$96	\$268	\$150	\$297	\$907

TWO NEW SAMPLE REVENUE PACKAGES

Sample Package B: \$767 million per year (\$7.7 billion over 10 years)**State highway funding – near term****Statewide fuel tax increase – 9 cents, phased in**

A 9-cent increase in the statewide per-gallon fuel excise tax (both gasoline and diesel) is phased in with 3 cents in year 1, 3 cents in year 2, and 3 cents in year 3.

Increase in basic vehicle license fee

A one-time \$40 increase in the basic vehicle license fee for all passenger vehicles, taking the annual cost of licensing from \$33 to \$73. For vehicles older than 7 years, the increase is \$20, taking the annual cost to \$53. The average increase across all vehicles in this scenario is \$30.

Mid- and long-term sustainable revenue**Road usage charge – light duty vehicles**

Establish a per-mile charge for light-duty vehicles in Nevada. Research, including potential federally-funded research and testing, must address critical policy, administrative, and financial issues. Report results by December 2026. This sample package assumes a per-mile charge would begin in 2027 on electric vehicles only at a rate of 0.5 cents per mile, increasing by 0.1 cents per mile per year until 2030. In 2031, all vehicles would pay a rate of 1.5 cents per mile and the gasoline tax would be eliminated.

Index fuel taxes, licensing fees, road usage charge, and delivery fee to inflation

The increased rate of statewide fuel tax (gasoline and diesel) would be indexed to inflation, as would the portion of existing gasoline and diesel tax rates for sales outside of Clark and Washoe Counties. The rate of the basic vehicle license fee, the per-mile road usage charge (starting at 1.5 cents in 2031), and the delivery fee (starting at 75 cents in 2025) would all be indexed to inflation as well.

Highway or Flexible transportation funding**Dedicated increase in GST**

Statutorily dedicate 0.1% of the existing GST (vehicle value tax) to the State Highway Fund. This effectively recaptures GST revenue that was diverted to general government purposes in prior years.

An additional 0.1% increase in the statewide GST, statutorily dedicated for statewide transportation needs, available for all modes (highways, sidewalks, transit grants, etc.)

Delivery fee on tangible goods

A tax of 75 cents would be collected from sellers of goods (including food services) that are delivered to Nevada addresses.

TWO NEW SAMPLE REVENUE PACKAGES

Sample Package B: \$416 million in year 1 (\$7.7 billion over 10 years)

Sample Package B generates \$416 million in new revenue if implemented in 2025, growing to \$1,197 million in 2034, averaging \$767 million per year over the 10-year time frame.

Year	Fuel Tax	Vehicle License Fee	Road Usage Charge	Delivery Fee	GST	Total
2025	\$36	\$76	\$-	\$115	\$189	\$416
2026	\$75	\$81	\$-	\$121	\$198	\$475
2027	\$113	\$87	\$5	\$127	\$209	\$540
2028	\$117	\$93	\$7	\$133	\$219	\$569
2029	\$121	\$99	\$10	\$140	\$231	\$600
2030	\$125	\$105	\$14	\$147	\$243	\$633
2031	\$21	\$112	\$481	\$154	\$255	\$1,024
2032	\$23	\$120	\$506	\$162	\$268	\$1,079
2033	\$25	\$127	\$532	\$170	\$282	\$1,136
2034	\$27	\$135	\$559	\$179	\$297	\$1,197

SAMPLES A & B COMPARED TO NO-ACTION ALTERNATIVE

Samples A and B revenue per mile driven, adjusted for inflation, are compared against the base case (status quo).

The charts below portray the revenue generated by the two sample packages on a per-mile basis, adjusted for inflation. In Sample A the status quo revenues remain unchanged, and rate increases and new revenue sources add to the existing available funds. In Sample B, the gasoline tax is eliminated (or refunded) in favor of road usage charges for light-duty vehicles beginning in 2031, with additional revenue from the new mechanisms and rate increases reflected in addition to other status quo revenue sources.

