

The Business of Tolling

National Practice, Oregon Developments
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The Business of Tolling - Agenda

- What's Old is New Again
- The US Tolls Industry Today
- Who, Why and How
- Focus Topics
- Wrap Up and Q&A

Photo: Astoria Bridge



What's Old is New Again - Oregon Has Done Tolls Before

-  Historical tolls
-  Current tolls

Sources: [Hood River Bridge](#); [The History Museum of Hood River County](#); [Bridge of the Gods](#); [Tolls in Oregon \(Hadlow, 2023\)](#)

Interstate Bridge

- Tolled 1917-1929 and 1960-1966
- Operated by Multnomah County and ODOT

Morrison Street Bridge

- Tolled 1887-1895
- Operated by ODOT

Barlow Road

- 1846-1912

Bridge of the Gods

- Tolls began 1926
- Operated by Port of Cascade Locks
- System: BreezeBy

Hood River-White Salmon Interstate Bridge

- Tolls began 1950
- Operated by Port of Hood River
- System: BreezeBy



What's Old is New Again - Oregon Has Done Tolls Before

- Tolls financed construction of the original Columbia River bridges



What's Old Was ... Not Always Customer Friendly

- Today, drivers don't like to stop...



What's Old Was ... Not Always Customer Friendly

- ... and especially don't like to stop to pay money.
- To stay in business, the toll industry had to change.
- Needed to rethink the customer value proposition, re-structure, and re-imagine the US toll industry of today.



The US Toll Industry Today - Relies on Non-Stop All-Electronic Tolling (AET)

- Today's Challenges We Must Meet
 - Collect tolls without forcing vehicles to stop
 - Gain customer acceptance and confidence
 - Contain leakage
 - Contain costs
 - Manage future changes
 - Meet enduring financial commitments
- Who, Why, and How?



The US Toll Industry Today - Who?

Public Authorities dedicated to toll facilities

- Pennsylvania Turnpike
- Illinois Tollway
- Denver E-470
- Transportation Corridor Agencies (CA)

State Departments of Transportation

- Washington State DOT
- Massachusetts DOT
- (coming soon) Oregon DOT

**Private Concessionaires / Owner Operators
(Public-Private Partnerships)**

- **States heavily involved: Indiana, Virginia, Texas, Florida**
- **Developers/ Operators include: Cintra Ferrovial, Brisa, Transurban, Vinci**

The US Toll Industry Today - Who: Engineers, Accountants, or Retail Operators?

- Engineering?
 - Highway
 - Structural
 - Traffic and Traffic Management
 - Highway Maintenance and Operations

- Finance?
 - Budget, Funding and Capital Planning
 - Account Management
 - Finance and Accounting

- Business Operations?
 - IT and Systems
 - Customer Relationship Management
 - Sales and Marketing

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YES - ALL
of these!

The US Toll Industry Today - Why: Critical for Delivery of Major Infrastructure

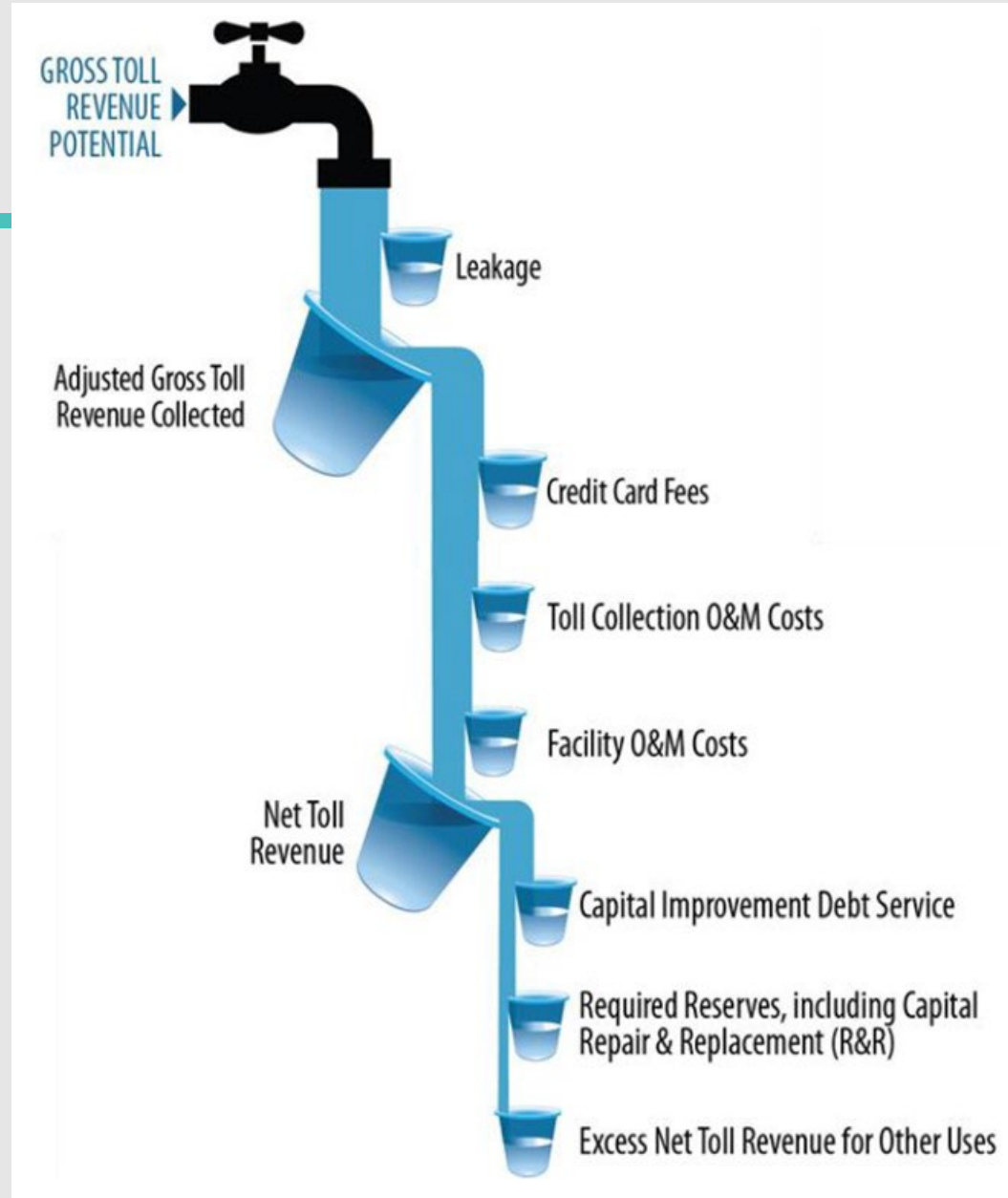
- Tolls: Public infrastructure meets private finance
- Needed to finance most major highway/bridge infrastructure today
- US tolls => \$25 billion per year - 50% of all FHWA highway funding
- Long-term investment funds such as pension funds like tolls. Example:
- State of Indiana raised \$3.85 billion to sell a concession in 2006.

From Indiana Toll Road:
www.indianatollroad.org



The US Toll Industry Today - Why: Financial Discipline

- Requires specific prioritization of toll revenues, “the waterfall”
- Operations and maintenance of the asset even before debt service
- Requires facilities to be kept in a good state of repair
- Studies show: toll facilities are the safest highways
- “Debt is your friend”



The US Toll Industry Today - Why: Summary

- Finance Major Capital Investments
- Leverage Private Capital in bonded debt and / or concession sales
- Ensure best facility maintenance
 - Minimizes long-term maintenance costs and disruption
 - Maximizes safe operating conditions
- Deliver projects more quickly than through normal DOT appropriation process
- Pricing effectively manages traffic – demonstrated in express lanes

Toll Business Strategy - How: Non-Stop Tolls with ETC and License Plates

- “ETC” = Electronic Toll Collection
- Account-based, with different options for ETC devices or plates
- Run like a business:
 - Minimize costs
 - Minimize leakage
 - Prioritize customer service



How do I pay tolls?

A: (Hopefully) with an automated account:

Account with toll tag

- Automatic account charge
- Online or cash payment option
- Likely frequent user

No account

- License plate picture
- Mailed bill
- Online or cash payment option
- Additional processing fee
- Likely infrequent user



How do accounts for electronic tolling work?

A: Seamlessly

- **Prepaid balances** – Universal since electronic tolls began in 1989/1990
- Lowest cost for registered, prepaid accounts
- Small sticker-type toll tags are typically free or low cost
- **No monthly cost** to maintain account
- All accounts offer **auto-replenishment**
- ODOT will offer a **range of account options** for various customers

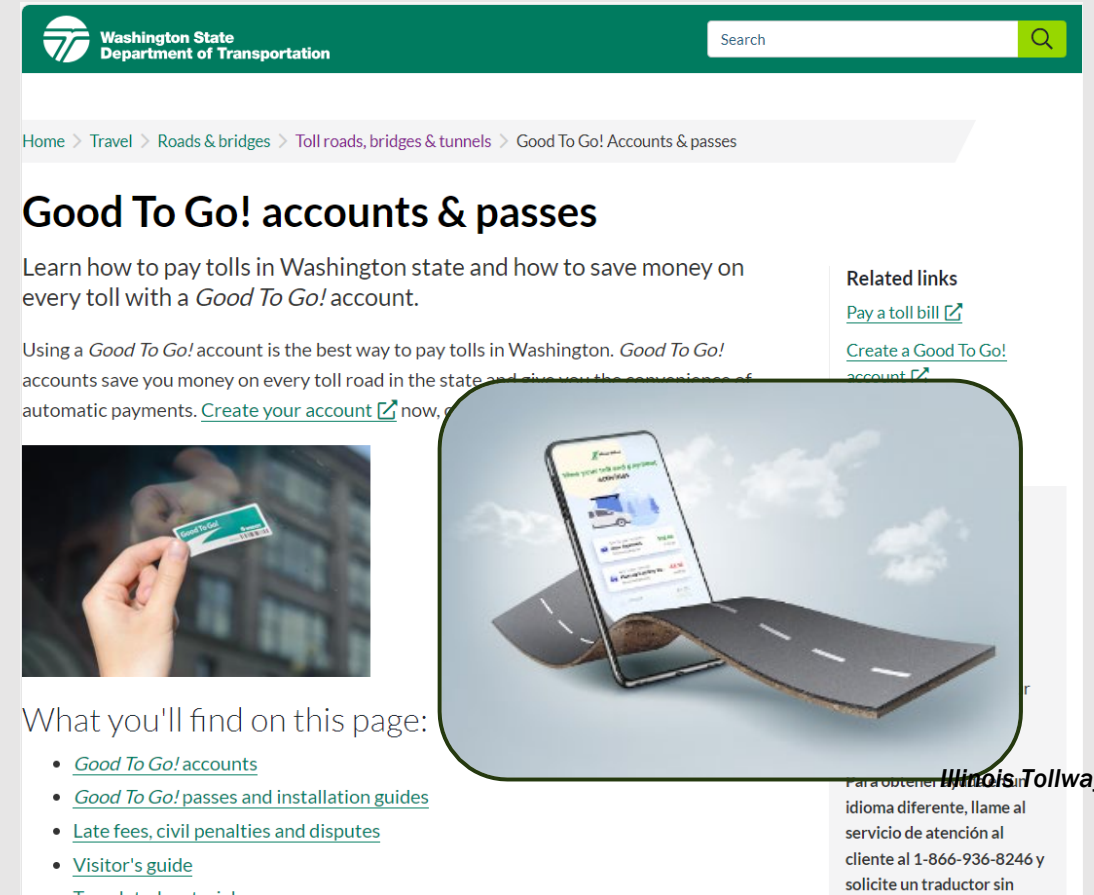


Having everyone sign up for an account and use a toll tag is the best way to keep toll rates and costs low.

How do accounts for electronic tolling work?

A: With multiple channels for customer service

- Online
- In-person customer service center
- Call center
- Cash payment option
- Multilingual services
- DMV kiosks
- Mobile application



The screenshot shows the Washington State Department of Transportation website. The header includes the logo and a search bar. The breadcrumb trail is: Home > Travel > Roads & bridges > Toll roads, bridges & tunnels > Good To Go! Accounts & passes. The main heading is "Good To Go! accounts & passes". Below it, there is introductory text: "Learn how to pay tolls in Washington state and how to save money on every toll with a *Good To Go!* account." and "Using a *Good To Go!* account is the best way to pay tolls in Washington. *Good To Go!* accounts save you money on every toll road in the state and give you the convenience of automatic payments. [Create your account](#) now." To the right, under "Related links", there are links for "Pay a toll bill" and "Create a Good To Go! account". Below the text are two images: one of a hand holding a physical Good To Go! card, and another of a smartphone displaying the Good To Go! app interface with a road graphic. At the bottom right, there is a section for "Illinois Tollway" with text in Spanish: "Para obtener el servicio de atención al cliente en un idioma diferente, llame al cliente al 1-866-936-8246 y solicite un traductor sin".

Will the toll tag work with other toll systems?

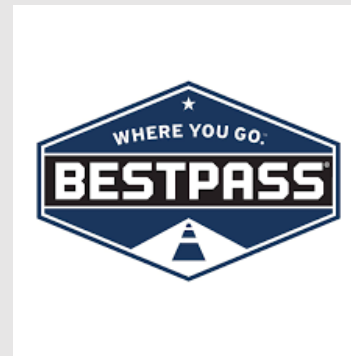
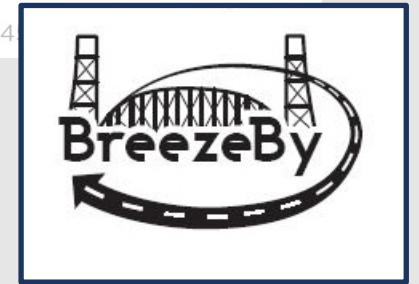
A: YES

- ODOT's toll system will be interoperable with:

- Washington ("Good To Go!") and gorge bridges (BreezeBy)
- Over 20 states and 50 toll operators (E-ZPass)
- Other public and private entities

- Why bother?

- Per FHWA, we're supposed to anyway
- Benefit for ODOT customers in other states such as Washington
- Advantage for out-of-state customers – especially commercial shippers



-> Significant operational savings with less toll invoicing.

What happens if I don't pay my toll bill?

A: We reach out and send an invoice.

ODOT's goal is to make sure users pay tolls, not to incur additional fees and penalties.

- Invoicing is costly and time-consuming for both the customer and ODOT.
- ODOT will not suspend a driver's license for unpaid tolls.
- Civil penalty process and registration holds are used to ensure payment



How much will I pay in tolls?

A: It Depends

Toll rates will vary by:

- Facility
- Time of day
- Vehicle size
- Account holder or not



Focus Topic: Toll System Rates by Vehicle Classification

FHWA combines vehicle classes into three weight general categories:

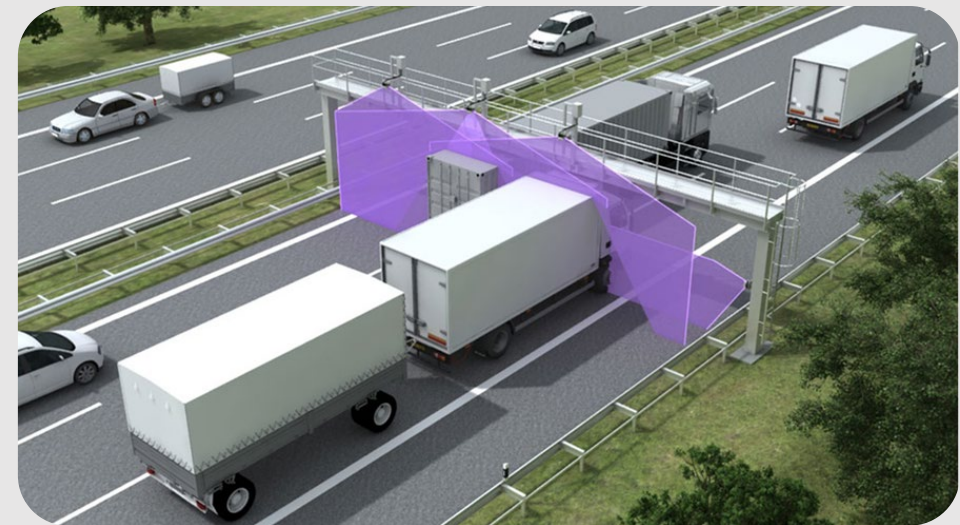
- Light
- Medium
- Heavy

Gross Vehicle Weight Rating (lbs)	Federal Highway Administration		US Census Bureau
	Vehicle Class	GVWR Category	VIUS Classes
<6,000	Class 1: <6,000 lbs	Light Duty <10,000 lbs	Light Duty <10,000 lbs
10,000	Class 2: 6,001 – 10,000lbs		
14,000	Class 3: 10,001 – 14,000 lbs	Medium Duty 10,001 – 26,000 lbs	Medium Duty 10,001 – 19,500 lbs
16,000	Class 4: 14,001 – 16,000 lbs		
19,500	Class 5: 16,001 – 19,500 lbs		
26,000	Class 6: 19,501 – 26,000 lbs		Light Heavy Duty: 19,001 – 26,000 lbs
33,000	Class 7: 26,001 – 33,000 lbs	Heavy Duty >26,001 lbs	Heavy Duty >26,001 lbs
>33,000	Class 8: >33,001 lbs		

Focus Topic:

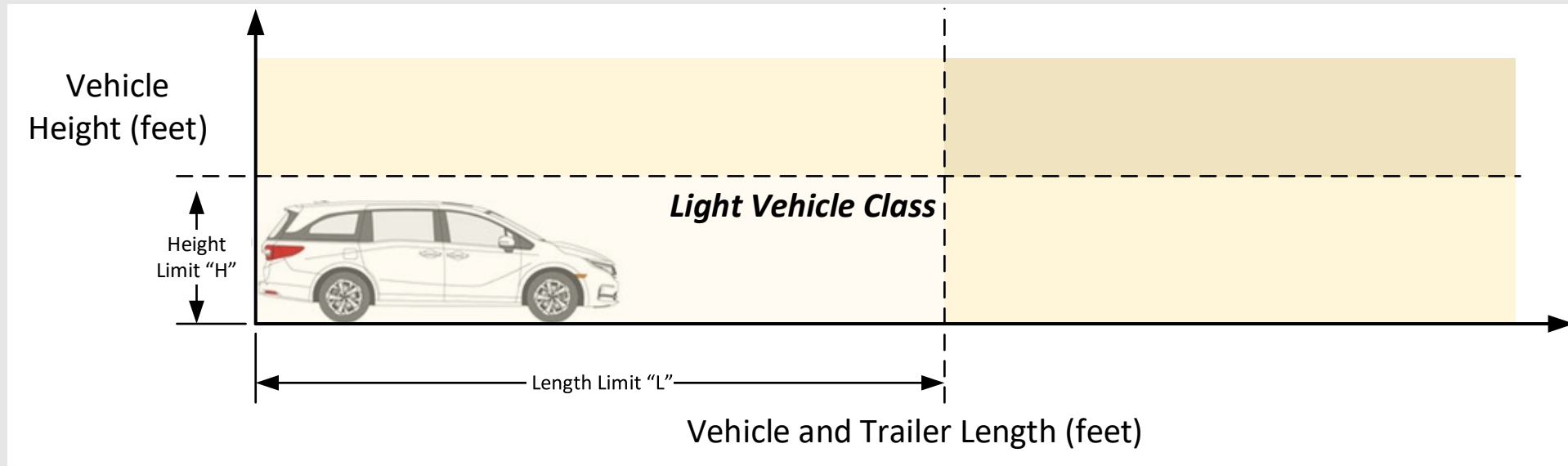
Toll System Rates by Vehicle Classification

- Three different toll rates:
 - Passenger and small, medium, or large vehicles,
 - Lowest, medium, highest toll rates
 - All major North American toll facilities in US charge more for larger vehicles
- **Sensors** measure vehicles as pass underneath the gantry



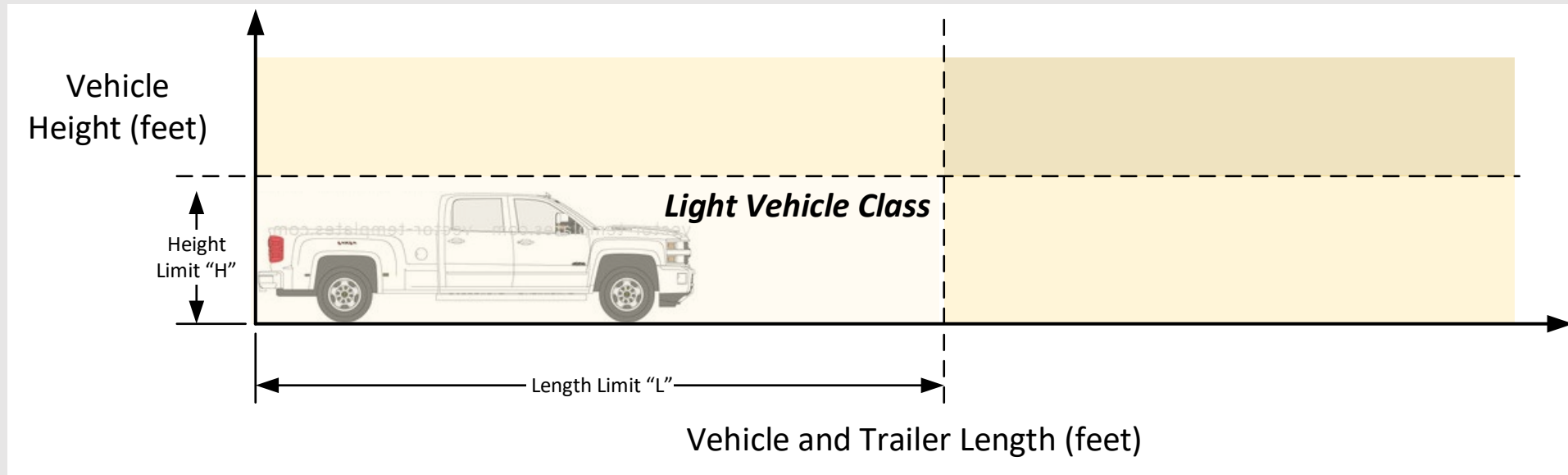
Focus Topic: Vehicle Classification by Shape

All light passenger cars and trucks on the market today would be detected as a light duty vehicle:



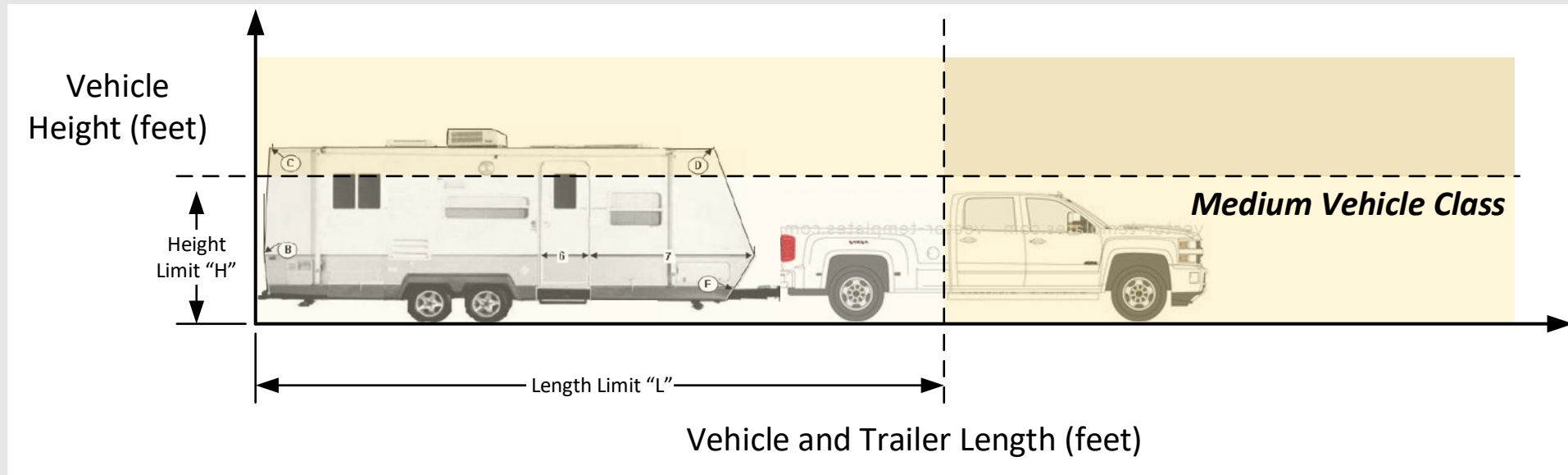
Focus Topic: Vehicle Classification by Shape

Even larger $\frac{3}{4}$ ton pickups (ex: Chevy 3500HD or Ford F-350) with dual rear tires are about 250", and would be a light duty vehicle:



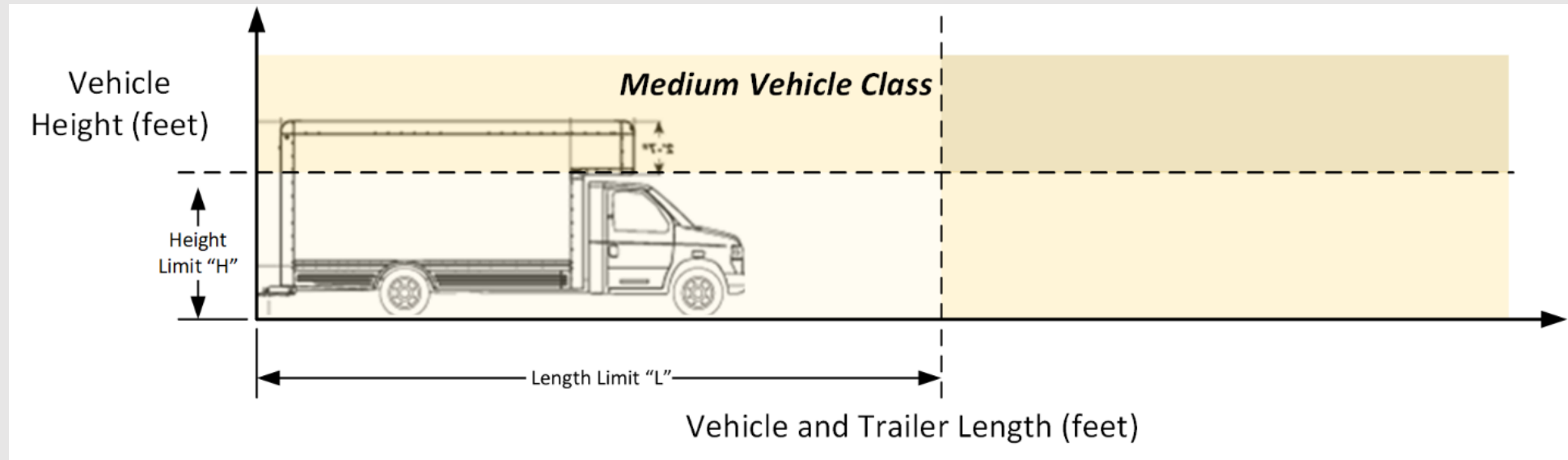
Focus Topic: Vehicle Classification by Shape

However, a large pickup with trailer would be classified as medium duty. Note the trailer height does not impact vehicle class:



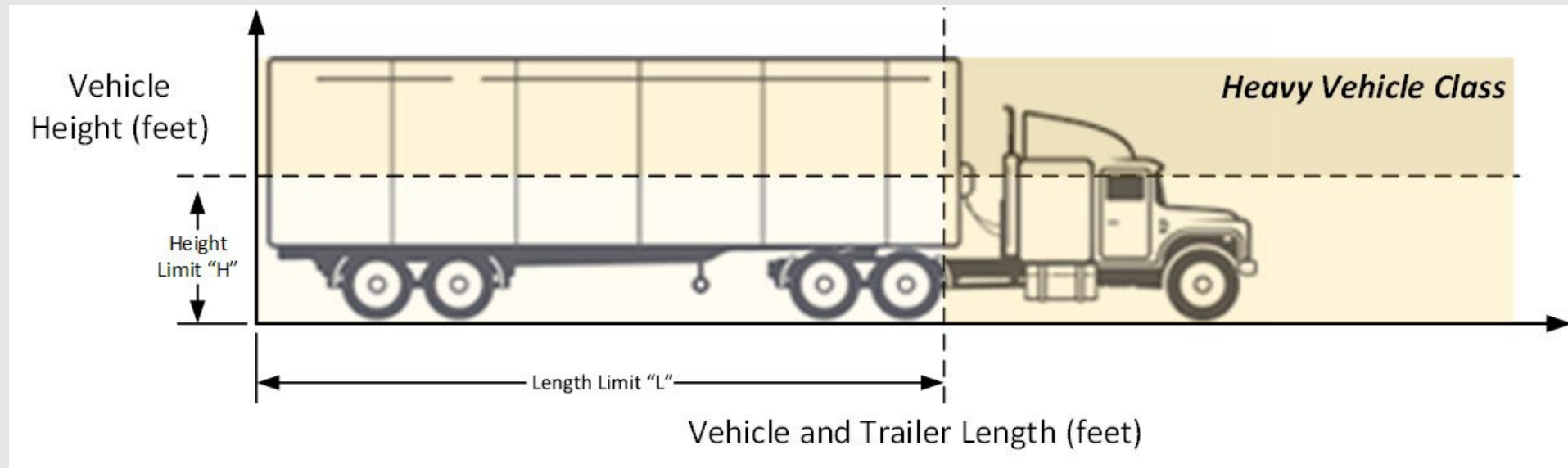
Focus Topic: Vehicle Classification by Shape

Vehicles under 35' but higher than the H limit such as panel trucks or delivery vans would be detected as medium duty vehicles:



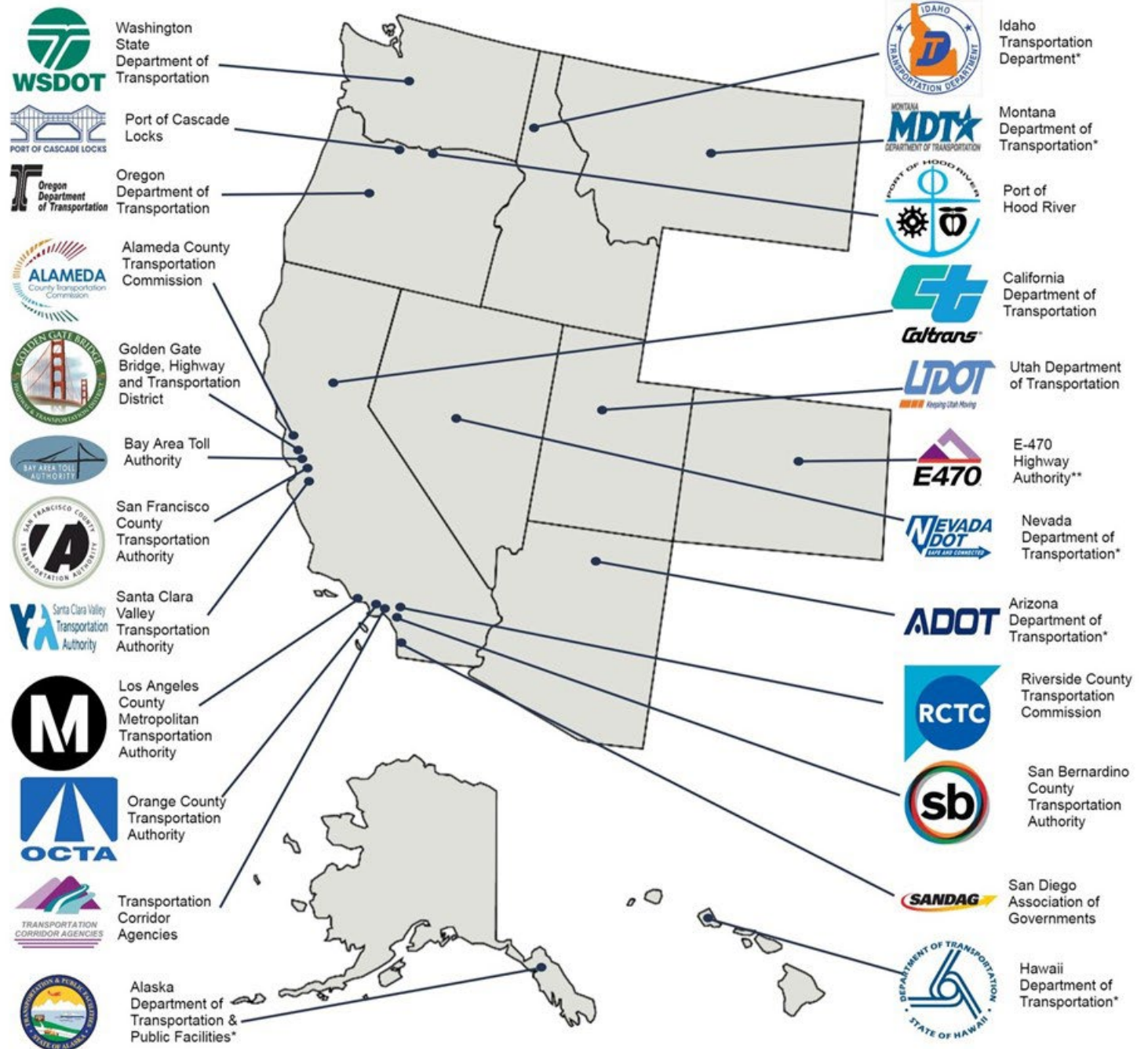
Focus Topic: Vehicle Classification by Shape

Virtually all articulated units exceed 35' in length. This scheme does not distinguish between single and multi-trailer vehicles:



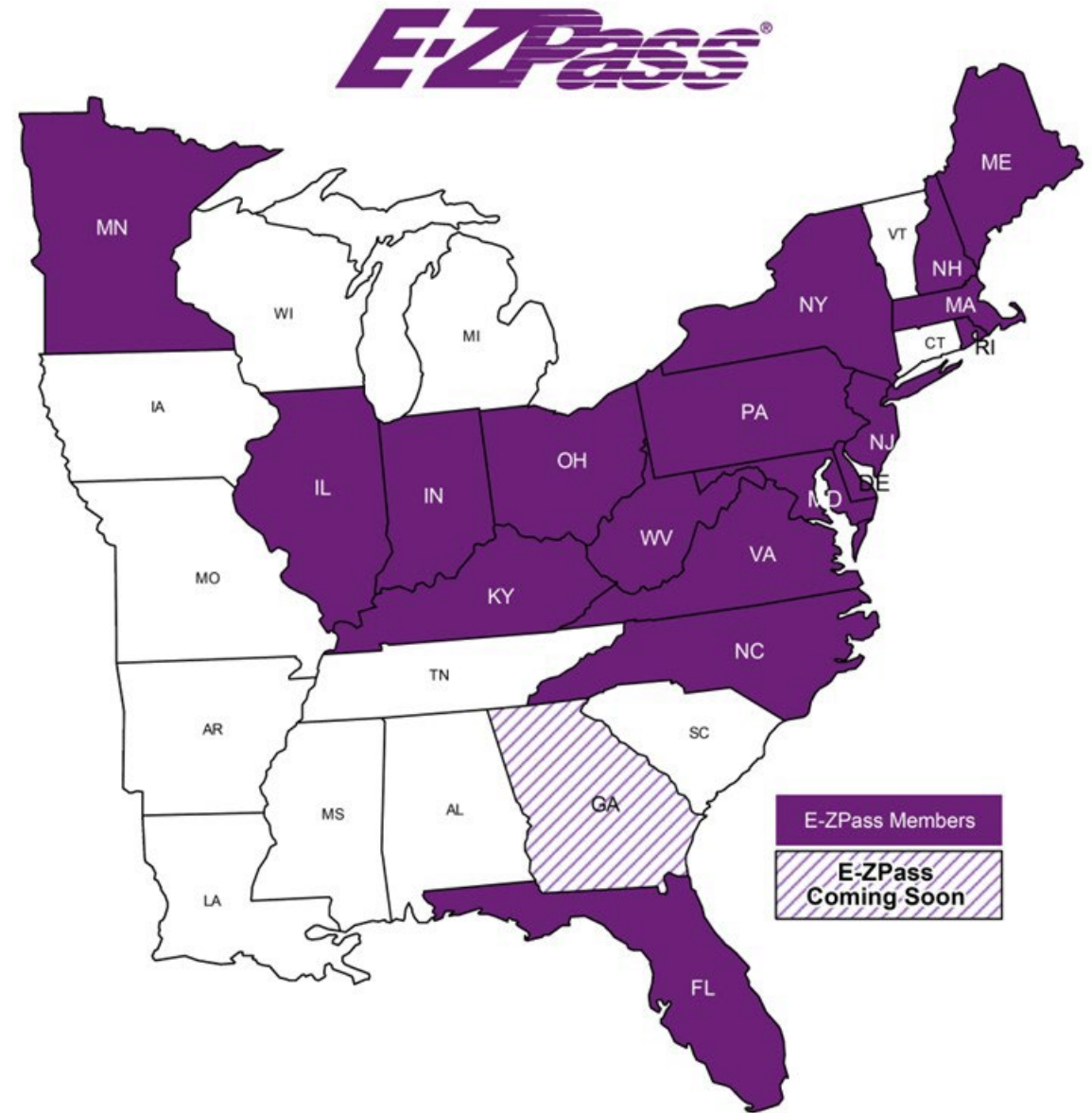
Focus Topic: Interoperability

Our initial focus is naturally our shared customers with WSDOT and the Port of Cascade Locks



Focus Topic: Interoperability

- World's largest toll interoperable group
- Over \$8 billion in tolls exchanged between partners annually
- Many fleet operators
- Commercial operators asked ODOT to join.



Focus Topic: Signing – to MUTCD and beyond

- Example of cross-discipline and cross-organization impacts
 - Traffic engineering
 - Business model
 - Marketing

Sign Designs

Design Option A

Design Option B

Alternate Layouts

12"E Font

10"E Font

8"E Font

*NO CASH - DO NOT STOP

E-Z Pass logo included

E-Z Pass logo included, stacked vertically

Modified message

The image displays various sign designs for toll roads. It is organized into three rows based on font size: 12 inch, 10 inch, and 8 inch. The first two columns show 'Design Option A' and 'Design Option B'. Design Option A features a green and white sign with a blue and red '205 TOLL' shield on the left and a 'Good To Go!' logo on the right. Design Option B is a yellow sign with 'TOLL AHEAD' in black text and a 'Good To Go!' logo on the right. The third column shows 'Alternate Layouts' with three variations: 1) A yellow sign with 'TOLL AHEAD' and 'NO CASH - DO NOT STOP' below it. 2) A yellow sign with 'TOLL AHEAD' and 'OR PAY ONLINE' below it, including an 'E-Z Pass' logo. 3) A yellow sign with 'TOLL AHEAD' and 'OR PAY ONLINE' below it, including an 'E-Z Pass' logo stacked vertically. A fourth alternate layout shows a yellow sign with 'TOLL AHEAD' and 'OR ACCEPTED' below it, with 'NO CASH - PAY ONLINE' at the bottom.

Who will operate the toll system?

A: We're working on that now.

- ODOT will contract with firms specializing in developing and operating toll systems.
- **Customer service center** will generate invoices, collect money, interact with customers, and provide in-person customer service.
- **Roadside systems** vendor will operate cameras, toll tag readers, and other technology to identify vehicles.



In Conclusion...

Thank you for your time and attention. Please feel free to follow up on any questions or concerns you might have:

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