

# Port of Portland Auto Cargo Imports & Exports Estimates, 2025-2045

Presentation for PNREC 2025 Conference

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Planning and Development

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# Background

Tioga and Hackett Associates were tasked with providing long-term forecasts of Terminal 6 auto import, export volumes, and ro-ro vessel calls from 2025-2045.

- The forecast will support internal planning, marketing, and competitive grant applications for ro-ro facility improvements.
- 2025 PIDP grant application for berth improvements makes vessel calls relevant
- The forecast was undertaken amid high economic uncertainty, inflation, and changing import tariffs affecting the auto outlook.

# Approach

Three auto trade forecast scenarios developed: Baseline, High Growth, and Low Growth:

- Baseline forecast includes population and vehicle sales demand growth, non-auto tariff impacts, and expected near-term economic downturn.
- High Growth forecast reflects favorable events such as increased in-migration lower tariffs, and previously expected export growth.
- Low Growth forecast incorporates general tariffs, economic downturn, and auto-specific tariffs.

Analysis includes Oregon and hinterland population growth, industry announcements, tenant perspectives, and vessel orderbook analysis.

# Portland Ro-Ro Terminals

The Port of Portland has two ro-ro terminal complexes:

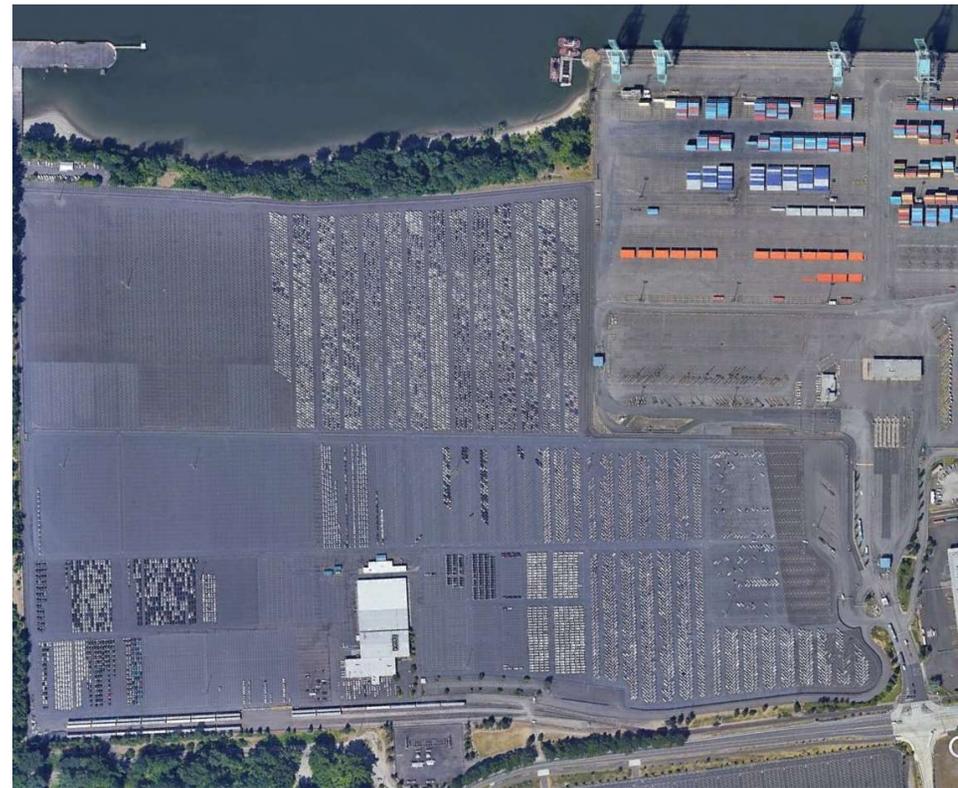
- Terminal 6 is the deep water terminal on the Columbia River, comprising Berths 601 and 607, operated by Auto Warehousing Company (AWC) and handling multiple import and export vehicle brands.
- Terminal 4 near the confluence of the Columbia River and the lower Willamette River is operated by Toyota Logistics Services and handling Toyota vehicle brands.

Focus of this analysis is Terminal 6 Berths 601 and 607.



# Portland Ro-Ro Terminals

- Forecast was focused on Berth 601, which encompasses 130 acres, while Berth 607 encompasses 62 acres.
- The two berths each have a 35-foot drafts and are served by BNSF Railway and UP Railway.
- The most frequently arriving vessels at Portland's berths are 200m long and 32m wide, accommodating between 5,059 and 6,697 CEU.



# Portland vs US Auto Imports and Exports

- Pre-2014 growth at Portland was slower than the US as a whole.
- Since 2014 Portland and the US have seen relatively slow growth but high year-to-year volatility.



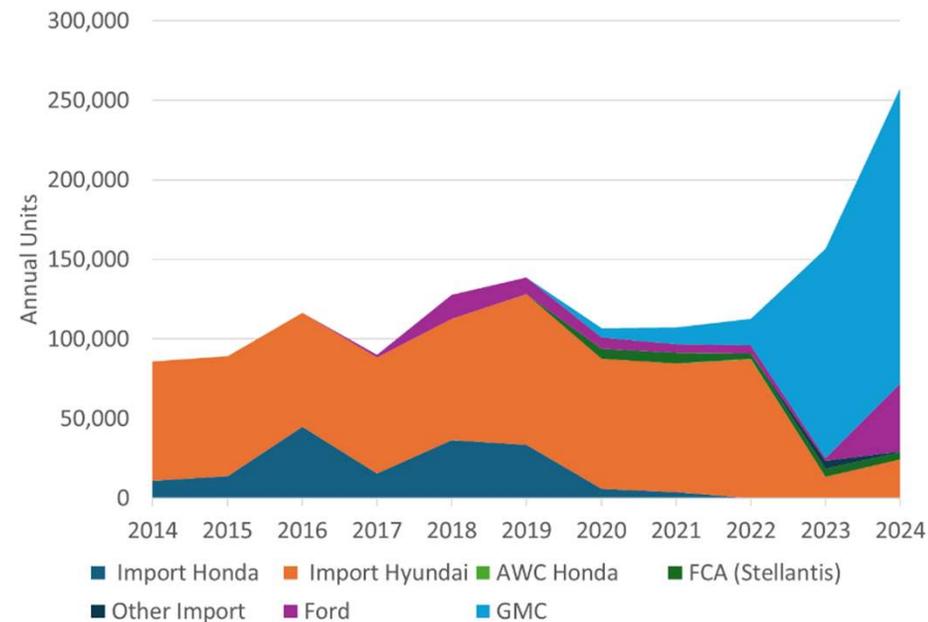
# Port of Portland Total Auto Volume (T4 + T6)

- Overall Portland auto volumes have been affected by economic trends and port shifts by major importers.
- Portland's total did not rebound completely after COVID, and some importers shifted to other ports.



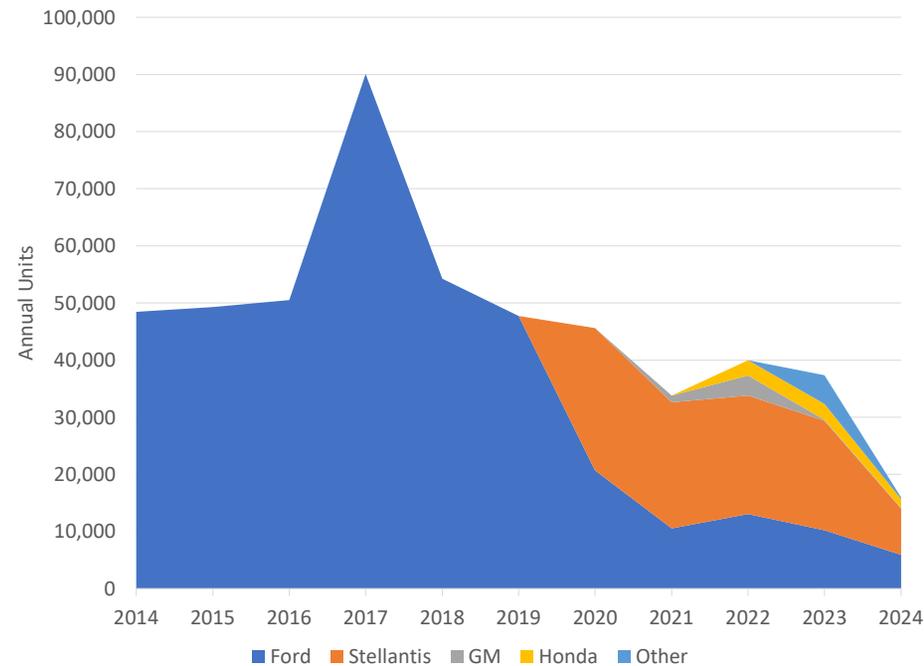
# Port of Portland Berth 601-607 Imports

- The T6 vehicle brand mix has varied over time.
- Variation is normal for multi-brand terminals as importers shift strategies and have more or less success in the marketplace.
- 2024-2025 T6 mix was dominated by GM, Ford, and Hyundai.



# Port of Portland Berth 601-607 Exports

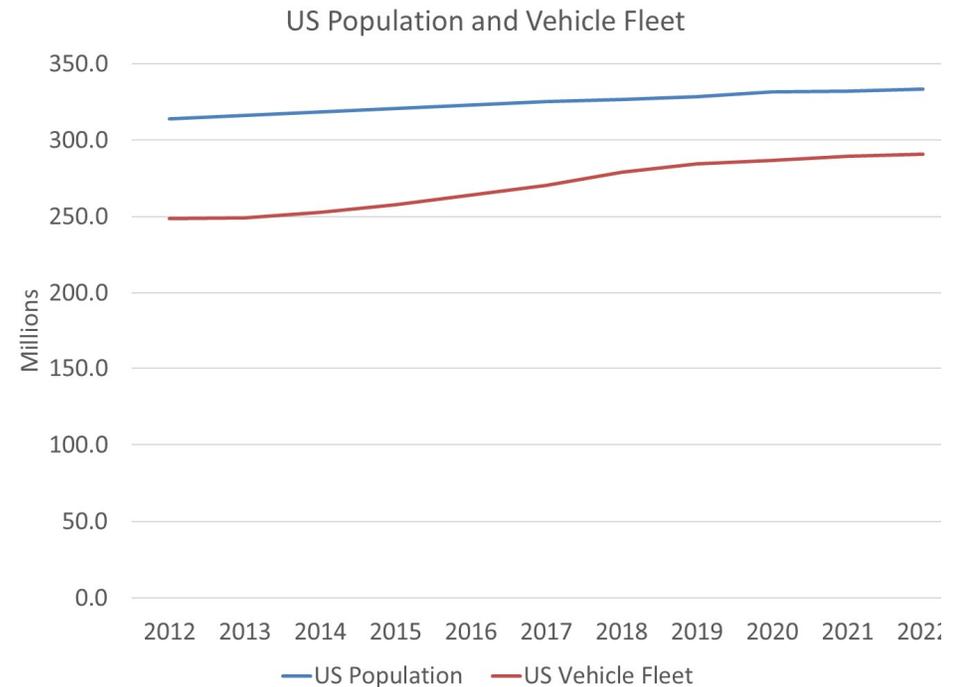
- Total export volumes have declined in recent years.
- Export brand participation has varied as well.
- Ford exports have declined while Stellantis (Fiat-Chrysler-Jeep) exports now constitute a larger share.



# Population Growth

**Population growth and household formation drive the demand for new vehicles, influencing market trends and consumer behavior.**

- The U.S. vehicle fleet has been slightly outpacing population growth leading to higher per capita ownership.
- Household formation has increased in line with OR and US population.

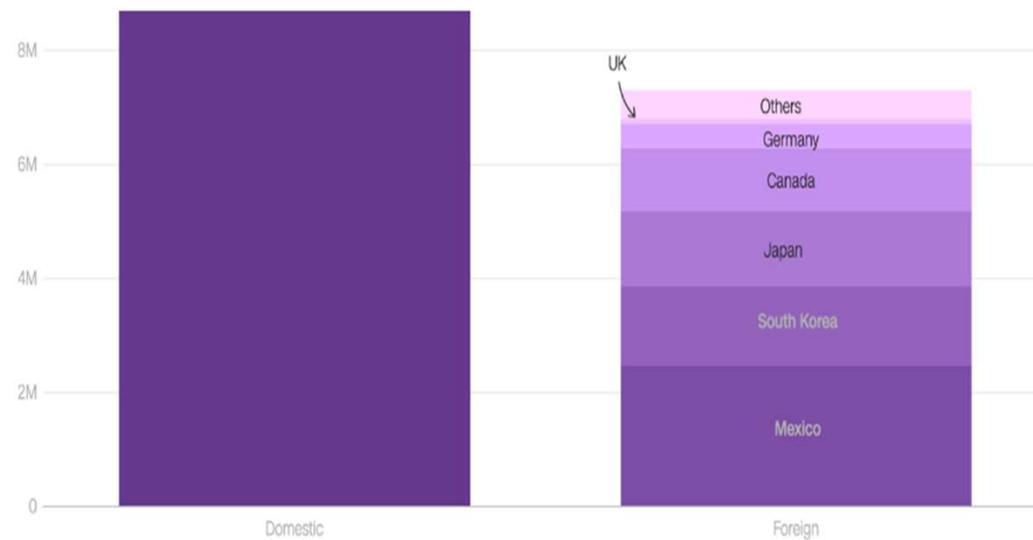


# Tariff Impacts

**Actual tariffs and tariff impacts are, as of now, predictable only in principle.**

- Tariffs on imported vehicles will increase prices, depressing vehicle import volumes.
- Different tariffs will apply to Canadian and Mexican vehicles.
- Tariffs on auto parts and steel will increase prices of “domestic” autos assembled in the US, including those exported.
- Relative impacts on domestic vs. import vehicle prices are still a matter of conjecture, but will likely favor domestic production and depress vehicle imports.
- Retaliatory tariffs will also depress vehicle exports.

2024 US Motor Vehicle Sources



# US Economy & Consumer Confidence

**Falling consumer confidence and adverse economic conditions are expected to depress auto sales and imports.**

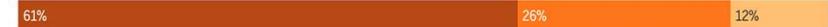
- Concerns over tariffs and trade volatility have prompted concerns about a potential recession, both among experts and consumers
- Approximately 80% of Americans are at least somewhat concerned about the US economy going into recession in the next few months
- Morgan Stanley predicts 40% odds of a recession this year; Goldman Sachs predicts 50% and JP Morgan Chase predicts 60%



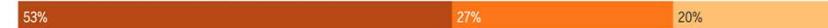
Percent of U.S. adults who are concerned about each of the following in the next few months:

Extremely or very concerned Somewhat concerned Not very or not at all concerned

The cost of groceries



The possibility of the U.S. economy going into a recession



The cost of big purchases, such as a car, cellphone or appliance



The availability of consumer goods you want to purchase



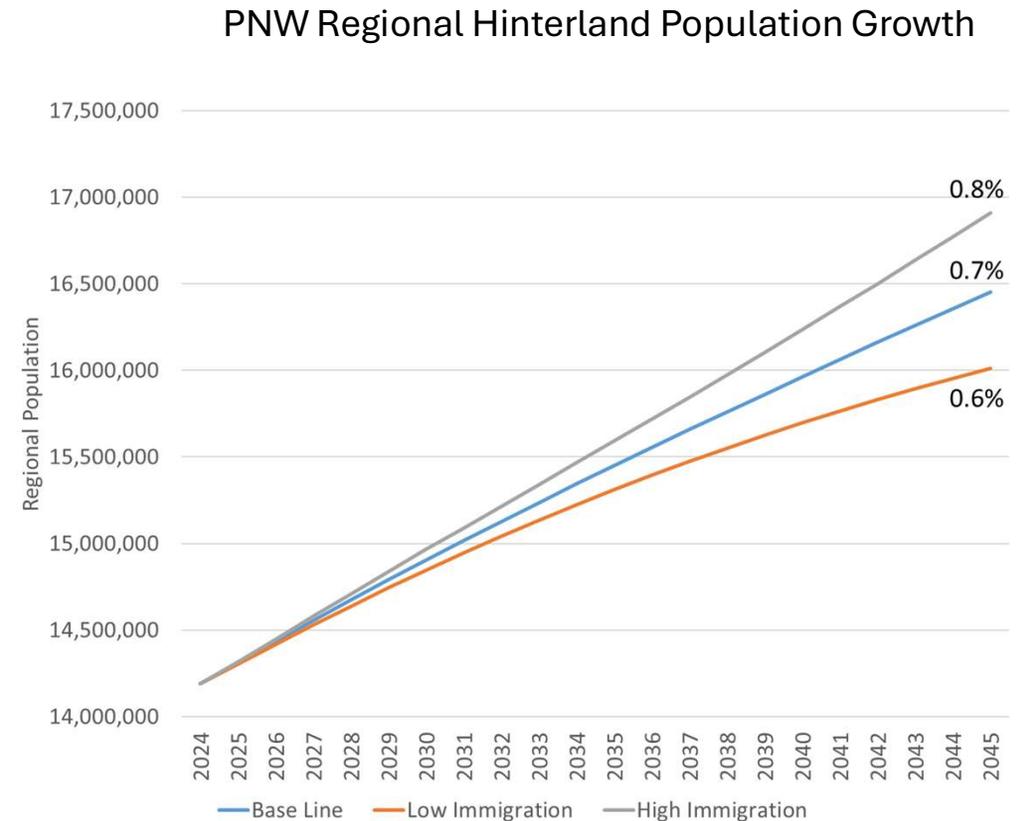
Results based on interviews with 1260 U.S. adults conducted April 17-21, 2025. The margin of error is ±3.9 percentage points for the full sample.

Source: The Associated Press-NORC Center for Public Affairs Research

# Forecast Approach

Three forecasts for imported ro-ro volumes were prepared based on population projections, economic growth, and tariffs.

- Port information indicates 20% of T6 import vehicles are trucked to the Pacific Northwest hinterland, while 80% are transported via rail to inland markets. (Exports arrive by rail.)
- The PNW hinterland population includes Oregon (30%), Washington (57%), and Idaho (13%).
- Population forecasts from Oregon, Washington, and Idaho extend through various years, with different calculation methods for future growth. Immigration is a key factor in expected growth.
- The US population forecast is based on the 2023 National Population Projections by the US Census Bureau, incorporating results from the 2020 Census.



# Import Scenarios

**Baseline Growth:** expected population growth, 5 years of adverse general tariff and economic impacts, and a moderate recovery.

**Low Growth:** lower population growth, longer tariff and economic impacts, 5 years of auto tariffs, and a weaker recovery.

**High Growth:** 2 years of general tariff and economic impact, no auto tariffs, strong recovery, and near-term GM export increase (per AWC).

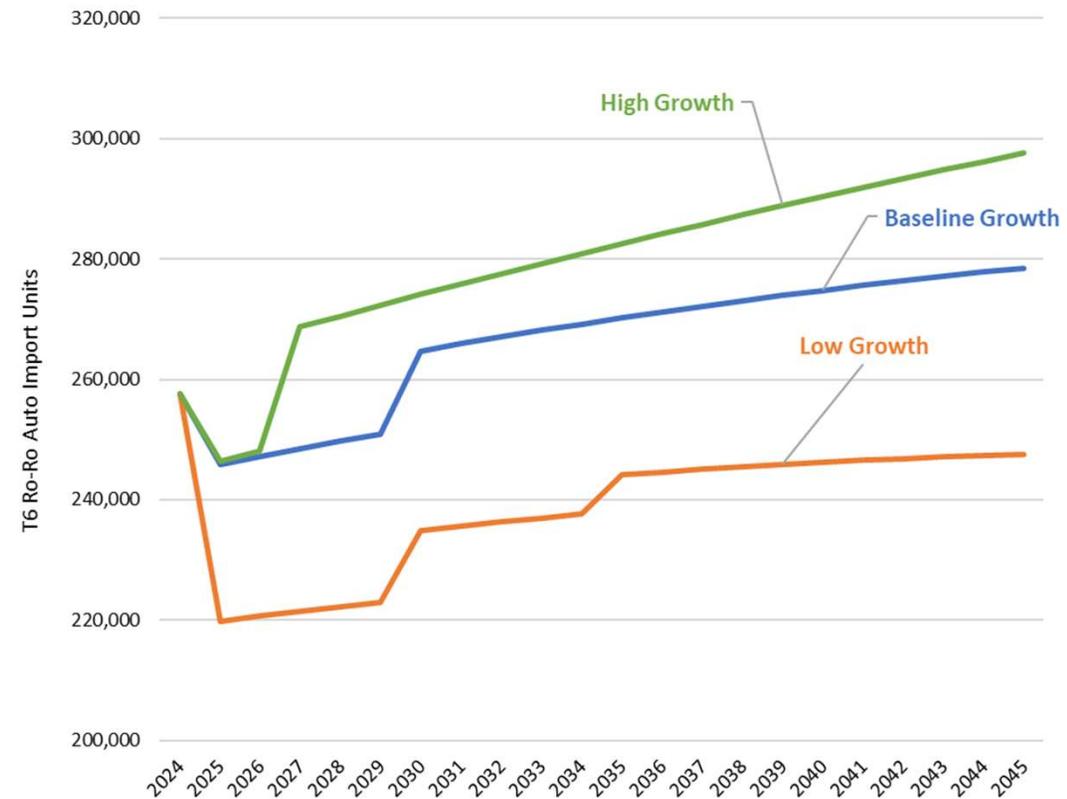
		General Tariff/ Economic Impact @ -5%	Auto-Industry Tariffs @ -10%	
	Population Growth Scenario	Years	Years	Rebound
Baseline Growth	Baseline	5	0	Medium (100% of % Impact)
Low Growth	Low	10	5	Weak (50% of % Impact)
High Growth	High	2	0	Strong (150% of % Impact)

# Import Scenario Growth Rates

All scenarios allow for near-term disruption.

- Baseline recovers 2024 volume by 2030.
- Low Growth stays below 2024 volume.
- High Growth passes 2024 volume in 2027.

Scenario	1 <sup>st</sup> decade 2025-2035	2 <sup>nd</sup> decade 2035-2045	Full period 2024-2045
Baseline Growth	0.9%	0.3%	0.4%
Low Growth	1.1%	0.1%	-0.2%
High Growth	1.4%	0.5%	0.7%



# Import Scenario Summaries

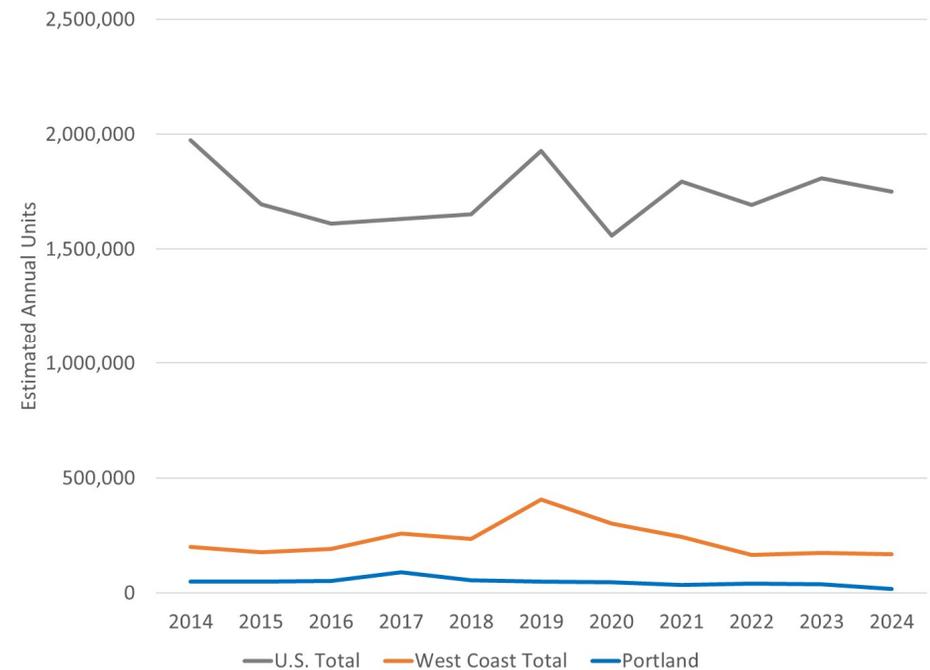
Baseline Import Growth	2024	2025	2030	2035	2040	2045	24-45 CAGR
<b>T6 Volume</b>	<b>257,505</b>	<b>245,941</b>	<b>264,703</b>	<b>270,211</b>	<b>274,784</b>	<b>278,469</b>	<b>0.4%</b>
Oregon Local	51,501	49,345	53,967	55,941	57,797	59,572	0.7%
Inland	206,004	196,596	210,736	214,270	216,987	218,897	0.3%
General Tariff/Economic Fac	0	5%	5%	0%	0%	0%	
Auto Tariff Factor	0	0%	0%	0%	0%	0%	
Growth	0	-4.5%	5.5%	0.4%	0.3%	0.2%	
<b>Low Import Growth</b>							
<b>T6 Volume</b>	<b>257,505</b>	<b>219,765</b>	<b>234,947</b>	<b>244,091</b>	<b>246,277</b>	<b>247,435</b>	<b>-0.2%</b>
Oregon Local	51,501	44,129	48,094	50,836	52,121	53,164	0.2%
Inland	206,004	175,635	186,853	193,254	194,156	194,271	-0.3%
General Tariff/Economic Fac	0	5%	0%	3%	0%	0%	
Auto Tariff Factor	0	10%	5%	0%	0%	0%	
Growth	0	-14.7%	5.3%	2.7%	0.1%	0.1%	
<b>High Import Growth</b>							
<b>T6 Volume</b>	<b>257,505</b>	<b>246,407</b>	<b>274,121</b>	<b>282,577</b>	<b>290,379</b>	<b>297,553</b>	<b>0.7%</b>
Oregon Local	51,501	49,368	55,472	57,798	60,177	62,674	0.9%
Inland	206,004	197,039	218,649	224,779	230,202	234,879	0.6%
General Tariff/Economic Fac	0	5%	0%	0%	0%	0%	
Auto Tariff Factor	0	0%	0%	0%	0%	0%	
Annual Growth	0	-4.3%	0.7%	0.6%	0.5%	0.5%	

# Port of Portland Exports

Tioga’s conservative forecast approach focused on the China, Japan, and South Korea markets currently being served from Portland.

- Auto exports through the Port of Portland are driven by different factors from the import flows.
- Portland has had a relatively stable share of U.S. and West Coast totals.

Market	FY 24-25 Share	2025-2032 CAGR
South Korea	55%	-0.3%
Japan	27%	-0.3%
China	18%	1.6%



# Export Scenarios

Export scenarios were built around recent S&P Global Asian auto sale projections

Sales Region	2024	2025	2026	2027	2028	2029	2030	2031	2032	24-32 CAGR
Greater China	26,391,134	27,272,037	27,796,001	28,775,746	28,032,374	28,708,252	29,094,353	29,583,990	29,873,719	1.6%
Japan/Korea	5,921,452	6,165,428	6,210,813	6,095,223	5,962,979	5,956,382	5,898,114	5,854,489	5,774,197	-0.3%

Source: S&P Global Mobility, Data compiled Mar. 28 2025.

- Baseline Growth case forecast uses 2024 destination market shares and growth rates.
- High Growth scenario incorporates a strong resurgence in GM exports.
- Low Growth scenario accounts for a 5% volume reduction for 10 years due to general tariffs and economic slowdown, and an additional 10% reduction for 5 years due to auto-specific tariffs.

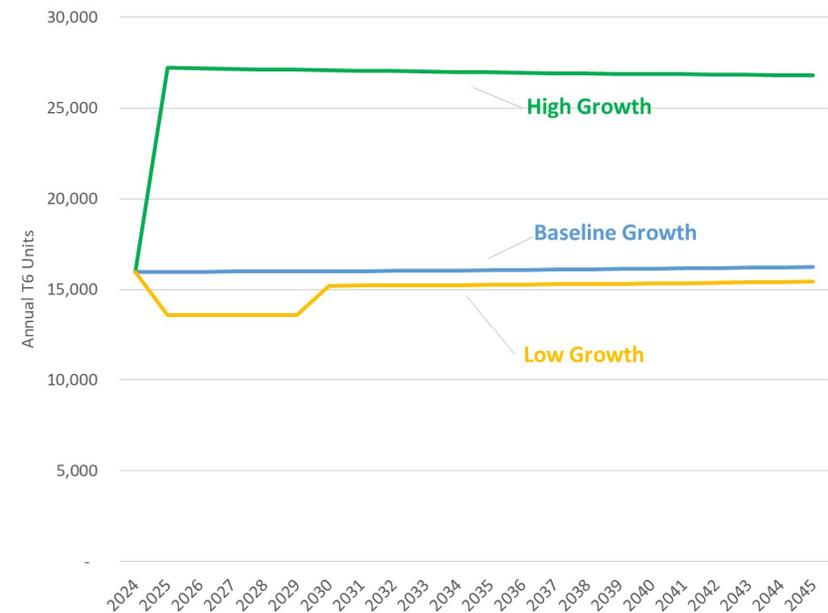
# Export Scenario Summaries

Export scenarios differ in the near term, but are consistent thereafter.

	2024	2025	2030	2035	2040	2045	24-45 CAGR
<b>Baseline Export Growth</b>							
South Korea	8,785	8,757	8,620	8,486	8,353	8,223	-0.3%
Japan	4,301	4,287	4,221	4,155	4,090	4,026	-0.3%
China	2,890	2,935	3,172	3,427	3,703	4,002	1.6%
	<b>15,976</b>	<b>15,980</b>	<b>16,013</b>	<b>16,068</b>	<b>16,146</b>	<b>16,250</b>	<b>0.1%</b>

	2024	2025	2030	2035	2040	2045	24-45 CAGR
<b>Low Export Growth</b>							
South Korea	8,785	7,444	8,189	8,061	7,936	7,812	-0.6%
Japan	4,301	3,644	4,010	3,947	3,885	3,825	-0.6%
China	2,890	2,495	3,013	3,256	3,518	3,802	1.3%
	<b>15,976</b>	<b>13,583</b>	<b>15,212</b>	<b>15,264</b>	<b>15,339</b>	<b>15,438</b>	<b>-0.2%</b>

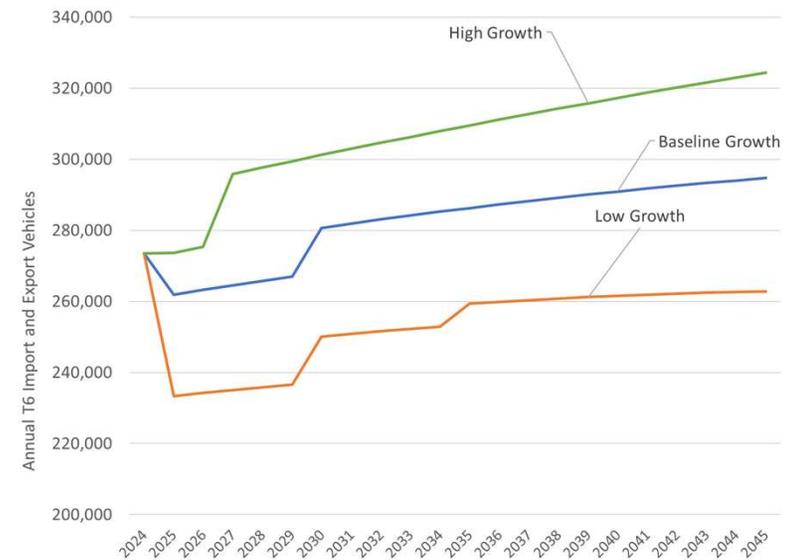
	2024	2025	2030	2035	2040	2045	24-45 CAGR
<b>High Export Growth</b>							
South Korea	8,785	20,000	19,688	19,380	19,078	18,780	3.7%
Japan	4,301	4,287	4,221	4,155	4,090	4,026	-0.3%
China	2,890	2,935	3,172	3,427	3,703	4,002	1.6%
	<b>15,976</b>	<b>27,223</b>	<b>27,080</b>	<b>26,962</b>	<b>26,871</b>	<b>26,807</b>	<b>2.5%</b>



# Overall Auto Volume Forecast

- Combined import and export forecasts yield growth rates ranging from -0.2% to 0.8%, with a baseline CAGR of 0.4%.
- All scenarios envision significant near-term disruption, followed by long-term recovery.

Baseline Growth	2024	2025	2030	2035	2040	2045	24-45 CAGR
<b>T6 Volume</b>	<b>273,481</b>	<b>261,921</b>	<b>280,716</b>	<b>286,278</b>	<b>290,930</b>	<b>294,720</b>	<b>0.4%</b>
Imports	257,505	245,941	264,703	270,211	274,784	278,469	
Exports	15,976	15,980	16,013	16,068	16,146	16,250	
<b>Low Growth</b>							
<b>T6 Volume</b>	<b>273,481</b>	<b>233,348</b>	<b>250,160</b>	<b>259,355</b>	<b>261,616</b>	<b>262,873</b>	<b>-0.2%</b>
Imports	257,505	219,765	234,947	244,091	246,277	247,435	
Exports	15,976	13,583	15,212	15,264	15,339	15,438	
<b>High Growth</b>							
<b>T6 Volume</b>	<b>273,481</b>	<b>273,630</b>	<b>301,201</b>	<b>309,540</b>	<b>317,250</b>	<b>324,360</b>	<b>0.8%</b>
Imports	257,505	246,407	274,121	282,577	290,379	297,553	
Exports	15,976	27,223	27,080	26,962	26,871	26,807	



# Questions and Discussion

- Thank you for Interest
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