Image by Google Gemini

DEFINING FOREST SECTOR ECONOMIC VIABILITY IN WASHINGTON STATE

Sándor F. Tóth

SCHOOL OF ENVIRONMENTAL AND FOREST SCIENCES
UNIVERSITY of WASHINGTON
College of the Environment

Annual Symposium (6/4/2026)

WASHINGTON HARDWOODS COMMISSION

OUTLINE

Image by Google Gemini

- Legislative references
- The state of the forest industry in WA
- A proposed definition of forest sector viability
- Viability metrics, vital signs – an overview
- Proposed metrics and measurement protocol
- Conclusion

LEGISLATIVE REFERENCES

RCW 76.09.010:

(1) "The legislature hereby finds and declares […] that a **viable** forest products industry is of prime importance to the state's economy"

"The legislature hereby finds and declares […] that coincident with maintenance of a **viable** forest products industry, it is important to afford protection to forest soils, fisheries, wildlife, water quantity and quality, air quality, recreation, and scenic beauty."

(2)(c) "Recognize both the public and private interest in the **profitable** growing and harvesting of timber;"

LEGISLATIVE REFERENCES (CONT.)

RCW 76.44.070:

(1) "maintaining a base of forestlands that may be utilized for sustainably managed commercial forestry is of utmost importance to the state."

(2) "The legislature finds that the promotion and fostering of the economic success of the forest products industry with the goal of keeping sustainably managed forestry as a priority land use, and helping to secure the timber managing, growing, harvesting, transporting, and manufacturing jobs is made possible by a vibrant working forestland base."

(3) "The legislature further finds that **maintaining** sustainable working forests is important for the quality of life of all Washingtonians, and that sustainable forest practices can help to maintain and restore the vitality of Washington's communities while also helping to preserve Washington's natural landscapes and ecosystems."

LEGISLATIVE REFERENCES (CONT.)

RCW 70A.45.090:

- (1)(a) “Washington's existing forest products sector, including public and private working forests and the harvesting, transportation, and manufacturing sectors that enable working forests to remain on the land and the state to be a global supplier of forest products, is, according to a University of Washington study analyzing the global warming mitigating role of wood products from Washington's private forests, an industrial sector that currently operates as a significant net sequesterer of carbon. This value, which is only provided through the **maintenance** of an intact and synergistic industrial sector, is an integral component of the state's contribution to the global climate response and efforts to mitigate carbon emissions.”

- (1)(b) “Satisfying the goals set forth in RCW 70A.45.020 requires supporting, throughout all of state government, consistent with other laws and mandates of the state, the economic vitality of the sustainable forest products sector and other business sectors capable of sequestering and storing carbon.”

KEY TERMS USED IN THE STATUTES

"COMMUNITY VITALITY"

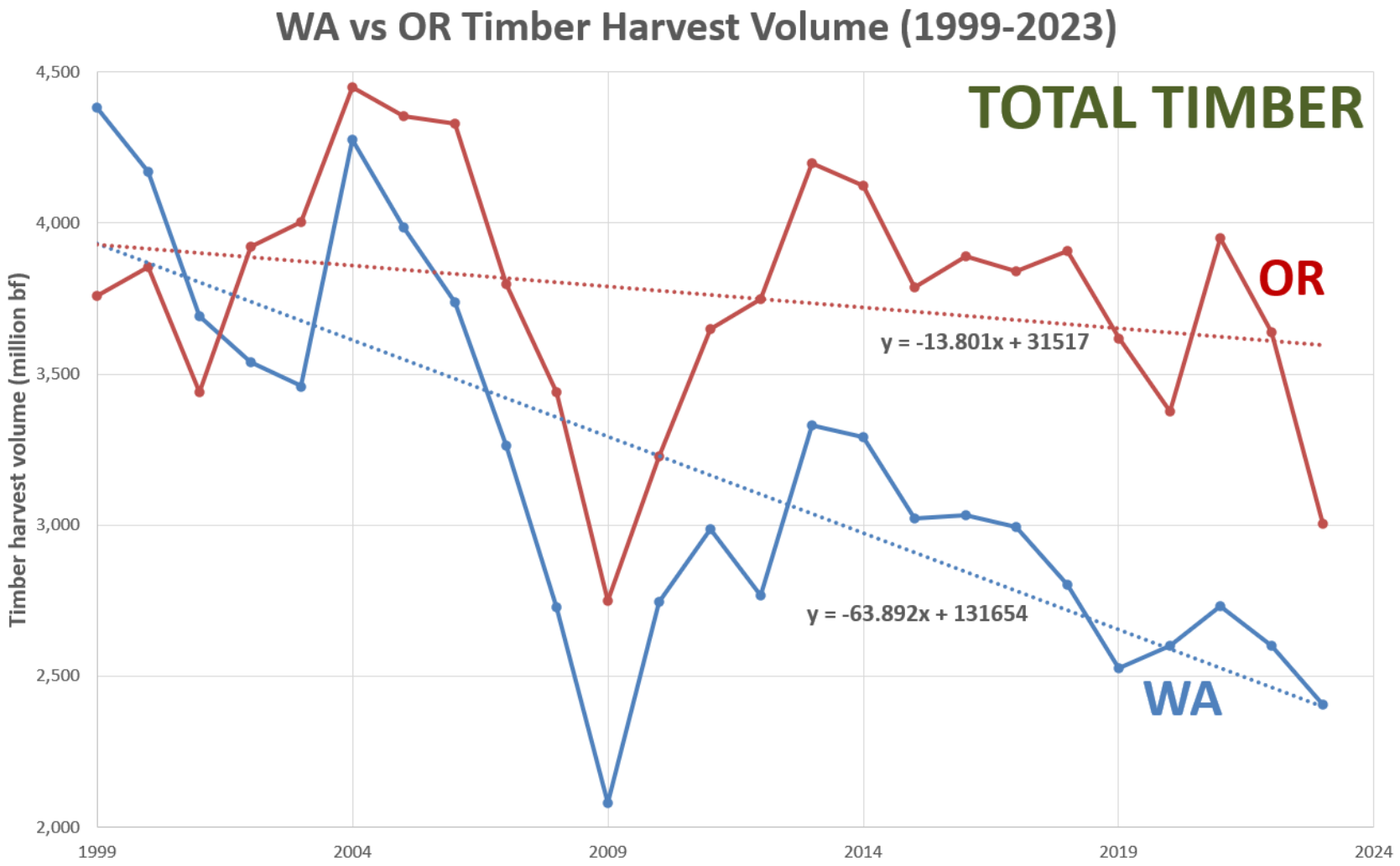
"ECONOMIC VITALITY/SUCCESS"

"VIABLE FOREST PRODUCTS INDUSTRY"

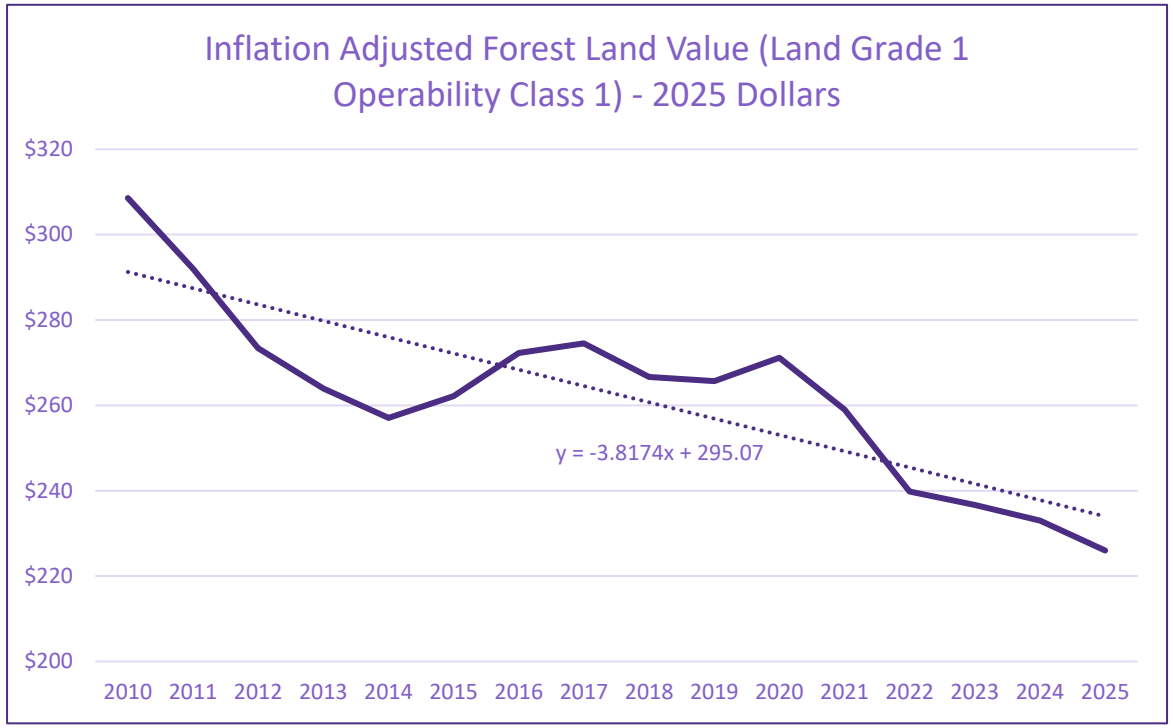
"MAINTAINING A WORKING FOREST BASE"

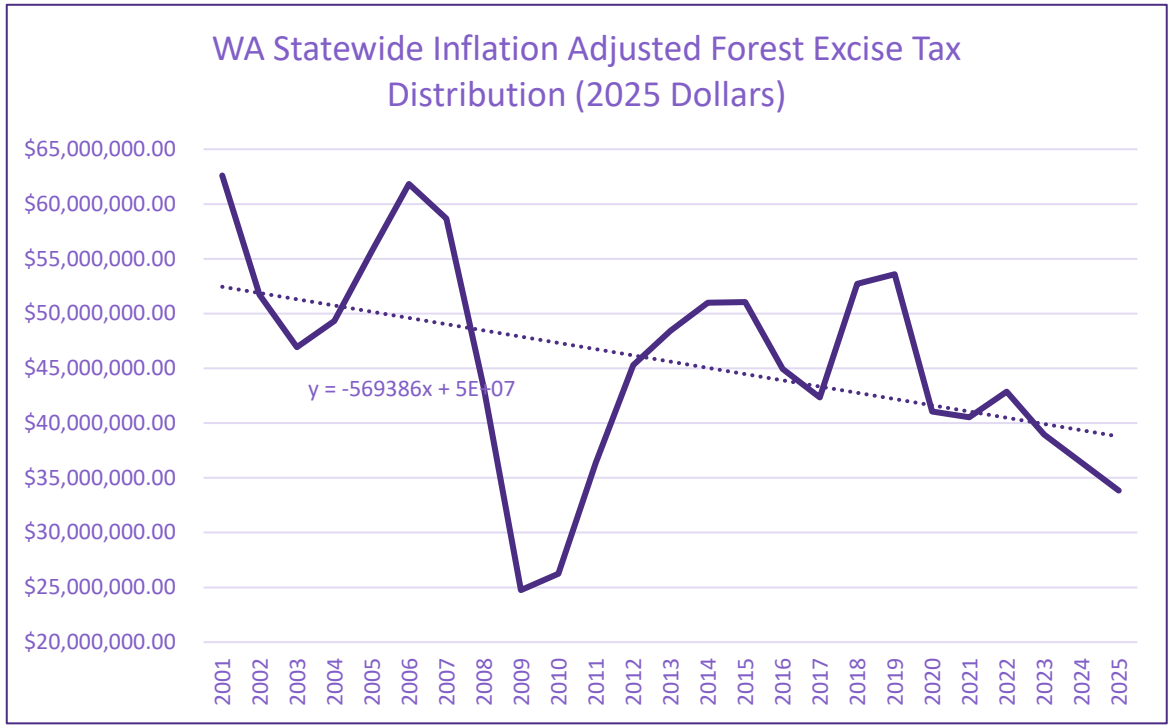
"PROFITABLE GROWING & HARVESTING OF TIMBER"

THE STATE OF THE INDUSTRY – HARVEST VOLUMES

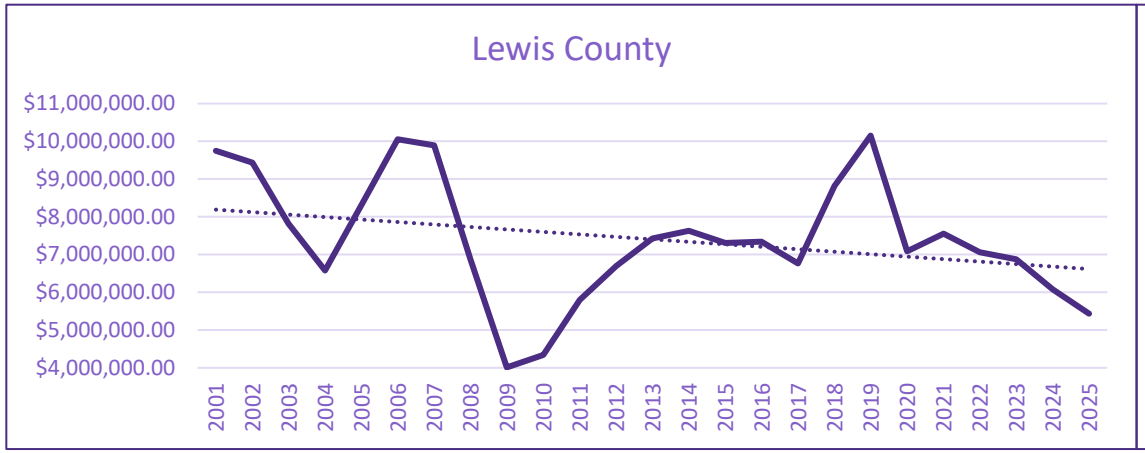


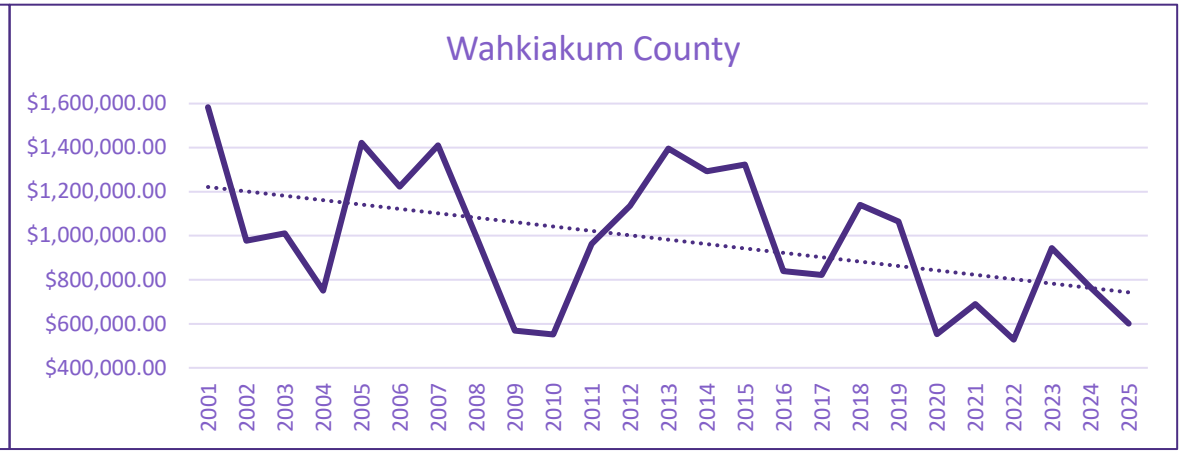
THE STATE OF THE INDUSTRY – STATEWIDE LAND VALUE (WAC 458-40-540) & EXCISE TAX RECEIPTS

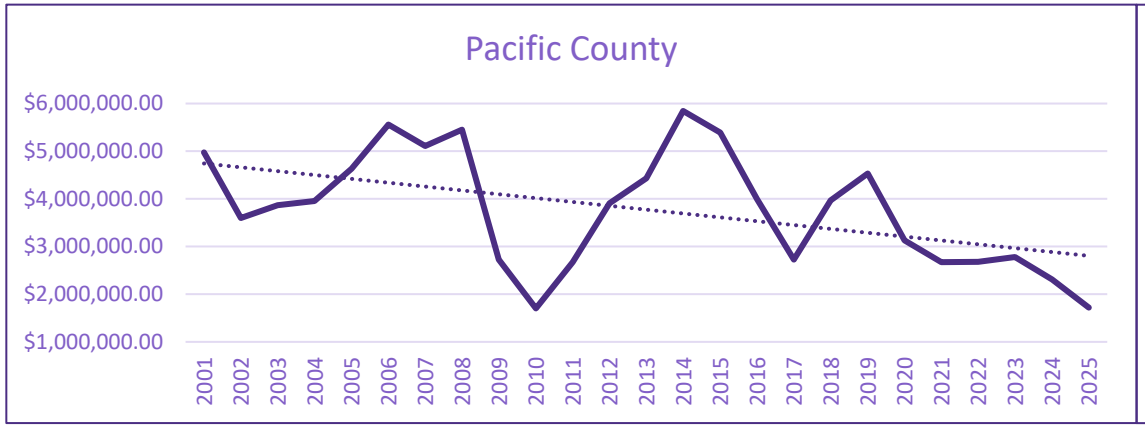


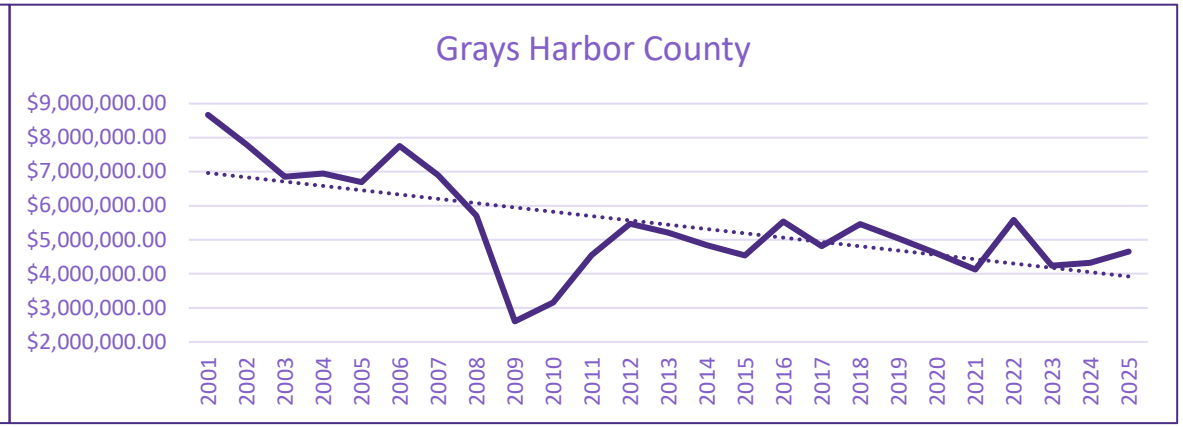


THE STATE OF THE INDUSTRY – EXCISE TAX RECEIPTS (BY COUNTY)

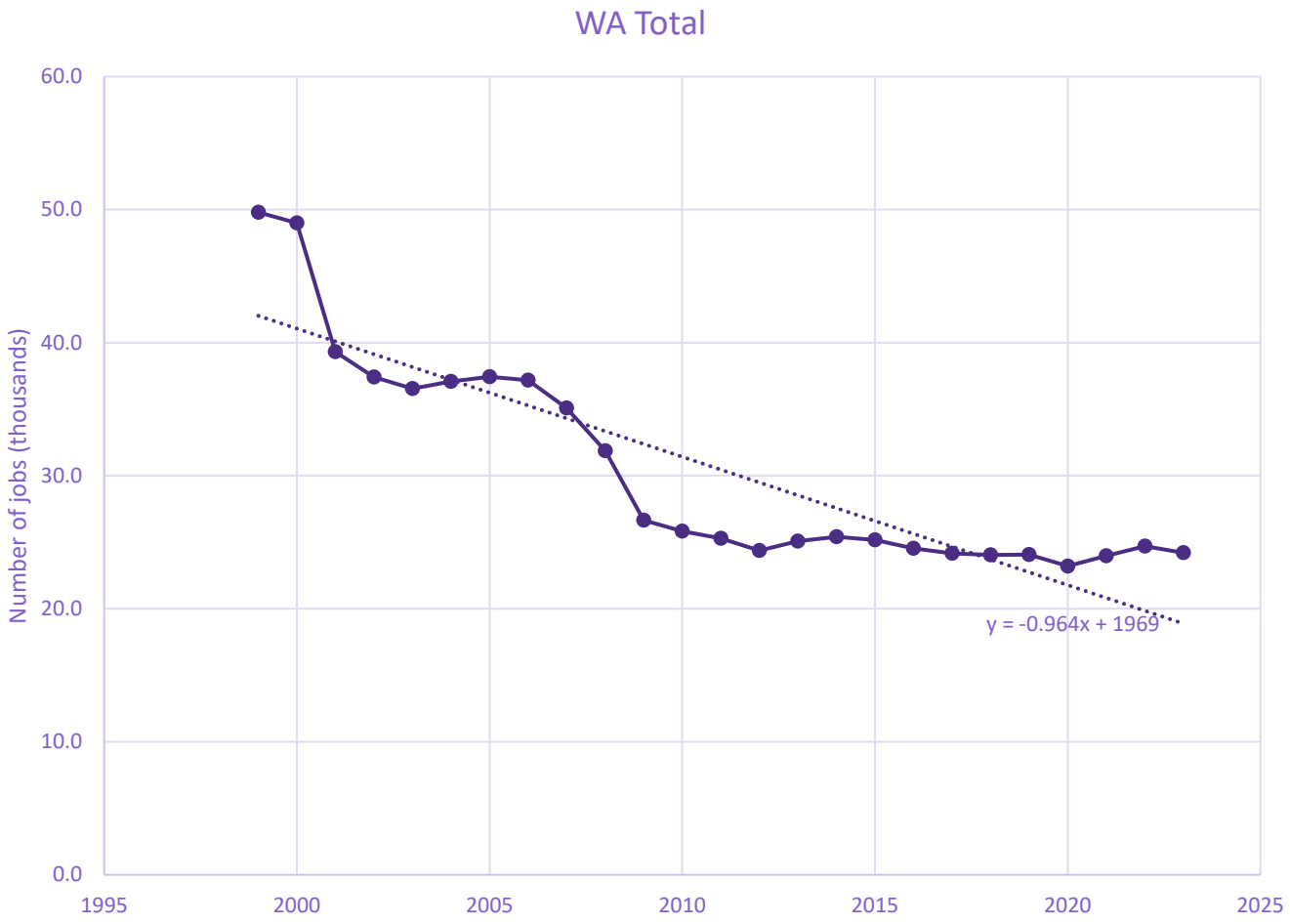




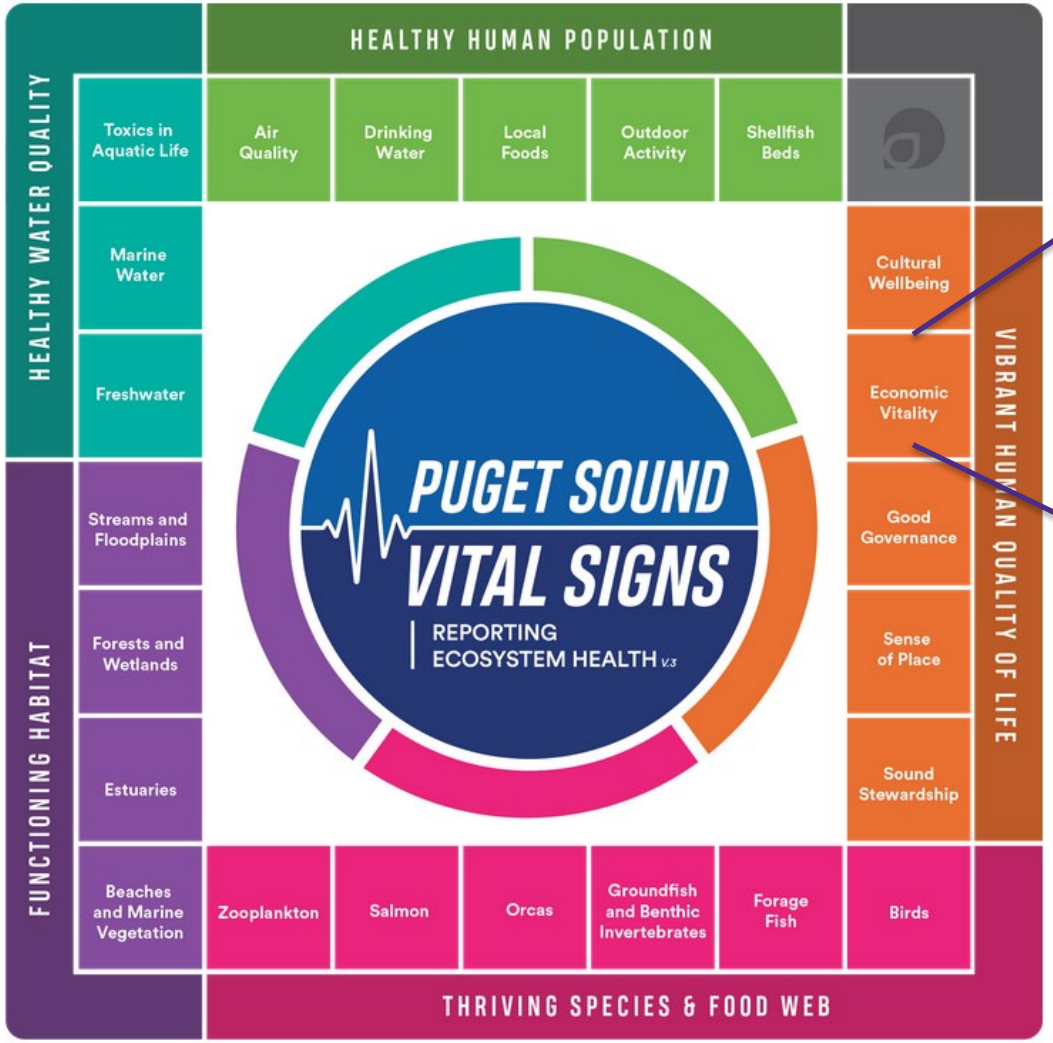


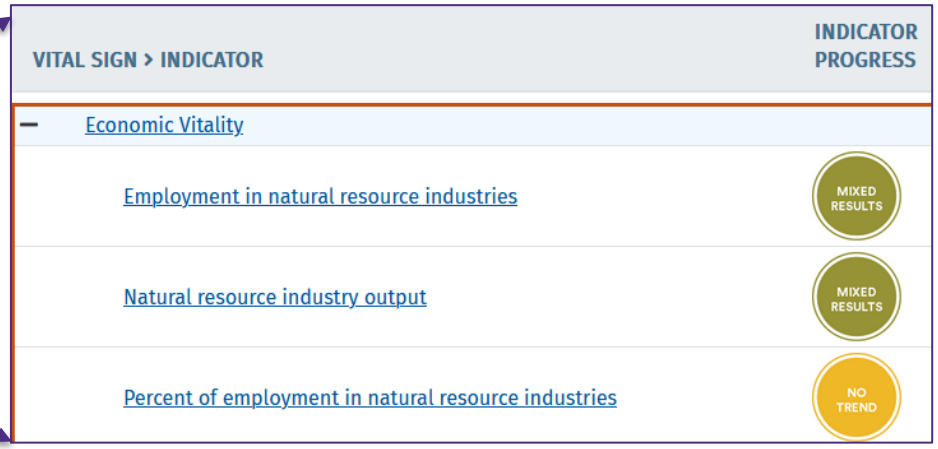


THE STATE OF THE INDUSTRY – FOREST SECTOR JOBS

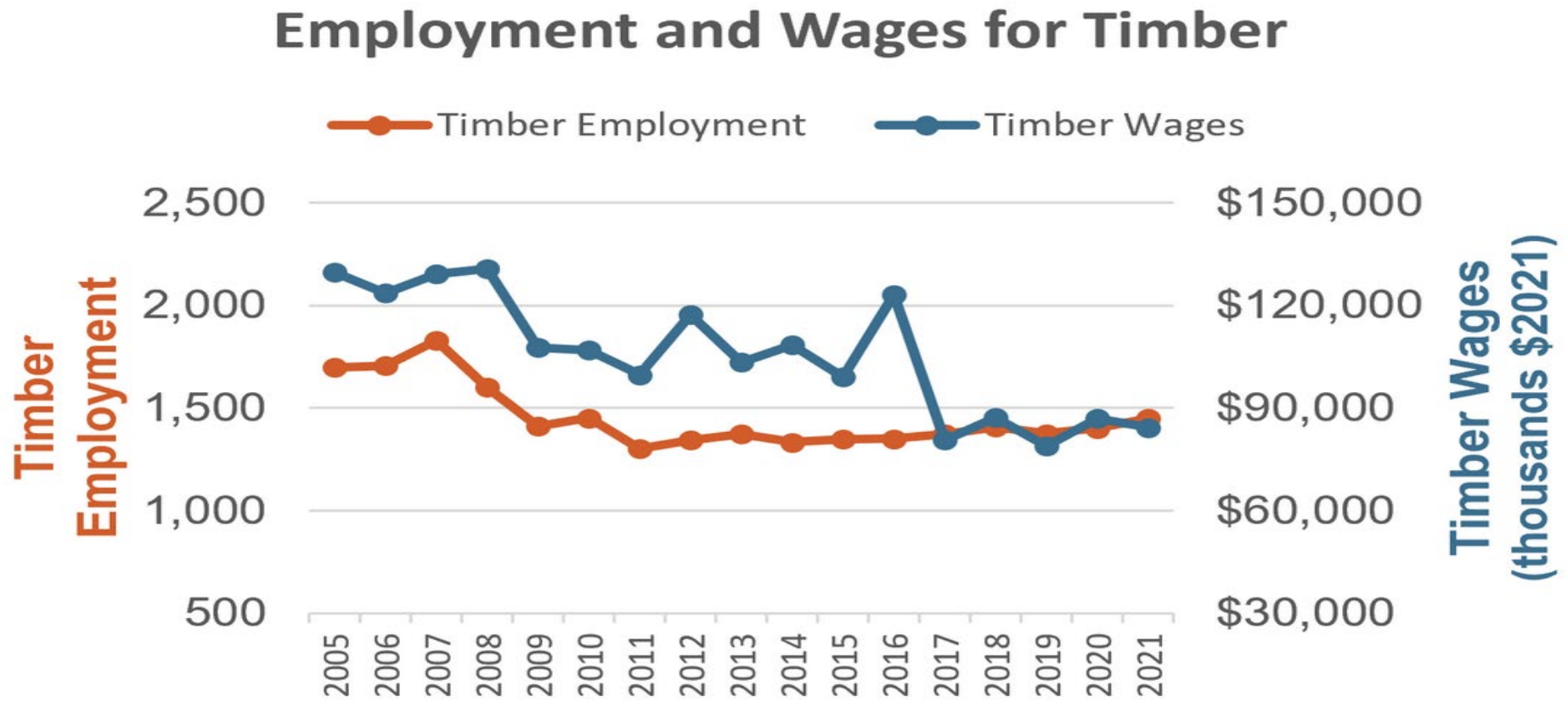


THE STATE OF THE INDUSTRY – PUGET SOUND VITAL SIGNS

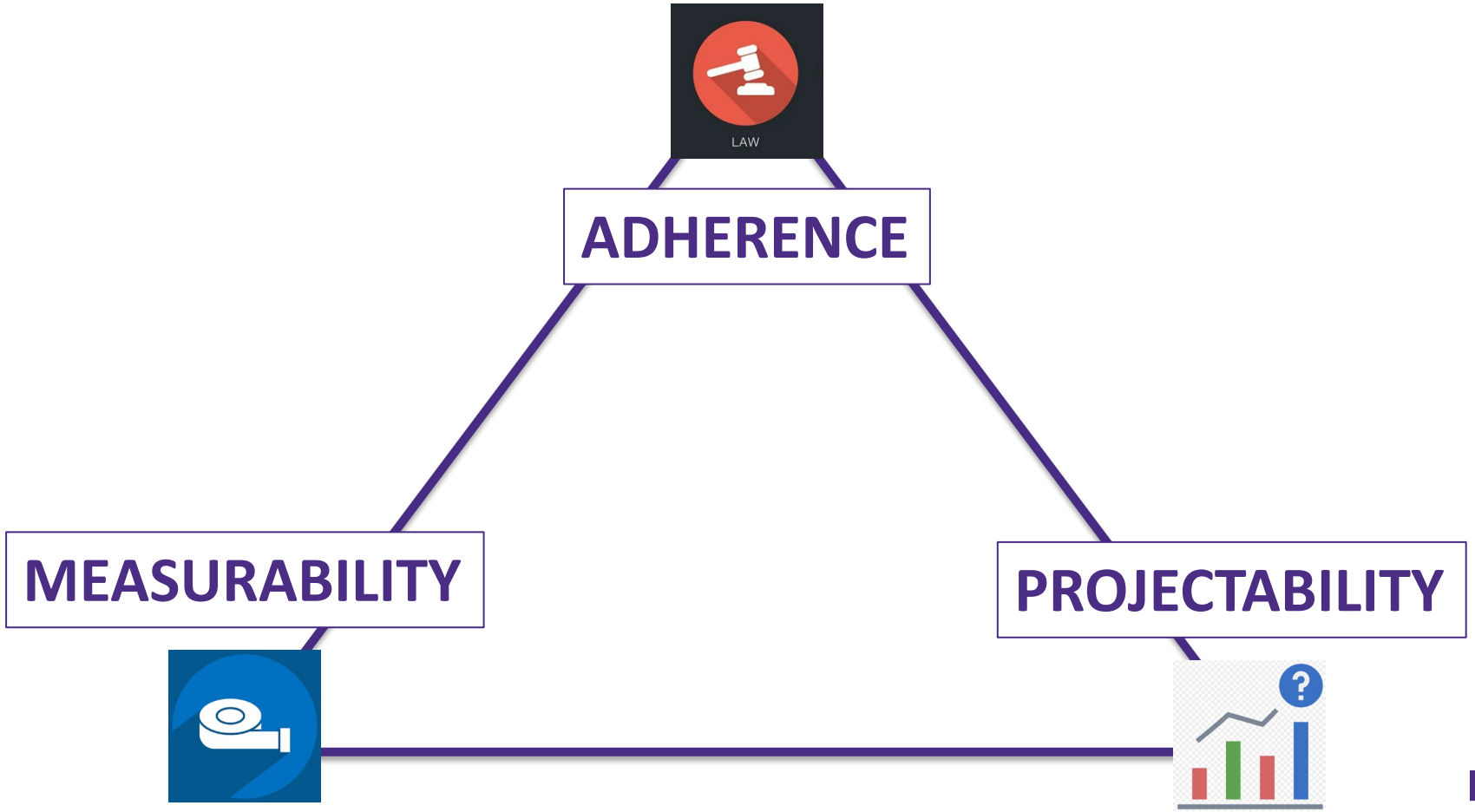




THE STATE OF THE INDUSTRY – PUGET SOUND VITAL SIGNS (CONT.)



CRITERIA FOR DEFINITION



PROPOSED DEFINITION

DRAFT

> ***The economic viability of the forest sector in Washington State is the industry's long-term unaided capacity to profitably grow timber without major prolonged curtailment in real tax revenues plus salaries in rural counties as well as harvest volumes relative to national consumption trends while maintaining a non-declining base of working forest acreage and growing stock that may be utilized for commercial forestry***

where:

- ***Long-term*** **= 100 years or more (from time of analysis);**
- ***Unaided*** **= without external grants or subsidies to industry;**

where:

- ***Profitable*** **= positive net present value averaged over a stratified, spatially random sample of small-scale-, industrial- and public forest ownerships performed by an independent third-party consultant (e.g., the U. of WA)***
- ***Real tax revenue*** **= inflation adjusted total forest excise tax revenue**
- ***Real Salaries = inflation adjusted sum of forest sector salaries + fringe benefits***
- ***Major prolonged curtailment*** **= more than 25% state-wide cumulative total decrease in harvest volume measured or projected over a moving window of ten years relative to percent change in national timber consumption, or in the sum total of real excise tax revenues plus forest sector salaries**
- ***Rural counties*****: TBD**
- ***Non-declining base*** **= no net loss of working forest area or growing stock due to regulatory action**

MEASURING FOREST SECTOR VIABILITY

	VITALITY METRICS	SCALE	SOURCE	CRITERION
1A	**Working forest area (ac)**	State-wide	WA State Parcel Database	Non-declining
1B	**Working forest growing stock (mbf)**	State-wide	WA State Parcel Database	Non-declining
2A	**Harvest volume (mbf/yr)**	State-wide	U. of Montana Bureau of Business & Economic Research	No more than 25% loss in 10-year moving window relative to national consumption trends
2B	**Real forest excise tax revenues + sum total of forest sector salaries & fringe ($/yr)**	Rural counties only	WA Dept. of Revenue Puget Sound Vital Signs	No more than 25% loss in 10-year moving window
CC	**Area-weighted Average Net Present Value ($/ac)***	State-wide	Third-Party Consultant (e.g., U. of WA)	Must be positive

CC: AREA-WEIGHTED AVERAGE NET PRESENT VALUE

- Random stratified spatial sampling in each ownership class
- Use WA State Parcel Database
- Cash-flow analyses for each randomly selected ownership
- Divide the weighted sum of NPVs with the total area of selected ownerships

CONCLUSIONS

Image by Google Gemini

- Finding a definition for industry viability is not trivial
- Any definition ought to (1) adhere to the legal frame, and (2) it has to be measurable, and (3) projectable
- A standard measurement protocol must be established
- This presentation should be viewed as a starting point