

# Mark Robinowitz

## Road Scholar

### PeakTraffic.org

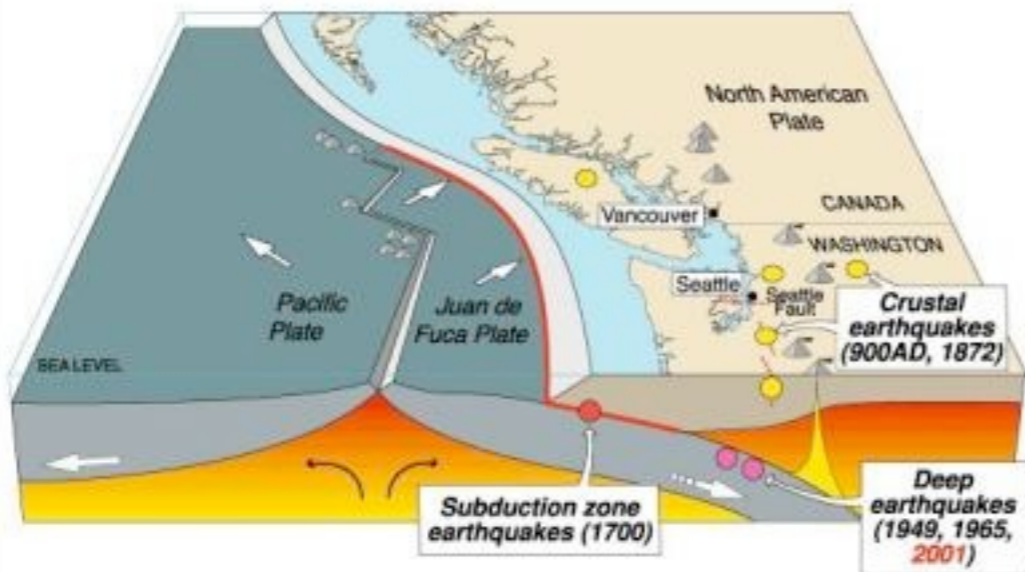


# CRC Peak Traffic Alternative

[www.PeakTraffic.org/columbia-river-crossing.html](http://www.PeakTraffic.org/columbia-river-crossing.html)

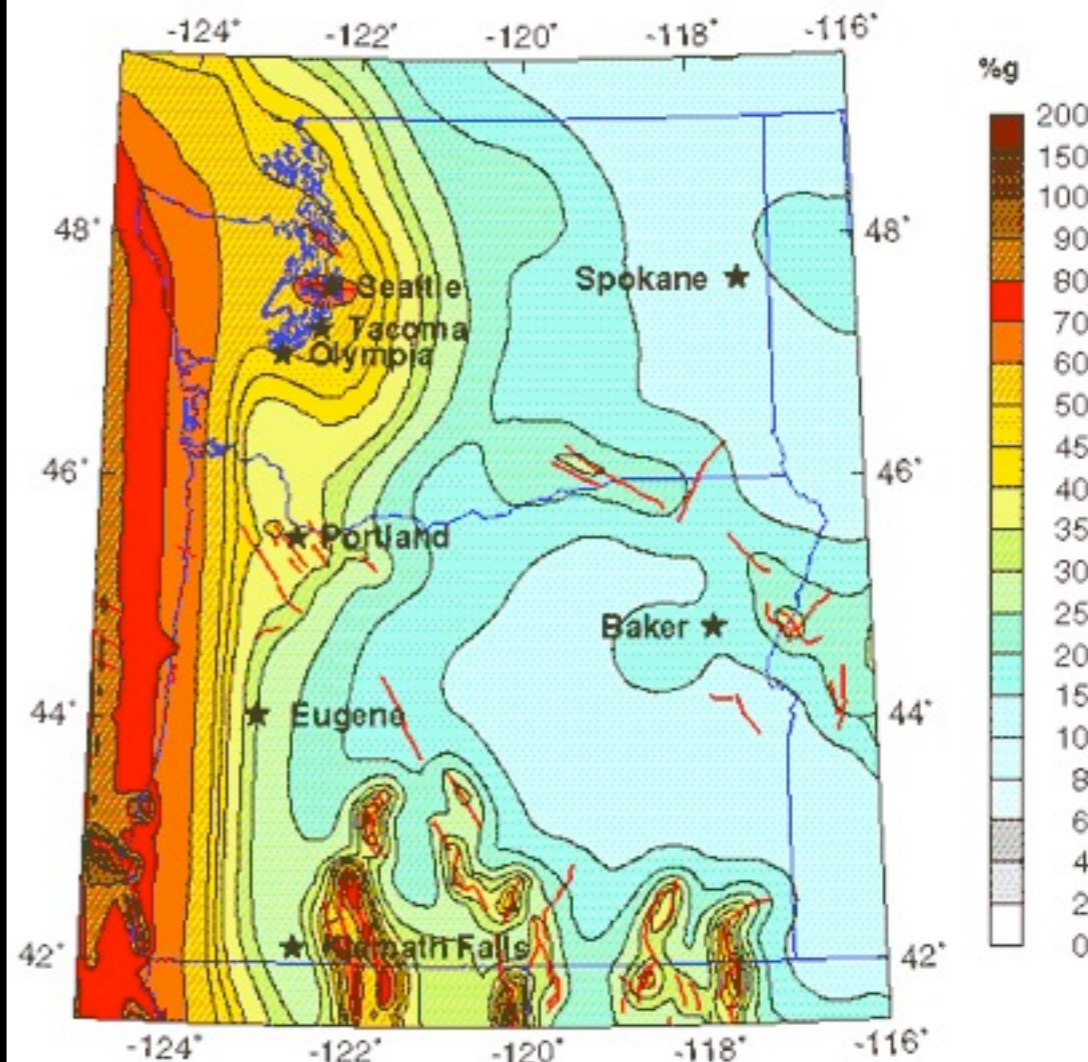


### Cascadia earthquake sources



Source	Affected area	Max. Size	Recurrence
● Subduction Zone	W.WA, OR, CA	M 9	500-600 yr
● Deep Juan de Fuca plate	W.WA, OR,	M 7+	30-50 yr
● Crustal faults	WA, OR, CA	M 7+	Hundreds of yr?

### Peak Ground Acceleration (%g) 2% Probability of Exceedance in 50 years Reference Site Material - 760 m/sec shear wave velocity



U.S. Geological Survey  
National Seismic Hazard Mapping Project

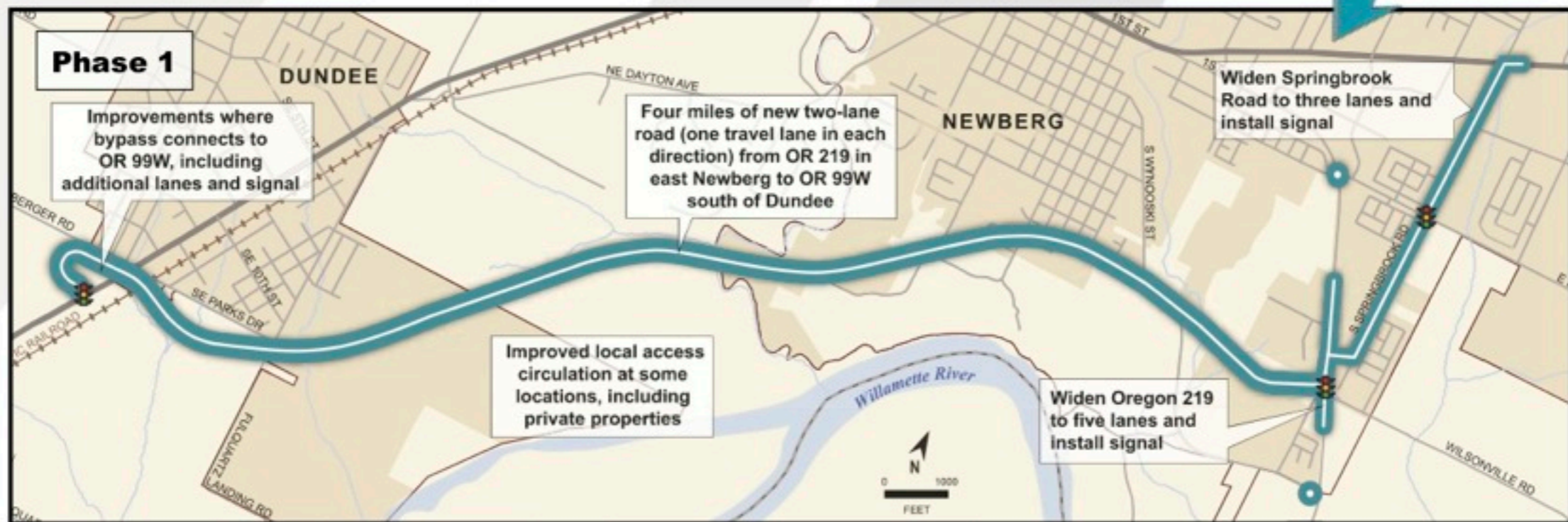
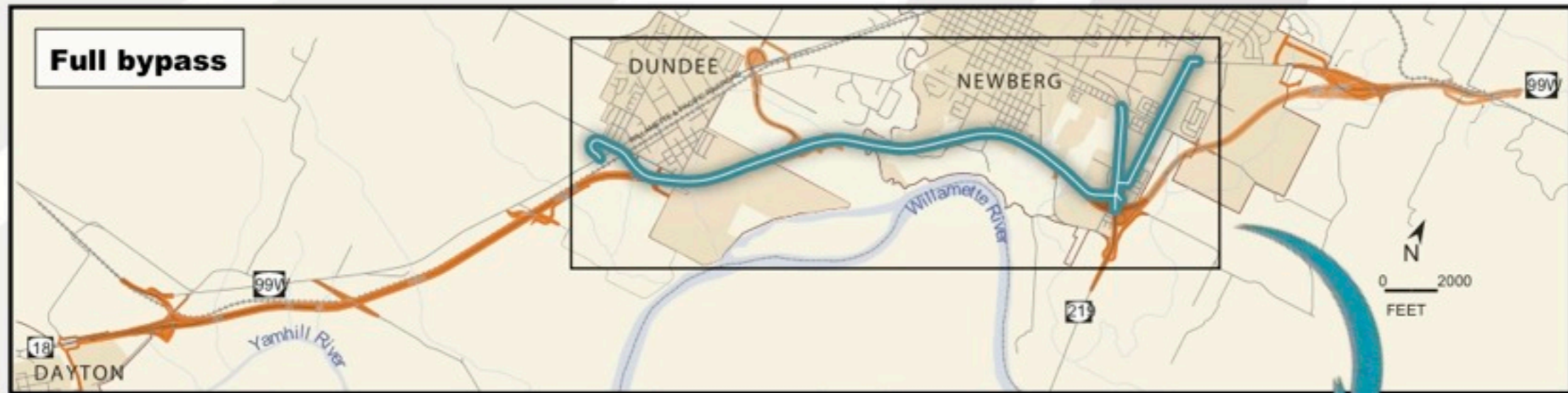
# CRC 16 lanes Washington side



- New Bridge
- Roadway Improvements
- New Transit Alignment
- Sidewalks
- Parks
- Stormwater Facilities
- Planter Strip

# Newberg Dundee Bypass through farmland only partly funded, full project to be built “later”

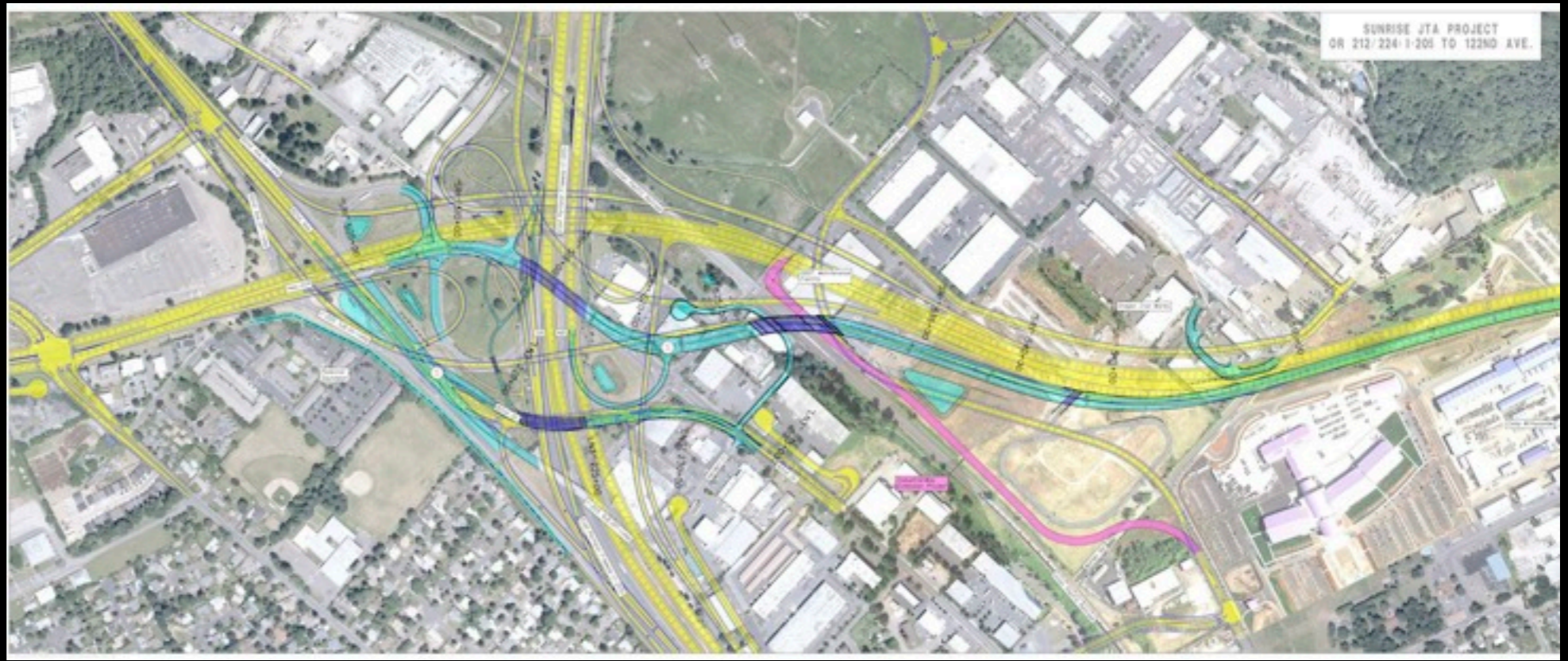
## Phase 1 will open in 2016



# Sunrise Freeway Clackamas County

## \$1 billion + plan, only \$100 million to be built?

**yellow  
approved  
by FHWA**



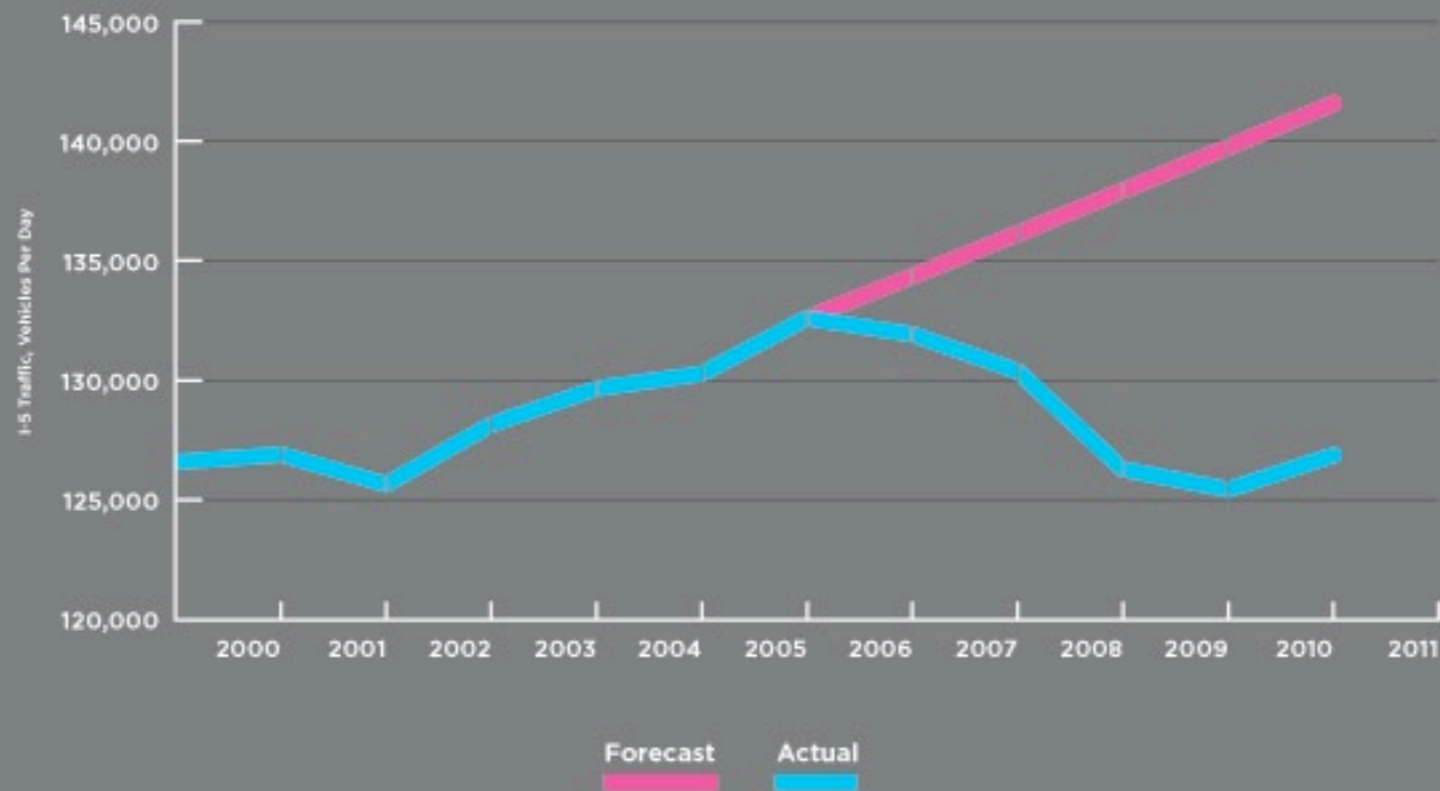
**blue to be  
built by  
ODOT**



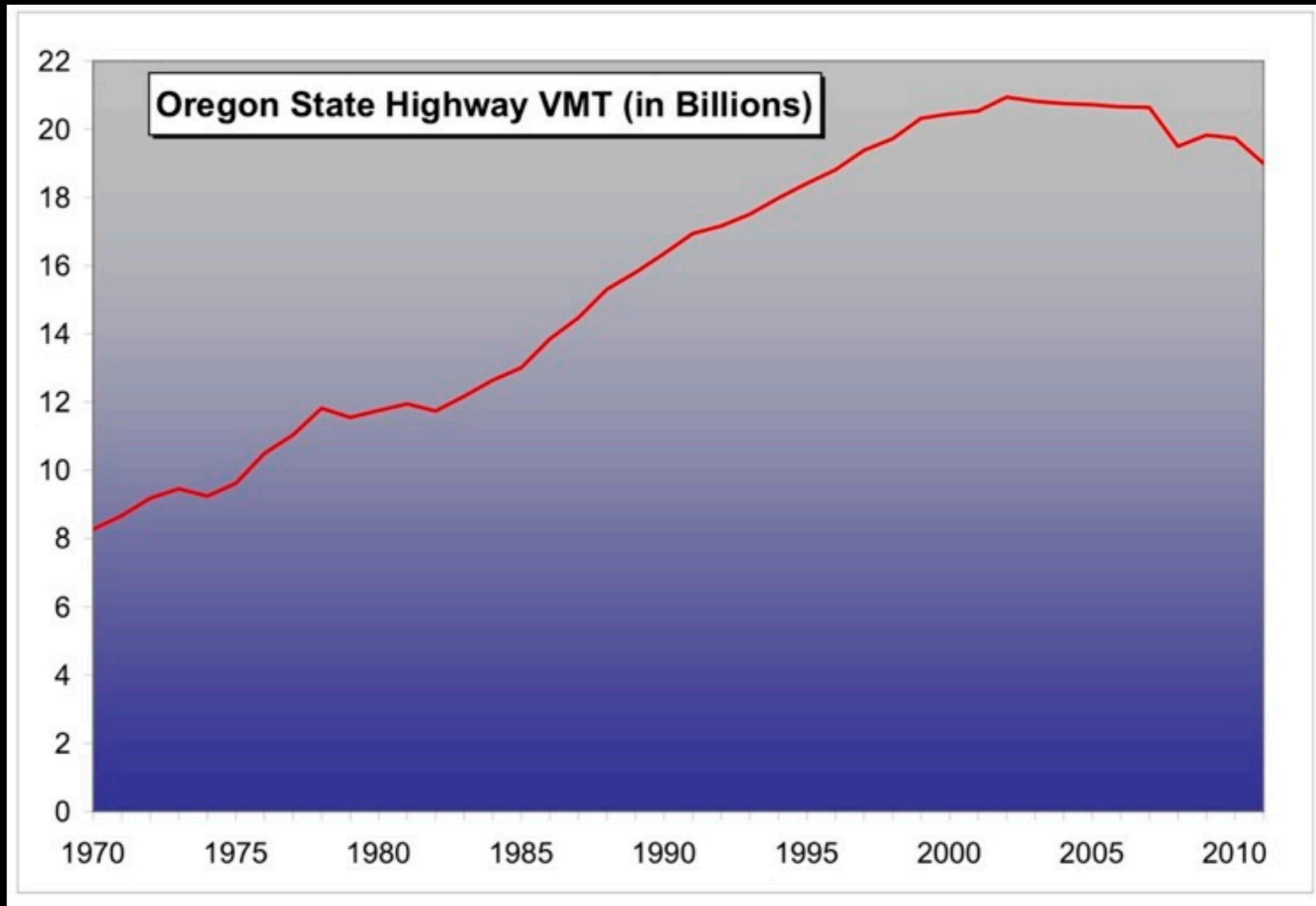
# CRC traffic peaked in 2005

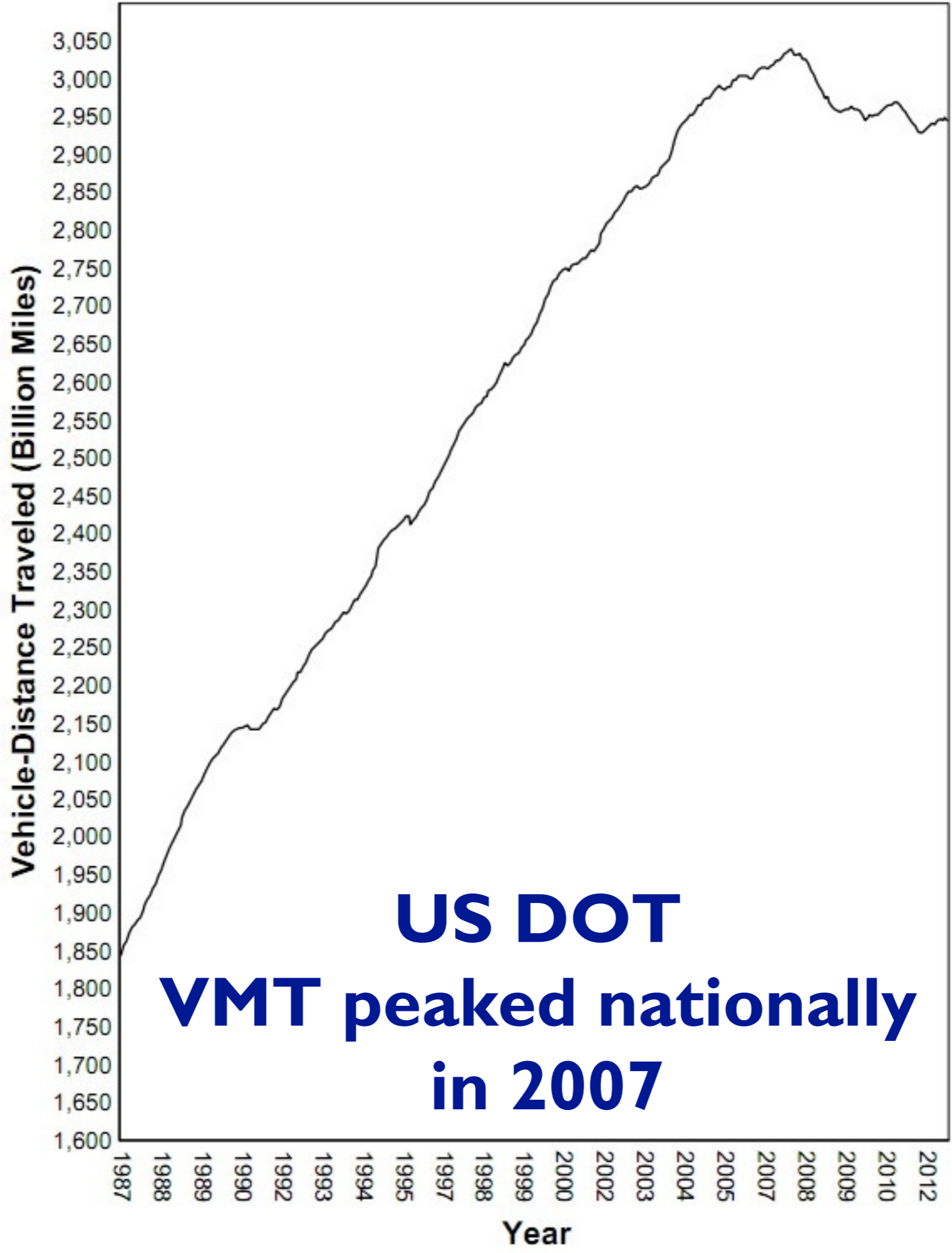
## CRC FORECAST VS. ACTUAL TRAFFIC

Behind schedule: Actual daily crossing of the I-5 bridge between Portland and Vancouver (lower line) have lagged far behind the projections upon which the project is based.



# ODOT: Oregon traffic peaked 2002

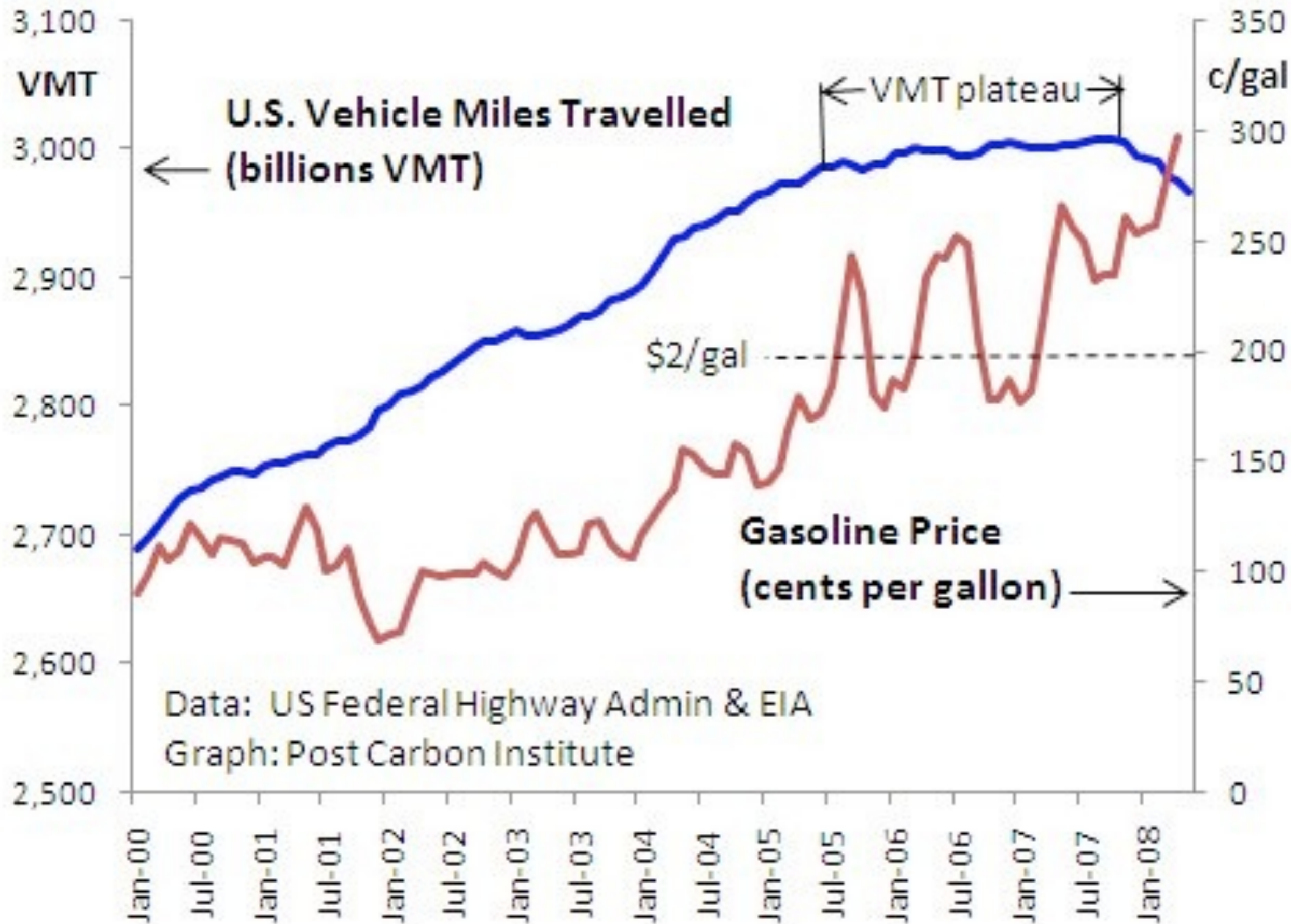




**US DOT**  
**VMT peaked nationally**  
**in 2007**







# Oregon gets fuel from Puget Sound refineries

refinery: Conoco Phillips - Ferndale

refinery - BP Cherry Point

refinery: Tesoro Anacortes

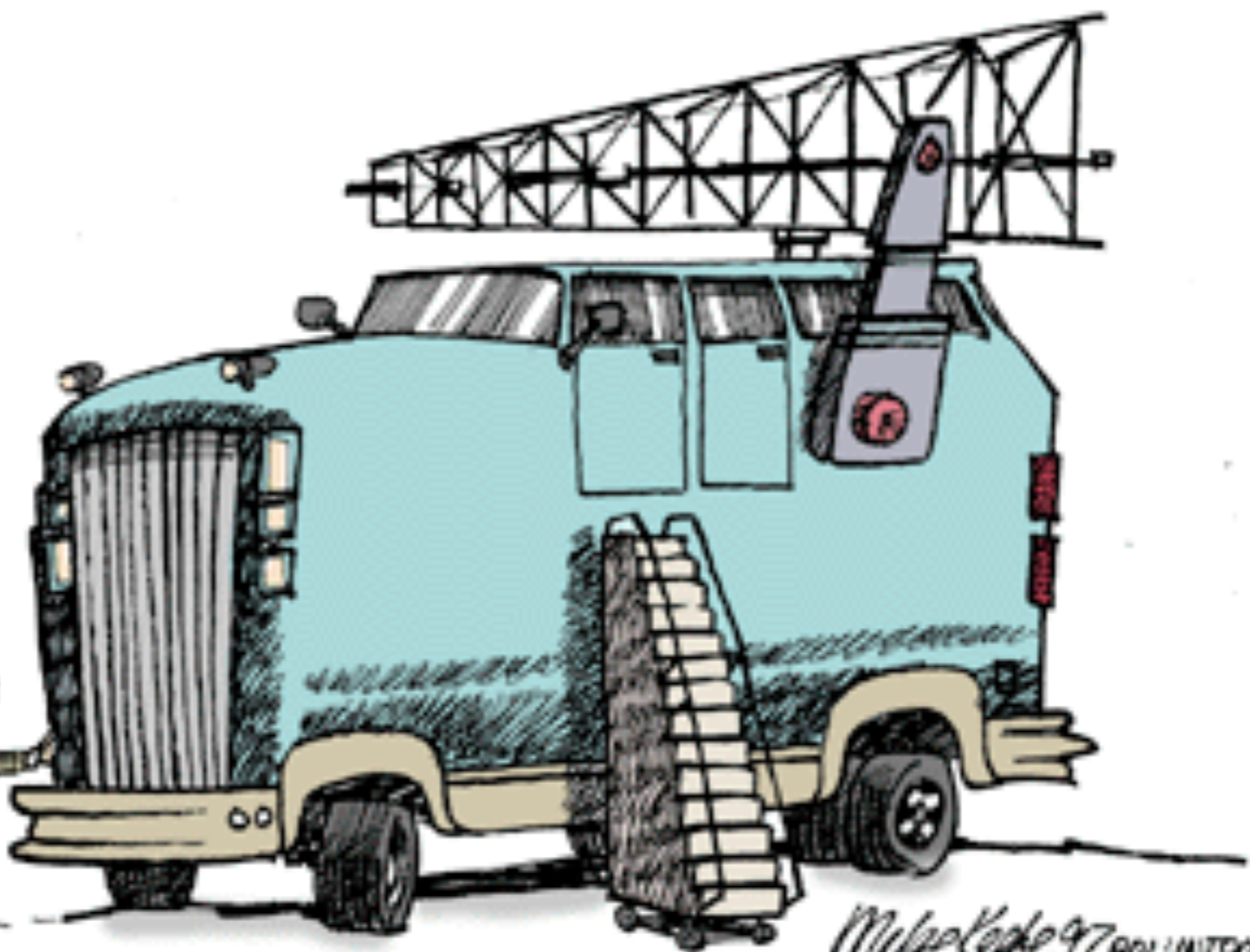
refinery: Shell Anacortes

refinery: US Oil & refining - Tacoma Refinery

Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
© 2012 Cnes, Spot Image  
Image © 2012 TerraMetrics  
© 2012 Google  
Streaming 100%

5.148° N 123.6559° W

NO NEED  
TO WORRY  
ABOUT  
PETROLEUM  
RESERVES...  
OUR LATEST  
SPORT UTILITY  
VEHICLE IS  
EQUIPPED WITH  
ITS OWN  
DRILLING RIG!

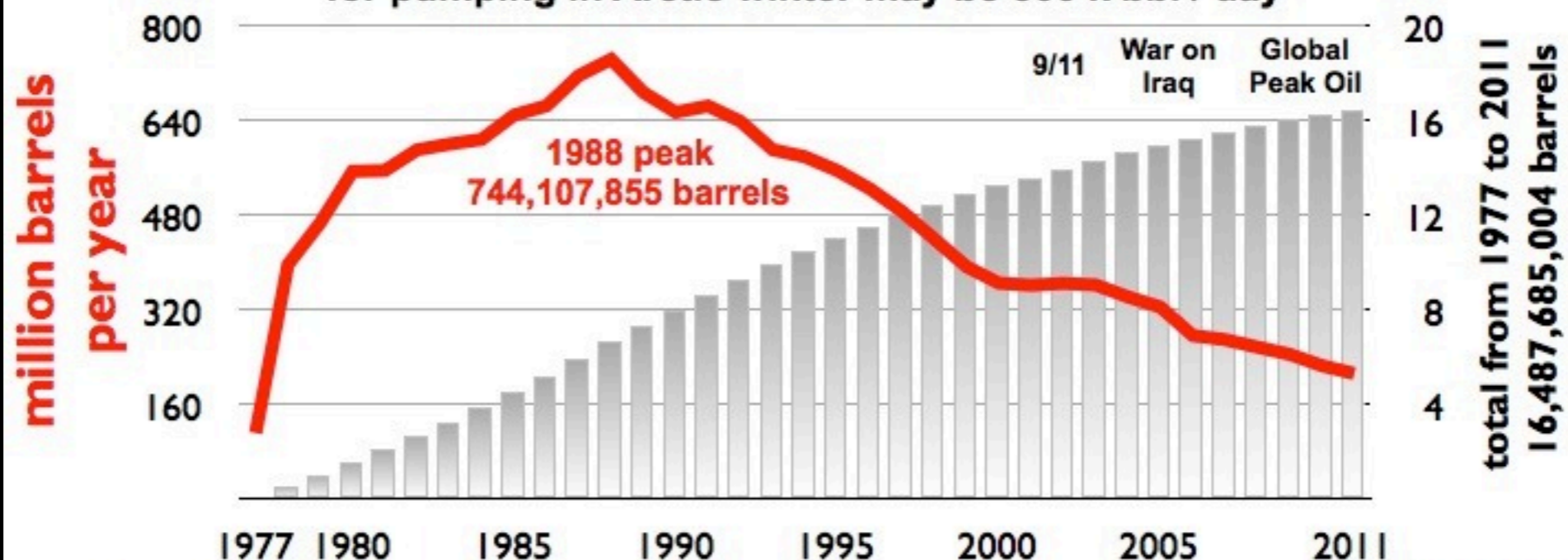


Mike Kedge 97 AOL INTCOM

**Puget Sound refineries get oil from Alaska Pipeline, which has dropped three fourths since 1988 peak. When it drops below “low flow” and can no longer flow in the Arctic winter, what part of the world will give up oil usage so Cascadians can drive and get food deliveries? Oregon does not have any oil - we have the wrong geology for petroleum traps.**

## **ALASKA PIPELINE PEAK & DECLINE**

2011 flow was 582 k barrels / day, low flow threshold for pumping in Arctic winter may be 500 k bbl / day



posted at [www.oilempire.us/alaska.html](http://www.oilempire.us/alaska.html)

data source: [www.alyeska-pipe.com/TAPS/PipelineOperations/Throughput](http://www.alyeska-pipe.com/TAPS/PipelineOperations/Throughput)

**Year 2011**  
**212,756,479 barrels**

# US Oil Extraction

Figure 29: Oil production in the USA

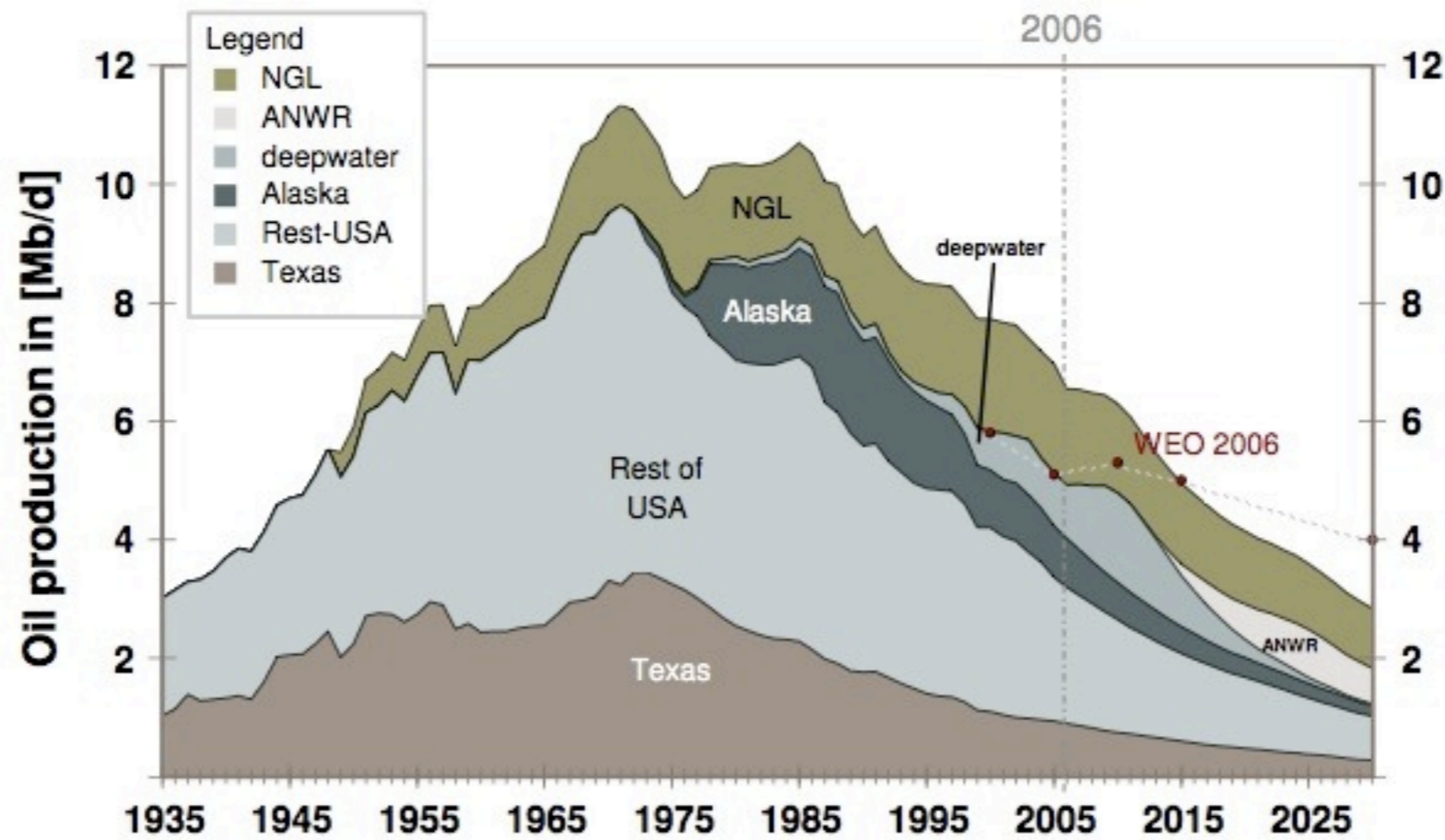
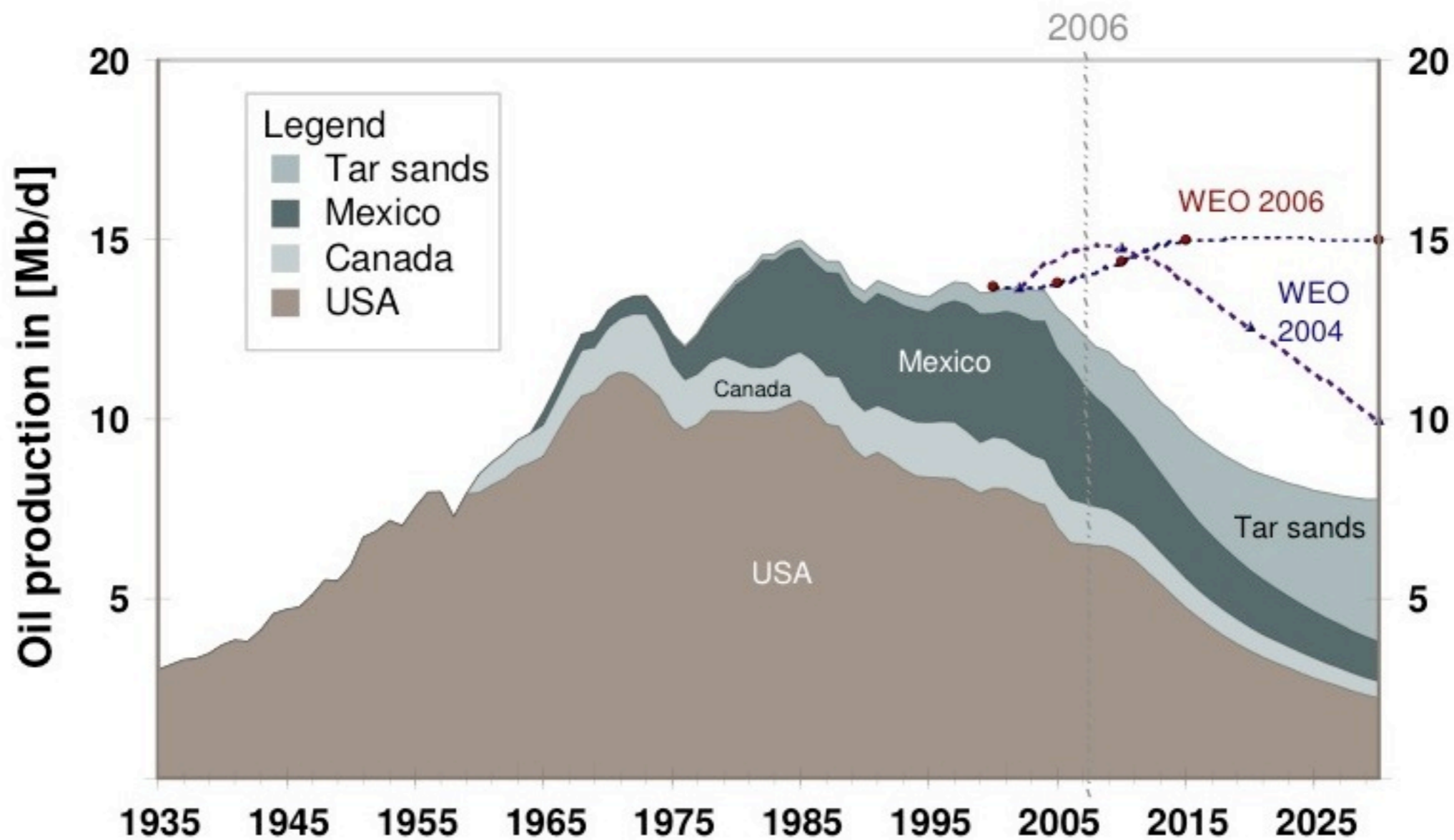
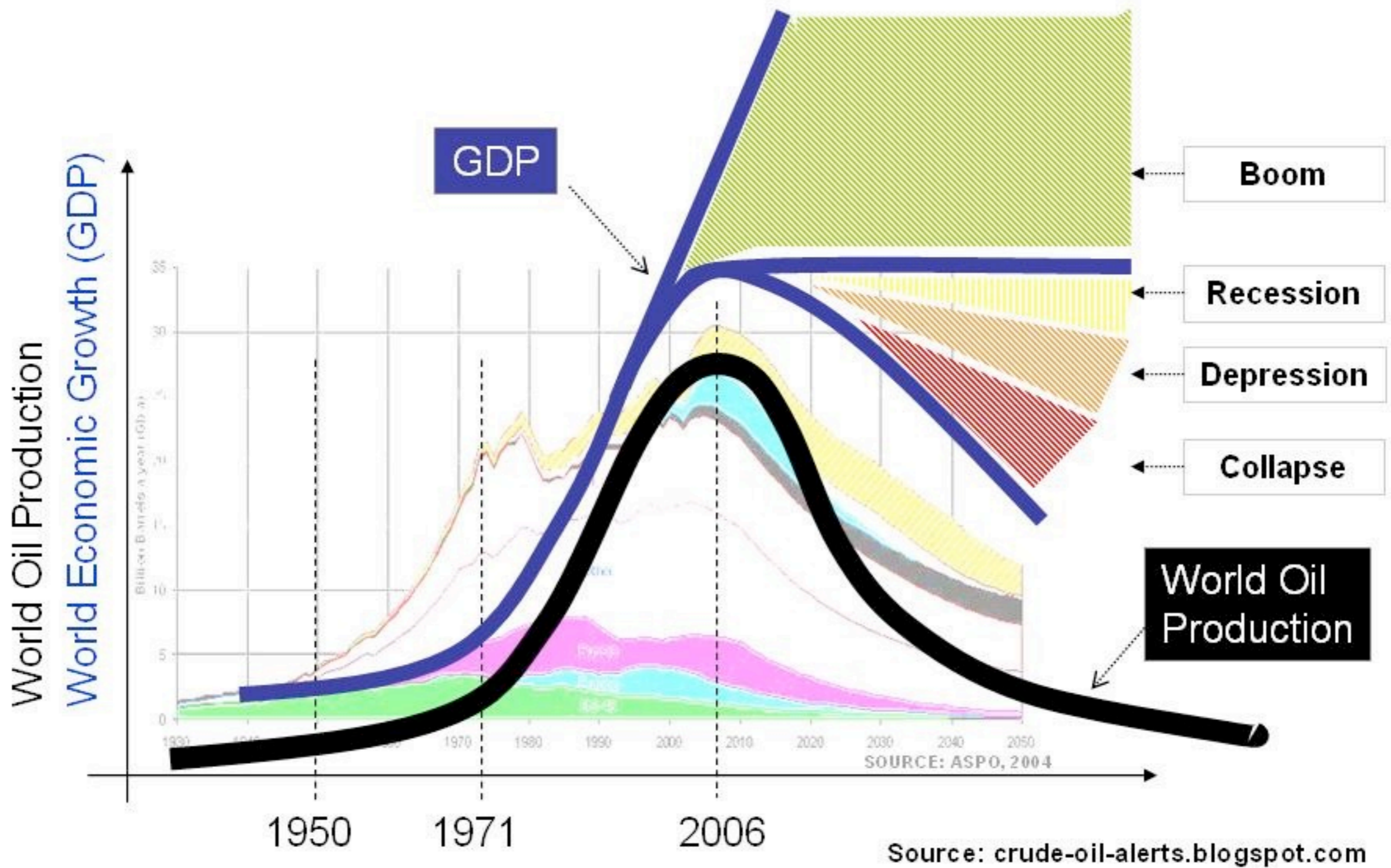


Figure 28: Oil production in OECD North America



# World Crude Oil Production and Gross Domestic Product are interrelated



**Oil Production and Economic Growth are directly related.**



# the endless growth economy versus a finite planet



**choose one**