

Mark Robinowitz

Road Scholar

PeakTraffic.org

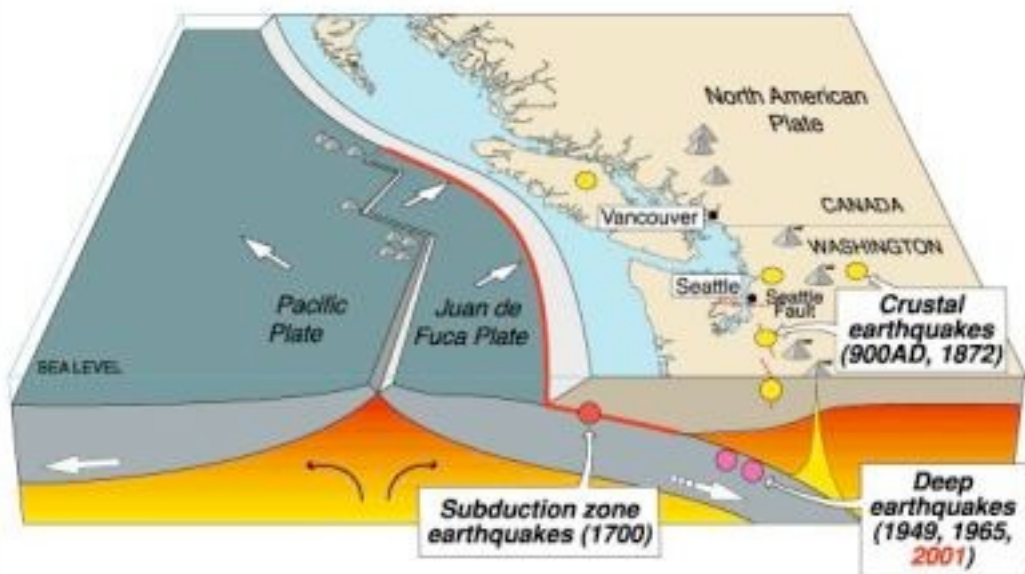


CRC Peak Traffic Alternative

www.PeakTraffic.org/columbia-river-crossing.html

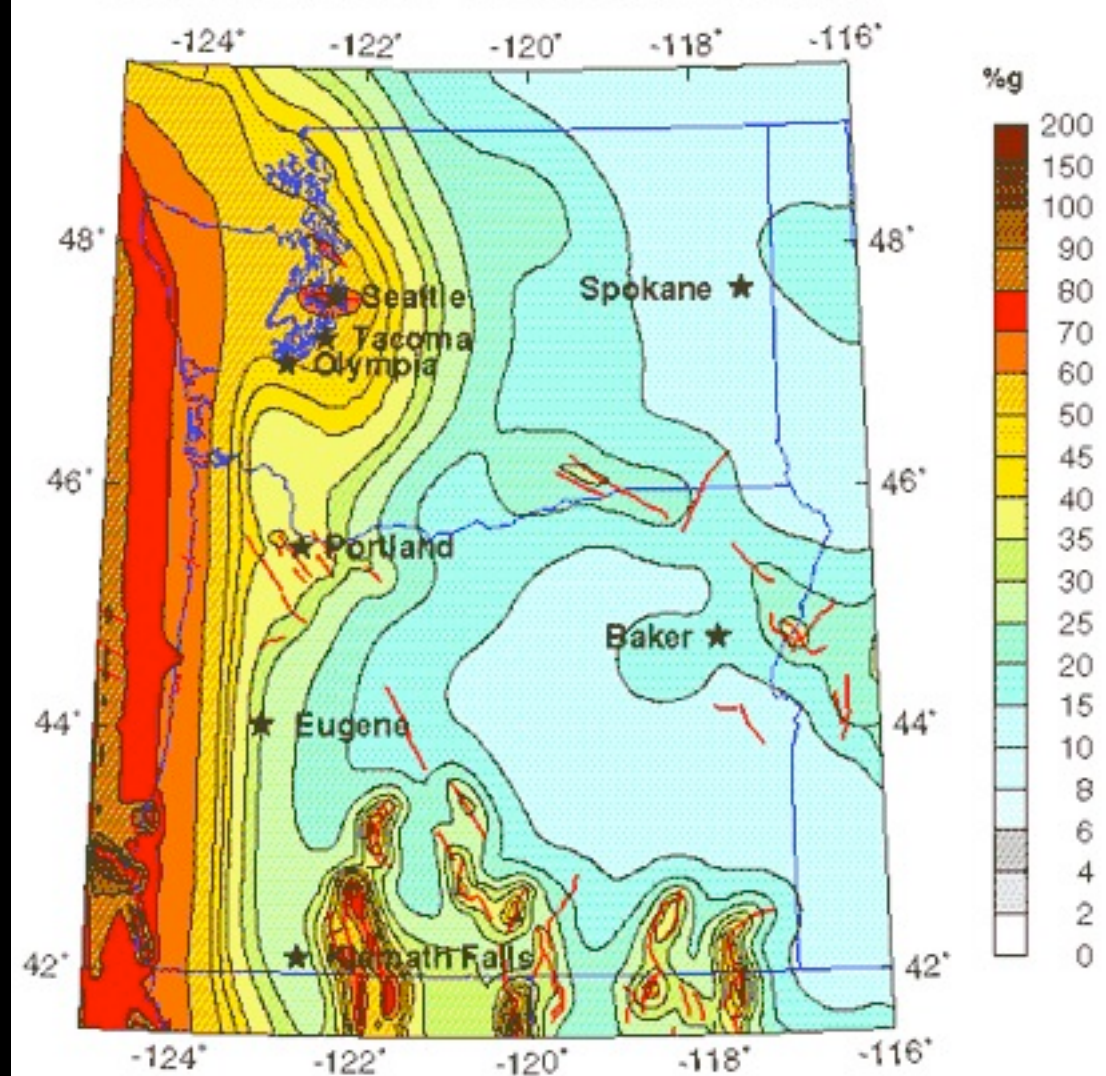


Cascadia earthquake sources



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



Vancouver
SHINGTON

Southbound
Collector-Distributor
Lane

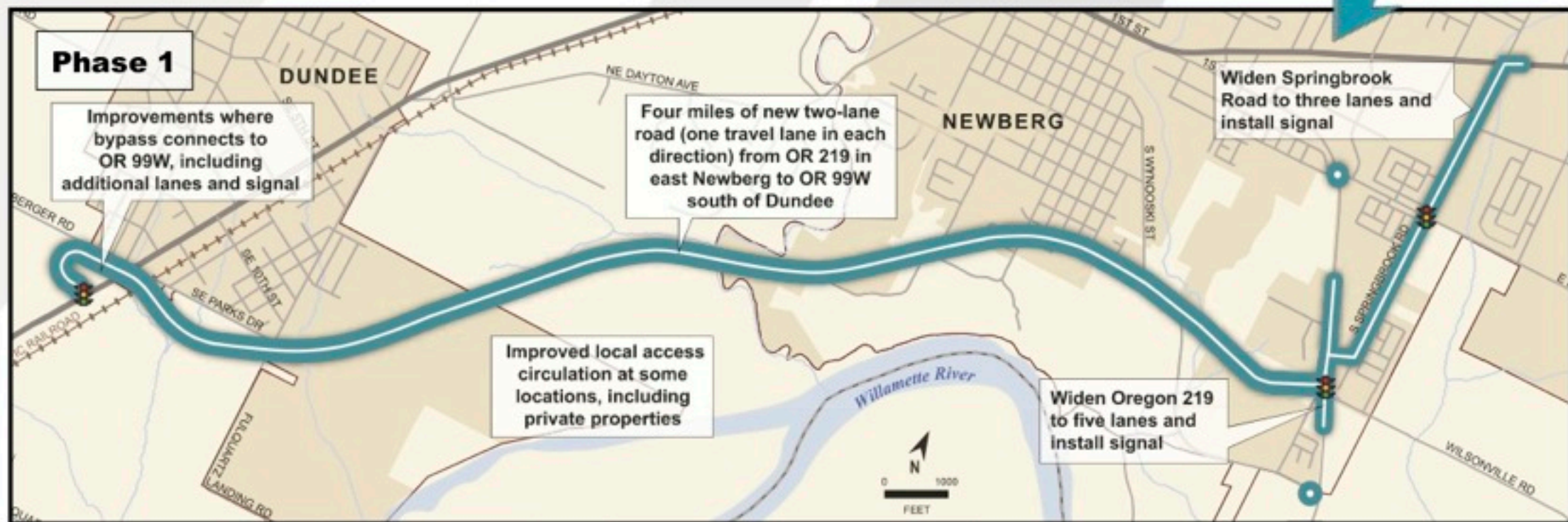
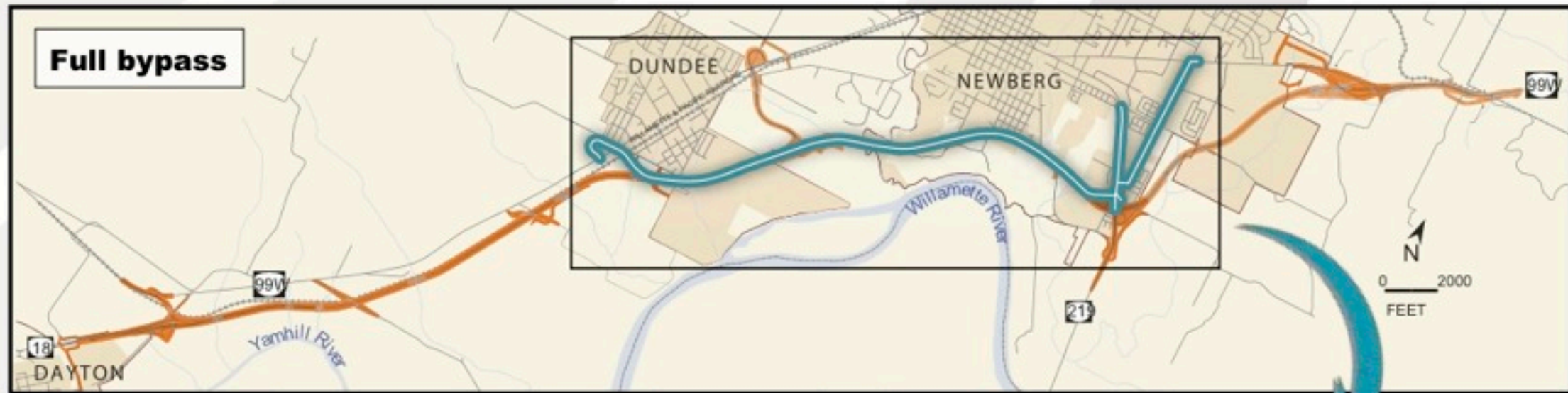
Evergreen Blvd

Northbound
Collector-Distributor Lane

- 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”

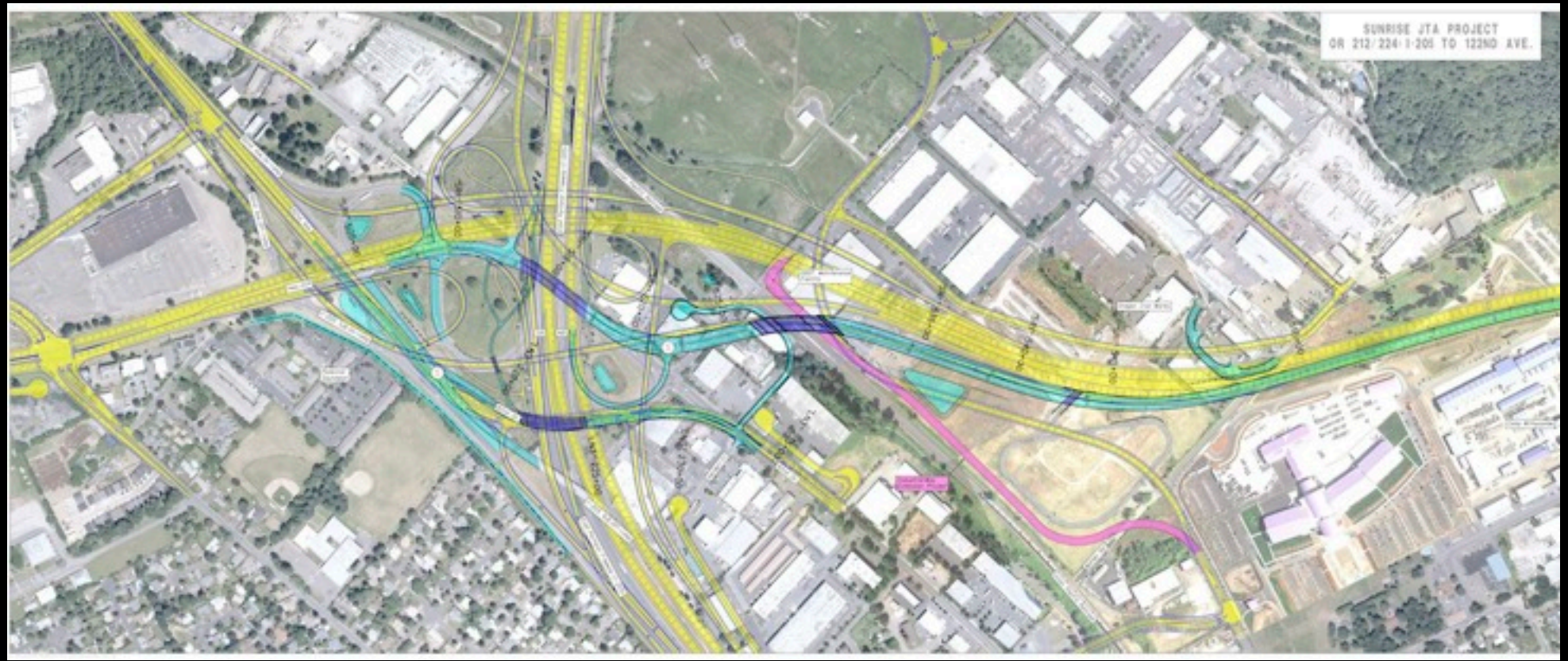
Phase 1 will open in 2016



Sunrise Freeway Clackamas County

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

**yellow
approved
by FHWA**



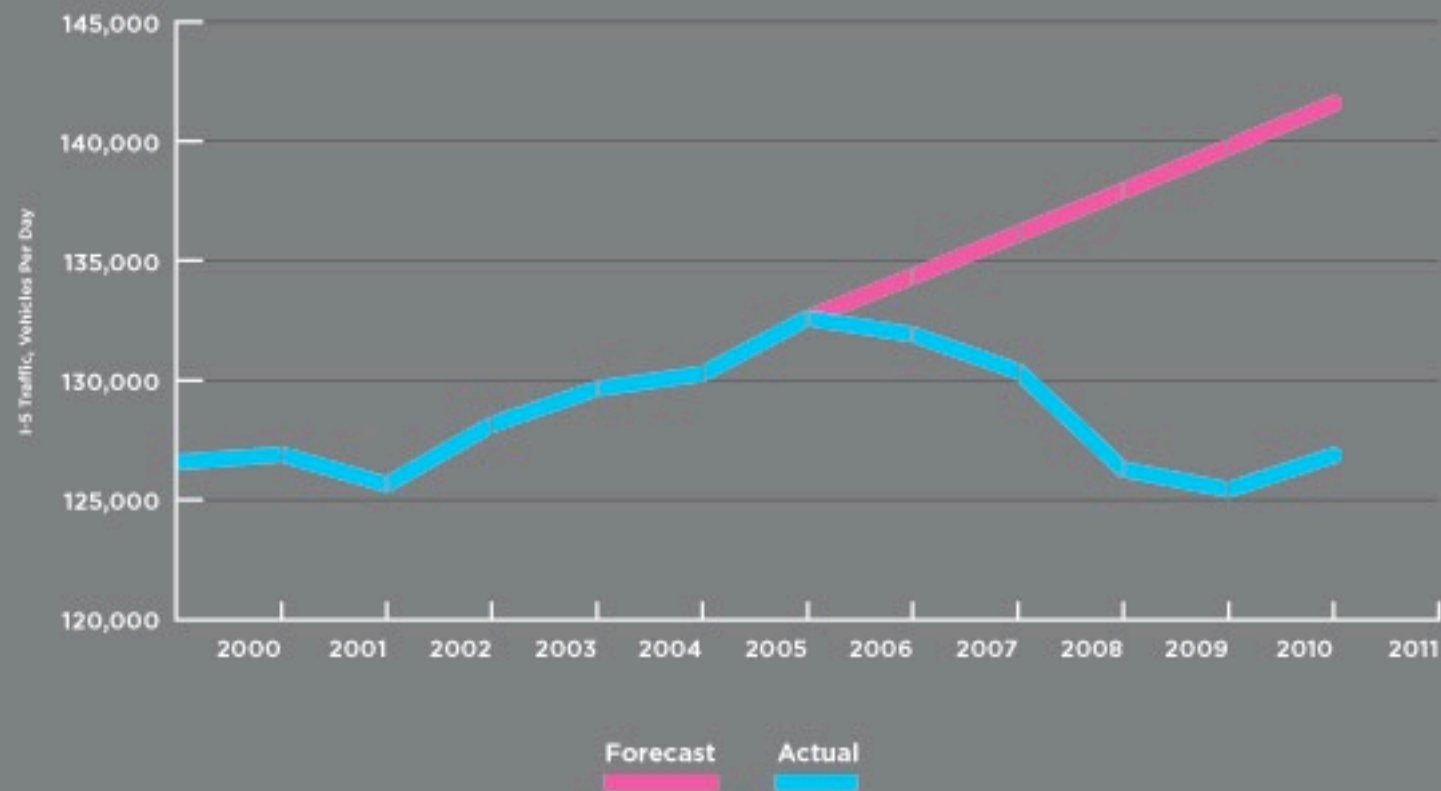
**blue to be
built by
ODOT**



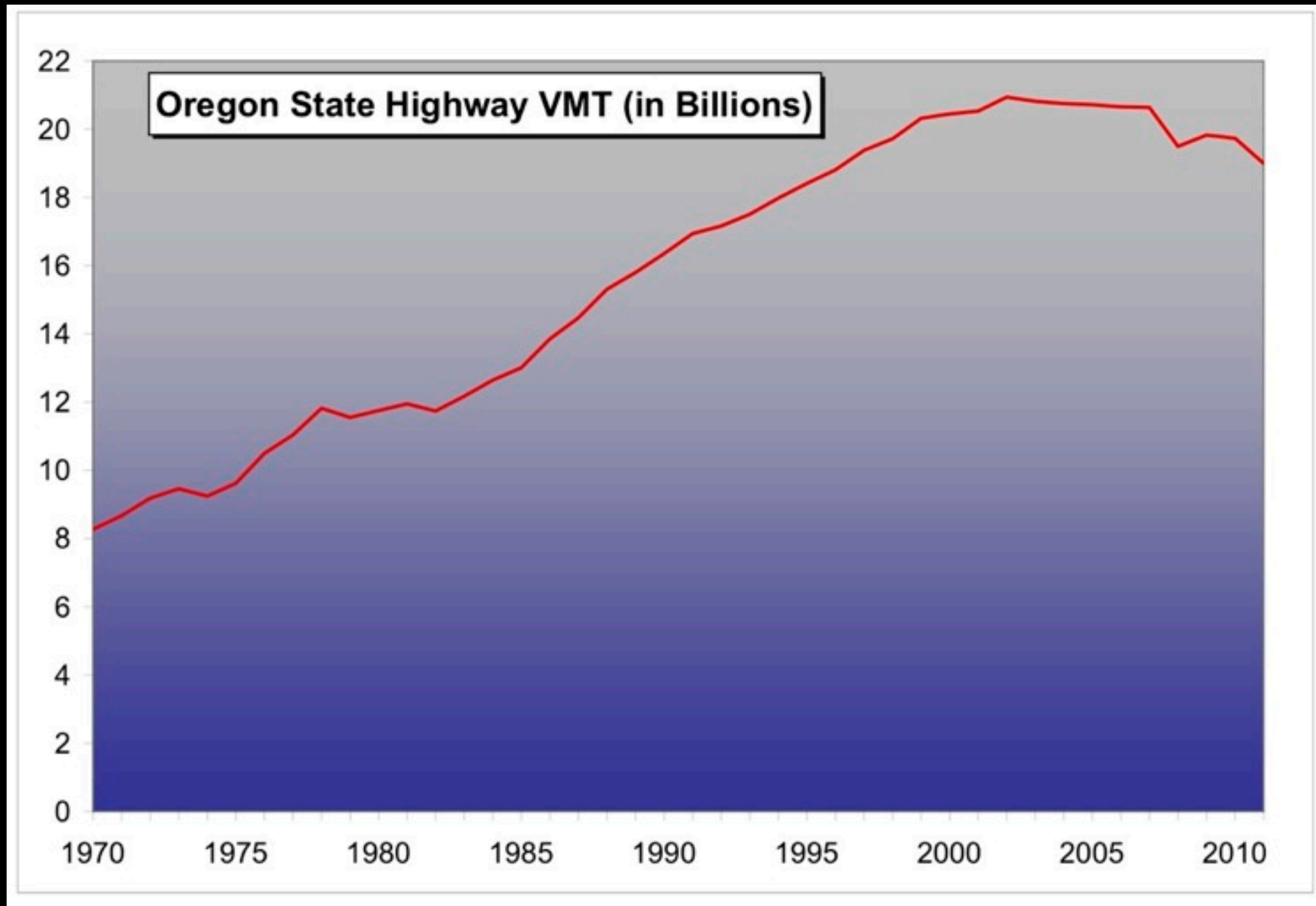
CRC traffic peaked in 2005

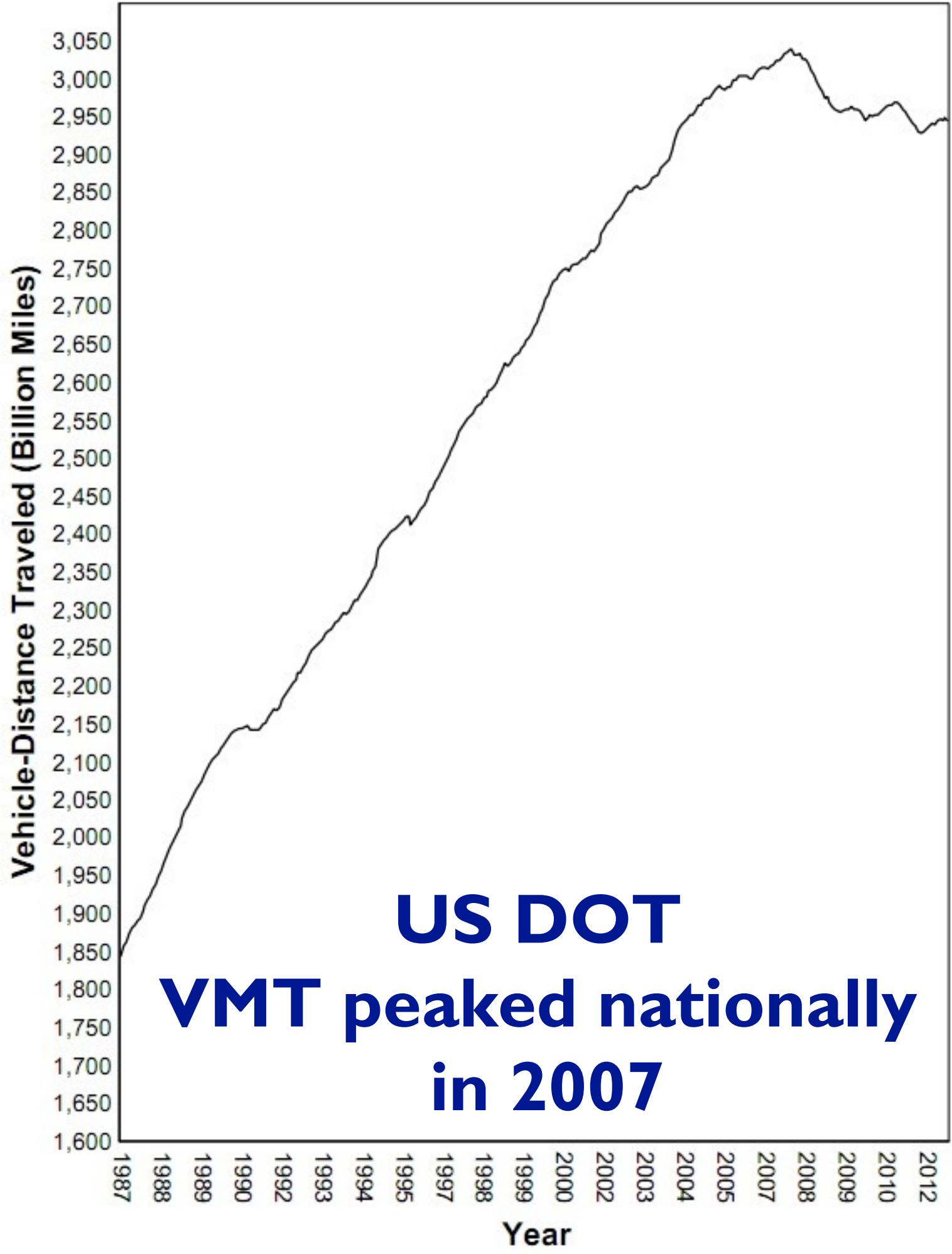
CRC FORECAST VS. ACTUAL TRAFFIC

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.



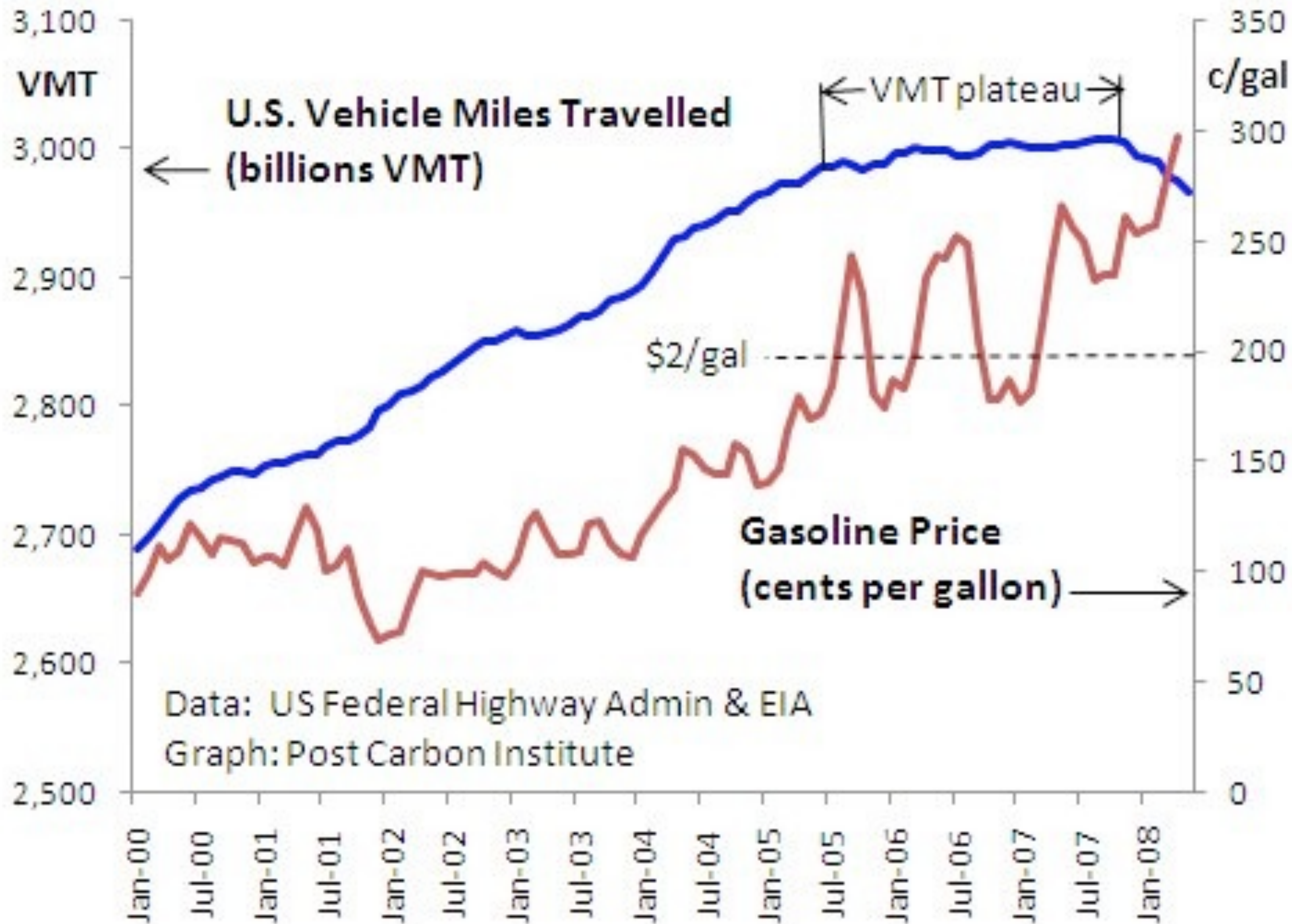
ODOT: Oregon traffic peaked 2002





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

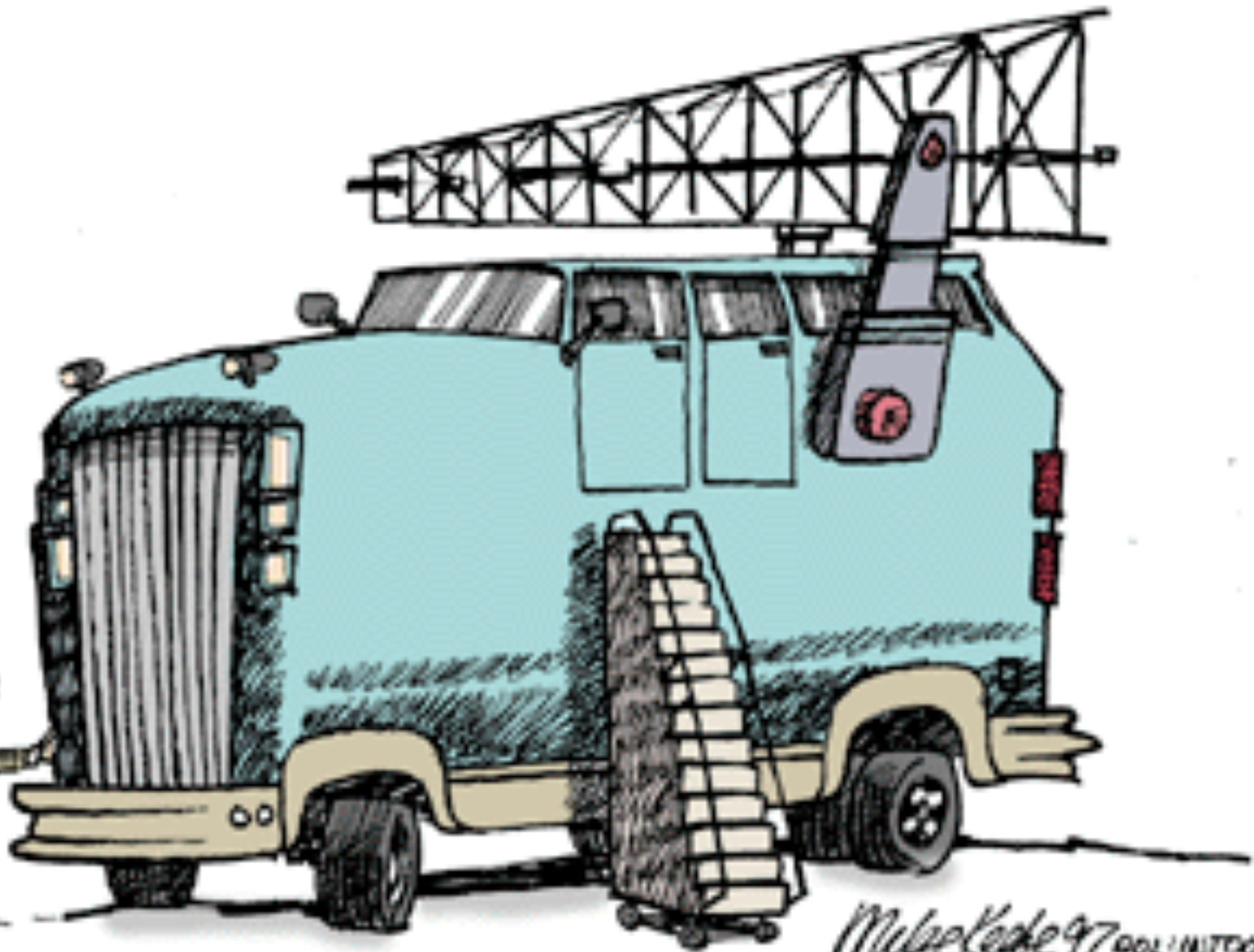
refinery: Shell Anacortes

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!

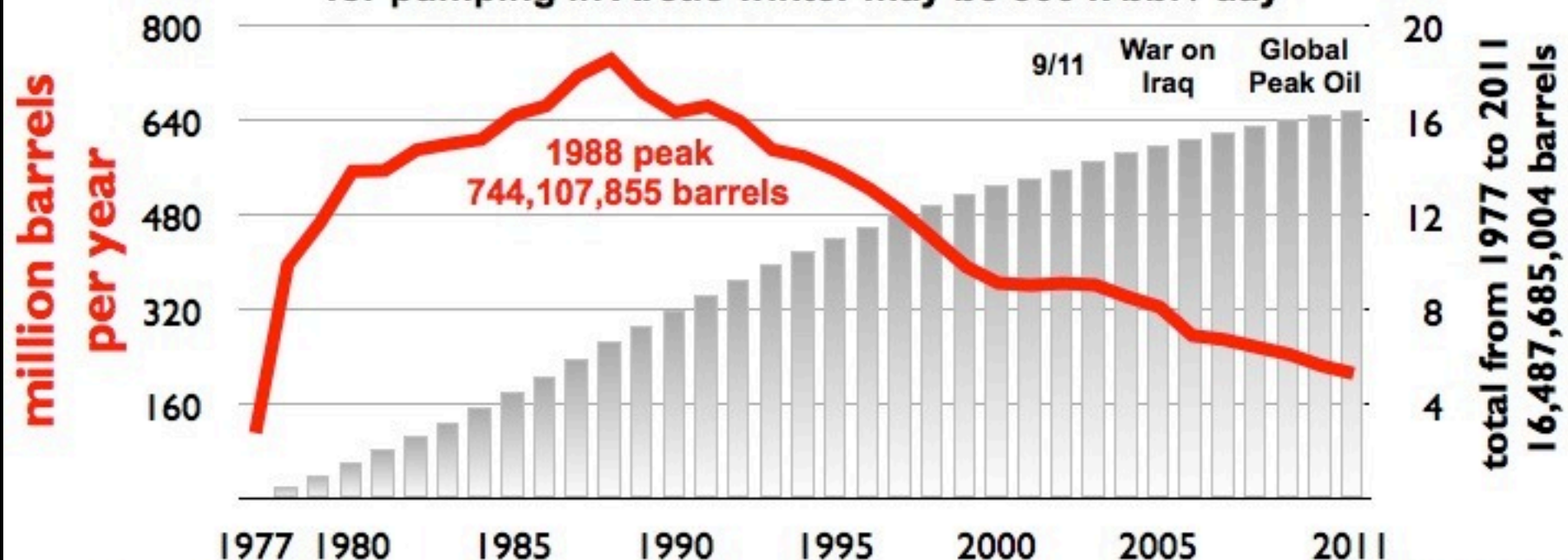


Mike Kedge 97 902 1111000

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

data source: www.alyeska-pipe.com/TAPS/PipelineOperations/Throughput

Year 2011
212,756,479 barrels

US Oil Extraction

Figure 29: Oil production in the USA

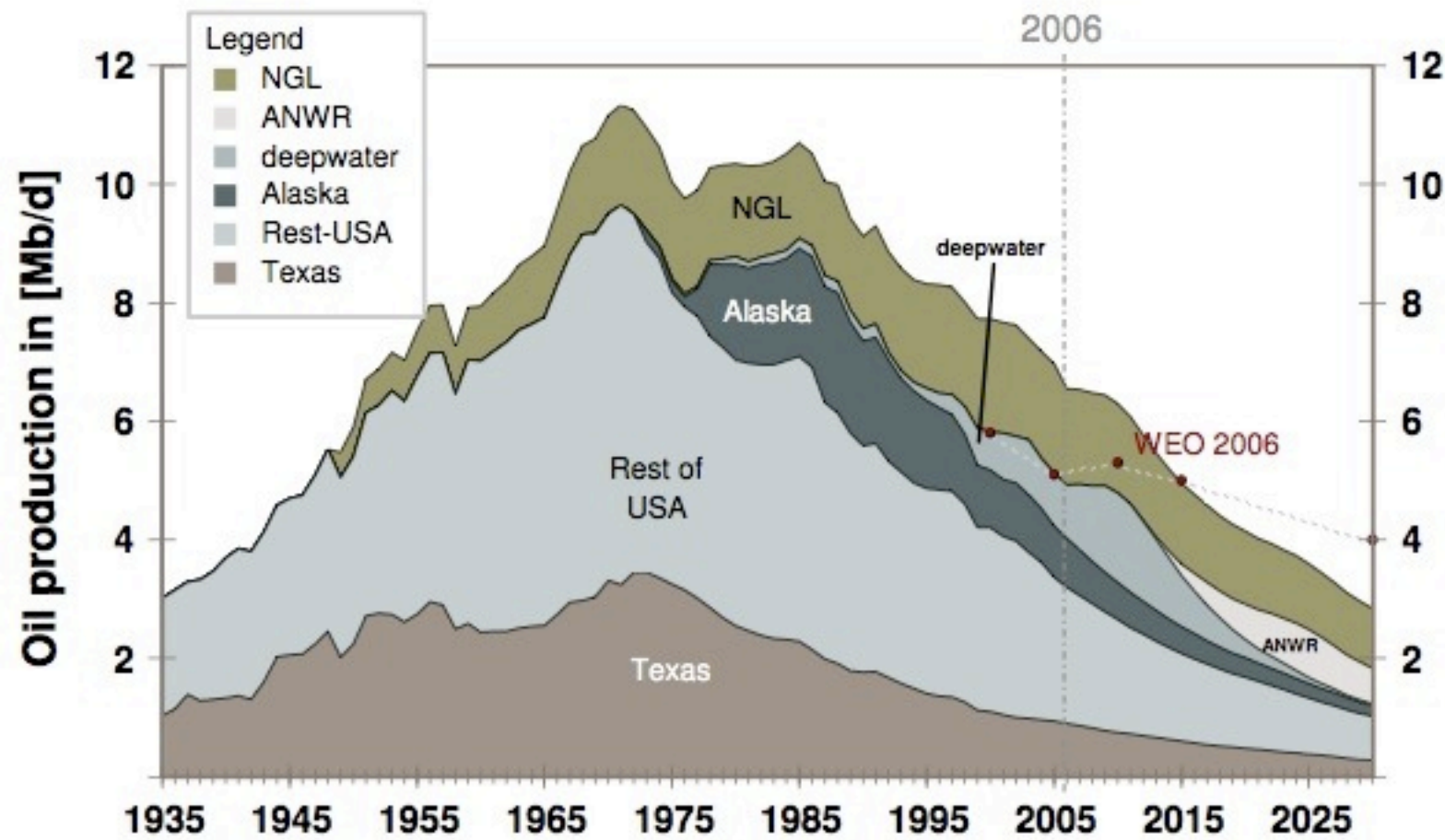
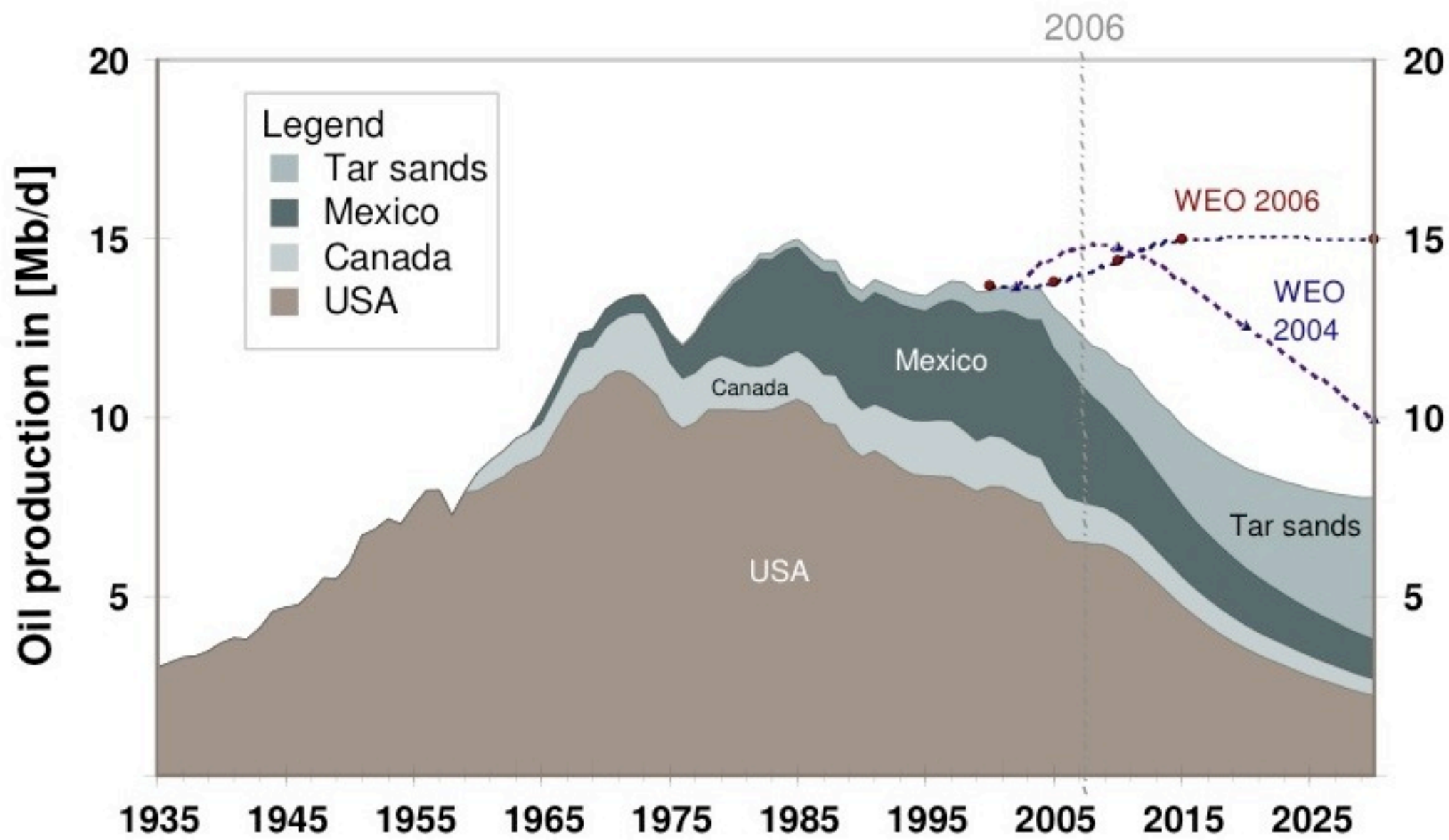
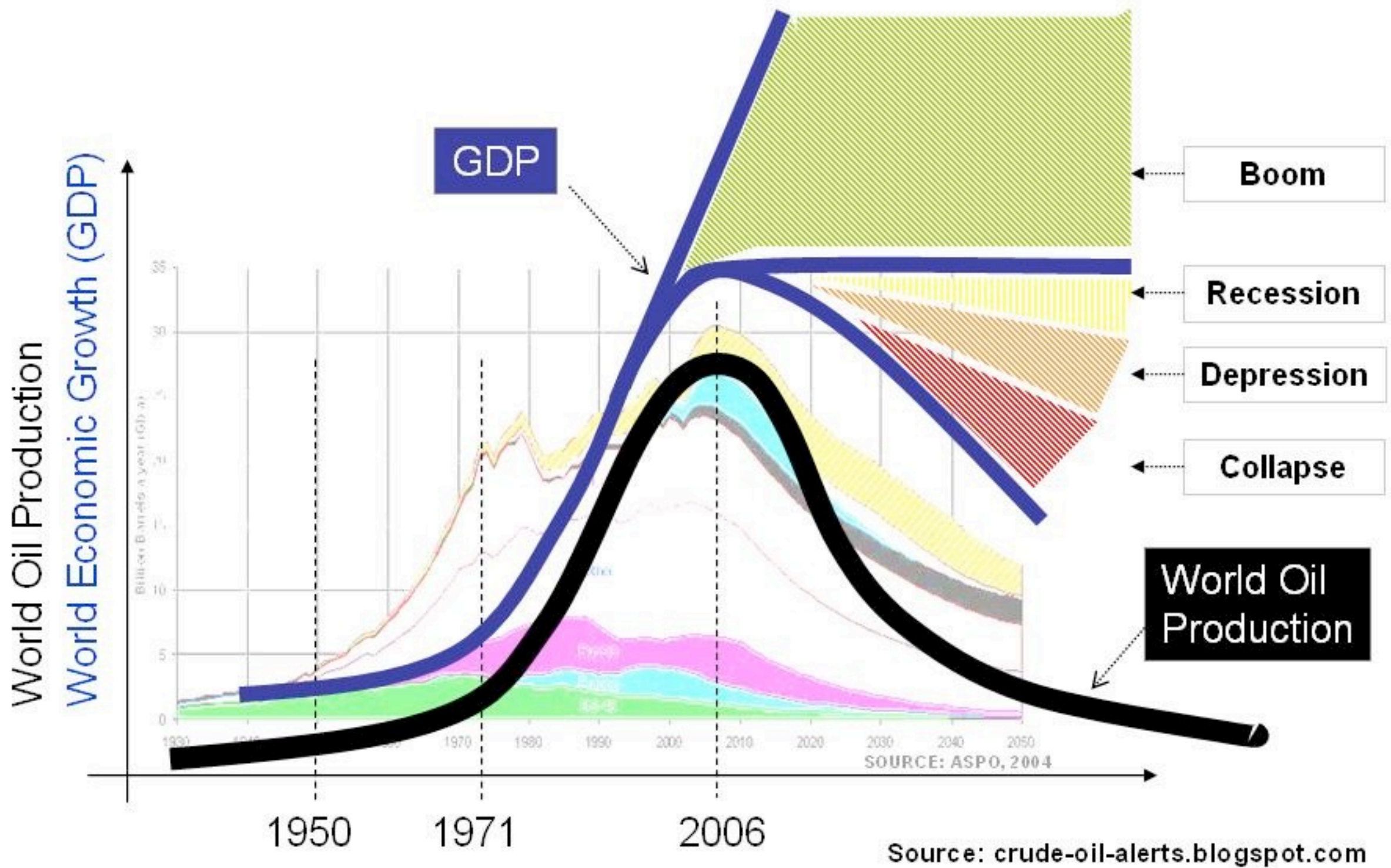


Figure 28: Oil production in OECD North America



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