

Peak Traffic and Transportation Triage
by Mark Robinowitz
a road scholar



Troubled Bridges Over Water
Time for Transportation Triage
Federal law requires 20 year plans
Highway plans ignore Peak Traffic



PEAKTRAFFIC.org

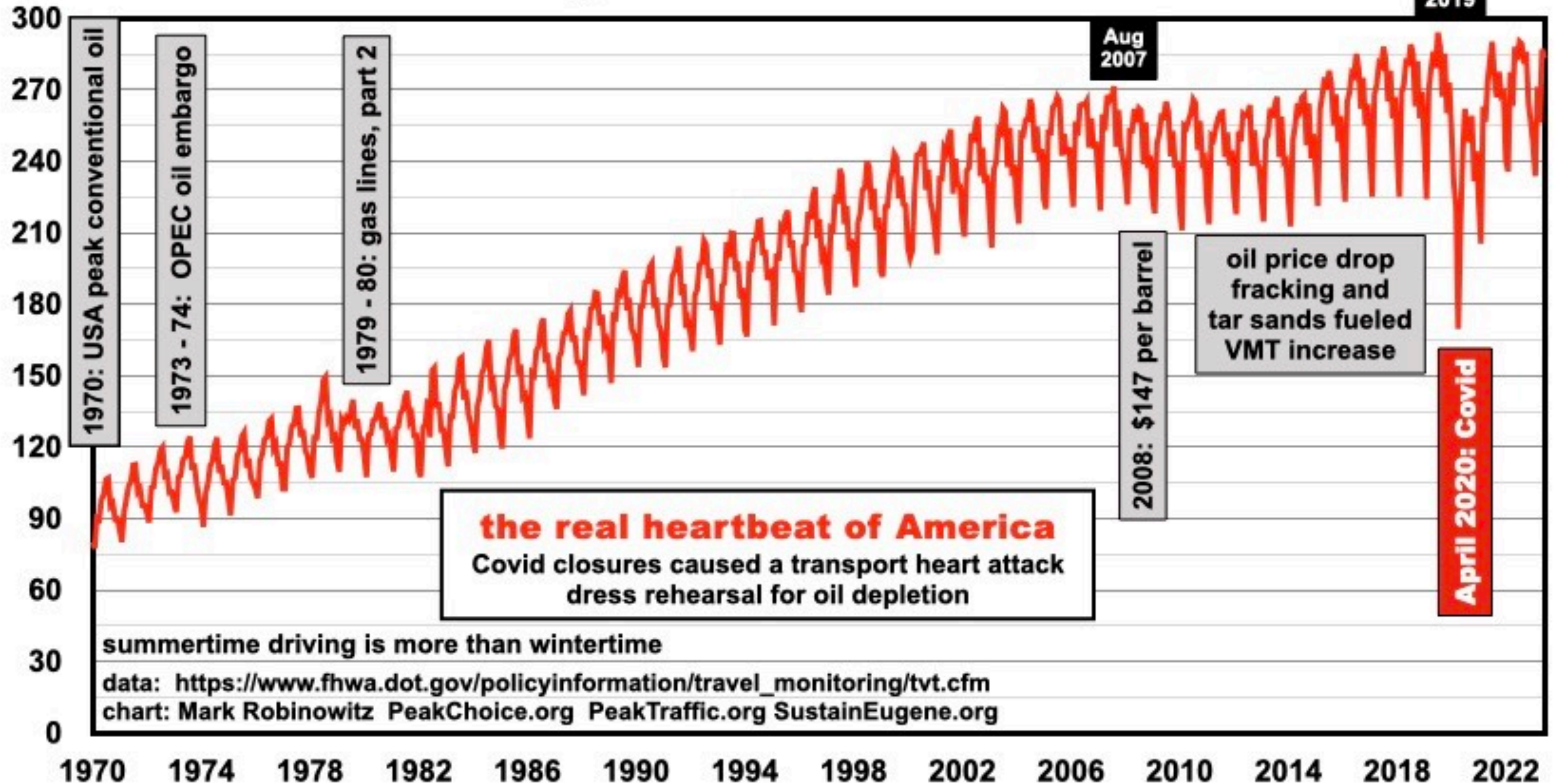
a legal strategy to cancel trillion dollar highway plans and prepare for post peak travel



USA Vehicle Miles Traveled

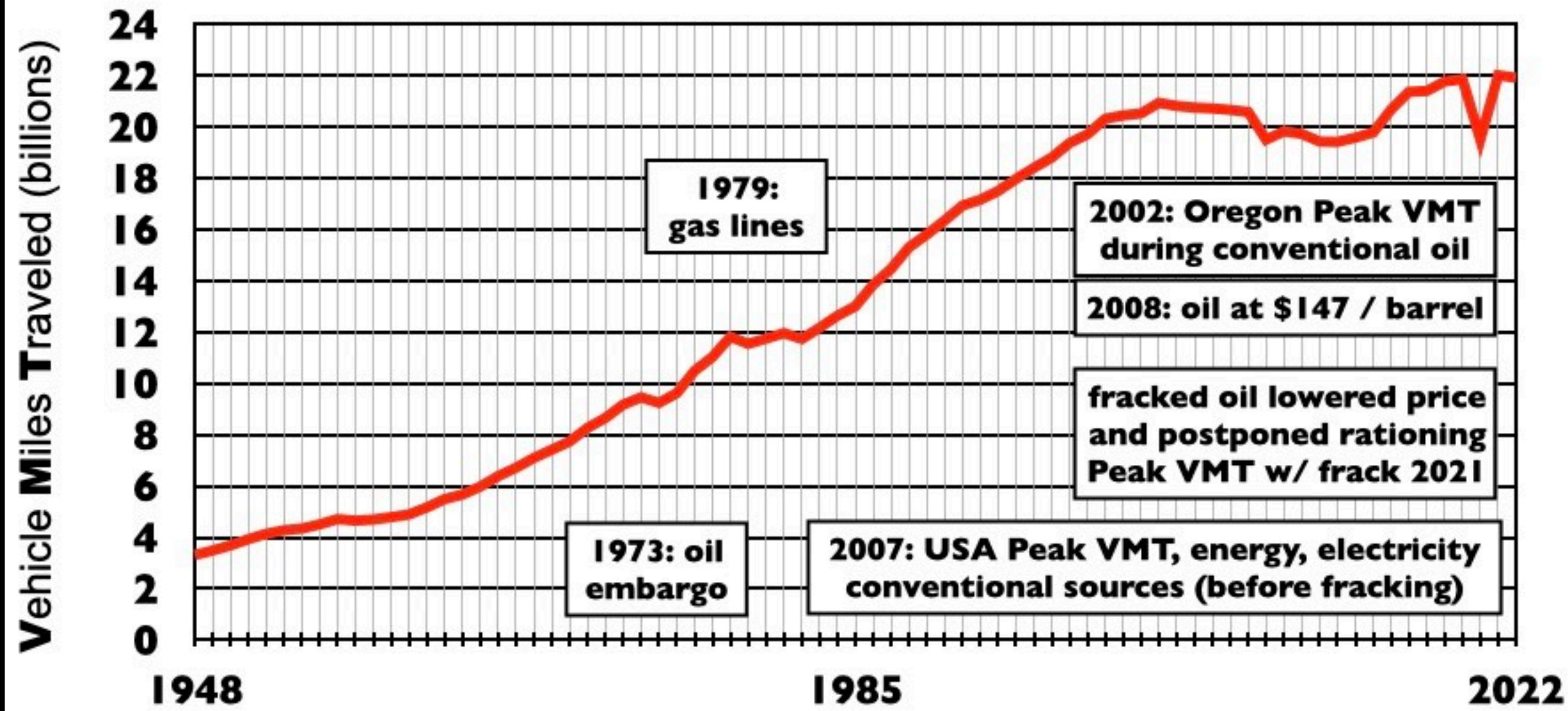
January 1970 — June 2023

billions of miles per month



Oregon Vehicle Miles Traveled: State highways

data source: www.oregon.gov/ODOT/Data/Pages/Traffic-Counting.aspx
 chart: Mark Robinowitz - Peak Choice.org - PeakTraffic.org - SustainEugene.org



Oregon Vehicle Miles Traveled: all roads

data source: www.oregon.gov/ODOT/Data/Pages/Traffic-Counting.aspx
 chart: Mark Robinowitz - Peak Choice.org - PeakTraffic.org - SustainEugene.org

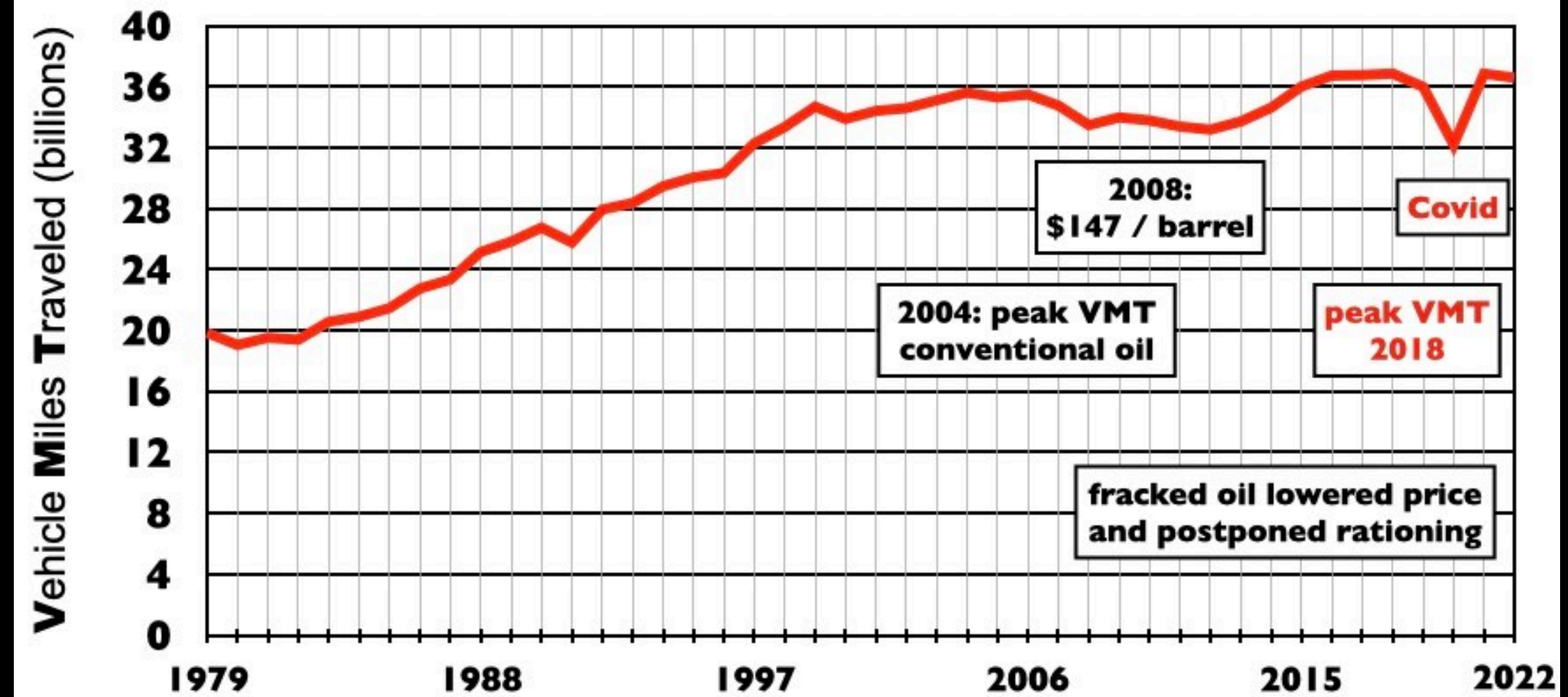
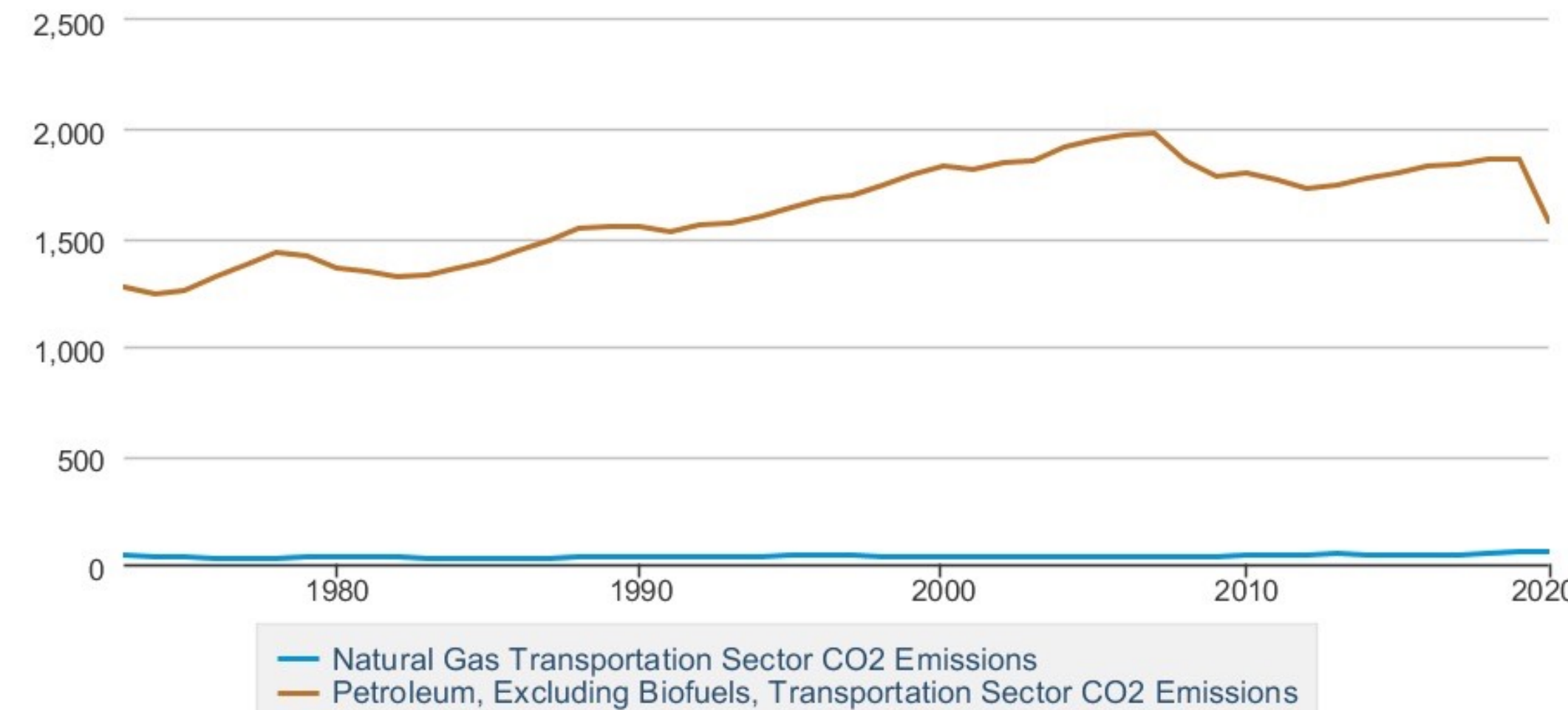


Table 11.5 Carbon Dioxide Emissions From Energy Consumption: Transportation Sector

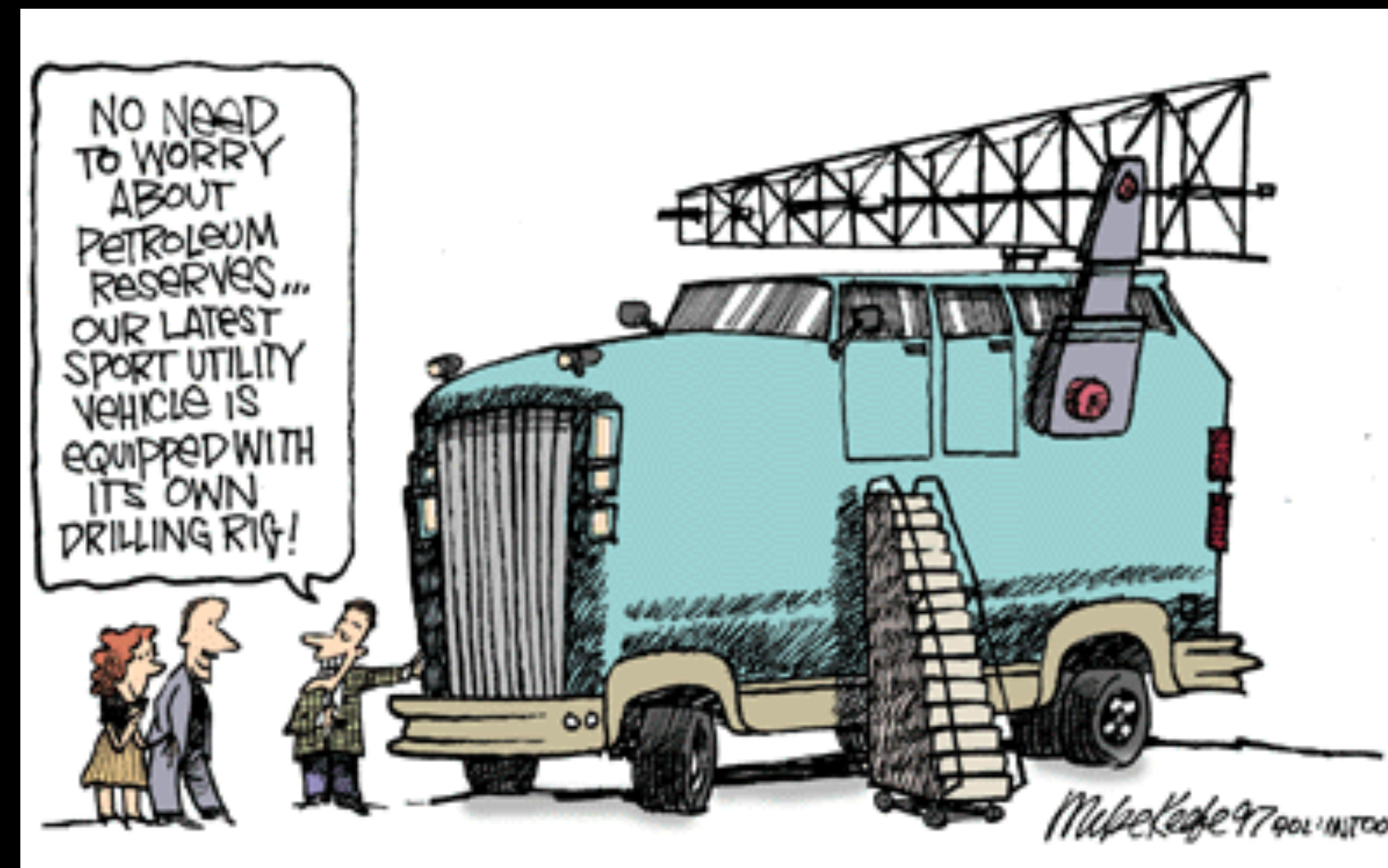
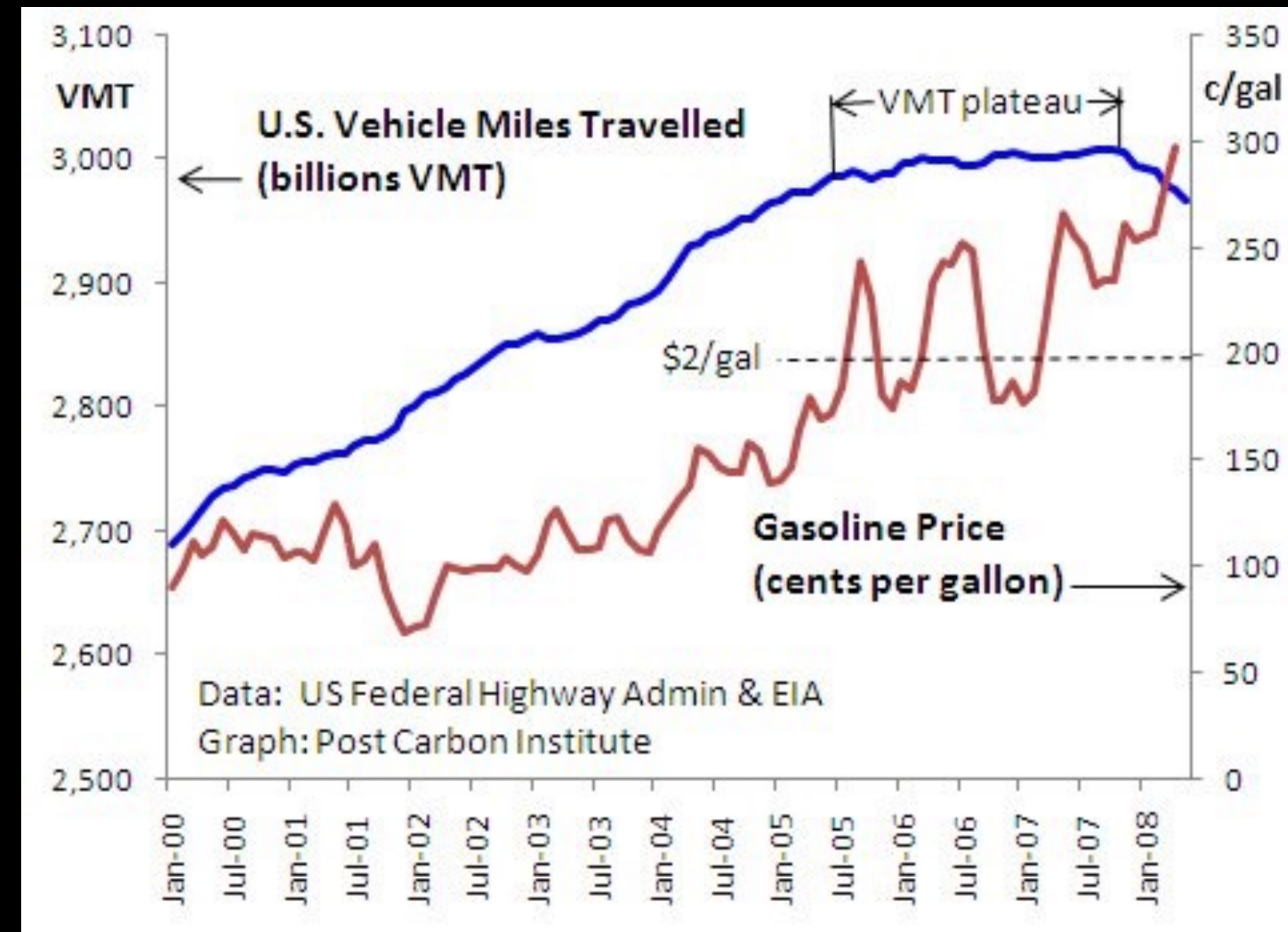
Million Metric Tons of Carbon Dioxide



Covid closures cut carbon more than climate activism

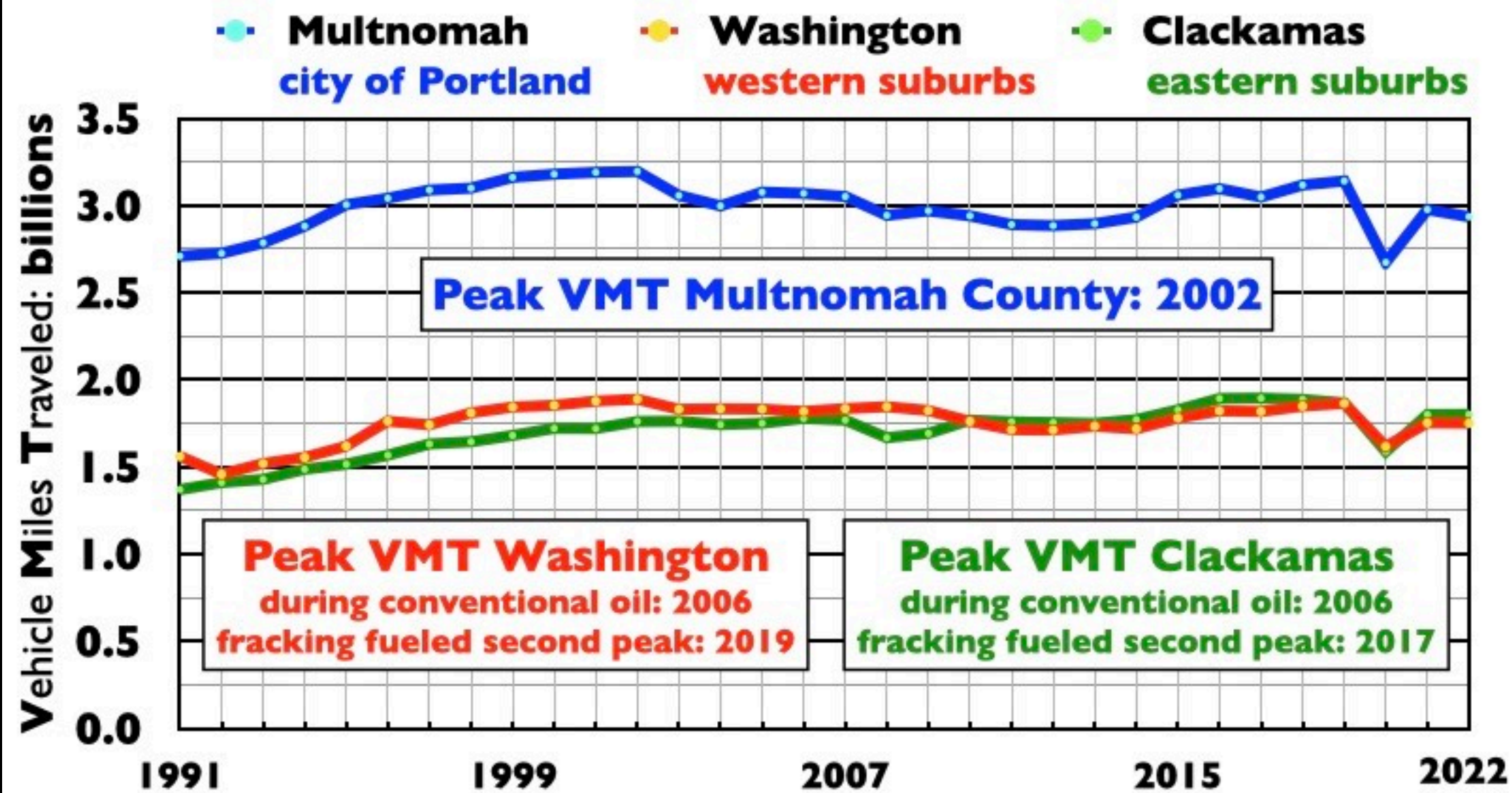
Most people have now heard of the concept of Peak Oil, but there is still not much public awareness of the implication and virtually no official response to the crisis. Peak Oil does not mean that the oil has run out, it merely is the point where oil extraction rates can no longer be increased no matter how much effort is expended. The end of the growth of fossil fuel use has tremendous implications for every aspect of civilization - beyond the scope of this short presentation - but it is safe to say that how we manage the downslope of petroleum is the most critical task facing our species. How will we use the rest of the oil - to help prepare future generations for living without any oil, or to pretend that business as usual will remain possible. Technological changes for efficiency will be useful, but they will not be sufficient to cope with the scale of these problems.

The Peak Oil curve mirrors the rise of Vehicle Miles Travelled on our highways, even showing temporary decreases after the 1973 Saudi oil embargo and the 1979 Iranian revolution. But the current leveling off of traffic levels is a permanent condition, since on the downslope of oil production there will be less energy available for transportation, and a diminished economy capable of sustaining this level of activity. Even a more rapid introduction of hyper efficient cars or electric vehicles will merely change the slope of the Peak Traffic downslope, since it takes a long time to convert existing infrastructure, it takes a lot of energy to make the alternative technologies, and we should have done this decades ago for the transition to be painless.



Portland VMT: Oregon State highways

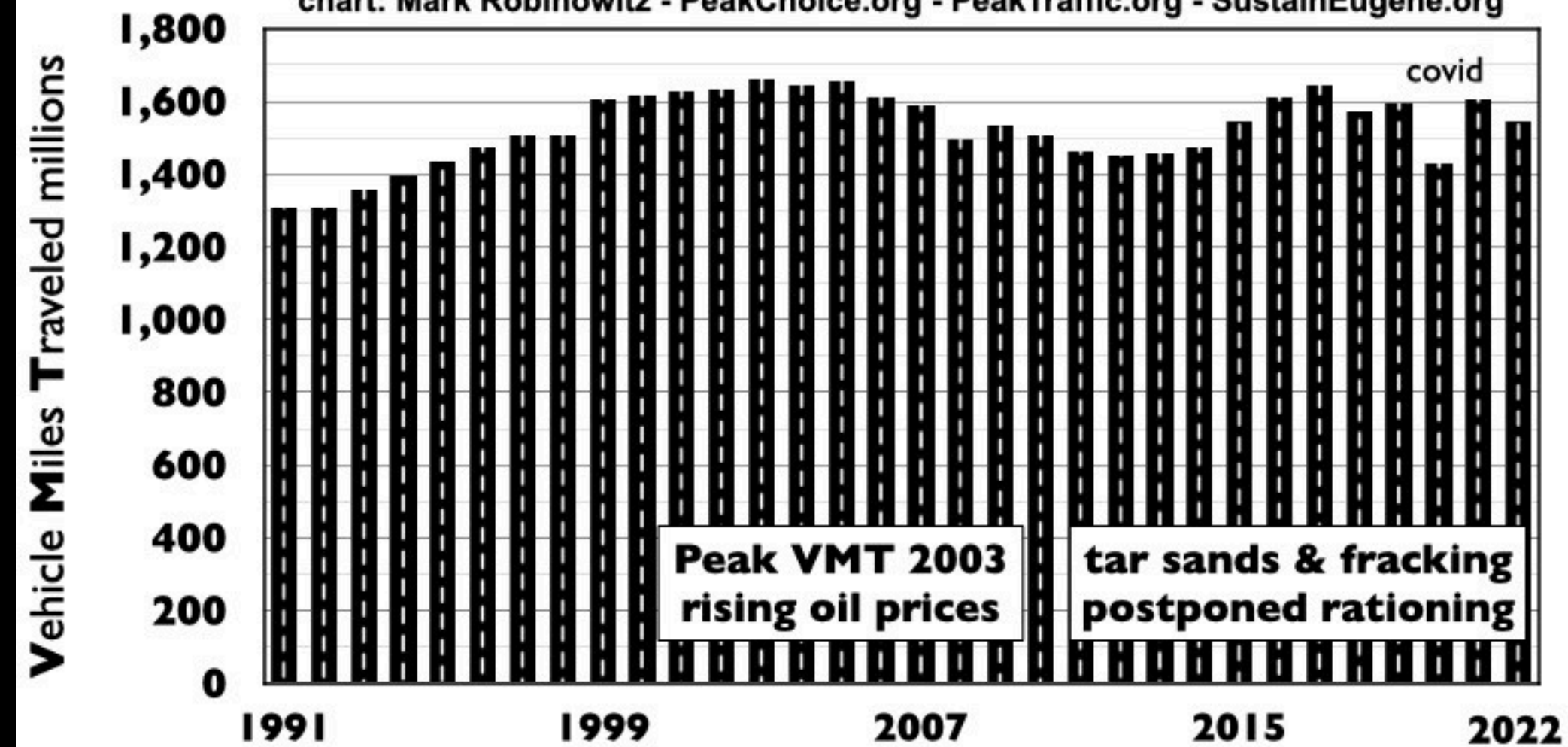
data: www.oregon.gov/ODOT/Data/Pages/Traffic-Counting.aspx
 chart: Mark Robinowitz - PeakChoice.org - PeakTraffic.org - SustainEugene.org



communities with more transit did not have an increased peak VMT after covid closures (so far, at least)

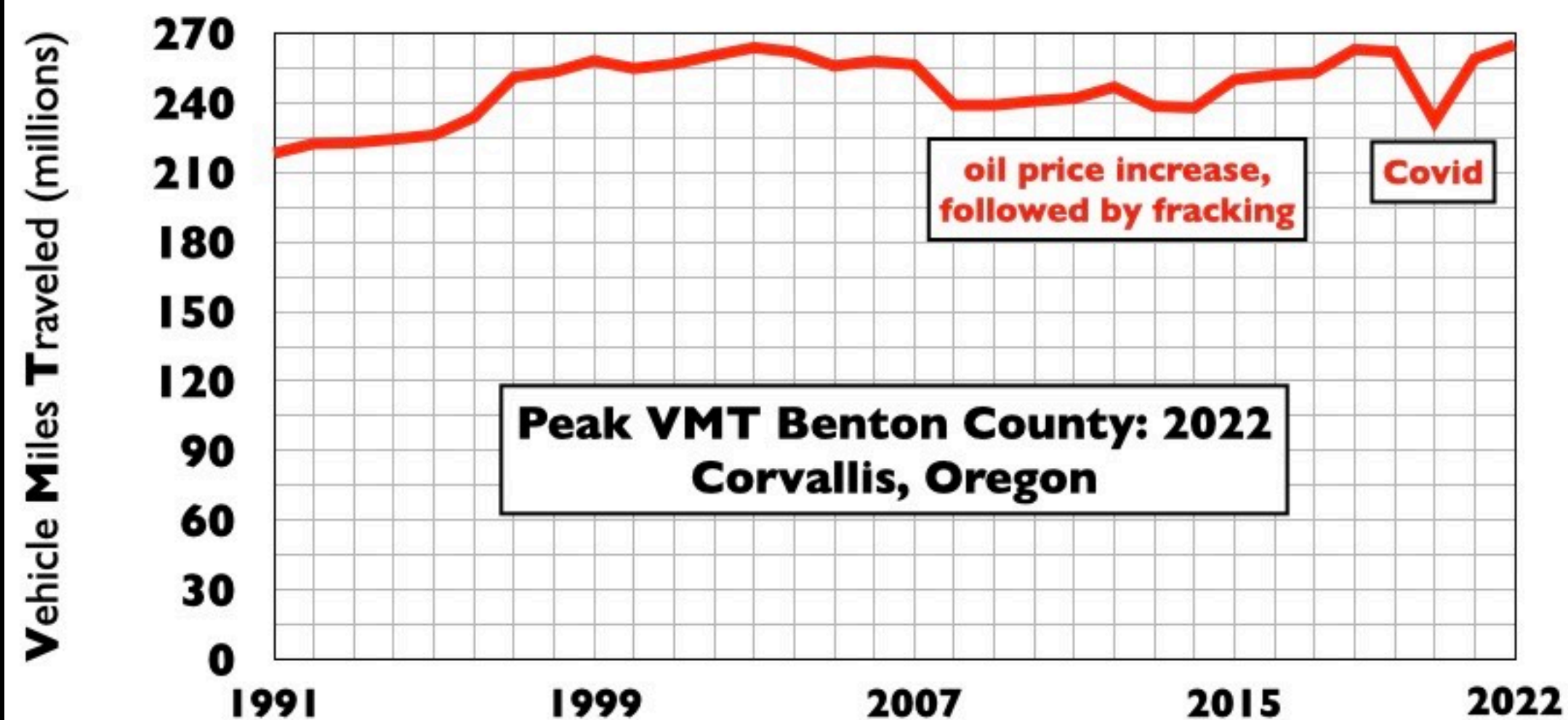
Lane County VMT ♦ Oregon State highways

data: www.oregon.gov/ODOT/Data/Pages/Traffic-Counting.aspx
 chart: Mark Robinowitz - PeakChoice.org - PeakTraffic.org - SustainEugene.org



Benton County VMT - Oregon State highways

data: www.oregon.gov/ODOT/Data/Pages/Traffic-Counting.aspx
 chart: Mark Robinowitz - PeakChoice.org - PeakTraffic.org - SustainEugene.org



PEAK TRAFFIC AND TRANSPORTATION TRIAGE

Mark Robinowitz • PeakTraffic.org

Whether you focus on Peak Energy, Climate Chaos or what is euphemistically called the "Great Recession," each of these aspects of reaching the limits to growth mandate an end to highway expansion. We cannot afford to build more roads when we cannot maintain what we already have. The transition from cheap, abundant oil to expensive, hard to get oil is reducing the amount that people drive and damaging the economic system that requires endless growth to function. Peak Energy is starting to reduce the physical ability to grow traffic levels, regardless of economic circumstances. Burning fossil fuels pollutes the thin film of the atmosphere, with health consequences and environmental impacts, including global warming. Ecology, energy and money are interconnected and inseparable, and each require a holistic integration with the others to address any of them.

Energy depletion is not merely about personal transportation. Driving less will be uncomfortable, but eating less would be far more difficult. Most food eaten in the US crosses time zones, some travels across international borders. As fossil fuels decline we need to grow food where it is eaten. Relocalizing food production, growing food in cities, community gardens, suburban "food not lawn" efforts, and protection of farmland from asphalt and concrete are all needed to cope with oil depletion.

George H.W. Bush's highway law - the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) - requires Federal aid highway plans to be designed for traffic conditions two decades in the future, not current traffic congestion.

It's anyone's guess what energy (and therefore, traffic) levels will be in the 2030s, but under any physically possible scenario the flow rates of petroleum will be lower, since conventional fossil fuels have peaked globally. There will be oil extraction in the 2030s but less than current flow rates. Future fuels will be the dirtier, more expensive, difficult to extract "bottom of the barrel" supplies. Electric cars, public transit, car sharing, and relocalization could mitigate these impacts but not prevent them. It takes fossil fuels and minerals to make electric cars and repave roads.

Transportation planning needs to focus on maintaining the enormous road networks already built, not expanding them further for travel demand that will not materialize on the energy downslope. Investments euphemistically called "modernization" should be dedicated toward train service, not super wide superhighways.

The National Environmental Policy Act (NEPA) mandates a "Supplemental" Environmental Impact Statement must be prepared if there are "new circumstances" not anticipated when the scoping process was conducted. Surely reaching the global peak of petroleum production is relevant for a transportation project allegedly designed for travel long past the peak.

If the Federal Highway Administration included Peak Energy in environmental analyses, this would be a seismic shift in transportation planning across the United States. Plans need to consider energy depletion and the limits to growth on a finite planet.

There are several ways this shift could happen: a successful Federal lawsuit forces FHWA to include Peak Energy, the start of gasoline rationing (delayed by fracking and tar sands mining) forces transportation planners to consider alternatives, or a change in national policies.

Peak Energy and Peak Vehicle Miles Traveled are "new circumstances" relevant for proposed transportation projects.



Council on Environmental Quality regulations
40 CFR 1502.9:

Draft, final and supplemental statements.

(c) Agencies:

(1) Shall prepare supplements to either draft or final environmental impact statements if:

- (i) The agency makes substantial changes in the proposed action that are relevant to environmental concerns; or
- (ii) **There are significant new circumstances or information** relevant to environmental concerns and bearing on the proposed action or its impacts.

Federal Highway Administration regulations
23 CFR 771.130:

Supplemental environmental impact statements.

(a) A draft EIS, final EIS, or supplemental EIS may be supplemented at any time. An EIS shall be supplemented whenever the Administration determines that:

- (1) Changes to the proposed action would result in significant environmental impacts that were not evaluated in the EIS; or
- (2) **New information or circumstances** relevant to environmental concerns and bearings on the proposed action or its impacts would result in significant environmental impacts not evaluated in the EIS.

Grading on a Curve

Enviro 'champs' ignoring the biggest issues

ARTICLE | FEBRUARY 13, 2014 | BY MARK ROBINOWITZ

On Nov. 27, EW's Slant profiled the "Environmental Scorecard" of the Oregon League of Conservation Voters. EW drew attention to "the relatively high scores racked up by state reps and senators in our part of the valley." Unfortunately, OLCV was grading on a curve to make Democrats in Salem look better than they are.

One of the most important votes of the 2013 session, not included in OLCV's scorecard, was to appropriate \$450 million toward the Columbia River Crossing (CRC), a \$3 billion to \$4 billion dollar boondoggle that would widen I-5 to 16 lanes north of the bridge. The Oregon House voted 45-11 in favor and the Senate voted 18-11 in favor. Only two Democrats in the House and one in the Senate voted "no."

EW highlighted Rep. John Lively's 94 percent OLCV rating, but did not mention his vote for the CRC nor his previous promotion of bigger roads while working for ODOT.

OLCV's website cites 10 state reps as environmental champions, but only one of those 10 voted against the CRC. Designating highway expansion supporters as "environmental leaders" suggests political partisanship has become more important than environmental protection.

The only legislator representing Lane County who was against CRC was Rep. Bruce Hanna of Roseburg, a Republican. Some Republicans expressed dislike of the token transit component. Republicans were freer than Democrats to oppose Gov. Kitzhaber's campaign for CRC.

CRC is now bogged down in financial chaos since Washington state legislators did not appropriate anything for it. However, the project is legally approved and an Obama administration priority.

In November 2008, Gov. Kulongoski's Transportation Vision Committee released a report that called for \$18 billion in new and expanded state highways, including over \$1 billion in Eugene and Springfield. 1000 Friends of Oregon, Oregon Environmental Council and Environment Oregon were part of this committee, but they were window dressing to show that all points of view were supposedly considered. If these groups had a minority report to dissent from the highway promotion, they kept it very quiet.

In 2013, ODOT started building two new highways: the Newberg Dundee Bypass (through farmland) and the Sunrise Freeway in Clackamas County. Both projects only have part of their funding, so ODOT is building segments and hoping for the rest of the money in the future. I attended public hearings for both of these

Mark Robinowitz of Eugene is author of "Peak Traffic and Transportation Triage: a Legal Strategy to Cancel Trillion Dollar Highway Plans and Prepare for Post Peak Travel," at PeakTraffic.org.

Sent to me from "a long time environmental activist and former OLCV board member":

OLCV continues to disappoint me. I wrote them after the special session in which local control over genetic engineering was thrown under the bus and told them they should target on a Democrat architect of that compromise for defeat in the primary, just to show that environmentalists mean business. I received no reply. That they left off the CRC from their list of counted votes doesn't surprise me in the slightest. They are an arm of the Democratic party and deathly afraid of organized labor.

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bypasses and did not see any environmental groups at either event.

Also in 2013, ODOT approved a new freeway in Medford, the Route 62 bypass. I didn't attend the hearing. The only environmental group that sent comments was Rogue Valley Audubon Society, which complained construction would harm birds.

Federal aid highways such as CRC have to plan for traffic two decades in the future, not current congestion. Our transportation plans ignore the fact that traffic levels peaked in Oregon in 2003 and Oregon's main fuel source, the Alaska Pipeline, peaked in 1988 and has dropped three quarters since then. It's anyone's guess how much energy will be available for traffic in the 2030s, but it will be much less than the current flow, especially if the Alaska Pipeline closes due to "low flow." Current levels are just above the minimum threshold needed for the pipeline to operate in the Arctic winter.

Here in Eugene from 1999 through 2007, I was the "road scholar" for a proposed lawsuit that prevented the West Eugene Parkway, a bypass of West 11th through the West Eugene Wetlands. WETLANDS vs. Federal Highway Administration was not filed because the feds withdrew the project and selected "no build." Details are at SustainEugene.org.

The lawsuit focused on legal precedents, including Section 4(f), which prohibits federal aid highways through parks. But it also would have tried to have set a new precedent combining the facts of peak oil and peak traffic as reasons the 20-year planning rule no longer justifies highway expansions.

Since then, I have looked for other freeway fights around the country that could use this legal strategy to create a precedent. A state-by-state list of plans for \$1 trillion of highway expansions across the country is at PeakTraffic.org.

The most energetic environmental efforts against new roads are often in places where liberal Democrats are surrounded by conservative Republicans (Bloomington, Ind., and Louisville, Ky., are examples). The professional environmentalists in these places know the state government is not their ally (nor their funder).

While trains and transit could play important roles for post-peak transportation, recognizing we're passing the limits to growth and relocalizing food production are probably the most important responses to peaked traffic and peaked energy.



"These forty million [poor] people are invisible because America is so affluent, so rich; because our expressways carry us away from the ghetto, we don't see the poor."

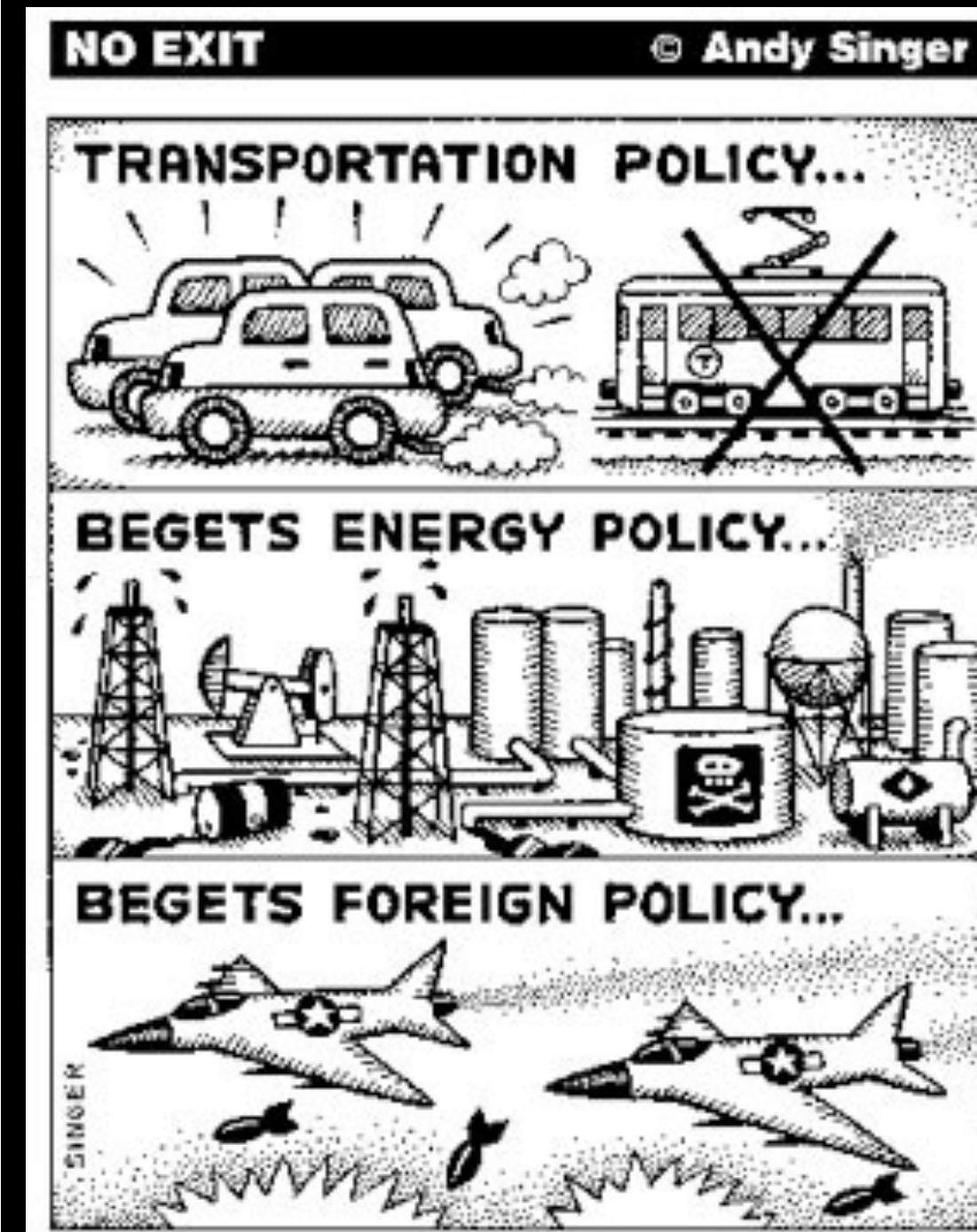
— Martin Luther King, "Remaining Awake Through a Great Revolution," March 31, 1968

Congressional High Priority Corridors on the National Highway System



Notes:
- Corridor numbers correspond to statutory listing in Section 1105(c) of ISTEA, as amended.
- Colors are added for clarity only.
- Corridors based on information available as of December 4, 2015.
- In some corridors, alignments are in project development stage.

December 16, 2015

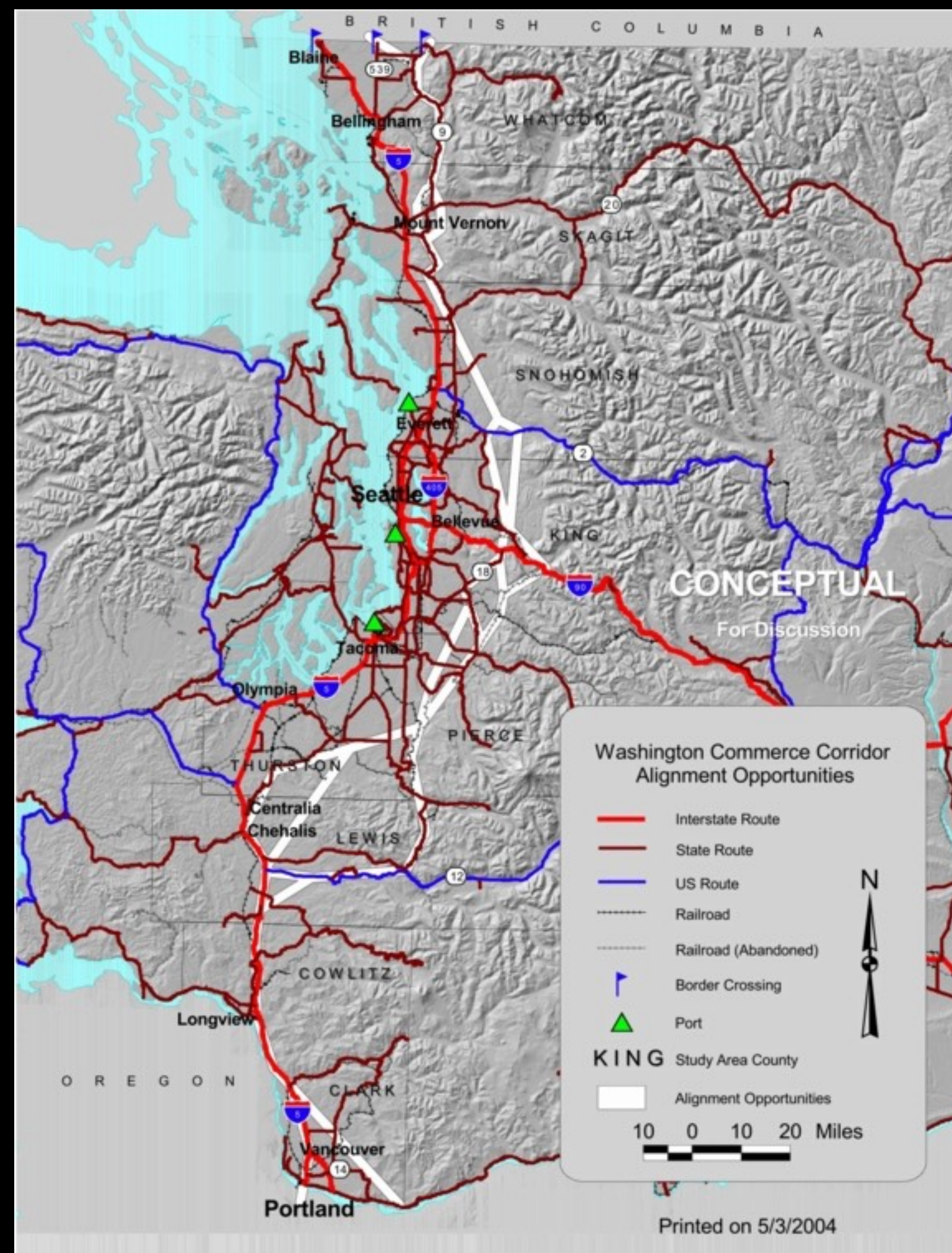


The 1991 federal transportation law “ISTEA” created a list of “Congressional High Priority Corridors” which are the projects that Congress loves the most (they are a small subset of overall highway plans). The numbers for the corridors are not route numbers, they are the numbering from the law’s list of projects.

Some of these projects are new interstate highways. Some are new limited access roads but not formally called “interstates” for bureaucratic reasons. Some are upgrades, converting arterials (rural or urban) to divided highways, not necessarily built to interstate standards.

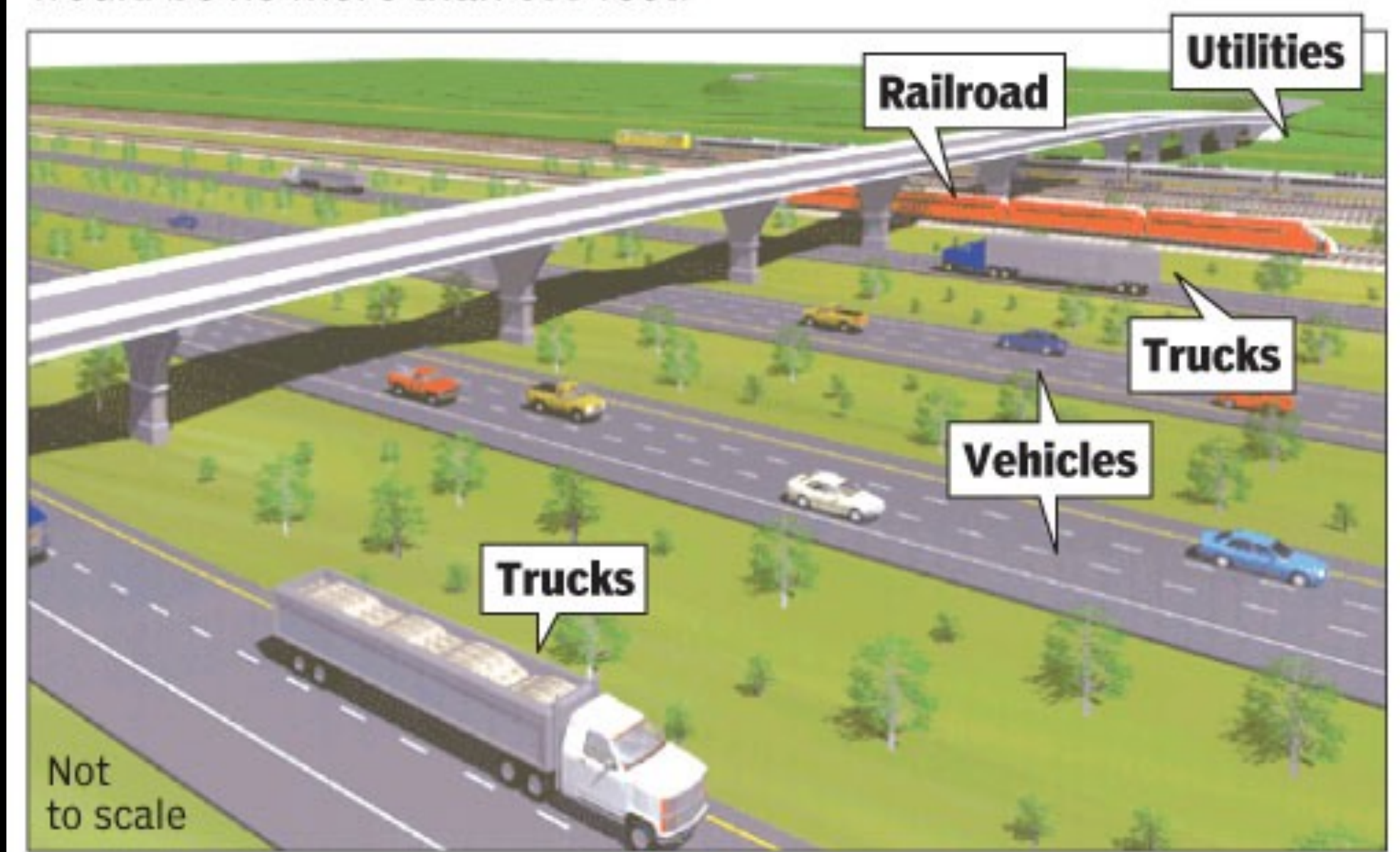
Washington Commerce Corridor

NAFTA Superhighway: Vancouver to Vancouver would resemble Trans Texas Corridor proposal withdrawn for now, but shows long term thinking



Trans-Texas Corridor plan

This artist rendering released by TxDOT in 2002 showed the Trans-Texas Corridor as a 1,200-foot-wide mix of roads, railways and utilities. The image, as well as the intent behind it, stoked political opposition that has engulfed the transportation concept since shortly after Gov. Rick Perry introduced it. On Tuesday, Perry and TxDOT said that the name is no more and that the corridor width would be no more than 600 feet.



Source: Texas Department of Transportation

AMERICAN-STATESMAN

monthly USA aviation passengers

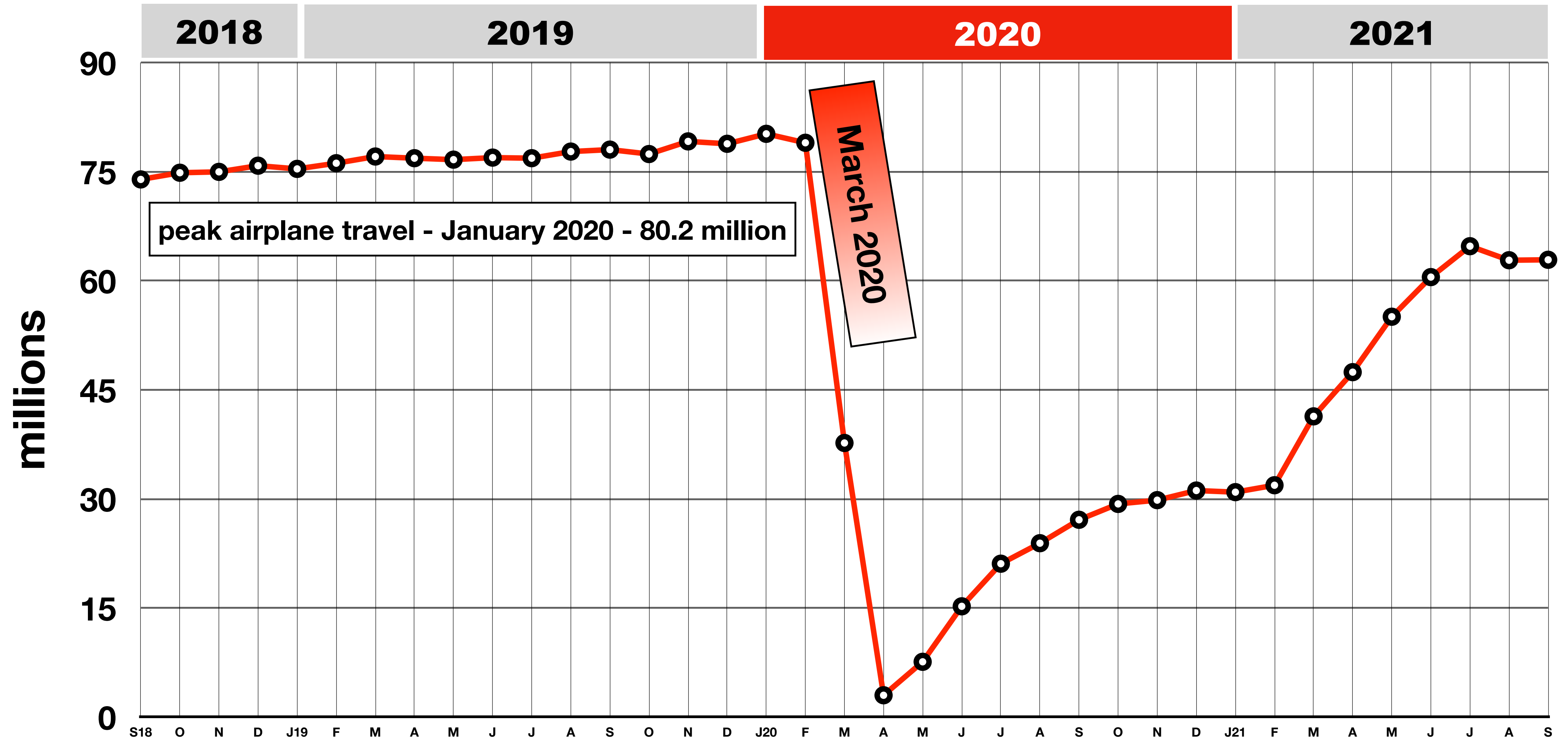


chart: PeakChoice.org

data: www.bts.dot.gov/newsroom/september-2021-us-airline-traffic-data

TSA daily airport checkpoint — 2019, 2020, 2021, 2022

data: www.tsa.gov/coronavirus/passenger-throughput
chart: PeakChoice.org - cooperation or collapse

peak: 2,882,915
2019-11-28

2,560,623
2022-11-27
2022 highest

