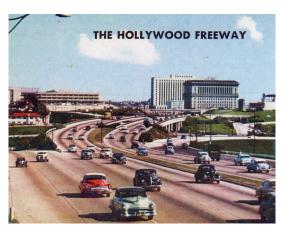


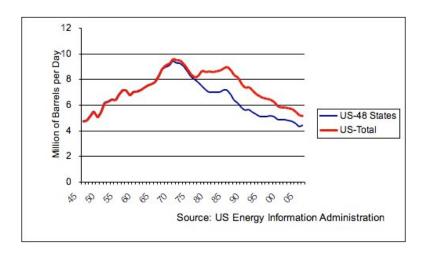
Another Inconvenient Truth

An Introduction to Peak Oil
October 2007
TheOilDrum.com

The US was once the leader in world oil production



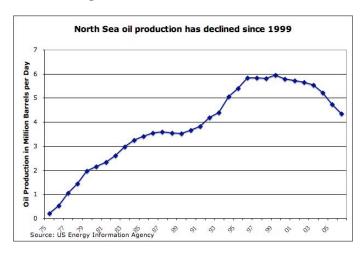
But US oil production began to decline in 1970



No one told the public about the decline

- US oil decline gave rise to the oil problems in the 1970s - OPEC, embargo
- Decline continues, year after year
- Decline occurred even with improving technology
- We began to import more oil and moved to a "service" economy
- Truth was too embarrassing to tell

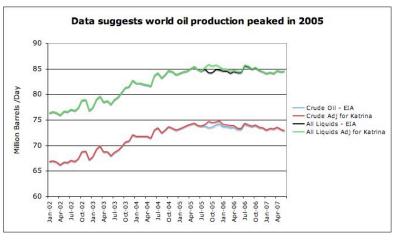
One by one, other sites have begun to decline also



Soon, world oil production will begin to decline

- · Date not yet certain
- Association for the Study of Peak Oil-USA says "Before 2015"
- Case Western Reserve survey of oil experts says "highly likely" by 2010
- Several experts say 2005 or 2006
- Data suggests peak may be past

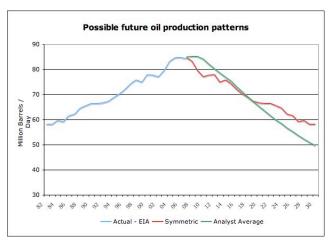
Peak may have occurred about time of Hurricane Katrina (2005)



Where is oil used?

- Transportation cars, buses, trucks
- Food planting and harvesting, processing, refrigeration, transportation
- Raw materials asphalt, building materials, clothing, pharmaceuticals
- Energy source manufacturing

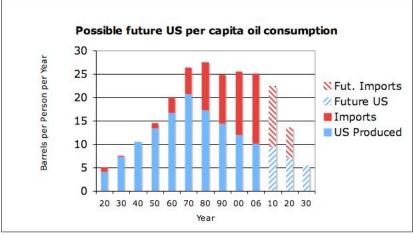
Rough estimates of future world oil production - if peak is now



Sources of data for previous graph

- Historical: US Energy Information Administration
- Symmetric: Assumes future will be mirror image of past
- Analyst average: Average of close-date projections by Ace, Bakhtiari, and Robelius

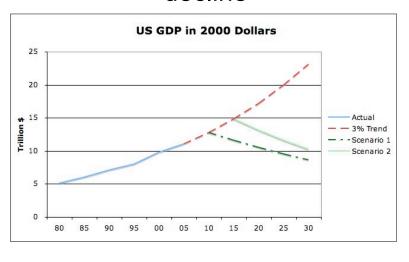
Future US oil supply will depend on level of imports



Level of future US oil imports is very uncertain

- Imports likely to decline faster than world oil supply
 - Exporters supply themselves first
 - Hoarding; civil unrest
- US may be unable to purchase oil
 - Balance of payments issues
 - Will exporters take more IOUs?

With less oil, real GDP is likely to decline



Why weren't we told?

- We weren't told when US production peaked.
- Can we expect to be warned before world production peaks?
- Declining economies are embarrassing.

Will technology save the day?

- Technology didn't prevent the decline in US oil production.
- Technology didn't prevent the decline in North Sea oil production.
- Should we expect it to prevent a decline in world oil production?

Is there an easy solution?

- No, not really.
- Conservation is a partial solution.
- Alternative fuels (solar, wind, biofuels, geothermal) are likely to provide some help.
- New technology like battery-operated cars are likely to be too little, too late.
- We may need to unwind globalization; go back to simpler life styles, technologies that worked before.