

## **Additional Support Documents for Declarative Statements (Links)**

### **710 tunnel is about Goods Movement, Freight Trucks**

SCAG memo February 17, 2005 To: Plans & Programs Technical Advisory Committee, From: Nancy Pfeffer, Senior Regional Planner, RE: Goods Movement White Paper for Secretary of Business, Transportation & Housing In 2004, Governor Schwarzenegger was "criticized by government and business leaders in Asia for allowing congestion at the San Pedro Bay Ports to impede the flow of goods from Asia to U.S. markets. On his return he tasked BT&H Secretary, Sunne Wright McPeak with developing a strategy on this issue."

<http://articles.latimes.com/2007/feb/13/local/me-roads13> State's future may be paved with fees Evan Halper, February 13, 2007, LA Times Under pressure from Gov. Arnold Schwarzenegger, who has been pushing for the state to start shifting the cost -- and some control -- of road building to the private sector, lawmakers last May authorized government agencies to build four demonstration projects in partnership with investment banks, shipping companies and other businesses...The Legislature has yet to sign off on what roads would be built under the arrangement, but has stipulated that they must serve the movement of goods...The California Department of Transportation is already suggesting a toll road for trucks that would go from the Port of Long Beach to the Inland Empire, and a toll road for cars and trucks at the Mexican border near San Diego that would have its own border crossing...State and local transportation planners have joined with the governor's office to lobby lawmakers for authority to broker more deals with private companies

[http://www.scag.ca.gov/rtp2008/pdfs/finalrtp/reports/fFinance\\_AppF\\_02\\_SR710.pdf](http://www.scag.ca.gov/rtp2008/pdfs/finalrtp/reports/fFinance_AppF_02_SR710.pdf) SR-710 Tunnel Financial Feasibility Assessment SCAG RTP 2008 PDF pg 5 please see section 2.7, especially the second paragraph: "Due to the importance of truck traffic on the SR-710 and to provide another east-bound connection for freight, it is critical to allow truck traffic in the tunnel."

[http://www.scag.ca.gov/rtp2004/pdfs/techappendix/appendix\\_E.pdf](http://www.scag.ca.gov/rtp2004/pdfs/techappendix/appendix_E.pdf) Appendix E Goods Movement 2001 RTP Technical Appendix, Southern California Association of Governments May 2001 Freight Issues, Implications and Options in the Moving Forward Document Starts on PDF pg 28-31 (doc E26 E-29) A potential solution is to modify the Interstate 710 gap closure project with the construction of four bored tunnels under South Pasadena... Trucks would be allowed to use the I-710 project thus modified, so that direct 710-210 truck movements are possible, permitting trucks to bypass downtown Los Angeles... A toll on cars and trucks would be used to pay for the additional cost of the bored tunnels above and beyond the expenditures for the cut-and-cover underground roadway through South Pasadena... If truck lanes are implemented on the 710 Freeway from the San Pedro Bay Ports to downtown Los Angeles, such truck lanes would logically be extended northward to use any such bored tunnels as might be incorporated into the gap closure project--allowing easy access from the 710 Freeway to the 210 Freeway.

[http://www.metro.net/images/lrtp\\_techappendix.pdf](http://www.metro.net/images/lrtp_techappendix.pdf) 2001 Long Range Transportation Plan For Los Angeles County Technical Document, Los Angeles County Metropolitan Transportation Authority 6-6 2001 Long Range Transportation Plan For Los Angeles County (PDF pg 132) Of the goods coming through the ports of Long Beach and Los Angeles, approximately 80% of those goods pass through the Gateway Cities either by train or truck. Port-related truck traffic is the leading cause of congestion on all of the major freeways within the sub-region but especially the I-5, I-710 & I-605 corridors regardless of time of day. Currently, trucks account for 45 to 60 percent of freeway capacity, and this traffic is expected to grow substantially due to expansion of the Ports, interstate freight movement,

weekday commute traffic and weekend recreational traffic.

<http://www.scag.ca.gov/goodsmove/pdf/2008/gmtf052108fullagn.pdf> Goods Movement Task Force Of The Southern California Association Of Governments, Wednesday, May 21, 2008 9:30 a.m. – 11:30 a.m., February 20, 2008 Minutes Pg 9PDF (Pg 6 of the Doc) Missing Link Truck Study Mr. Vigen Davidian, Iteris, Inc., began by giving an update on the progress of the project, noting it was 50% complete and on-schedule to be finished by the June 30, 2008. Mr. Davidian began by describing the I-710 gap and the potential for the construction of a tunnel to close the gap between the I-710 freeway and the I-210 freeway based on previous study. He emphasized that the purpose of the study was to evaluate the full effects of the connection and its various options, specifically in relation to truck impacts.

[http://www.usc.edu/schools/sppd/keston/research/documents/710FinancingCharretteFinalReport\\_1-2807\\_.pdf](http://www.usc.edu/schools/sppd/keston/research/documents/710FinancingCharretteFinalReport_1-2807_.pdf) Financial Planning Charrette 710/210 Tunnel Connection USC Keston Institute for Public Finance and Infrastructure Policy, Louise Nelson Dyble, Ph.D., December 5, 2007 The University Club University of Southern California, Meeting Summary, The Keston Institute for Public Finance and Infrastructure Policy, University of Southern California PG 2-5 PDF (Pg 1-4 doc) The tunnel would serve to connect two major interstate freeways, closing a critical 4.5-mile gap in the regional highway system. Interstate 710 or the "Long Beach Freeway" is a major goods-movement corridor and an important north-south route extending from the City of Long Beach area in the South, through Los Angeles... The tunnel would continue the route... descend in Alhambra, continue underground beneath the city of South Pasadena, and emerge in Pasadena to connect to Interstate 210,... The historical overview presented by Mr. Huddy (SCAG) was followed with data on current traffic estimates and cost estimates... Traffic estimates indicate that the tunnel would immediately attract significant traffic between the port area and Los Angeles heading toward major national distribution centers in San Bernardino County... and also eliminate the current bottleneck where I-710 currently ends in South Pasadena. The MTA was represented at the meeting by Linda Hui, Transportation Planning Manager of the San Gabriel Valley Area Team, and Caltrans District 7 was represented by senior engineer Abdi Saghafi, route 710 corridor manager, both of whom contributed informal assessments of current prospects and progress.

<http://www.burbankusa.com/Modules/ShowDocument.aspx?documentid=3034> Iteris, I-710 Missing Link Truck Study Traffic Analysis for the Arroyo Verdugo Subregion With and Without the I-710 Gap Closure Preliminary Draft Final Report, submitted to SCAG May 2009 (This study shows they were designing the freeway for trucks/goods movement and that it will result in worse congestion than what exists now– see summation below)

[http://www.lacanadaflintridge.com/docfiles/city/cc\\_na\\_mis\\_090721\\_092848.pdf](http://www.lacanadaflintridge.com/docfiles/city/cc_na_mis_090721_092848.pdf) I-710 Missing Link Truck Study Traffic Analysis for the Arroyo Verdugo Subregion With and Without the I710 Gap Closure Preliminary Draft Final Report Submitted by Iteris In Association with the KOA Corporation, May 2009, Submitted to Southern California Association of Governments  
*Note - Study was done to look at the effect the I-710 "gap closure" would have on the roadway system of the communities surrounding the project. In it, it states that the "gap closure" Truck lanes would allow trucks to bypass the downtown area for trips "to and from the Central Valley and Northern California areas" and increase traffic to the area.*

<http://www.everythinglongbeach.com/metro-transportation-projects-2011/> Metro's Freeway Projects Mean Better Transportation For Everyone By Editor 2011-03-24 "Transportation from The Ports -...710 north gap closure between the I-10 and the I-210 would complete the natural goods corridor that was begun several decades ago"... 'designed primarily to address the demands of commerce' "specifically goods movement from the twin ports of L.A. and Long Beach" "While this year's 18 projects and the I-405 are designed primarily to give people a better commute, three other high-profile projects in various planning stages but not yet scheduled, address the demands of commerce — specifically

goods movement from the twin ports of L.A. and Long Beach, the two busiest ports in the country... The I-710 south from the Pomona Freeway (SR-60) to the Ports of Los Angeles and Long Beach will involve a freeway widening and possibly a separate freight corridor that could be tolled. The **710-north gap closure between the I-10 and the I-210 would complete the natural goods corridor that was begun several decades ago.** Metro has been holding a series of conversations and outreach with the community, in an effort to collect ideas on best options. A third, the High Desert Corridor, will be a brand new 63-mile east-west freeway between SR-14 in Los Angeles County and SR-18 in San Bernardino County. It would create a shortcut for goods movement from the Central Valley to the rest of the United States and trim back goods congestion through the L.A. basin."

*Note - IN FACT here they state it is not about the "commute", which this year's highway projects are designed to address, but that the 710 is about "commerce"*

[http://narc.org/uploads/Annie%20Nam\\_Financing.pdf](http://narc.org/uploads/Annie%20Nam_Financing.pdf) Freight Planning and Investment Strategies in Southern California Annie Nam, Manager of Transportation Finance & Goods Movement, 2008, SCAG Pg 4 - Over 70% of imports pass through to other markets. Ports handle one third of all container traffic in U.S. and nearly two-thirds of containers from Asia. Pg 5 - Dramatic Increase in U.S. Maritime Trade. Pg 6 - Projected Container Growth Expected to Triple for LA/Long Beach - 42.5 In Million TEUs by 2030 Source: POLA, POLB. Pg 7-8 - Goods Movement Congestion - Daily Truck Traffic to/from LA/LB Ports Will Grow Dramatically 92,000 by year 2020 Source: Gill V. Hicks Associates. Pg 9 - Truck Travel on Southern California Highways - 115% Increase 2000 to 2030. Pg 13 - **Moving Freight Faster via East-West Corridor and I-15 Strategic RTP.** Pg 22 - Potential Funding Sources - User Fees: Tolls, TEU Fees, Railroad Contribution. Public Funding & Financing: Existing Sources (Federal and State Contributions, County Transportation Commissions), Financing Provisions in SAFETEA-LU (Private Activity Bonds). Pg 23 - **LA/LB (Ports) At what point would fees used to finance infrastructure divert business elsewhere?**

[http://www.metro.net/projects\\_studies/710\\_final\\_report/images/appendix\\_p.pdf](http://www.metro.net/projects_studies/710_final_report/images/appendix_p.pdf) APPENDIX P I-710 Major Corridor Study "Hybrid" Alternative (Locally Preferred Strategy) Technical Report Gateway Cities Council of Governments, Metro, April 2004, Final Report, March 2005 **PDF Page 7 Doc pg 1** Section A Introduction, Background And History Introduction The **I-710 Freeway is a vital transportation artery, linking the Ports of Long Beach and Los Angeles** to the Los Angeles region and beyond.

[http://www.wsdot.wa.gov/NR/rdonlyres/5A019EA4-50EF-4286-96F905398B52608A/0/DR1\\_WCCC\\_TradeandTransportationStudy\\_COMPLETEweb.pdf](http://www.wsdot.wa.gov/NR/rdonlyres/5A019EA4-50EF-4286-96F905398B52608A/0/DR1_WCCC_TradeandTransportationStudy_COMPLETEweb.pdf)  
[http://www.scag.ca.gov/goodsmove/pdf/Summary\\_GM\\_Priorities.pdf](http://www.scag.ca.gov/goodsmove/pdf/Summary_GM_Priorities.pdf) West Coast Corridor Coalition Trade and Transportation Study final report *prepared for* West Coast Corridor Coalition, *prepared by* Cambridge Systematics, Inc, April **2008** Southern California Consensus Priority Goods Movement Projects (May 2005) Southern California Association of Governments Lists 5 rail projects (\$2.425 Billion), 5 highway projects (\$1.321 Billion) and ITS Enhancements (Cost TBD) total cost: (w/o ITS) + \$3.75 B. This one-page summary document also notes that the Multi-County **Goods Movement Action Plan will study an east-west truck way linking proposed I-710 truck lanes with potential truck lanes on I-15.**

<http://www.longshoreshippingnews.com/2010/04/battle-looms-over-tunnel-to-finish-la-area-freeway/> Longshore & Shipping News Covered the article from the From the Associated Press, April 21, 2010 titled <http://www.businessweek.com/ap/financialnews/D9F867800.htm> "Battle looms over tunnel to finish LA-area freeway" Advocates and opponents are gearing up for battle over a plan to dig a tunnel to complete a Southern California freeway...what we need are smart solutions and sustainable modes of transit."

*Note - Article is the Longshore & Shipping News because they know it would be a shipping route*

## Goods Movement Facts

[http://ops.fhwa.dot.gov/freight/freight\\_analysis/nat\\_freight\\_stats/docs/05factsfigures/pdf/ff2005.pdf](http://ops.fhwa.dot.gov/freight/freight_analysis/nat_freight_stats/docs/05factsfigures/pdf/ff2005.pdf) Freight Facts and Figures 2005. U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations Snapshot of the volume and value of freight flows in the United States, the physical network over which freight moves, the economic conditions that generate freight movements, the industry that carries freight, and the safety, energy, and environmental consequences of freight transportation.

## Route Neutral Assessment is a Sham

Zone 3, the original Meridian Route, has already been chosen as the preferred route for completion of "the gap", as stated by Gloria Molina at the December 9, 2009 Metro Board meeting. Metro tapes of the meeting, when later requested, were reported to have been "lost" – but a recording of the comment was made.

<http://www.710gap.com/> Well-paid pro-Freeway tunnel lobbyist Nat Read has given the visuals for the predetermined route on his website (showing there is nothing "neutral" about the EIR Metro is conducting. Nat Read's "Gap Map" screen shot recorded 2011-3-20 at 8:45:58 PM.png

[http://www.metro.net/projects\\_studies/route\\_710/feasibility\\_assessment.htm](http://www.metro.net/projects_studies/route_710/feasibility_assessment.htm) Google Cache Feb 2, 2010 12:24:35 GMT – saved PDF Route 710 Tunnel Technical Feasibility Assessment Metro has completed the feasibility assessment of a tunnel alternative to extend the 710 Freeway from its current terminus at Valley Boulevard in the City of Los Angeles to 1-210 in the City of Pasadena. (Note Location not neutral in this statement; they were claiming one of the Zone 2 connections would be to the 2 freeway!) Over the past year, Metro staff, in coordination with its consultant team, has been conducting a preliminary feasibility assessment of a bored or mined tunnel to extend the Route 710.... The technical feasibility assessment considered a myriad of tunnel alternatives with construction costs ranging from approximately \$1.3 billion to \$3.6 billion (2006 dollars).

## Impact of Trucks

[http://www.dot.ca.gov/hq/tpp/offices/ogm/products\\_files/GGDP\\_Final\\_Report.pdf](http://www.dot.ca.gov/hq/tpp/offices/ogm/products_files/GGDP_Final_Report.pdf) Global Gateways Development Program State of California Business, Transportation & Housing Agency California Department of Transportation Division of Transportation Planning Office of Goods Movement January 2002 As requested by Resolution Chapter 158, Statutes of 2000 (SCR 96, Karnette) PDF pg 6 (doc pg 2) Goods Movement Challenge Port container traffic and air cargo volumes are expected to triple by 2020, while overall goods movement volume is projected to jump 56 percent, between 1996 and 2016. PDF pg 20 (doc pg 16) The San Pedro Bay Ports (Los Angeles and Long Beach) rely heavily on the Long Beach Freeway (I-710) for truck access. Half of all trucks serving the San Pedro Bay Ports use I-710 which contributes to the 710 corridor having the highest truck accident rate in the State and second highest in truck volumes. These two ports combined generate about 34,000 truck trips per day. This number of daily truck trips could exceed 50,000 by 2010 and reach almost 92,000 by 2020.

<http://www.sfmex.org/support/mts/webdocs/Needs%20Report.pdf> California Marine Transportation

System Infrastructure Needs March 11, 2003 Prepared By: California Marine and Intermodal Transportation System Advisory Council, Northern California Marine Transportation System Advisory Council, Southern California Marine, Transportation System Advisory Council PDF pg 18 (doc pg 10) Currently, approximately 34,000 truck trips/day move to/from the Ports via the I710 Corridor (which includes the I-710 freeway and adjacent arterial streets and freeways). The total number of daily truck trips is forecast to increase to about 92,000 by 2020.

PDF pg 19-20 (doc pg 11-12) 2002 Ports Lockout Impact - For ten days, beginning at the end of September 2002 and extending through the first week of October, a waterfront labor dispute shut down West Coast ports ...Roadways around west coast ports, such as the I-710 serving the Ports of Long Beach/Los Angeles, experienced severe congestion after the ports reopened.

Note - This is written by the Port's "Advisory" councils - it states that the ports rely on the 710 as a cargo route. It is a lobbying effort on behalf of the Ports to get the Federal Government to invest tax dollars towards improving their (710) freeway cargo route. When cargo trucks are taken off of our local freeway systems - commuter issues become obsolete for the 710-freeway area. (See pictures I-710 Under Normal Conditions & I-710 During Ports Shutdown)



**I-710 Under Normal Conditions**

**I-710 During Ports Shutdown**

## Tunnel Dangers

[http://en.wikipedia.org/wiki/Big\\_Dig](http://en.wikipedia.org/wiki/Big_Dig)

[http://en.wikipedia.org/wiki/Caldecott\\_Tunnel\\_fire](http://en.wikipedia.org/wiki/Caldecott_Tunnel_fire)

[http://en.wikipedia.org/wiki/Salang\\_tunnel](http://en.wikipedia.org/wiki/Salang_tunnel)

<http://www.guardian.co.uk/world/2001/oct/26/jonhenley1>

<http://www.landroverclub.net/Club/HTML/MontBlanc.htm>

<http://www.youtube.com/watch?v=VeZjMTzqNQ8> <http://www.worldshipny.com/walking.shtml> under "Hudson River Park"

<http://www.flickr.com/photos/bencouldrey/1016957975/in/photostream/>

<http://www.ourbrisbane.com/transport/2370803.clem7-tunnel-ventilation-outlet-2-woolloongabba>

[http://www.hbi.ch/fileadmin/media/pdf/publikationen/Paper\\_Ilg\\_HBI\\_Gijon\\_2005\\_english.pdf](http://www.hbi.ch/fileadmin/media/pdf/publikationen/Paper_Ilg_HBI_Gijon_2005_english.pdf)

# Tunnel Disasters

<http://www.nytimes.com/1994/04/25/news/25iht-safe.html?pagewanted=1> Terrorist Attacks and Fires Present the Greatest Risks : Taking the Time To Ensure Safety Barry James, Published: April 25, 1994 The Channel Tunnel, one of Europe's biggest construction projects, is also its biggest security headache... Because the tunnel has a single entry and exit, Mr. Clutterbuck said, there is more incentive for terrorists to "to grab the headlines by blocking it, by a terrorist act, by sabotage or by a hoax call." As in any complex underground system, the biggest danger is from fire and toxic fumes... Some chemicals, nuclear material and other potentially dangerous materials will be banned from the tunnel... If an explosion occurs, the blast would follow the path of least resistance - the tunnel itself... Every coal miner knows that the likeliest cause of death underground is not flame but toxic fumes, such as odorless carbon monoxide, which can race through a tunnel faster than a man can run. Other risks being considered include: Flooding Earthquakes.

[http://en.wikipedia.org/wiki/Channel\\_Tunnel](http://en.wikipedia.org/wiki/Channel_Tunnel) Channel Tunnel From Wikipedia, the free encyclopedia page was last modified on 8 May 2010 at 07:37 There have been three fires in the Channel Tunnel that were significant enough to close the tunnel—all on the heavy goods vehicle (HGV) shuttles—and other more minor incidents. During an "invitation only" testing phase on 9 December 1994 a fire broke out in a Ford Escort car whilst its owner had been loading it on to the upper deck of a tourist shuttle. The fire started at approximately 10:00 with the shuttle train stationary in the Folkestone terminal and was extinguished around 40 minutes later with no passenger injuries. On 18 November 1996 a fire broke out on a heavy goods vehicle shuttle wagon in the tunnel but nobody was seriously hurt. The exact cause is unknown... although it was not a Eurotunnel equipment or rolling stock problem; it may have been due to arson of a heavy goods vehicle. It is estimated that the heart of the fire reached 1,000 °C (1,800 °F), with the tunnel severely damaged over 46 metres (151 ft), with some 500 metres (1,640 ft) affected to some extent. Full operation recommenced six months after the fire...11 September 2008 a fire occurred in the Channel Tunnel at 13:57 GMT. The incident started on a freight-carrying vehicle train traveling towards France... The event occurred 11 kilometres (6.8 mi) from the French entrance to the tunnel. No one was killed but several people were taken to hospitals suffering from smoke inhalation, and minor cuts and bruises. The tunnel was closed to all traffic, with the undamaged South Tunnel reopening for limited services two days later. Full service resumed on 9 February 2009... after repairs costing €60 million... Home Office statistics indicating that car fires had doubled in ten years... Eurotunnel has banned a wide range of hazardous goods from travelling in the tunnel. Two STTS vehicles with firefighting pods are on duty at all times, with a maximum delay of 10 minutes before they reach a burning train.

[http://en.wikipedia.org/wiki/Gotthard\\_Road\\_Tunnel#History](http://en.wikipedia.org/wiki/Gotthard_Road_Tunnel#History) Gotthard Road Tunnel From Wikipedia, the free encyclopedia page was last modified on 14 April 2010 at 13:51 Owing to the enclosed space of a tunnel, fires can have very serious effects on users. The main dangers are gas and smoke production, with low concentrations of carbon monoxide being highly toxic. Fires killed 11 people in the Gotthard tunnel fire of 2001 for example, all of the victims succumbing to smoke and gas inhalation.

<http://www.guardian.co.uk/world/2001/oct/26/jonhenley1> Vehicles found fused together in molten mass after tunnel inferno European transport network left paralyzed after Swiss disaster, and key questions are raised on future policy Jon Henley in Paris, The Guardian, Friday 26 October 2001 12.36 BST Up to 128 people were reported to be still missing yesterday more than 24 hours after a fierce fire broke out in Switzerland's Gotthard tunnel, throwing road freight traffic in the heart of Europe into chaos. The blaze, which followed the collision of two trucks about a mile from the tunnel's southern entrance, prompted renewed demands from transporters, environmentalists and safety campaigners for an EU-wide shift from road to rail transport... Mounting fears about tunnel safety were fanned by a second crash yesterday morning just outside the 6km-long St Bernhard tunnel, the closest alternative

to the Gotthard, although it is not used by heavy goods vehicles. A lorry crashed into a car and a minibus after it left the tunnel, killing the minibus driver and prompting authorities to close the St Bernhard for several hours. This effectively cut off all Italy's main road links to the north, adding to the misery of thousands of stranded lorry drivers and tourists.... The Gotthard tunnel disaster, Switzerland's worst ever, will hit European freight traffic - and Italy's entire economy - hard. The third major accident in a transalpine tunnel in as many years, it leaves two of the four main road freight routes linking Germany, Switzerland, France and Italy out of operation. Italian Transport Federation (Confetra) chief Piero Luzzati told Reuters: "This is the nightmare scenario."... France's Mont Blanc tunnel, shut since a fire in March 1999 that killed 39 people, was due to reopen before the end of the year. But it is now likely to remain closed for longer, pending stricter safety regulations in the wake of the Swiss blaze. Unmanageable. The Gotthard tunnel, used by 1.2m lorries a year and millions more motorists, is likely to be closed for weeks if not months. Swiss railways yesterday increased capacity to ease the congestion, but road freight organisations warned the situation could quickly become unmanageable. The tunnel is also fitted with a state-of-the-art fire detection system and a ventilation system that allows air in the tunnel to be refreshed, and fumes evacuated, within 15 minutes of an accident. None of that was enough to prevent the tragedy. "This accident shows us, sadly, that it is simply impossible to guarantee anyone's safety in a two-directional, mono-bore tunnel," said Louis Verdier, deputy mayor of Chamonix, at one end of the Mont Blanc tunnel. "This disaster must pose major questions about the reopening of Mont Blanc."... Survivors and rescue workers described how litres of petrol from the crumpled trucks then washed over the tunnel floor, causing a huge explosion to rip through the structure and starting a fire which blazed throughout the night.... "Knowing the layout of the tunnel I quickly walked towards an emergency exit. Of course, I couldn't see anything. It was like someone had turned the lights out. But even with loudspeakers giving directions some people simply became distraught and several cars were trying to reverse. It was chaotic."... Another rescue worker Benno Beuhmann, in charge of Uri canton's chemical accident unit, described how workers found four corpses in cars and six people who had suffocated in the emergency tunnel, tantalisingly close to exits which would have saved their lives.

[http://www.google.com/images?hl=en&q=Mont+Blanc+tunnel+fire&um=1&ie=UTF8&source=univ&ei=SbfpS7LeJo6qsgP9pInMBw&sa=X&oi=image\\_result\\_group&ct=title&resnum=4&ved=0CDUQsAQwAw](http://www.google.com/images?hl=en&q=Mont+Blanc+tunnel+fire&um=1&ie=UTF8&source=univ&ei=SbfpS7LeJo6qsgP9pInMBw&sa=X&oi=image_result_group&ct=title&resnum=4&ved=0CDUQsAQwAw) Images of Mont Blanc tunnel fire Memorials

[http://www.thefreelibrary.com/Threat+of+terrorism,+accidents+turns+attention+to+tunnel+safety...\\_a091203782](http://www.thefreelibrary.com/Threat+of+terrorism,+accidents+turns+attention+to+tunnel+safety..._a091203782) [http://goliath.ecnext.com/coms2/gi\\_0199-2157363/Threat-of-terrorism-accidents-turns.html](http://goliath.ecnext.com/coms2/gi_0199-2157363/Threat-of-terrorism-accidents-turns.html) Threat of terrorism, accidents turns attention to tunnel safety. Property/Casualty: Loss/Risk Management Notes. Fire more likely in roadway tunnels than in railroad tunnels; Mont Blanc tunnel fire examined; Interview with Bill Kennedy, Brief Article Loss/Risk Management Notes is compiled by Senior Associate Editor Lynna Goch. Best's Review, Publication Date: 01-SEP-02 The Mont Blanc tunnel fire of 1999, which occurred on the border of France and Italy, burned for two days and killed 39 people.... The tunnels in New York--including the Lincoln and the Holland--have about one or two car fires a year, and they are considered routine incidents... The thing that's a horse of a different color is either if you have a deliberately caused incident or, in the interest of saving time and money, a driver tries to sneak illegal cargo through the tunnel.... The 1999 Mont Blanc tunnel fire was caused by foodstuffs... **a tanker full of margarine** ... It was not looked at as a risky cargo at all prior to that incident. Between the time of the Mont Blanc fire and the Channel Tunnel fire, I don't think the French and Italians had caught on to the fact that they had a serious risk.... The attitude of complacency, in my opinion, raises the likelihood that an event will occur.

<http://www.landroverclub.net/Club/HTML/MontBlanc.htm> The Mont Blanc Disaster **41 deaths (correction 39), 52 hours burning and reached temperatures of 1000 °C (1830 °F)** Of the 41 people who died after fire swept through the Mont Blanc tunnel on 24 March, all but 7 had stayed in their cars. They were poisoned by fumes from the fire. To understand what happened you must know that there are independent control rooms, ventilation and safety systems on both sides as

half of the tunnel is French and the other half Italian territory. Only every second refuge area (unpair numbers) has a sheltered gastight room with fresh air supply giving protection for 2 hours. *This is a minute-by-minute report of the incident – it is a MUST READ, but have a box of Kleenex handy – devastating.*

[http://www.boston.com/news/traffic/bigdig/articles/2006/07/28/bostons\\_emergency\\_routes\\_to\\_be\\_reviewed\\_after\\_death/](http://www.boston.com/news/traffic/bigdig/articles/2006/07/28/bostons_emergency_routes_to_be_reviewed_after_death/) Boston's emergency routes to be reviewed after death By Raja Mishra, Globe Staff, July 28, 2006

[http://en.wikipedia.org/wiki/Salang\\_tunnel\\_fire](http://en.wikipedia.org/wiki/Salang_tunnel_fire) Salang tunnel fire From Wikipedia, the free encyclopedia page as it appeared on 5/11/10 12:28 PM The Salang tunnel fire occurred on 3 November 1982 in one of Afghanistan's road tunnels - the Salang tunnel - during the Soviet occupation of Afghanistan. Details are unclear, but the incident may have been one of the deadliest fires of modern times.... Initial reports detailed fuel and ordnance explosions, and the death toll was speculated as high as 2,700. The death toll was subsequently revised downwards many times...FROM SOVIET MILITARY DATABASE: On 3 November 1982 two military convoys (2211 and 2212) collided in the Salang tunnel causing a traffic jam. There were no fire or explosions. 64 Soviet soldiers and 112 Afghan people were killed by carbon monoxide emitted by idling engines.

[http://en.wikipedia.org/wiki/Big\\_Dig](http://en.wikipedia.org/wiki/Big_Dig) Fatal ceiling collapse From Wikipedia, the free encyclopedia page as it appeared on 5/11/10 12:54 PM A fatal accident raised safety questions and closed part of the project for most of the summer of 2006. On July 10, 2006, a concrete ceiling panel weighing 3 tons (2722 kg) and measuring 20 by 40 ft (6.1 by 12.2 m) fell on a car traveling on the two-lane ramp connecting northbound I-93 to eastbound I-90 in South Boston, killing Milena Del Valle, who was a passenger, and injuring her husband, Angel Del Valle, who was driving... On September 1, 2006, one eastbound lane of the connector tunnel was re-opened to traffic... The project has incurred criminal arrests, escalating costs, death, leaks, and charges of poor execution and use of substandard materials...

[http://www.boston.com/news/traffic/bigdig/articles/2008/03/14/no\\_big\\_dig\\_copycats/](http://www.boston.com/news/traffic/bigdig/articles/2008/03/14/no_big_dig_copycats/) No Big Dig copycats By Noah Bierman, Globe Staff / March 14, 2008 By Noah Bierman, Globe Staff / March 14, 2008 As other cities consider removing elevated highways, activists cite Boston as a reason not to go underground... If all had gone as planned, the mayor of Seattle would don a hard hat next year and break ground on a multibillion-dollar project to replace the city's downtown overpass with a tunnel. (Boston Globe, 3/14/08)

[http://en.wikipedia.org/wiki/Caldecott\\_Tunnel\\_fire](http://en.wikipedia.org/wiki/Caldecott_Tunnel_fire) Caldecott Tunnel fire From Wikipedia, the free encyclopedia last modified on 15 February 2011 at 22:07. The Caldecott Tunnel fire killed seven people in the north tube of the Caldecott Tunnel, on State Route 24 between Oakland and Orinda in the US state of California just after midnight on 7 April 1982. It is one of the few major tunnel fires involving a cargo normally considered to be highly flammable, namely gasoline.... - overcome by smoke - ventilation system was not switched on at the time of the accident

<http://abclocal.go.com/kgo/story?section=resources/traffic&id=7227809> Crews hope to reopen Caldecott Tunnel Alan Wang, 1/19/10, ABC Local KGO-TV/DT Crews dealt with major flooding issues in the Caldecott Tunnel on Tuesday and it is a problem they are hoping to resolve before Wednesday morning's commute and the next big storm.

<http://www.allbusiness.com/operations/disaster-preparedness-disaster-insurance/518361-1.html> MTA failed to test before tunnel realignment. By Rackham, Anne, Date: Monday, July 3 1995 Despite the sinkage along Hollywood Boulevard in the summer of 1994, which the Metropolitan Transportation Authority blamed on soil conditions brought on by the Northridge earthquake, the MTA did no soil tests before it set about realigning the subway tunnel in the Vermont Avenue area - now the site of a

house-size sinkhole....A few hours later, a 70-foot-wide chunk of Hollywood Boulevard collapsed into a huge hole in the street...The MTA has blamed a broken city water pipe for the problem, but an engineer with the Department of Water & Power said the water main broke because of the sinkhole collapse. Any earlier water in the soil was likely groundwater that fell into the tunnel because of the construction work, said Bob Simmons of the DWP..."The fact that the water went down, instead of shooting up, proves that the cavern was already there," said Simmons. "Yes, there have been changes in the soil since the earthquake. But even the smallest leak (in a DWP main) would have shown on the surface. ... It clearly wasn't our hole. They (the MTA) may have just misestimated something."... "The (MTA) geologist said that, in hindsight, testing would have been a good idea," admitted Chesser..."The DWP has been doing business in this town the same way for years. It just doesn't make sense that all of a sudden, and only around MTA sites, their pipes would start popping," said Schneiderman. "The MTA's whole approach is they want to speed things up. They had already decided not to take precautionary measures."

<http://www.allbusiness.com/north-america/united-states-california-metro-areas/481388-1.html>

Hollywood business people find damage growing; subway work is suspended but cracking, sinkage go on. By Rackham, Anne, Los Angeles Business Journal Date: Monday, December 12 1994 Hollywood Boulevard business people have been astonished to find that their buildings have continued to shift, crack and break away from the sidewalk in recent weeks, even though Metro Rail subway tunneling has been on hold for the past four months. Business and property owners say that, especially since it rained over Thanksgiving weekend, the ground under Hollywood Boulevard has been shifting, causing their buildings to move, sink and crack. Business traffic along the boulevard is dismal, and some business owners are concerned that if tunneling resumes this month on schedule, irreparable damage will follow. "Hollywood community activist Robert Nudelman speculated ...that underground rivers, fueled by the recent rain, have shifted additional soil under the boulevard. He blames unstable soil conditions and "bogus" soil studies for the problems caused by tunneling -- rather than inadequate construction materials. "Nobody in his right mind would build a subway there," said Nudelman.... The owners of the 64unit Hillview Apartments, at the corner of Hollywood Boulevard and Hudson Avenue, claim that subway tunneling-caused damage has rendered the building a total loss, and that the structure must be demolished... The MTA last August paid to house displaced tenants of the apartment building at the nearby Holiday Inn after Metro Rail crews ruptured utility lines. MTA spokesman Steve Chesser said the MTA spent \$200,000 to upgrade gas lines so the apartment residents could re-enter the property... However, the MTA has denied responsibility for what the building owners claim is permanent, irreparable structural damage... Subway tunneling in August caused "cracking, pulling apart, separation, subsidence, settling, loss of use, loss of value, and other damage to the subject property," the suit alleges. The contractors named in the suit are Shea-Kiewit-Kenny, which has the contract to dig and build the Hollywood tunnel section, and construction management firm Parsons-Dillingham.

<http://www.scientific.net/AMR.150-151.719> Research on Earthquake Resistant Materials in Mountain Tunnels Crossing Fault Jinglong Bu, Zhengyi Jiang and Sihai Jiao, October, 2010, Advanced Materials Research (Volumes 150 151)

<http://www.springerlink.com/content/y523412634024424/> Seismic response of deep tunnels in near-fault conditions Mirko Corigliano, April 2007, Research Doctorate in Geotechnical Engineering XIX Cycle, Politecnico di Torino 2.4. Damage Due To Fault Displacement 22, 2.5. Miscellaneous Aspects Related To Dynamic Motion 23 Even a low level of damage may affect the serviceability of a wide network. Seismic analysis of tunnels close to seismogenic faults is a complex problem, which is often neglected at the design stage for the lack of specific codes or guidelines for the design of underground structures in seismic conditions

<http://www.fhwa.dot.gov/bridge/tunnel/pubs/nhi09010/13.cfm> United States Department of Transportation - Federal Highway Administration, Updated: 4/05/2011 The greatest incidence of

severe damage has been associated with large ground displacements due to ground failure, i.e., fault rupture through a tunnel, landsliding (especially at tunnel portals), and soil liquefaction. Ground shaking in the absence of ground failure has produced a lower incidence and degree of damage in general, but has resulted in moderate to major damage to some tunnels in recent earthquakes... Near-surface rectangular cut-and-cover tunnels and immersed tube tunnels in soil have also been vulnerable to transient seismic lateral ground displacements, which tend to cause racking of a tunnel over its height and increased lateral pressures on the tunnel walls. Their seismic performance could be vital, particularly when they comprise important components of a critical transportation system (e.g., a transit system) to which little redundancy exists. Adequate design and construction of seismic resistant tunnel structures, however, should never be overlooked, as moderate to major damage has been experienced by many tunnels during earthquakes, as summarized by Dowding and Rozen (1978), Owen and Scholl (1981), Sharma and Judd (1991), and Power et al. (1998), among others. The greatest incidence of severe damage has been associated with large ground displacements due to ground failure, i.e., fault rupture through a tunnel, landsliding (especially at tunnel portals), and soil liquefaction. Ground shaking in the absence of ground failure has produced a lower incidence and degree of damage in general, but has resulted in moderate to major damage to some tunnels in recent earthquakes. The most recent reminder of seismic risk to underground structures under the ground shaking effect is the damage and near collapse at the Daikai and Nagata subway stations (Kobe Rapid Transit Railway) during the 1995 Kobe Earthquake in Japan . Near-surface rectangular cut-and-cover tunnels and immersed tube tunnels in soil have also been vulnerable to transient seismic lateral ground displacements, which tend to cause racking of a tunnel over its height and increased lateral pressures on the tunnel walls. Their seismic performance could be vital, particularly when they comprise important components of a critical transportation system (e.g., a transit system) to which little redundancy exists.

[http://naosite.lb.nagasaki-u.ac.jp/dspace/bitstream/10069/22249/1/NatHaz\\_Jiang.pdf](http://naosite.lb.nagasaki-u.ac.jp/dspace/bitstream/10069/22249/1/NatHaz_Jiang.pdf) 3.2.1 Cracking of lining Damage assessment of tunnels caused by the 2004 Mid Niigata Prefecture Earthquake using Hayashi's quantification theory Jiang, Yujing; Wang, Chunxiang; Zhao, Xiaodong, Natural Hazards, 53(3), pp.425-441; 2010 From Table 1, we can see that almost all of the damaged tunnels suffered cracking of the concrete lining. The types of the lining cracks are longitudinal cracks, transverse cracks and inclined cracks in the arch, sidewall and roadbed. The extent of cracks is various. Slight cracks have little influence on the function of the concrete lining. But opening of cracks and buckling of the lining, inflicted spalling or collapse of the lining and consequently water leakage happened.

3.2.2 Spalling of lining Spalling of concrete lining is the severe damage pattern in this disaster. There are three causes for spalling: space over the arch crown; imperfection of the contact between the concrete material and the rock surrounding of the tunnel; and the aged concrete lining. The seismic shaking force is the initiation factor.

[http://books.google.com/books?id=CPJC9K9unvMC&pg=PA413&lpg=PA413&dq=frequency+of+tunnel+accidents&source=bl&ots=4rt5e8Ustv&sig=Tm7mN1XgZKV-2VaPkOsOYYh3Kg8&hl=en&ei=IXFtTc-qK4OksQOg2tHGBQ&sa=X&oi=book\\_result&ct=result&resnum=2&ved=0CB8Q6AEwATgK#v=onepage&q=frequency%20of%20tunnel%20accidents&f=false](http://books.google.com/books?id=CPJC9K9unvMC&pg=PA413&lpg=PA413&dq=frequency+of+tunnel+accidents&source=bl&ots=4rt5e8Ustv&sig=Tm7mN1XgZKV-2VaPkOsOYYh3Kg8&hl=en&ei=IXFtTc-qK4OksQOg2tHGBQ&sa=X&oi=book_result&ct=result&resnum=2&ved=0CB8Q6AEwATgK#v=onepage&q=frequency%20of%20tunnel%20accidents&f=false) The handbook of tunnel fire safety, Thomas Telford, 2005 - Technology & Engineering - 514 pages By Alan Beard, Richard Carvel PG 90 ...the public becomes sensitized to tunnel fires due to repeated major accidents....

[http://books.google.com/books?id=JuTAZmIseeAC&pg=PA282&lpg=PA282&dq=frequency+of+tunnel+accidents&source=bl&ots=RvcNNwoV2V&sig=XWP8qzuAsX91ieWUiz700pa5M&hl=en&ei=s2RtTamHE5LQsAOG\\_NytBQ&sa=X&oi=book\\_result&ct=result&resnum=10&ved=0CFIQ6AEwCQ#v=onepage&q=frequency%20of%20tunnel%20accidents&f=false](http://books.google.com/books?id=JuTAZmIseeAC&pg=PA282&lpg=PA282&dq=frequency+of+tunnel+accidents&source=bl&ots=RvcNNwoV2V&sig=XWP8qzuAsX91ieWUiz700pa5M&hl=en&ei=s2RtTamHE5LQsAOG_NytBQ&sa=X&oi=book_result&ct=result&resnum=10&ved=0CFIQ6AEwCQ#v=onepage&q=frequency%20of%20tunnel%20accidents&f=false) The Handbook of Road Safety Measures By Rune Elvik, Alena Hoye, Truls Vaa, Michael Sorensen, Emerald Group Publishing, 2009 -Health & Fitness,1124 pages Factors which can make tunnels less safe than roads above-ground include: Traffic space is limited, opportunities for evasive maneuvers are small;

there is no daylight, and light conditions often change dramatically when driving in and out of a tunnel; access to fresh air is reduced and steam, mist or exhaust gases can reduce visibility; in the event of accidents or fires, the escape route may be blocked and rescue work may be more difficult than on roads above ground.

<http://www.nytimes.com/gwire/2011/01/20/20greenwire-200-year-flood-in-calif-more-devastating-than80143.html> 200-Year Flood in Calif. More Devastating Than Major Quake, USGS Says By COLIN SULLIVAN of Greenwire, Published: January 20, 2011 A massive California rain event -- one expected to occur once every 200 years -- would far surpass destruction caused by a "Big One" earthquake, causing more than \$700 billion in damage and hobbling the state's economy for decades, federal scientists are warning....U.S. Geological Survey scientists ran an extreme hypothetical, called "ArkStorm," through simulation models and determined that a deluge not seen in California since 1862 could potentially cause three times more damage than a large earthquake on the San Andreas Fault.

[http://bpa.odu.edu/forecasting/sor/2009/2009\\_sor\\_ch7.pdf](http://bpa.odu.edu/forecasting/sor/2009/2009_sor_ch7.pdf) The Tunnels that Connect Hampton Roads, bpa.odu.edu, 2009 Tunnel accident stats, Final Reflection: Accidents and Terrorism

## Videos Truck and Car Accidents in Tunnels

Envision cars and trucks stuck inside a long tunnel after an accident and the impending ventilation issues and fire possibilities with smoke traveling up the grade (acting like a chimney) in the proposed 710 tunnel. Also imagine the detours necessary through the surrounding neighborhood for those who have not yet entered the tunnel. Makes you wonder how often accidents will happen in such a tunnel. Take a look.

<http://www.youtube.com/watch?v=VeZjMTzqNQ8> Seconds From Disaster - S01E02 - Tunnel Inferno \_46:24 minutes On 24 March 1999, 39 people died when a Belgian transport truck carrying flour and margarine caught fire in the tunnel. After several km, the driver realized something was wrong as cars coming in the opposite direction flashed their headlights at him; a glance in his mirrors showed white smoke coming out from under his cab. This was not yet a fire emergency; there had been 16 other truck fires in the tunnel over the previous 35 years, always extinguished on the spot by the drivers.

[http://www.youtube.com/watch?v=99vKkFo\\_IKI](http://www.youtube.com/watch?v=99vKkFo_IKI) Need to be able-bodied for this: Qingdao Undersea Tunnel Evacuation (EXODUS) 1:30 min Simulation of the undersea tunnel in Qingdao, China, visualizing an accident in the tunnel and showing how evacuees can escape the tunnel. Simulation by UC-win/Road, a FORUM8 software program, Analysis by FSEG's EXODUS.

<http://www.youtube.com/watch?v=SXOd9z5jHfo> 1:30 min **Evacuation in an Aging Society** Taisei **Engineering's research into evacuation of tunnels, comparing the survival rate of a group of elderly and a group of younger people.** (Need to be able-bodied for this. While you watch – try to imagine what a possible fire with it's accompanying smoke would do to cut down the numbers of those physically capable of escaping)

<http://www.youtube.com/watch?v=w3DA36sXT3A> CityLink Collision - Tunnel Nightmare 3:31 min News footage, CityLink collision, Melbourne 23/03/2007

<http://www.youtube.com/watch?v=AxVxGMOYeN0> <http://jaimejepartage.blogspot.com/20...> En Corée du Sud, un bus arrive à vive allure dans un tunnel et s'encastre dans des voitures à l'arrêt. Accident De Bus Dans Un Tunnel!!!! : 31 min ('The same tunnel In South Korea, a bus arrives at high speed in a tunnel and smashes into stopped cars.')

<http://www.youtube.com/watch?v=42C-Pw2HXq8> Tunnel on fire, 1:55 min, 20/1/2010, Predor Trojane, Slovenia. 3 trucks were involved in the accident, which caused fire, 5 people were taken to the hospital. I had to take the camera off, because I had 200 grams of marijuana in the back seat and was scared of Mr. Police.

<http://www.youtube.com/watch?v=weBwRewEYa4&feature=fvsr> euronews:  
[www.euronews.net/nocomment/](http://www.euronews.net/nocomment/) Slovenia tunnel fire\_:53 min

<http://www.youtube.com/watch?v=58VoduuPWFk> Huge Multi-Car Pileup in French tunnel\_:39 min  
Dozens of cars pile up in a tunnel in France.

<http://www.youtube.com/watch?v=8yJSh2B5-YU> BIKE ACCIDENT IN TUNEL\_2:53 min

<http://www.youtube.com/watch?v=uVZ4RxYznp4> Accident in a tunnel: Sanyo expressway, Okayama prefecture, 3:31 min on Feb. 15, 2010, a truck slammed into the back of a patrol car near the exit of Musa tunnel on a part of the Sanyo expressway in Okayama prefecture. the accident caused the tunnel to be blocked and inaccessible. at first, there were a couple explosions rocking the tunnel, which then made everyone abandon their vehicles and escape towards the entrance of the tunnel due to smoke rapidly filling the tunnel. about an hour and a half later, everyone was taken to a highway patrol office and waited there until we could go back and retrieve their vehicles. about 4 hours later after the accident, we went back to the tunnel, reeking of burned chemicals and plastic, also leaving a dark layer of soot on everyone's car. breathing became difficult, but everyone drove out of the tunnel the same way we all came in.

<http://www.youtube.com/watch?v=RvpupKheJr0&NR=1> Truck fire on PA Turnpike 6-20-08\_1:01 min  
4 cell phone video of truck fire at the entrance of the Allegheny Mountain Tunnel Westbound. Taken by Thatcher

<http://www.youtube.com/watch?v=0FBMWE9BfqE&NR=1> [Accident] Crash in a tunnel ...\_:54 min  
Caused by over-speed...unfortunately the driver died

<http://www.youtube.com/watch?v=yWQTbN945I&NR=1> Tunnel car truck crash\_:46 min

<http://www.youtube.com/watch?v=V1LM8TtSLZ0&feature=related> Melbourne Domain Tunnel truck and car crash\_:50 min This was a story on A Current Affair which was about dangerous driving. By coincidence the car that was fitted with cameras to demonstrate this was directly in front of an accident inside the Domain tunnel, so it was captured on video. Watch the Mercedes move into the centre lane, out of view of the truck's mirrors as he indicates to change into the same lane. Once the truck moves left a collision is inevitable. Higher quality capture available here:

<http://media.sensationcontent.com/row...>

<http://www.youtube.com/watch?v=21kBlAaVWz0&NR=1> Dubai Tunnel Accidents Video\_2:03 min Get to know the what driving in Dubai is like. Scenes inside the Rashidiya tunnel captured on video.

<http://www.youtube.com/watch?v=KQkb8uMQPIY> Truck accident in tunnel\_:53 min Truck driver fall a sleep in tunnel

[http://www.youtube.com/watch?v=9KUUeF8\\_AzQ&NR=1](http://www.youtube.com/watch?v=9KUUeF8_AzQ&NR=1) Inversioni di marcia ed altro in galleria highway tunnel accident 1:39 min Italian, ('the unthinkable at the end when a truck crushes three cars still in the tunnel taken from the watchful eye of big brother')

<http://www.youtube.com/watch?v=5wO2sApvTXc&NR=1> Russian Tunnel. Crash(es). 1:24 min This tunnel in Russia is the longest in-city tunnel of Europe. (3,150m long Lefortovo tunnel in Russia is the

longest in-city tunnel in the world. It is nicknamed 'The Tunnel of Death'. There is a river running over it and water leaks at some points. When the temperature reaches -38 degrees outside the tunnel like it did this winter, the water on the tunnel road freezes and the result is the attached video taken during a single day with the tunnel camera.

[http://www.scatnow.com/index\\_files/Page679.htm](http://www.scatnow.com/index_files/Page679.htm) (Explanation)

<http://www.youtube.com/watch?v=GW-8g40oLbc&NR=1> Ledenik tunnel crash, 1:10 min The accident took place on July 28, 2006. Miljenko Striak (age 26, the one who caused the accident) said that he was sending a text message when he was entering the Ledenik Tunnel. He also said that the sunlight was blinding him and he couldn't see the traffic signs. Additionally, he violated the speed limit (60kph / 35mph) by driving at 100kph / 60mph. And? he didn't even touch the brake pedal when he was approaching the traffic jam. In September 2008, he was sentenced to 8.5 years in prison.

## Construction Problems Taxpayers Fund "Private" Cargo Industry

[http://www.boston.com/news/traffic/bigdig/articles/2008/07/17/big\\_digs\\_red\\_ink\\_engulfs\\_state/](http://www.boston.com/news/traffic/bigdig/articles/2008/07/17/big_digs_red_ink_engulfs_state/) By Sean P. Murphy, Globe Staff / July 17, 2008

**Big Dig's red ink engulfs state** Contrary to the belief that the project was heavily subsidized by the federal government, **73 percent of costs were paid by Mass. drivers and taxpayers.** (Boston Globe, 7/17/08)

[http://www.dot.ca.gov/hq/tpp/offices/ogm/products\\_files/GGDP\\_Final\\_Report.pdf](http://www.dot.ca.gov/hq/tpp/offices/ogm/products_files/GGDP_Final_Report.pdf) Global Gateways Development Program State of California Business, Transportation & Housing Agency California Department of Transportation Division of Transportation Planning Office of Goods Movement January 2002 As requested by Resolution Chapter 158, Statutes of 2000 (SCR 96, Karnette) PDF pg 6 (doc pg 2) Goods Movement Challenge The State, RTPAs and other local agencies should take an aggressive role in planning, funding, developing, operating and maintaining critical public portions of the goods movement transportation system. In the proposed 2002 STIP, the Governor has nominated 23 projects totaling over \$225 million to improve goods movement in the State. RTPAs and other local agencies should also **financially support needed freight projects with regional and local funds.**

<http://www.sfmex.org/support/mts/webdocs/Needs%20Report.pdf> California Marine Transportation System Infrastructure Needs March 11, 2003 Prepared By: California Marine and Intermodal Transportation System Advisory Council, Northern California Marine Transportation System Advisory Council, Southern California Marine, Transportation System Advisory Council  
Lobbying effort on behalf of the ports to get Federal Government country to invest tax dollars towards improving their (710) freeway cargo route. PDF pg 22 (doc Pg14) - National Assets, National Recognition - 4th paragraph= "For 150 years, projects that promote or enhance rail freight have routinely been ruled ineligible to receive federal funds, primarily because federal policies that date back to the land grant programs DO NOT acknowledge that private rail carriers serve the public good."

*The Port's "Advisory" councils wrote this White paper - it states that the ports rely on the 710 as a cargo route. Essentially, in this document they stress the need to lobby the Federal Government (on the ports behalf) to convince the Govt. that it is in the best interest of the country to invest tax dollars towards improving their (710) freeway cargo route(s) (they include other freeways and train cargo routes in their discussion). They promote viewing/equating their private money making venture (shipping) as a "common good" issue (jobs/economy). They push for the freeway route "improvements" because the train route is harder to achieve. Apparently there is a rule that keeps the Govt. from subsidizing freight rails (!) Apparently there is no such rule that keeps the Govt. from subsidizing a freeway built for Cargo! This "white paper" is corporate "spin" so the taxpayer's money and freeway systems can be used to help their shipping businesses.*

<http://www.mxsocal.org/Authors/13/Manny-Aschemeyer.aspx> California MTS Infrastructure Needs Report by Manny Aschemeyer, Published 08/09/2005, Marine exchange of Southern California In 2003, Congress will establish successor legislation to the Transportation Equity Act for the 21st Century (TEA-21). More than a simple reauthorization of existing funding programs, the new legislation (herein referred to as "TEA-3") is intended to be the federal government's definitive statement of national transportation policies, programs and projects that address the transportation needs of the United States... investments in transportation infrastructure that enhance freight movement have taken a back seat to commuter-oriented alternatives. An old adage in the freight industry notes that goods movement suffers from lack of attention because "Cargo doesn't vote". ... This year, advocates of goods movement are organizing to become actively engaged in the discussions about TEA-3... California State Senator Betty Karnette is working to establish the California Freight Advisory Commission (CALFAC), a group of ports, shippers, transportation providers, and other interest groups as well as state agencies dedicated to improving freight transportation in the state... In January 2002, the California Business, Transportation and Housing Agency, and the California Department of Transportation (Caltrans) published the Global Gateways Development Program (GGDP), a reflection of stakeholder perspectives on the urgency and options to facilitate the movement of goods in California. (See Appendix 3.) Many of the recommendations outlined in the GGDP provide a foundation for MTS improvement efforts in California. Building upon the GGDP, the MTS program focuses on the ports and supporting inland transport systems in California. This white paper, entitled California Marine Transportation System Infrastructure Needs, is a collaborative effort of the Northern California Marine Transportation System Advisory Council (NORCAL-MTSAC), the Southern California Marine Transportation System Advisory Council (SOCAL-MTSAC), and the California Marine and Intermodal Transportation System Advisory Council (CALMITSAC). This report presents recommended policies, programs and projects for reinvesting in needed infrastructure to support the MTS system. Together with the GGDP, this report will serve as a framework for dialogue with state and federal agencies, the state Legislature and Congress, with the objective of establishing project funding for transportation infrastructure and security upon which we all so heavily depend... From a strategic viewpoint, California is ideally situated in the global trading network. It is blessed with a premier location for ports and international gateways to the entire American market.

## Cost Under-Estimations

[http://en.wikipedia.org/wiki/Channel\\_Tunnel](http://en.wikipedia.org/wiki/Channel_Tunnel) Channel Tunnel From Wikipedia, the free encyclopedia page was last modified on 8 May 2010 at 07:37. Private funding for such a complex infrastructure project was of unprecedented scale... **an 80% cost overrun. The cost overrun was partly due to enhanced safety, security, and environmental demands. Financing costs were 140% higher than forecast...** Delays and cost overruns led to the share price dropping.... Eurotunnel suspended payment on its debt in September 1995 to avoid bankruptcy. In December 1997 the British and French governments extended Eurotunnel's operating concession by 34 years to 2086. Financial restructuring of Eurotunnel occurred in mid-1998, reducing debt and financial charges. Despite the restructuring The Economist reported in 1998 that to break even Eurotunnel would have to increase fares, traffic and market share for sustainability. A cost benefit analysis of the Channel Tunnel indicated that there were few impacts on the wider economy and few developments associated with the project, and that **the British economy would have been better off if the tunnel had not been constructed... The overall environmental impact is almost certainly negative...**

[http://www.metro.net/board/Items/2011/02\\_February/20110224RBMItem2.pdf](http://www.metro.net/board/Items/2011/02_February/20110224RBMItem2.pdf) Planning And Programming Committee February 16,2011, Measure R Project Delivery Committee February 17,2011 Public-Private Partnership Program, Arthur T Leahy Chief Executive Officer Page 7 PDF **"estimate"** for the SR-710 cargo tunnel of **2.81 billion from the METRO staff 2/11**

[http://en.wikipedia.org/wiki/Big\\_Dig](http://en.wikipedia.org/wiki/Big_Dig) Big Dig, From Wikipedia page as it appeared on 10 May 2010 at 15:18. GMT **Project...estimated... at \$2.8 Billion (1982 dollars)** ... federal and state tax dollars ... **the total a staggering \$22 billion...** It will not be paid off until 2038... Bechtel/Parsons Brinckerhoff, the consortium that oversaw the project ....The project has incurred criminal arrests escalating costs, death, leaks, and charges of poor execution and use of substandard materials.

<http://www.infrastructurist.com/2009/12/16/the-4-highway-projects-that-would-be-the-biggest-waste-of-money/> The 4 Highway Projects that Would Be the Biggest Waste of Money by Yonah Freemark, Wednesday December 16<sup>th</sup>, The Infrastructurist Some big infrastructure projects, it seems, will simply never be abandoned. One example is Los Angeles County's I-710 extension between Alhambra and Pasadena: In the works since 1947, it's still just a line on the state highway plans map... A study completed in 2006 pegged the cost of the road at \$2.3 to \$3.6 billion, but that number would likely be higher today... The huge cost is the biggest obstacle — though Caltrans still has a motivation to push forward because it would lose billions of potential federal dollars if it didn't, and it claims it could line up foreign investors to help pay for the road... But other arguments for the project hardly hold up. The Ports have invested billions of dollars in an improved Alameda Corridor to allow the shipment of goods via rail. If more products were moved via train instead of truck, congestion would decrease significantly.

<http://la.streetsblog.org/2010/10/26/former-metro-board-chair-how-much-will-710-tunnel-cost/> Former Metro Board Chair: How Much Will 710 Tunnel Cost? by Damien Newton on October 26, 2010 given the potentially huge cost of the project, and the wildly different estimates given for the project over the years (see chart below); Najarian is arguing that Metro should have some hard fiscal figures before committing to spending nearly \$60 million on an environmental study.

<http://sierramadretattler.blogspot.com/2009/07/710-tunnel-is-feeling-california.html> The 710 Tunnel Is Feeling Some California Legislative Love Posted By The Moderator At 7:00 AM Thursday, JULY 9, 2009, Sierra Madre Tattler if we were dealing with a real government here, perhaps the cost - which apparently is staggering - would be at least considered. The problem is that tunneling underground is so expensive that one wonders if the action by the Assembly's Transportation Committee was a serious gesture or, even, a maneuver intended to kill the project by making it too expensive to undertake". "... Knowing that these figures were prepared by SCAG makes me wonder if perhaps the real consequences (noise levels, air pollution, environmental impacts, traffic congestion) won't be far worse.... The California State Legislature looks to be in the process of making the 710 Tunnel a reality. People don't want it, we can't afford it, environmentalists shudder, and some engineers think it will shatter with the first decent earthquake to come along... if we were dealing with a real government here, perhaps the cost - which apparently is staggering - would be at least considered. Particularly in the face of California's ballooning debt. But we are talking about Sacramento, so any consideration of the rational is probably inappropriate.... The problem is that tunneling underground is so expensive that one wonders if the action by the Assembly's Transportation Committee was a serious gesture or, even, a maneuver intended to kill the project by making it too expensive to undertake."... Knowing that these figures were prepared by SCAG makes me wonder if perhaps the real consequences (noise levels, air pollution, environmental impacts, traffic congestion) won't be far worse.... With CEQA review having been removed from redevelopment considerations in SB 375, and SB 1350 informing us that as far as the 710 Tunnel goes we can just butt out, it is becoming quite obvious that Sacramento has gotten a little tired of the democracy thing getting in the way of business... Bill Weisman also goes on to note that this bill is opposed by the Consulting Engineers and Land Surveyors of California (they think it might be unconstitutional), the cities of La Canada Flintridge, and South Pasadena, and the Planning and Conservation League. The only registered supporter? A paid lobbyist named Nat Read and his 710 Freeway Coalition. In case you are blissfully unaware, Nat is a former cop who became known for writing poetry about the rigors of life in law enforcement.

<http://www.lacanadaonline.com/news/tn-gnp-tunnel-20101022,0,2103822.story> Najarian wants to

know what tunnel would cost By Bill Kisliuk, *October 22, 2010, La Canada Valley Sun* Najarian, who serves on the MTA board of directors, said there is no credible figure for a project with an estimated price tag of \$3 billion to \$11.8 billion.... "The ultimate question is whether we can ever afford that tunnel," he said.

[http://en.wikipedia.org/wiki/Channel\\_Tunnel](http://en.wikipedia.org/wiki/Channel_Tunnel) Channel Tunnel, Wikipedia, 5/11/10 3:15 PM Private funding for such a complex infrastructure project was of unprecedented scale. An initial equity of £45 million was raised by CTG/F-M, increased by £206 million private institutional placement, £770 million was raised in a public share offer that included press and television advertisements, a syndicated bank loan and letter of credit arranged £5 billion...Privately financed, the total investment costs at 1985 prices were £2600 million. At the 1994 completion actual costs were, in 1985 prices, £4650 million: **an 80% cost overrun... The cost overrun was partly due to enhanced safety, security, and environmental demands... Financing costs were 140% higher than forecast...** Tunneling commenced in 1988, and the tunnel began operating in 1994... In 1985 prices, the total construction cost was £4650 million (equivalent to £10501 million today), **an 80% cost overrun**. At the peak of construction 15,000 people were employed with daily expenditure over £3 million... Ten workers, eight of them British, were killed during construction between 1987 and 1993, most in the first few months of boring. Economic performance Shares in Eurotunnel were issued at £3.50 per share on 9 December 1987. By mid-1989 the price had risen to £11.00. **Delays and cost overruns led to the share price dropping;** during demonstration runs in October 1994 the share price reached an all-time low value. Eurotunnel suspended payment on its debt in September 1995 to avoid bankruptcy... In December 1997 the British and French governments extended Eurotunnel's operating concession by 34 years to 2086. Financial restructuring of Eurotunnel occurred in mid-1998, reducing debt and financial charges. **Despite the restructuring The Economist reported in 1998 that to break even Eurotunnel would have to increase fares, traffic and market share for sustainability...** A cost benefit analysis of the Channel Tunnel indicated that there were few impacts on the wider economy and few developments associated with the project, **and that the British economy would have been better off if the tunnel had not been constructed.**

## Toll Tunnels Not Viable

<http://sunroomdesk.com/2011/01/25/najarian-raises-710-tunnel-cost-question-at-one-community-forumin-pasadena/> Posted By: Editor, Tuesday, January 25, 2011 The big problem I have is that **there is a 'tipping point' for the tunnel. If it gets to be greater than \$3 billion (I've heard inside the MTA), it will fail.** The PPP report says if this cost is higher than \$5 billion, it will fail. It doesn't make sense as a community to spend the millions of dollars on consultants, on the finance people, on the engineers, on the outreach people, who are eating their way through that money by the tens of millions of dollars as we speak, only to find years down the road that this is too expensive a project and isn't feasible."

[http://ops.fhwa.dot.gov/freight/freight\\_analysis/reg\\_ind\\_studies/so\\_cal\\_study.htm](http://ops.fhwa.dot.gov/freight/freight_analysis/reg_ind_studies/so_cal_study.htm) Southern California Regional Freight Study - Executive Summary United States Department of Transportation - Federal Highway Administration, Last modified: May 27, 2010 Funding/Financing - But not all freight projects in Southern California will be able to rely on user fee financing. Initial evaluations of tolling options for truck lanes in Southern California show that they may not produce sufficient revenues to support project financing... In addition, user **fees may reduce the competitive position of regional freight facilities** as compared to ports and intermodal facilities elsewhere in the U.S.

[http://www.scag.ca.gov/goodsmove/pdf/white\\_paper.pdf](http://www.scag.ca.gov/goodsmove/pdf/white_paper.pdf) The Southern California Association of Governments (SCAG) Goods Movement Program: A survey of regional initiatives and a discussion of program objectives A White Paper produced by the Southern California Association of Governments January 2002appendices Pg 33 Of PDF ( Pg 1 Appendix 1). Framework For Understanding Regional Goods Movement Pg 41 Of PDF ( Pg 9 Appendix 4): Summary Of Outstanding Goods Movement Issues

And Research Needs Pg 53 Of PDF ( Pg 21 Appendix 4): Issue 9: The propensity of trucks to use toll roads needs to be documented in preparation for SR-60 and other truck lane implementation. **It is uncertain whether truckers will be willing to pay tolls sufficient to pay for 30% or 40% of the costs of a new truck lane system which would include I-710, SR-60, I-15, eventually I-5, and perhaps others. Ability to generate user fees to fund construction will be crucial to actually implementing these truck lanes.**

[http://www.ycat.org.au/?page\\_id=62](http://www.ycat.org.au/?page_id=62) Finances Cost-Benefit of the Road Tunnel Yarra Campaign for Action on Transport Community campaign against unsustainable road developments in Melbourne's inner northern suburbs and parks. Even Eddington's report showed that cost of the road tunnel exceeded its benefits, even when "wider economic benefits" are included. These wider benefits, like those used to justify the heavily subsidised Melbourne Grand Prix are never defined. Eddington's consultants used very low predictions for the price of oil, and carbon. A realistic assessment of these prices would lead to a reduction in revenue, as is occurring on toll ways around the world, including the newly opened EastLink.

<http://www.ycat.org.au/?p=66> A Current Affairs Toll Challenge On September 15th, 2008 , *Current Affairs* tested out toll roads versus main roads to see which is quicker and how much money you'll actually save - one expert saying nearly \$1,000 a year. ACA concluded toll roads were "a scam".

<http://www.road-scholar.org/peak-traffic.html> Transportation triage at the end of the age of oil by Mark Robinowitz, originally published May 10, 2006, From the Wilderness An engaging discussion of the effects of Peak Oil on automobile traffic, Mark Robinowitz examines the ridiculousness of implementing "superhighway" plans while the nation faces an inevitable oil drop-off.

<http://www3.wsws.org/articles/2005/oct2005/tunn-o21.shtml> The Road to Hypocrisy November 15th, 2010

<http://www3.wsws.org/articles/2005/oct2005/tunn-o21.shtml> Australia: Privatised road tunnel creates havoc in Sydney, By Rick Kelly, 21 October 2005 Wholesale privatisation by stealth Under the guise of making Australia more internationally competitive, governments at both the federal and state levels have worked to introduce so-called free market and user-pays models throughout virtually every aspect of society.... Independent research conducted by Sydney University's Dr. John Goldberg has demonstrated that without the ongoing support of massive levels of government funding, the toll road companies would be unviable. So-called Public Private Partnerships (also variously known as Private Finance Initiatives or Privately Financed Projects) have spearheaded the privatisation drive over the past decade. First developed in Britain by the Tory government in the early 1990s, and then further promoted by Labour's Tony Blair as part of his right-wing "third way" program, Public Private Partnerships (PPPs) have been particularly utilised throughout Australia to sell off and contract out those sectors for which there is the most deep rooted hostility towards privatisation. In NSW, PPPs have been used to introduce the profit principle into areas such as school and hospital development, construction of public housing, prison upgrades, and waste disposal and recycling. Across Australia, the PPP market is expected to soon be worth \$20 billion to private companies. None of the arguments used by governments and supporters of PPPs hold water. Proponents variously claim that private contractors are more efficient, deliver higher quality service, and help governments avoid going into debt to fund expensive new infrastructure developments. The latter claim is especially bogus with regard to the operation of privately run roads and tunnels in Australia. Independent research conducted by Sydney University's Dr. John Goldberg has demonstrated that without the ongoing support of massive levels of government funding, the toll road companies would be unviable... Through an obscure and highly complex scheme known as the infrastructure offset borrowings tax offset scheme (IBTOS), the federal government effectively underwrites private loans to road infrastructure companies through tax concessions worth billions of dollars to the lenders. This ensures that the

infrastructure companies have a guaranteed flow of government-backed money through their books—which is then paid to the companies' shareholders in the form of dividends, ensuring that these companies maintain their high rating on the stock market... The flow of money through private investors, the federal government, and the infrastructure companies increasingly resembles that of a pyramid scheme. As ABC Radio explained: "Toll roads cost a lot to build and generally don't make a profit for many years. So to make their stock attractive to investors, toll road companies borrow against future earnings, and pay that yet to be earned money out to shareholders in dividends today, often refinancing and upping the debt again and again. Of course those debts eventually have to be repaid. So to keep investors fed with dividends, toll road companies have to buy new assets and start the process all over again."

[http://www.pe.com/localnews/stories/PE\\_News\\_Local\\_D\\_tunnel12.1def12e.html](http://www.pe.com/localnews/stories/PE_News_Local_D_tunnel12.1def12e.html) Cost could shelve Corona-Irvine tunnel By DUG BEGLEY, 10:10 PM PDT on Sunday, July 11, 2010 , The Press-Enterprise A commuter tunnel below the Cleveland National Forest between Corona and Irvine might never see the light of day, officials and transportation planners say. At a cost of \$8.6 billion, it's simply too expensive, they said, especially since officials can't start collecting tolls until after they spend 10 years building it. Critics also have chided the tunnel's ever-rising price. Cost estimates have climbed from \$3 billion in 2003, to \$6 billion five years ago, to \$8.6 billion earlier this year. On average, the toll to use the tunnel would be \$14, according to a financial analysis of the project... To pay for the construction, the counties and their private partner would need to borrow \$17.9 billion to guarantee payment of the debt, then wait 10 years for the tunnel to be built. But it appears that also is too costly to make good business sense, according a recent report prepared for the two-county commission. To pay for the construction, the counties and their private partner would need to borrow \$17.9 billion to guarantee payment of the debt, then wait 10 years for the tunnel to be built before they made a dime collecting tolls when commuters could finally use the tunnel. Rather than spend \$100,000 on a more detailed analysis of how much money tolls could raise and continue field studies in the forest, staff at both county transportation agencies recommend shelving the project.

[http://corridornews.blogspot.com/2006\\_01\\_22\\_archive.html](http://corridornews.blogspot.com/2006_01_22_archive.html) Fork in road on toll plans? By TONY HARTZEL, January 24, 2006, The Dallas Morning News Some discuss pullout if agency uses local funds for FW highway Toll shortfall -The tollway authority's most recent estimates show that the approved policy would collect only enough tolls to initially pay about 45 percent of Southwest Parkway's construction, operating and debt costs. Although the policy calls for higher tolls on Southwest Parkway than on most other roads, the Fort Worth toll road is not expected to raise enough money to pay its costs, even after 30 years.

[http://en.wikipedia.org/wiki/Channel\\_Tunnel](http://en.wikipedia.org/wiki/Channel_Tunnel) Channel Tunnel From Wikipedia, the free encyclopedia page was last modified on 8 May 2010 at 07:37. It has been postulated that the British economy would have actually been better off without the costs from the construction project, both Eurotunnel and Eurostar, companies heavily involved in the Channel Tunnel's construction and operation, have had to resort to large amounts of government aid to deal with debts amounted. Eurotunnel has been described as being in a serious situation.

## **Failed Toll Roads and Tunnels (PPP's) Socializing the Losses**

<http://cdn.publicinterestnetwork.org/assets/H5QI0NcoPVeVJwymwlURRw/Private-Roads-Public-Costs.pdf> Private Roads, Public Costs, U.S. PIRG Education Fund Written by: Phineas Baxandall, Ph.D. U.S. PIRG Education Fund Kari Wohlschlegel and Tony Dutzik, Frontier Group Spring 2009 The Facts About Toll Road Privatization and How to Protect the Public A listing of toll roads and how many of them failed and their troubles.

[http://corridornews.blogspot.com/2006\\_01\\_22\\_archive.html](http://corridornews.blogspot.com/2006_01_22_archive.html) Pitfalls abound on private roads BY SYLVIA SMITH, January 24, 2006, Ft. Wayne Journal Gazette Recent projects that faltered include: Camino Colombia highway, a 22-mile stretch from Texas to Mexico's border that went bankrupt after three years. Projections that heavy truck traffic would pay \$16 per toll never materialized. The state bought the private toll road in 2004 for \$20 million, a fraction of its \$90 million cost, and Texas got a new road for 22 cents on the dollar, according to Texas officials.

<http://www.theage.com.au/business/drivers-desert-eastlink-as-rail-network-overflows-200808073rsn.html> Drivers desert EastLink as rail network overflows Mathew Murphy and Jason Dowling, August 8, 2008 THE future of private toll roads in Australia has been called into question after traffic on EastLink slumped dramatically in the first week of tolling...On the same day that EastLink's lacklustre traffic figures were released, a new report detailed massive overcrowding on Melbourne trains, with some carrying more than 1000 passengers - way over their official capacity of just under 800...The trends were seized on by a prominent tollway critic, who declared more people were choosing to use public transport...-Investors yesterday dumped shares in the tollway owner, ConnectEast...

[http://en.wikipedia.org/wiki/EastLink\\_\(Melbourne\)](http://en.wikipedia.org/wiki/EastLink_(Melbourne)) EastLink (Melbourne) From Wikipedia, the free encyclopedia page as it appeared on Apr 9, 2011 04:10:21 GMT **In its first six months of operation, Eastlink made a loss of almost \$93 million. In 2010 the road had to be refinanced with its traffic forecasts rewritten due to lower than expected traffic volumes.**

<http://www.youtube.com/watch?v=yDyE6o8iKhM> This video from YouTube – it is a glimpse into “future” for the neighborhoods that border the planned 710 toll-tunnel. This video is just one of many reports about the killing effects of cargo transport pollution in Melbourne and Sydney Australia (also Brisbane and Victoria). The results of the toll tunnel are:

1. Trucks exit the tollway to avoid the tolls and use residential street as a bypass...
2. The pollution emitted from an “emission stack” from a 4 Km (2.4 miles) tunnel, which handles 90,000,000 cars daily makes the residents sick. “Polluted air is a contributing factor in the deaths of 1,400 people each year in Sydney alone”.

<http://satollparty.com/post/?p=1466> San Diego privatized toll road goes bankrupt using taxpayer money, San Antonio Toll Party, By David Tanner, associate editor, Monday, April 5th, 2010 The South Bay Expressway foreign-owned toll road is the new poster child for the failed policy of road privatization...government sanctioned monopolies...the flaw in raising toll rates when traffic drops, which is the exact opposite of a free market response to fewer customers....taxpayer subsidized toll roads, often co-mingled with private money) find themselves consistently upside down on their debt despite the taxpayer bailouts that help front the construction costs. We're creating an infrastructure bubble that will be deemed too big to fail that will require even greater taxpayer bailouts if we allow this tax raid to continue. I have yet to see any data that shows increasing the cost of transportation (toll taxes on top of high gas prices) helps the economy either.

<http://www.i69tour.org/failedtollrds.html> examples of Failed Toll Roads Count Us! County Under New Terrian I-69

<http://www.corridorwatch.org/ttc/cw-caminocolombia.htm> Will History Repeat Itself? Corridor Watch.org The Camino Colombia Toll Road failed and the bondholders foreclosed on their \$75 million note. On April 29, 2004 the Texas Transportation Commission issued a Minute Order authorizing the Executive Director or his designee to enter into necessary agreements to acquire the Camino Colombia toll road at a cost not to exceed \$20 million dollars.

<http://www.dailytelegraph.com.au/business/news/tunnel-broke-by-next-year/story-e6frez80111116289848> Lane Cove Tunnel set to be second toll road failure By Simon Benson and

Rhys Haynes From: \_The Daily Telegraph May 09, 2008 12:00AM THE Lane Cove Tunnel could be broke by next year in a second spectacular billion-dollar toll road failure for the State Government in 18 months.

<http://www.visordown.com/motorcycle-news--general-news/m6-toll-road-branded-an-expensivefailure/13708.html> M6 Toll Road branded "an expensive failure", Posted: 1 September 2010 by Visordown News, motorcycle news : general news "Toll roads are not, and will never be, a solution to congestion on Britain's roads"...congestion around Birmingham is as bad, if not worse, than when the 27-mile stretch of toll-charge motorway was opened in 2003...Initially, drivers were charged just £2 to use the road; this figure has risen to £5 for cars and £9 for vans, with motorcyclists incurring a hefty £2.70 one-way weekday charge...In a bid to make the M6 flow more freely, proposals had been made to allow cars to use the hard shoulder - a move that would cost a claimed £300 to £500 million to undertake..."Toll roads are not, and will never be, a solution to congestion on Britain's roads, no matter how attractive they may appear to cash-strapped politicians desperate to deliver otherwise unaffordable road schemes," the report concludes.

## **Investors Back Away from Risky PPP's**

<http://www.smh.com.au/business/shortterm-thinking-puts-brakes-on-infrastructure-20110304-1bi5y.html> Short-term thinking puts brakes on infrastructure Matt O'Sullivan and Philip Wen, March 5, 2011, The Sydney Morning Herald The recent failures mean governments are under greater pressure to meet the huge shortfall in funding as investors run scared from piling equity into so-called "greenfield" infrastructure projects. Leighton has made clear its appetite for investing in such projects has been "very much reduced"... "The government does need to bear a big chunk of the responsibility for those failures," says Andrew Chambers, an infrastructure analyst at Austock. "After all, it was their tenders which created a model that attracted a lot of hot money. "If the government was going to tender something like that today, the hot money wouldn't be there and sensible money was never there... the level of debt to equity has to be at more appropriate levels of 40-50 per cent - not the 80-90 per cent gearing that toll-road owners such as RiverCity Motorway and Connector Motorways (failed owner of the Lane Cove Tunnel) were saddled with.

## **Reasons for Failed Tollways**

<http://www.washingtontimes.com/news/2010/mar/30/the-trouble-with-tolls/> Editorial: The Trouble With Tolls, By THE WASHINGTON TIMES, Tuesday, March 30, 2010 A toll-road project in San Diego, once held up as a model of the "innovative" public-private partnerships, collapsed last week... The South Bay Expressway filed for Chapter 11 bankruptcy protection... this article mentions a study TxDOT did that admits toll roads are based on FLAWED traffic projections (that are kept secret until after the contracts are signed)

<http://www.tollroadsnews.com/node/2366> Hungarian toll road fails Posted on Wed, 1999-09-15 12:42, toll roads news High tolls and exaggerated notions of traffic appear to lie behind the recent failure of the first toll road concession in Hungary.... Cars were charged \$6.50 for the trip on the 42km \$320m M1 toll road from Gyor to Austria, a rate of 16c/km. Heavy trucks were tolled at a rate of 55c/km.

<http://www.theaustralian.com.au/news/nation/clem7-tunnel-losses-endanger-public-privateinfrastructure/story-e6frg6nf-1225912550578> Clem7 tunnel losses endanger public-private infrastructure Annabel Hepworth and Jared Owens From The Australian September 01, 2010 12:00AM

..traffic volumes were still much lower than expected...The tunnel company's woes bring to eight the toll-road PPPs that have caused losses to investors, lenders and taxpayers in the past five years..."It's the kind of engineering madness among those who think that if you build something, people will come. " Governments face pressure to radically overhaul the way they structure public-private partnerships for critical infrastructure following the shock of Brisbane's first major road tunnel being written down by a massive \$1.56 billion. The operator of the Clem7 tunnel revealed yesterday that traffic volumes were still much lower than expected, despite tolls being slashed by 50 per cent on July 1 in a desperate bid to convince motorists to use the link. The tunnel company's woes bring to eight the toll-road PPPs that have caused losses to investors, lenders and taxpayers in the past five years. The tunnel projects have lost at least \$5.5bn, according to an analysis by The Australian, and there are fears the figure could rise. Australian Super head Ian Silk warned that if the private sector was to shoulder the risk that traffic volumes would fall short, this would "warrant a much higher return than is currently available in many infrastructure investments". Industry Funds Management chairman Garry Weaven said "somebody is going to lose money" if the private sector "bid too aggressively on the basis of inflated traffic forecasts". "It's the kind of engineering madness among those who think that if you build something, people will come. "

<http://www.theage.com.au/articles/2003/04/15/1050172596490.html> Lies, damned lies and the Bracks tollway Kenneth Davidson April 16 2003 **If a toll is put on the road, the traffic will be even less than shown in the EES, and the tolls would have to be astronomical to make it a paying proposition** But will a private toll or PPP road be attractive to private investors without massive subsidies from the taxpayer? A study commissioned by Peter Batchelor from the Department of Infrastructure in 1999 concluded motorists would have to pay \$8 per trip for the road to be economically viable. How many cars are likely to use the proposed freeway? According to the environmental effects statement on the proposed freeway, providing it was toll free, there would be only 100,000 trips a day on parts of the freeway and virtually no trips covering the full distance between Frankston and Ringwood. According to the panel report, **"the EES has based all traffic modelling and evaluation on the assumption that a Scoresby freeway will be a 'free road'** and will not be subject to tolls. The panel considers if consideration is given to making the freeway subject to tolls . . . the conclusions drawn in the modelling and economic evaluation sections in this report to be void and this and any other analysis undertaken in the EES would need to be repeated." If a toll is put on the road, the traffic will be even less than shown in the EES, and the tolls would have to be astronomical to make it a paying proposition. How to overcome this? There are three options. 1. Close off alternative routes such as Stud and Springvale Roads to through traffic, to force traffic on to the toll road. But as there isn't much through traffic in the first place, this won't help much. A cheaper way to relieve pressure on Stud and Springvale Roads would be to introduce a decent bus service, to get some cars off the roads. 2. Build the road as a public-private partnership in which the private partners put up all the initial capital in return for revenue guarantees down the track in the form of "shadow tolls", toll subsidies, or a subsidy like that given to the public transport franchisees. 3. Do what has been intended all along, irrespective of how the Scoresby freeway is to be financed: namely, extend the tollway to include the VicRoads long-term plan to complete the ring road by joining up the Mitcham end of the Scoresby freeway to the eastern end of the Metropolitan Ring Road. A private toll road along the Scoresby corridor doesn't even begin to make commercial sense unless it forms part of a larger ring road. But even then it doesn't make economic or environmental sense, when the cheaper and environmentally superior alternatives are taken into account.

[http://corridornews.blogspot.com/2006\\_01\\_22\\_archive.html](http://corridornews.blogspot.com/2006_01_22_archive.html) Privately built roads often fail to keep promises By Sylvia A. Smith, Jan. 23, 2006, Washington editor FortWayne.com But in the first 10 years of its 40-year franchise, the Greenway never turned a profit, in part because traffic was much lower than projected. The toll road defaulted on its loans in 1996, refinanced, and last year sold a

majority interest in it for \$533 million to an Australian investment firm that was part of the conglomerate that leased the Chicago Skyway....Elsewhere, overly rosy projections for how much traffic private toll roads would attract have limited their financial success. For instance, toll roads in Virginia and South Carolina have not lived up to their expected usage, so the income from tolls is below projections.

<http://www.thomaswhite.com/explore-the-world/BRIC-spotlight/2010/china-toll-roads-expressways.aspx> Toll Roads in China: Speeding Up Growth Thomas White International August 2010  
Risks involved in road projects -*Operation risks*: These are the significant risks that arise once the road is operational and the tolls are collected in the form of incorrectly estimated traffic demand, toll levels and the toll collection technology.

<http://www.signonsandiego.com/news/2010/mar/23/south-bay-expressway-builders-file-chapter-11/>  
Toll road operator files for Chapter 11 By Steve Schmidt Originally Published March 23, 2010 At 12:24 A.M., Updated March 24, 2010 At 12:05 A.M. South Bay Expressway use below forecasts the company is falling about \$16 million short each year in what it owes its direct lenders, according to court filings. When the deal was crafted in 1991, it was lauded as a novel way to finance public roads."The idea was to see if the private sector could succeed in building highways,"... Motorists pay \$2.50 to \$4.50 per trip, depending on length.... But once the higher tolls kicked in, they stopped completely.

<http://opinion.latimes.com/opinionla/2008/10/road-toll-footh.html?cid=135353695> For whom the road tolls, Observations And Provocations From The Times' Opinion Staff October 17, 2008, 2:21 pm Opinion L.A.The Transportation Corridor Agencies-- that would be the same group trying to build a toll road to nowhere through a favored state park -- is asking the government for a loan of more than \$1 billion. But what the federal government really needs to take into account is the reason for the request: The existing toll roads aren't doing well. Contrary to what toll-road officials love to predict, higher gas prices do not make commuters switch to (less crowded) toll roads, where they pay an extra \$4 to \$5 or so each way.The worst performer by far is the San Joaquin Hills Transportation Corridor, or Route 73, which has never met expectations. Ridership last year was half the predicted level, and the numbers are sliding downward.

<http://bicycleaustin.info/rogerbaker/tollroad-failure.html> The Failure of Toll Roads By Roger Baker \* June 20, 2003, Bicycle Austin.info The major factors that are going to cause the toll road bonds to default are: 1. Declining regional growth in the suburbs of affluent folks... 2. The scale of the toll road network built with borrowed money... 3. The sudden realization that there is not enough gas has taken the marketplace by surprise,

<http://www.chart.state.md.us/video/video.asp?feed=2a012b0800ae0059004d06363d235daa> No free ride: Traffic dips as ICC tolls start ICC Maryland Transportation Authority tolls By: Kytja Weir 03/08/11 1:19 Pm Only about 8,500 vehicles traveled on the first 5.6-mile leg of the new highway that runs from Interstate 370 in Shady Grove to Georgia Avenue in Olney on Monday, according to Maryland Transportation Authority spokeswoman Kelly Melhem... well below the 21,000 car per day total that officials estimated for the leg. Empty Toll way in the State of Maryland – streaming video

## **99-Year Lease Agreement, Tolls Doubled, Non-Compete Clauses**

[http://en.wikipedia.org/wiki/Ontario\\_Highway\\_407](http://en.wikipedia.org/wiki/Ontario_Highway_407) Ontario Highway 407, From Wikipedia page as it appeared on Apr 9, 2011 08:36:36 GMT Highway 407 in Toronto, Ontario was leased to a consortium of investors under a 99-year lease in 1999. Bad contracts: "About Highway 407 in Canada" "99-year lease agreement, unlimited control of the highway and its tolls, as well as a clause protecting the

corporation from any competition, not the least of which includes a ban on construction of any nearby provincial highways that may reduce toll revenue.”

[http://corridornews.blogspot.com/2006\\_01\\_22\\_archive.html](http://corridornews.blogspot.com/2006_01_22_archive.html) When good toll-road ideas turn bad By GORDON DICKSON, January 23, 2006, Fort Worth Star-Telegram 407 ETR, Toronto -- Residents and government officials have gone to court to try to stop Madrid-based operator Cintra and its partners from raising toll rates

[http://corridornews.blogspot.com/2006\\_01\\_22\\_archive.html](http://corridornews.blogspot.com/2006_01_22_archive.html) Frisco drivers may face \$700 toll rise By STEVE STOLER / WFAA-TV, Thursday, January 26, 2006 Dallas/Fort Worth

[http://corridornews.blogspot.com/2006\\_01\\_22\\_archive.html](http://corridornews.blogspot.com/2006_01_22_archive.html) Privately built roads often fail to keep promises By Sylvia A. Smith, Jan. 23, 2006, Washington editor FortWayne.com Within a few years of the toll lanes’ opening, the non-compete clause became a political nightmare because it blocked upgrades to the adjacent public highway. In 2003, the state purchased the toll lanes for \$207.5 million in bonds, which it expects to pay off with toll revenue.

[http://en.wikipedia.org/wiki/91\\_Express\\_Lanes](http://en.wikipedia.org/wiki/91_Express_Lanes) 91 Express Lanes, From Wikipedia page as it appeared on 13 September 2010 at 07:10 GMT

The deal included an 99-year lease agreement, unlimited control of the highway and its tolls. The government also may not build any nearby freeway which might potentially compete with 407. The toll on the busiest hour on the tollway, 4:00 pm to 5:00 pm eastbound on Thursdays, is \$9.90, or approximately \$1.00 per mile, the highest toll for any toll road in the country... The express lanes have been controversial because of a "non-compete" agreement that the state made with CPTC. The clause, which was negotiated by Caltrans... to ensure profit for the express lanes. This includes restricting the state from widening the free lanes or building mass transit near the freeway. CPTC filed a lawsuit against Caltrans over freeway widening related to the interchange with the Eastern Transportation Corridor interchange, which was dismissed once the purchase with OCTA was finalized.

<http://www.unbossed.com/index.php?itemid=276> Toll Roads, Privatization, and Taxes – Connect the DOTs - Part II by shirah at 01:43:00 Wednesday, July 20, 2005

The pro-private roads lobby has said that they cannot make a profit on roads unless they are given noncompete agreements... The poster child for noncompete agreements is California SR 91. The private contractor and the state agreed that public highways near SR 91 would not be maintained or improved until the year 2030. In other words, the state was to allow the state highway to crumble for decades, forcing the public onto the private toll road. But California found it could not leave the roads to deteriorate and endanger drivers’ lives. When the state fixed the nearby roads, the private owner sued for breach of contract, and the public learned the true cost of the private road. The public was furious and turned against the project and the government that had agreed to it.... California Attorney General Bill Lockyer described the Hwy. 91 as a “polite form of highway robbery.” The problem is that when there is no “noncompete” provision, the private sector is not interested in funding toll roads. The GAO found that 4 of the 5 tollways examined included noncompete clauses in their contracts “under which the public sector agrees to varying degrees not to build any new roads or improve any of the existing roads that may result in additional capacity within a predetermined distance of the newly constructed road for a certain period of time.” Where these did not exist, there were “understandings” the state would not build a competing road... The SR 91 experience has forced privatization proponents to find creative ways to achieve the same end. One is to require the state to compensate the private owner for any revenues lost when improvements are made to nearby roads. California’s State Route 125 includes a provision that allows the state to build a competing road but only if the state reimburses the private company for revenues lost to the new road. Calculating those lost revenues is, again, an enterprise filled with uncertainty and opportunities for overreaching.... The private sector takes the position that “eliminating or limiting noncompete provisions is not a solution, because the private sector would be unwilling to invest in highway projects without adequate

protection against future competition." Robert Poole said, in January 2005, "Nearly all new toll road projects, in order to sell bonds to investors, must offer some degree of protection from unlimited taxfunded competition from competing free highways."

<http://www.unbossed.com/index.php?itemid=274> Part I - Toll Roads, Privatization, and Taxes – Connect the DOTs by shirah, Tuesday, July 19, 2005 While the Bush DOT favors privatization, the **General Accountability Office** has carefully examined the history of private highway projects and found serious problems. In *Highways and Transit: Private Sector Sponsorship of and Investment in Major Projects Has Been Limited*, GAO-04-419, March 25, 2004, the **GAO found that the "private sector encounters many challenges to becoming more actively involved in highway and transit projects because of limited opportunities and barriers to financial success."** In plain English, the problem is that it is hard to make money in private roads . . . if you rely on the "magic" of the market.

<http://pwm.sagepub.com/content/5/4/259.abstract> An Odyssey of Privatizing Highways The Evolving Case of SR 91, Willard T. Price Public Works Management & Policy, April 2001; vol. 5, 4: pp. 259-269. University of the Pacific California Private Transportation Corporation) soon filed suit against the public partner (the California State Transportation Department, or Caltrans) for violation of the "noncompete clause" of the original agreement... following questions are discussed: Can toll and free lanes compete for traffic or "business"? Is the public interest served by a profit-making private tollway? Would a public or nonprofit agency be a better steward of tollway assets?

<http://articles.latimes.com/2002/jul/07/local/me-toll7> Dan Weikel July 07, 2002 Los Angeles Times - Los Angeles, Calif. Pay-as-you-go highways have become a political nightmare. Orange County transportation authorities hope to buy the lanes, but still operate the tollway... Political and financial problems have led many state leaders to conclude that California's nearly two-decade experiment with toll roads has failed, despite fervent hopes and vast investments... Largely because of noncompete clauses, members of the Assembly and Senate Transportation Committees say it is unlikely the Legislature will support more toll roads.

<http://www.smh.com.au/business/the-toll-roads-that-turn-into-money-pits-20100831-14flh.html> The toll roads that turn into money pits, By Matt O'Sullivan, September 1, 2010 Rosy traffic forecasts have turned into red faces and red ink, writes Matt O'Sullivan.... As it has turned out, fewer than 28,000 vehicles are now using the Clem7 - less than a third of the original predictions - even after RiverCity Motorway, the operator and builder of the tunnel, halved tolls and introduced other incentives in a desperate bid to entice motorists... With those ambitious traffic forecasts now seemingly impossible to meet, the tunnel named after former Brisbane lord mayor Clem Jones is on the verge of following the lead of Sydney's failed Cross City and Lane Cove tunnels... Yesterday RiverCity revealed the extent of its predicament when it posted a \$1.67 billion annual loss. **So how did traffic forecasters, charging millions for their expert opinions, conclude that thousands more motorists would use the \$2.8 billion Clem7 than the Midtown Tunnel? Put simply, the traffic forecasts here were made to fit the financial models...** John Goldberg, an honorary associate of the University of Sydney and a leading critic of the toll-road model, says the predictions for the Clem7 and other projects such as BrisConnections' Airport Link are the result of a "work-back from the financial outcome promised to equity investors". **'They worked out what the investor was going to be happy with in terms of rates of return, and they worked back to a set of numbers which would produce that return for investors.** Such forecasts do not properly relate to the interaction of land use and transport, and it is not surprising that they are not fulfilled. Moreover, the forecasts usually correspond to congested conditions during the peak periods." Goldberg has brought his concerns to the attention of investors and politicians for nigh on a decade yet they largely fell on deaf ears

-as RiverCity's latest woes show. In the case of the Clem7, RiverCity's then boss, Peter Hicks, said in 2006 that the company had adopted a more conservative approach to traffic forecasting after the Cross City Tunnel debacle. "We have always had a very careful approach to traffic forecasting," Hicks

told *The Australian* at the time. "If anything, the example in Sydney has led us to put more emphasis on traffic forecasts."

## Fraud Scandals and Corruption

<http://www.freerepublic.com/focus/f-news/1189316/posts> Highway tiff threatens Canada-EU trade deal Free Republic JOHN IBBITSON Posted on August 11, 2004 5:21:24 AM PDT OTTAWA -- The government of Spain has warned that it will veto a proposed trade agreement between Canada and the unless the Ontario government allows a Spanish company to raise tolls on the province's Highway 407.

<http://www.thenewspaper.com/news/09/936.asp> 2/3/2006 the News Paper.com

"Australia: Traffic Lights Modified to Funnel Traffic Into Toll Tunnel" Traffic lights in Sydney, Australia were modified to create gridlock forcing frustrated motorists into a controversial toll tunnel.

<http://www.youtube.com/watch?v=VeZjMTzqNQ8> Seconds From Disaster - S01E02 - Tunnel Inferno \_46:24 minutes On 24 March 1999, 39 people died when a Belgian transport truck carrying flour and margarine caught fire in the tunnel. After several km, the driver realized something was wrong as cars coming in the opposite direction flashed their headlights at him; a glance in his mirrors showed white smoke coming out from under his cab. This was not yet a fire emergency; there had been 16 other truck fires in the tunnel over the previous 35 years, always extinguished on the spot by the drivers.

<http://www.ycat.org.au/?p=156> - more-156 The Road to Hypocrisy, November 15th, 2010  
<http://www3.wsws.org/articles/2005/oct2005/tunn-o21.shtml> Australia: Privatised road tunnel creates havoc in Sydney, By Rick Kelly, 21 October 2005 The Cross City Tunnel.. under the control of an international syndicate headed by Li Ka-Shing, Asia's wealthiest individual... based on the forecast that 90,000 vehicles would make daily use of the twokilometre tunnel... Less than 25,000 cars presently use the tunnel each day, with other drivers taking alternative routes to avoid the exorbitant \$3.56 minimum toll... the government... has tried to dragoon motorists into the tunnel by shutting down and restricting a number of public roads in the area... the government admitted that the 30-year contract negotiated with the tunnel's owners compelled it to take such measures to ensure an adequate traffic flow on the road. Under the terms of the deal, within a fivekilometre radius of the tunnel, up to 500 roads in a dozen suburbs can be closed or restricted. (The contract euphemistically refers to such measures as "road calming")... The result has been traffic chaos throughout many parts of eastern Sydney.... The government also promised to compensate the company if any improvements were made to the public transport system which affected the number of vehicles traveling through the tunnel. If the contract is broken—by any government in the next three decades—the company is entitled to an \$850 million payout... The Cross City Tunnel, running under the centre of Sydney, opened last month under the control of an international syndicate headed by Li Ka-Shing, Asia's wealthiest individual. The group won the bid to operate the tunnel and collect the toll revenue for the next 30 years after paying the New South Wales (NSW) government \$105 million. This payment was based on the forecast that 90,000 vehicles would make daily use of the two-kilometre tunnel... Less than 25,000 cars presently use the tunnel each day, with other drivers taking alternative routes to avoid the exorbitant \$3.56 minimum toll for each trip on the private road... In an extraordinary measure befitting that of a police state, the government of Premier Morris Iemma has tried to dragoon motorists into the tunnel by shutting down and restricting a number of public roads in the area. When this predictably provoked public outrage, the government admitted that the 30-year contract negotiated with the tunnel's owners compelled it to take such measures to ensure an adequate traffic flow on the road. Under the terms of the deal, within a five-kilometre radius of the tunnel, up to 500

roads in a dozen suburbs can be closed or restricted. (The contract euphemistically refers to such measures as "road calming")... The result has been traffic chaos throughout many parts of eastern Sydney.... The government also promised to compensate the company if any improvements were made to the public transport system which affected the number of vehicles travelling through the tunnel. If the contract is broken—by any government in the next three decades—the company is entitled to an \$850 million payout...The Cross City Tunnel scandal largely overshadowed an announcement by the NSW government that it has agreed to pay more than \$100 million to the receivers of the private company that formerly operated the Sydney airport rail link. The company collapsed five years ago after lower than expected usage of the route.

[http://www.boston.com/news/traffic/bigdig/articles/2008/06/24/accused\\_big\\_dig\\_firm\\_files\\_for\\_ch\\_11/](http://www.boston.com/news/traffic/bigdig/articles/2008/06/24/accused_big_dig_firm_files_for_ch_11/) Accused Big Dig firm files for Ch. 11 By Sean P. Murphy and Jonathan Saltzman, Globe Staff / June 24, 2008 Modern Continental Corp., which earned \$3.2 billion as the largest contractor on the Big Dig and was charged criminally with hiding shoddy workmanship, sought the shelter of US Bankruptcy Court, claiming up to \$1 billion in debts. (Boston Globe, 6/24/08)

[http://www.boston.com/news/traffic/bigdig/articles/2008/06/20/firms\\_ex\\_managers\\_agree\\_to\\_plead\\_guilty\\_in\\_big\\_dig\\_scandal/](http://www.boston.com/news/traffic/bigdig/articles/2008/06/20/firms_ex_managers_agree_to_plead_guilty_in_big_dig_scandal/) By John M. Guilfoil, Globe Correspondent / June 20, 2008 Firm's ex-managers agree to plead guilty in Big Dig scandal Two defendants agreed to plead guilty to highway project fraud in scheming the state out of more than \$300,000 for work done on the Interstate 93 tunnel. (Boston Globe, 6/20/08)

[http://www.boston.com/news/traffic/bigdig/articles/2008/05/21/contractor\\_pleads\\_guilty\\_in\\_big\\_dig\\_overbilling\\_case/](http://www.boston.com/news/traffic/bigdig/articles/2008/05/21/contractor_pleads_guilty_in_big_dig_overbilling_case/) By Jef Feeley and Beverly Ford, Bloomberg News / May 21, 2008 Contractor pleads guilty in Big Dig overbilling case A major contractor for the \$15 billion Big Dig project has pleaded guilty to defrauding the US government. (Boston Globe, 5/21/08)

[http://www.boston.com/news/traffic/bigdig/articles/2008/04/05/big\\_dig\\_officials\\_firing\\_led\\_to\\_windfall/](http://www.boston.com/news/traffic/bigdig/articles/2008/04/05/big_dig_officials_firing_led_to_windfall/) Big Dig official's firing led to windfall By Sean P. Murphy, Globe Staff / April 5, 2008 Michael P. Lewis didn't retire from his post as the head of the Big Dig, but was actually fired last year. The move allowed him to more than triple his state pension. (Boston Globe, 4/5/08)

[http://www.boston.com/news/traffic/bigdig/articles/2008/03/01/big\\_dig\\_firm\\_manager\\_charged\\_with\\_conspiracy/](http://www.boston.com/news/traffic/bigdig/articles/2008/03/01/big_dig_firm_manager_charged_with_conspiracy/) Big Dig firm, manager charged with conspiracy By Jonathan Saltzman, Globe Staff / March 1, 2008 Federal prosecutors charged a major Big Dig contractor and one of its managers with scheming to overcharge the government more than \$300,000 for work done on the Interstate 93 tunnel. (Boston Globe, 3/1/08)

[http://www.boston.com/news/local/breaking\\_news/2008/01/458m\\_big\\_dig\\_settlement\\_reached.html](http://www.boston.com/news/local/breaking_news/2008/01/458m_big_dig_settlement_reached.html) \$458m Big Dig settlement reached By Globe Staff, January 23, 2008 02:47 PM State and federal authorities announced a settlement of \$458.2 million with the firms that designed and managed the Big Dig. (Boston Globe, 1/23/08)

[http://www.boston.com/news/traffic/bigdig/articles/2008/01/17/settlement\\_reportedly\\_near\\_in\\_i\\_90\\_tunnel\\_ceiling\\_collapse/](http://www.boston.com/news/traffic/bigdig/articles/2008/01/17/settlement_reportedly_near_in_i_90_tunnel_ceiling_collapse/) Settlement reportedly near in I-90 tunnel ceiling collapse By Andrea Estes, Globe Staff / January 17, 2008

The attorney general's office is close to reaching a settlement with Bechtel/Parsons Brinckerhoff in exchange for not seeking criminal charges. (Boston Globe, 1/17/08)

[http://www.boston.com/news/local/massachusetts/articles/2007/11/26/cost\\_of\\_probe\\_on\\_big\\_dig\\_nearly\\_1m/](http://www.boston.com/news/local/massachusetts/articles/2007/11/26/cost_of_probe_on_big_dig_nearly_1m/) By Andrea Estes Globe Staff / November 26, 2007 Cost of probe on Big Dig nearly \$1m The special prosecutor spearheading the investigation into the Big Dig tunnel ceiling collapse is billing the state almost \$30,000 a week. (Boston Globe, 11/27/07)

[http://www.boston.com/news/traffic/bigdig/articles/2007/07/14/big\\_dig\\_deal\\_could\\_hit\\_1b/](http://www.boston.com/news/traffic/bigdig/articles/2007/07/14/big_dig_deal_could_hit_1b/) Big Dig deal could hit \$1b By Andrea Estes and Sean P. Murphy, Globe Staff / July 14, 2007  
State and federal officials are demanding that Bechtel/Parsons Brinckerhoff pay as much as \$1 billion to settle claims for shoddy work on the Big Dig, in exchange for a guarantee that the consortium will not face criminal charges in last year's tunnel collapse. (Boston Globe, 7/14/07)

[http://www.boston.com/news/local/massachusetts/articles/2007/07/11/wide\\_risk\\_wide\\_blame/](http://www.boston.com/news/local/massachusetts/articles/2007/07/11/wide_risk_wide_blame/) Wide risk, wide blame By Sean P. Murphy and Andrea Estes, Globe Staff / July 11, 2007 Federal investigators blamed multiple Big Dig contractors and the Massachusetts Turnpike Authority yesterday for last summer's fatal tunnel collapse, concluding that the wrong kind of glue was used to hold up part of the concrete ceiling and that project oversight was inadequate to detect the problem. (Boston Globe, 7/11/07)

[http://www.boston.com/news/traffic/bigdig/articles/2006/08/20/big\\_dig\\_officials\\_chose\\_not\\_to\\_retest/](http://www.boston.com/news/traffic/bigdig/articles/2006/08/20/big_dig_officials_chose_not_to_retest/) Big Dig officials chose not to retest By Scott Allen and Sean P. Murphy Globe Staff / August 20, 2006

Several ceiling bolts came loose in the Interstate 90 connector tunnel while it was under construction in 1999, even after they passed a safety inspection. But project documents show that officials overseeing the Big Dig chose not to retest most of the bolts. (Boston Globe, 8/20/06)

[http://www.boston.com/news/traffic/bigdig/articles/2006/07/24/probes\\_may\\_test\\_bechtels\\_clout/](http://www.boston.com/news/traffic/bigdig/articles/2006/07/24/probes_may_test_bechtels_clout/) Big Dig's design firm deflects blame By Christopher Rowland, Globe Staff / July 24, 2006 Bechtel Corp., one of the world's largest construction and engineering firms, has few equals when it comes to wielding political power and fending off enemies. (Boston Globe, 7/24/06)

## Parsons Brinckerhoff

<http://www.publicpurpose.com/ut-pblie.htm> Taken for a Ride: Parsons Brinckerhoff Expose By Tara Servatius, *The Public Purpose: One of National Journal's Top 4 Transport Internet Sites* (c) 2002  
[www.publicpurpose.com](http://www.publicpurpose.com) --- Wendell Cox Consultancy

[http://www.nashtu.us/download/HR\\_2104\\_-\\_Disaster\\_Examples.pdf](http://www.nashtu.us/download/HR_2104_-_Disaster_Examples.pdf) HR 2104 "Safety, Efficiency and Accountability in Transportation Projects through Public Inspection Act" (Filner) - Disaster Examples- Boston's Big Dig - Deadly Failures

[http://en.wikipedia.org/wiki/Big\\_Dig](http://en.wikipedia.org/wiki/Big_Dig) Big Dig From Wikipedia The project has incurred criminal arrests escalating costs, death, leaks, and charges of poor execution and use of substandard materials. Former Massachusetts Attorney General Thomas Reilly demanded that contractors refund taxpayers \$108 million for "shoddy work". ... Bechtel/Parsons Brinckerhoff, the consortium that oversaw the project, would pay \$407 million in restitution for its poor oversight of subcontractors (some of whom committed outright fraud), as well as primary responsibility in the death of a motorist. However, despite admitting to poor oversight and negligence as part of the settlement, the firm is not barred from bidding for future government contracts. Several smaller companies agreed to pay a combined sum of approximately \$51 million.

<http://www.thestar.com/Business/article/296783> Contractors to settle Boston Big Dig suit for \$450M Denise Lavoie, Published On Wed Jan 23 2008, THE ASSOCIATED PRESS "The citizens of Massachusetts entrusted Bechtel/Parsons Brinckerhoff to act as their eyes and ears on the Central Artery Project," Sullivan said. "They grossly failed to meet their obligations and responsibilities to the citizens of Massachusetts and the United States.".. Under the settlement, Bechtel/Parsons Brinckerhoff will not face criminal charges in the deadly Interstate 90 tunnel ceiling collapse in July 2006. Milena

Del Valle, 39, of Boston, was crushed by about 23 tonnes of concrete as she and her husband drove to Logan International Airport. The deal also does not bar the consortium from receiving future government contracts. Bechtel/Parsons Brinckerhoff was paid more than \$2 billion to manage the project. State officials will be able to seek additional damages from Bechtel/Parsons Brinckerhoff only if there is a catastrophic event, defined as causing more than \$50 million in damages. Its liability will be capped at \$100 million.

## Toll Roads Increase Commute Times

[http://www.boston.com/news/traffic/bigdig/articles/2006/07/18/headaches\\_return\\_in\\_north\\_end\\_s\\_boston/](http://www.boston.com/news/traffic/bigdig/articles/2006/07/18/headaches_return_in_north_end_s_boston/) Residents, businesses feel effects of Big Dig reroutes  
Headaches return in North End, S. Boston By Donovan Slack and Emma G. Fitzsimmons Globe Staff and Globe Correspondent / July 18, 2006

[http://www.boston.com/news/local/articles/2008/11/16/big\\_dig\\_pushes\\_bottlenecks\\_outward/](http://www.boston.com/news/local/articles/2008/11/16/big_dig_pushes_bottlenecks_outward/) Big Dig pushes bottlenecks outward By Sean P. Murphy, Globe Staff / November 16, 2008 Longer on several major routes "A Globe analysis of state highway data documents what many motorists have come to realize since the new Central Artery tunnels were completed: ... **the bottlenecks were only pushed outward**, as more drivers jockey for the limited space on the major commuting routes...Ultimately, many motorists going to and from the suburbs at peak rush hours are spending more time stuck in traffic, not less. The phenomenon is a result of a surge in drivers crowding onto highways – an ironic byproduct of the Big Dig's success in clearing away downtown traffic jams."

Spokker -*"Never mind how much the Big Dig cost. The biggest problem with it is that it didn't even work".* It diverted traffic elsewhere.

## Alternative Solutions

### Trucking is Toxic No Such Thing as Clean Diesel Trucks

<http://articles.latimes.com/2010/jul/08/opinion/la-oe-polakovic-20100708> Breathing the filth  
*Hydrocarbons in the air are more toxic than oil in the gulf.* By Gary Polakovic, July 08, 2010, LA Times

<http://www.examiner.com/environmental-policy-in-national/correction-to-story-clean-diesel-arrives-and-exceeds-the-grade> Correction to Story Clean Diesel Arrives and Exceeds the Grade Jon Anderson, Environmental Policy Examiner, December 19th, 2010 11:17 am ET ... correction to the story Clean Diesel Arrives and Exceeds the Grade because nitrogen oxide has always been a problem for diesel in warm climates...NOx is a major problem from all diesel engines. ... especially if you have lung or heart function problems, work outdoors, or have children or elderly parents...A very deep divide over carbon control and traditional pollutants control exists at every level of government in the United States...Clean diesel is not clean (re) the same to pollutants it has always been a problem with, nitrogen oxides and particulate matter. Diesel may work in Europe where ground level ozone is not a major problem. But in the United States and the tropical cities of the world where most of the population of the planet lives, **diesel must be banned.**

<http://news.sciencemag.org/sciencenow/2010/03/clean-diesel-not-so-precious-aft.html> Clean Diesel:

Not So Precious After All, Tim Wogan on 26 March 2010, 11:27 AM, Science Now Now scientists have produced a new type of catalytic converter...Chemical engineer Jan Stepanek of the Institute of Chemical Technology in Prague foresees another potential problem. "It is well known that, due to automotive catalyst decay, there are appreciable concentrations of precious metals near roads," he says....But the team's new design contains strontium, which is thought to stunt the growth of children. If this were released from an aging catalytic converter, says Stepanek, it might be more dangerous.

<http://buildaroo.com/news/article/new-catalytic-converters-diesel-engines-environmentally-friendly/>  
New Catalytic Converters Can Make Diesel Engines Environmentally Friendly (Not) BY TALI AARON : APRIL 1 A new catalytic converter...There are concerns about the environmental impact of this converter, however, and a chemical engineer at the Institute of Chemical Technology in Prague, Jan Stepanek, commented that "due to automotive catalyst decay, there are appreciable concentrations of precious metals near roads."...But the introduction of strontium to the design has raised concerns that aging catalytic converters could leak this potentially hazardous material into the water table. Also, the perovskite reacts to the sulfur content in the diesel, and can be deactivated if the converter reaches temperatures over 700 degrees Centigrade.

## Roads Create Congestion, Not Solve It

<http://aca.ninemsn.com.au/article.aspx?id=631599> [Aired Ch 9, 15th September, 2008]  
Demonstrating that building major roads creates rather than solves congestion.

<http://www.fhwa.dot.gov/publications/publicroads/07july/06.cfm> Perspective on Freight Congestion by Crystal Jones July/August 2007 · Vol. 71 · No. 1

"We have \$125,000 trucks and drivers going 4 miles [6 kilometers] an hour on congested highways.".... Freight bottlenecks are found on highways serving major international gateways such as the San Pedro Bay port complex, which includes the Los Angeles/Long Beach Port Congestion reduction is a critical and national priority for the **U.S. Department of Transportation (USDOT)**. **USDOT's National Strategy to Reduce Congestion on America's Transportation Network, also known as the Congestion Initiative**, includes a **six-point plan to reduce congestion** in the short term and build the foundation for success in the longer term. **The Congestion Initiative's activities** that relate most directly to freight movement **include targeting major freight bottlenecks, expanding freight policy outreach, incorporating private sector investment resources, and establishing USDOT's Corridors of the Future program**. In 2006, USDOT proposed the **Framework for a National Freight Policy**, which works hand-in-glove with the Congestion Initiative to improve freight movement and decrease congestion. The Framework for a National Freight Policy **focuses on the first objective of the Congestion Initiative — reducing major freight bottlenecks and building an outreach component to bring together the public and private sectors to address seven key goals:**

- **Maximize safety and security** of the freight transportation system — "job one" every day for USDOT
- **Improve the operation** of the existing freight transportation system, including changing how the public and private sectors use the freight system to improve throughput or capacity
- **Add physical capacity** to the freight transportation system wherever investment improves system throughput
- **Use pricing** to improve alignment of costs and benefits between freight system users and owners and to encourage deployment of productivity-enhancing technologies
- **Reduce or remove statutory, regulatory, and institutional barriers** to improved performance in freight transportation
- **Proactively identify and address emerging transportation needs**, including conducting research into freight movement, data, and modeling to improve investment choices and understanding of freight movement

- *Mitigate and better manage environmental, health, and community impacts of freight*

transportation ...Allen Lund, a transportation third-party logistics provider based in La Cañada, CA, commented in a 2003 interview with *Logistics Today*, "We have \$125,000 trucks and drivers going 4 miles [6 kilometers] an hour on congested highways.".... Freight bottlenecks are found on highways serving major international gateways such as the San Pedro Bay port complex, which includes the Los Angeles/Long Beach Port,... ..Jack Kyser, chief economist for the Los Angeles County Economic Development Corporation, wrote in his white paper "Goods Movement in Southern California: How Can We Solve Problems and Generate New State Sales and Income Tax Revenues?": "As one of the Nation's premier global gateways, southern California connects the region, the State, and the rest of the country with the dynamic economies of Asia. The volume of trade flowing through our ports has surged in recent years and is expected to at least triple over the next 20 years." Recognizing the importance of the California region and the necessity to ensure that transportation capacity is adequate to meet future demand, the **Congestion Initiative will transform USDOT's existing Gateway Team in southern California into a larger "Southern California freight congestion team."** The initiative charges the team to "convene the region's diverse freight stakeholder community to forge consensus on immediate and longer term transportation solutions." This partnership approach to addressing bottlenecks at or near international gateways then could be replicated at other locations throughout the Nation. Unlocking key freight bottlenecks, such as in southern California, is a vital strategy to improve freight movement, but it is just one piece of the puzzle. Solving the full spectrum of freight movement constraints in the long and short terms will require coordinated collaborative action from public and private parties.

## Roads are a Dead End

<http://www.road-scholar.org/peak-traffic.html> Transportation triage at the end of the age of oil by Mark Robinowitz, originally published May 10, 2006, From the Wilderness An engaging discussion of **the effects of Peak Oil on automobile traffic, Mark Robinowitz examines the ridiculousness of implementing "superhighway" plans while the nation faces an inevitable oil drop-off.**

<http://www.energyandcapital.com/articles/wikileaks-saudi-oil-lies-exposed/1423> WikiLeaks: Saudi Oil Lies Exposed, Turning Our Back on OPEC By Keith Kohl, *Wednesday, February 9th, 2011* The EIA projects U.S. crude production to fall by 50,000 bbls/d in 2011 and another 190,000 bbls/d in 2012...

## Better Solutions to the Tunnel

<http://labusinessjournal.com/news/2010/aug/09/end-road-710/> End of the Road for the 710? OP-ED: Razing the freeway would be the best path to easing traffic between Long Beach and San Gabriel Valley. By Richard Risemberg, Monday, August 9, 2010 If we really want to improve traffic flow between Long Beach and the San Gabriel Valley, we should tear down the entire 710, because it is inherently inadequate to the task. "The basic problem with urban/suburban freeways is that they take up so much space for the capacity they deliver. At 1,500 cars per lane per hour, a six-lane freeway's maximum capacity is about 11,000 people per hour ... within a 300 foot right-of-way. Urban rail systems can deliver as much or more capacity in 100 foot or less of (right-of-way). ... Heavy-rail systems like the Washington Metrorail have five times the capacity of a six-lane freeway in about one-third the space and cost about the same per mile as the Century Freeway in Los Angeles."... But what about freight, the real reason for the 710 (despite some proponents' bland assertions that trucks would be banned from the extension)? The solution is simple: heavy rail for freight to complement

light rail for people. Build another Alameda Corridor trench along the 710's route, run light rail on spans above the trench for passengers, add a bicycle freeway alongside and throw in a two-lane road for local travel. You could even electrify the freight route, lessening its impact even further, and run shuttle trains (operated by the city or a contractor) between the harbors and the big main freight yards in Colton. Instead of crushing neighborhoods with noise, pollution and induced traffic on feeder roads, or walling them off with highways a quarter-mile wide, you would increase the freight and passenger capacity of the corridor, reduce pollution and noise, lessen congestion, and free up precious land for tax-paying homes and businesses, schools and civic facilities, and parks, and even urban farms.. Radical? Maybe. Sensible, responsible and profitable? You bet!

<http://la.streetsblog.org/2011/04/13/editorial-don't-extend-the-710shrink-it-and-expand-alternatives/> Editorial: Don't extend the 710;Shrink It and Expand Alternatives by Mark Vallianatos on April 13, 2011 Others interested in this project are submitting comments focused on the proper scope of environmental review of a mega tunnel. So I'm focusing on how the agencies should study and fund alternative mobility projects in the project area and remove, rather than expand, a portion of SR-710.

1. Remove the SR-710 freeway between the 10 freeway and Valley blvd by transforming it into a boulevard and/ or a linear park.
2. Expand transit to reduce car traffic and pollution and spur transit-oriented development
3. Create complete, living and green streets that promote safe walking and cycling and create vibrant public spaces.
4. Reduce freight truck traffic and pollution by expanding on dock rail at the Ports of Los Angeles and Long Beach.
5. Conduct a health impact assessment of all alternatives. I believe that investing in these alternatives would better meet the goals "to relieve congestion and improve mobility within the project area" than would a freeway tunnel.

<http://gcaptain.com/secretary-laheed-argues-case-transportation?23721>

[http://www.marad.dot.gov/documents/MTSNAC\\_Kickoff\\_\(July\\_23\\_2009\)\\_-S1\\_Remarks.pdf](http://www.marad.dot.gov/documents/MTSNAC_Kickoff_(July_23_2009)_-S1_Remarks.pdf) By gCaptain Staff, gCaptain, April 6th 2011 Secretary LaHood Argues Case of Better Transportation Use of America's Coasts, Waterways

U.S. Department of Transportation Secretary LaHood Remarks to: MTS Marine Transportation System National Advisory Council (MTSNAC) Meeting July 23, 2009 First, the administration is seeking advice on how to better integrate our waterways into our existing intermodal freight transportation system. We should take advantage of inherent environmental and energy benefits of marine transportation wherever possible – while reducing congestion on highways and rail lines. Second, we're looking for advice on how to address the Congressional mandates of the Marine Highway Program. We must find ways to take better advantage of our existing waterways. This will help reduce land-based congestion and emissions, decrease our dependence on oil, and offer an alternative to building and maintaining costly new highway and rail systems.... As Congress and the Administration begin to debate the future of reauthorization for surface transportation, we will want advice on how the maritime industry can help us achieve integrated and environmentally sensitive transportation solutions.

<http://www.thestranger.com/seattle/stop-the-insanity/Content?oid=7200124> Stop the Insanity, By DOMINIC HOLDEN March 15, 2011 The deep-bore tunnel is insane. Now is the time to stop it. There is a better option.

## **Freight by Rail is Better than Trucks Cheaper, Safer, Cleaner, Faster, Tunnel not High a Performing Project**

<http://capntransit.blogspot.com/2011/04/moving-things-from-city-to-city.html> Moving things from city to city, Cap'n Transit Sunday, April 3, 2011 if we can shift a freight load from truck to

rail or boat at no extra cost, it will be cheaper and use less energy, and most likely pollute less. If there is an added cost to shifting the load from truck to rail, that cost should be compared with the cost of keeping it on trucks. Reducing highway and fuel subsidies is one way to make the cost of trucking more apparent. Rail infrastructure costs about the same as roads, and once it's built, some combination of rail and boat (by sea, lake, river or canal) costs less to maintain and operate than trucks on roads...The freight question reduces to chemistry and physics: steel on steel has less rolling resistance than rubber on asphalt....Beyond energy efficiency, steel rails are also more durable than asphalt and rubber...Trains are also more efficient in terms of operating labor: the tracks and signals make it easier to predict what will be in the train's path, and where the train cars will go, which allows huge amounts of cargo to be moved by a handful of people...Ships and lake boats are more efficient than cars...the Department of Energy estimated that airplanes use 32,000 BTU of energy to move a ton of freight one mile, while trucks consume 3,100, boats 418 and trains 305 BTU per ton-mile (PDF, table 2.16).

[http://www.eia.doe.gov/emeu/efficiency/ee\\_ch5.htm](http://www.eia.doe.gov/emeu/efficiency/ee_ch5.htm) Transportation Sector Stephanie Battles, October 17, 1999, Independent Statistics & Analysis U.S. Energy Information Administration

[http://cta.ornl.gov/data/tedb29/Edition29\\_Chapter02.pdf](http://cta.ornl.gov/data/tedb29/Edition29_Chapter02.pdf) Chapter 2 Energy Summary Statistics from Tables in this Chapter Airplanes use 32,000 BTU of energy to move a ton of freight one mile, while trucks consume 3,100, boats 418 and trains 305 BTU per ton-mile (PDF, table 2.16).

[http://www.fra.dot.gov/Downloads/Comparative\\_Evaluation\\_Rail\\_Truck\\_Fuel\\_Efficiency.pdf](http://www.fra.dot.gov/Downloads/Comparative_Evaluation_Rail_Truck_Fuel_Efficiency.pdf) Comparative Evaluation of Rail and Truck Fuel Efficiency on Competitive Corridors Final Report Federal Railroad Administration, November 19, 2009

<http://www.gao.gov/new.items/d11134.pdf> SURFACE FREIGHT TRANSPORTATION GAO United States Government Accountability Office, January 2011, Report to the Subcommittee on Select Revenue Measures, Committee on Ways and Means, House of Representatives A Comparison of the Costs of Road, Rail, and Waterways Freight Shipments That Are Not Passed on to Consumers - If government policy gives one mode a cost advantage over another, by, for example, not recouping all the costs of that mode's use of infrastructure, then shipping prices and customers' use of freight modes can be distorted, reducing the overall efficiency of the nation's economy. GAO's analysis shows that on average, additional freight service provided by trucks generated significantly more costs that are not passed on to consumers of that service than the same amount of freight service provided by either rail or water. GAO estimates that freight trucking costs that were not passed on to consumers were at least 6 times greater than rail costs and at least 9 times greater than waterways costs per million ton miles of freight transport. Most of these costs were external costs imposed on society. Marginal public infrastructure costs were significant only for trucking. Given limitations in the highway, rail, and waterway economic, financial, technical, and environmental data available for the analysis, GAO presents conservative estimates.

<http://www.joc.com/government-regulation/mica-eyes-rail-get-more-trucks-cars-roadways> Mica Eyes Rail to Get More Trucks, Cars Off Roadways John D. Boyd | Jan 13, 2011 3:57PM GMT, The Journal of Commerce Online - News Story Goal would be to reduce roadway damage, trust fund spending on pavement repair....The new chairman of the House Transportation and Infrastructure Committee, signaling domestic transport goals similar to those of the Obama administration, says he wants to advance several initiatives that shift commercial truck loads and automobiles off the nation's stressed highways.

<http://dc.streetsblog.org/2011/03/01/gao-trucking-the-least-efficient-mode-of-freight-shipping/> GAO: Trucking the Least Efficient Mode of Freight Shipping by Tanya Snyder on March 1, 2011 Freight transportation, which accounts for nearly a quarter of transportation-related greenhouse

gas emissions, doesn't get as much attention as passenger transportation because most people don't feel it affects them as much. But more than 15 million trucks deliver 70 percent of the goods this country consumes – and the GAO says that's a mistake. The Government Accountability Office published a study finding that the costs of freight trucking that are not passed on to the consumer are at least six times greater than the equivalent rail costs and at least nine times greater than the equivalent waterways costs. Many of those are externalized costs passed on to society – like congestion, pollution, and crashes – as well as public costs, like infrastructure maintenance.

## The Grid

### Efficiency in Cargo Handling and Distribution

<http://www.labusinessjournal.com/news/2010/aug/23/expanded-chinese-business-buoy-long-beach/> Expanded Chinese Business to Buoy Long Beach By David Haldane Monday, August 23, 2010

*TRADE & TRANSPORT: Oakland-based Matson could add 234,000 more container units.*

"The problem was that the cargo wasn't being handled efficiently." As a result, he said, many importers – reacting to what they perceived as insurmountable problems causing congestion and delays – began turning away from Southern California amid the boom in international trade in favor of ports such as Norfolk, Va.; Charleston, N.C.; and Savannah, Ga. "The congestion was the poster child, but what was happening was that the importers were deciding, based on their experiences, not to put all their eggs in one basket," Bingham said.

<http://www.glendalenewspress.com/news/tn-gnp-tunnel-20110117,0,2928212.story> A new wave against 710 tunnel Former port worker presents plan to scrap the idea in favor of a high-tech cargo rail. By Bill Kisliuk January 17, 2011 | 11:14 am LA Times an alternative plan for improving traffic flow... Alba proposed a cargo rail pipeline running alongside the San Gabriel River and then out to the warehouses in Ontario, saving an estimated 2.5 million truck trips a year from the harbor along the 710 Freeway to the Inland Empire.

<http://aiapf.org/calendardisplayevent.cfm?event=335800&date=11-Feb-2011> February First Friday Forum Grid: The (San) Gabriel River Infrastructure Development The American Institute of Architects Pasadena & Foothill, 11 Feb 2011 The movement of cargo containers out of the Ports of Los Angeles and Long Beach is a major rationale for the completion of the 710 Freeway....The tunnel alternative lies in accordance with Caltrans' modus operandi, but there are other solutions unaffiliated with Caltrans that are more radical and potentially superior regarding environmental concerns. NEPA does require consideration in an EIR of all such alternatives. There are at least three outside alternatives, the Multi Mode Low Build Alternative, the Cargo Way, and The Pipeline, also known as the GRID, or (San) Gabriel River Infrastructure Development. Of these, the Cargo Way and the GRID focus on rapidly moving containers out of the ports, past the densely populated areas nearer the water, to the proposed "Inland Port" in Ontario. Both systems use nonpolluting propulsion on dedicated transit ways, environmentally superior to trucks on freeways burning fossil fuels....The GRID ..."container conveyors" run in an underground pipeline, a large portion of which will be in the embankment of the San Gabriel River. Parallel pipelines for other purposes, such as power transmission and light rail can be installed as well. To facilitate the container conveyor movement, the proposal redirects pending investment for the ports into a computerized "Empty/Loaded Container Storage and Transfer Center," or ECSTC. This "feeds" the container conveyor in a highly efficient way, sending containers in an organized way to the Inland Port.

<http://sunroomdesk.com/2011/01/19/futuristic-realistic-alternative-to-the-710-tunnel-the-grid->

[project/](#) Futuristic, Realistic Alternative to the 710 Tunnel: The GRID Project, Posted By: Editor Development, Transportation Wednesday, January 19, 2011 Transforming the port of Long Beach into a fully electrified green facility, constructing a freight rail system underneath river channel levies to Inland Empire distribution centers, and reducing truck traffic through the densest parts of Southern California, are some of the great features of the Gabriel River Infrastructure Development (GRID) Project.

<http://content.yudu.com/Library/A1cbbe/WorldCargoNewsJune09/resources/20.htm> Counting the cost of zero emissions Cargo Handling, June 2009, World Cargo News SkvStorage Systems vision is to create a "single stop" on-dock terminal that would eliminate the need for railroads to build inland hubs. The concept is for a longer, thinner terminal with much greater crane density, able to handle a 10,000ft train in under 30 min.

[http://www.newcolonist.com/vox/archive/GRID\\_project\\_ovr\\_2pg.pdf](http://www.newcolonist.com/vox/archive/GRID_project_ovr_2pg.pdf) GRID – Gabriel River Infrastructure Development David Alba, Project Systems Designer The Panama Canal is being widened to allow passage of large container ships. Once the wider canal is open, container ships from the Far East will have passage to US ports on the east coast...Ports have planned \$1.5B upgrades, but these efficiency improvements are limited and the upgrades will not result in lower pollution levels...*Living Conditions Will Dramatically Decline for Citizens Living Along I-710*...Caltrans has proposed to widen the southern part of I-710.. also proposed to build a toll tunnel in the San Gabriel Valley to extend I-710 to I-210...Both of these projects will increase local pollution levels and are strongly opposed by environmental groups...GRID is a solution that merges economic imperatives with environmental concerns...*Streamline Ship-to-Rail Operations at the Ports* It's called the "Empty/Loaded Container Storage and Transfer Center", or ECSTC. This facility converts the space under shipping cranes into a computerized storage facility for empty and loaded containers. Containers are moved to and from ships directly into the ECSTC. Full-length trains drive under or adjacent to the ECSTC to be loaded or unloaded within the Port, so there is no intermediate shuffling of containers to off-site container transfer facilities to assemble trains for transport beyond Southern California. Use of the ECSTC could reduce unloading...*Use Underground Pipeline for Electric Cargo Trains.. Embed Power and Water Transmission in the Freight Pipeline...Create Urban Parkways Interspersed with Environmentally Sustainable Neighborhood Clusters...Together, These Projects are the "Gabriel River Infrastructure Development", or GRID.*

## CargoWay

### **Inexpensive, Quick to Implement, Near Zero Emission Congestion Relief**

<http://aiapf.org/calendardisplayevent.cfm?print=true&date=01%20Apr%202011&event=335786>  
April First Friday Forum - MMLB (Multi-Mode Low Build Alternative) & Cargoway The American Institute of Architects Pasadena & Foothill, 01 Apr 2011

*Overlooked by the Ports and Metro because the commissioned studies by URS/Cambridge Systematics were flawed. Studies: Alternative Goods Movement Technology Analysis Initial Feasibility Study Report and Alternative Container Transportation Technology Evaluation and Comparison.*

The CargoWay is an integrated, dual-mode, near-zero-emissions system consisting of electric and CNGhybrid-powered cargo trams operating on a rail system that connects the Port of Los Angeles to the Inland corridor. It will augment and extend the existing Alameda rail transportation system already in place. The system and its components are developed by engineers affiliated with MegaRail, who have contributed considerable thought to the dilemmas common to all major trade centers—such as the Port of Los Angeles and its surrounding economic region—posed by cargo transfer from port to distribution centers. The focus is on efficient, non-

polluting, rapid, and cost-effective transfer of cargo and containers from the shipping source, where the volume and congestion are the greatest, to the diversified outlying hubs of distribution and transfer from which conventional truck and/or rail assume the most efficient means of further distribution to the end destinations.

[http://www.megarail.com/CargoRail\\_Heavy\\_Cargo/](http://www.megarail.com/CargoRail_Heavy_Cargo/)  
<http://www.megarail.com/pdf/CRPTOP-U.pdf>  
<http://www.megarail.com/pdf/CRLBLA-7a.pdf>  
<http://www.megarail.com/pdf/HCGEN5-1.pdf>

## Multi-Mode, Low Build

<http://aiapf.org/calendardisplayevent.cfm?print=true&date=01%20Apr%202011&event=335786>  
April First Friday Forum - MMLB (Multi-Mode Low Build Alternative) & CargoWay The American Institute of Architects Pasadena & Foothill , 01 Apr 2011

The MMLB proposes a series of lighter touches at various choke points along the corridor as it filters through the El Sereno, Alhambra, South Pasadena, and Pasadena communities. Some of these solutions are already in process, such as the ACE corridor extension and the Gold Line eastern extension, while others are already completed, such as the Glenarm/Raymond on-ramp to the 110 and the North Orange Grove reconfiguration with signalization at the 110 crossing. In conjunction a further series of improvements, such as extending the 710 to Mission Road and adding an off-ramp at Cal State LA, will relieve congestion at critical bottlenecks... provide a separate, efficient, high-capacity cargo transport system that will alleviate air pollution imposed on all communities along the 710 from the port to the interior.

- provide a series of sensible improvements and upgrades to existing surface roads, entrance ramps, and bridges over rail tracks that will re-link severed arteries in the existing road systems.
- enhance or complete existing and new transportation systems including light rail, Alameda Corridor East (ACE), buses, shuttles, and bicycle paths.
- provide a more fully-integrated solution to the regional cargo transport and passenger vehicle transportation systems at an equal or likely lesser cost than other proposals.
- decrease pollution and increase mobility on a system already choked to capacity with truck and passenger vehicles.
- restore and preserve the urban fabric and livability of all communities along this transportation system, which is vital to the region.

<http://www.acta.org/> <http://www.theaceproject.org/> Alameda Corridor Transportation Authority ACE Trade Corridor/ ACE Project San Gabriel Valley Capacity could be greatly increased if combined with CargoWay system

<http://www.thetransitcoalition.us/newspdf/wdn20100907a.pdf> Trench Project for San Gabriel railroad crossings moves forward By James Figueroa Staff Writer

<http://articles.latimes.com/2006/nov/28/local/me-maglev28> Ports considering maglev trains to cut smog

*Officials see magnetic levitation technology as a clean, high-speed way to move goods inland, ease traffic congestion and reduce pollution.*

November 28, 2006|Dan Weikel | Times Staff Writer Searching for ways to reduce air pollution and highway congestion, local harbor officials might resort to so-called maglev trains to haul cargo containers to and from the Los Angeles and Long Beach ports -- the first freight application of the technology anywhere in the world. Now under study at Cal State Long Beach are three maglev proposals to shuttle cargo to rail yards in Los Angeles and to inland distribution centers in Victorville and Beaumont. Maglev, or magnetic levitation, trains produce no air pollution along their routes and are powered by magnetic fields in guideways that pull

them along at speeds up to 300 mph. So far, two systems have been built for commercial passenger service in China and Japan. Adapted for freight, researchers say, maglev trains could do the work of thousands of trucks and conventional locomotives, cutting harmful emissions in the port area and alleviating congestion on rail and highway corridors that serve the nation's largest harbor complex.

*This would work if integrated into "the Grid" system*

<http://www.healthimpactproject.org/resources/document/State-Route-520-Bridge.pdf> SR 520 Health Impact Assessment Recommendations A bridge to a healthier community *Tim Whelan, September 2008* Transit, Bicycling and Walking PDF pg 11 (doc page 19) Increasing and improving transit service and providing bicycling and walking facilities in the corridor will provide multiple health benefits by reducing greenhouse gas emissions and other air pollutants through the use of alternatives to single-occupant vehicles, increased opportunities for physical activity, and improved social connections.

<http://articles.latimes.com/2010/may/13/business/la-fi-lazarus-20100514> Fixes needed for L.A. public transit system Among them: Adopt a regional approach, make transit more convenient and create more online resources. David Lazarus, May 13, 2010, LA Times

<http://www.calpirg.org/issues/transit/la-public-transit> Build L.A. Public Transit Now California Public Interest Research Group

## Environmental Justice

<http://www.newgeography.com/content/00467-city-planning-and-the-politics-pollution> City Planning And The Politics Of Pollution By Greg Critser, New Geography 12/11/2008

<http://egpnews.com/?p=16949> Commerce Freeway Plan Could Displace Neighborhood By Elizabeth Hsing-Huei Chou, EGP Staff Writer March 25, 2010

<http://juh.sagepub.com/content/30/5/729.abstract> Matthew W. Roth Whittier Boulevard, Sixth Street Bridge, and the Origins of Transportation Exploitation in East Los Angeles Journal of Urban History July 2004 30: 729-748, doi:10.1177/0096144204265187

<http://www.techtransfer.berkeley.edu/newsletter/03-1/ej.php> Environmental Justice Handbook Debuts By Linda Howe-Steiger From Tech Transfer Newsletter, Winter 2003 "Environmental Justice" -- or EJ -- is actually a long-standing principle of American governance combining civil rights with environmental protection. The concept embraces environmental health, equity, and conservation issues and has been defined by US DOT as a way of identifying and addressing any "disproportionately high or adverse effects [of projects] on minority or low income populations."... and those interested in sustainable development and new urbanism. The phrase "environmental justice" was coined only about ten years ago as a rallying cry in opposition to what was dubbed "environmental racism." The terms refer to the intentional or unintentional creation of adverse environmental and health impacts on minority and low-income populations from a wide variety of public and private infrastructure and industry projects.... The legal basis for enforcement of environmental justice, however, derives from Title VI of the 1964 Civil Rights Act...and... the 1969 National Environmental Policy Act. NEPA... to ensure that all Americans are able to live in safe, healthy, productive, and pleasing surroundings and that public decision-makers consider and then mitigate significant adverse environmental impacts of a wide variety of public investments, including, transportation investments.

[http://biodiversity.ca.gov/Meetings/archive/ej/ITS\\_EJhandbook.pdf](http://biodiversity.ca.gov/Meetings/archive/ej/ITS_EJhandbook.pdf)  
<http://www.ciatrans.net/ejhandbook.pdf> Environmental Justice & Transportation By Shannon

Cairns, Jessica Greig And Martin Wachs, Published by the Institute of Transportation Studies at the, University of California Berkeley, Copyright © 2003 University of California Regents The goals of environmental Justice - State and local transportation agencies have a legal obligation to Prevent discrimination and to protect the environment through their plans and programs. The federal government has identified environmental justice as an important goal in transportation, and local and regional governments must incorporate environmental justice into transportation programs. Some communities get the benefits of improved accessibility, faster trips, and congestion relief, while others experience fewer benefits... Some communities suffer disproportionately from transportation programs' negative impacts, like air Pollution.

[http://www.justice.gov/crt/grants\\_statutes/legalman.php](http://www.justice.gov/crt/grants_statutes/legalman.php) TITLE VI LEGAL MANUAL An on-line version of Title Six (VI) Legal Manual from the Civil Rights Division of the US Department of Justice.

U.S. Department of Justice, Civil Rights Division, P.O. Box 65560, Washington, D.C. 20035-6560, September, 1998

[www.epa.gov/region9/ej/ej-resource-guide.pdf](http://www.epa.gov/region9/ej/ej-resource-guide.pdf) Environmental Justice Resource Guide U.S. Environmental Protection Agency, Pacific Southwest/Region 9, EPA-909-R-09A Handbook for Communities and Decision-Makers Enforcement EPA's enforcement programs may use EJ-related demographic information to target its inspections in areas where EJ communities could be most heavily affected by pollution and toxics.

<http://timothyblee.com/2010/07/22/the-anti-urban-20th-century/> Freeways and the Decline of St. Louis Posted on July 22, 2010 by Timothy B Lee Driving a freeway through the middle of a healthy urban neighborhood not only destroys thousands of homes, it rips apart tightly integrated neighborhoods. Pedestrians rarely walk across freeways, so businesses near a new freeway are immediately deprived of half their customers. Similarly, residents near a new freeway lose access to half the businesses near them. The area along the freeway becomes what Jacobs calls a "border vacuum" and goes into a kind of death spiral: because it contains little pedestrian traffic, businesses there don't succeed. And because there are no interesting businesses there, even fewer people go there, which hurts the sales of businesses further from the freeway. The harms from such a freeway extends for blocks on either side....Carving up St. Louis with freeways didn't just undermine individual neighborhoods; it permanently changed the region's culture. By undermining walkable urban neighborhoods while simultaneously making it easier to commute in from the suburbs, planners effected a massive transfer of wealth from cities to suburbs.

<http://www.layouth.com/fighting-to-save-my-home/> Fighting to save my home - A proposed freeway extension could demolish the houses in my neighborhood By Audrey Salas The newspaper by and about teens LA youth October 2010 Issue This wouldn't happen in a wealthier community. I overheard someone telling my mom that there were no freeways running through Beverly Hills or San Marino. That made me wonder: why is it that the poor have to deal with freeways? I think of it as an indirect form of oppression. The poor have to accept what they're given while the rich enjoy their untouched neighborhoods.

<http://www.hsp.org/node/2573> Philadelphia's Chinatown: An Overview - Historical society of Pennsylvania Activism and the "Save Chinatown" Movement Construction plans for Market East, the Vine Street Expressway, and the Convention Center literally boxed Chinatown in from all sides and entailed the demolition of many homes and institutions.

<http://www.no710.com/rod/comment5.pdf> State Route 710 Freeway Extension (Route 10 To Route 210) Record Of Decision Record Of Additional Comments Received On Environmental Justice, Historic Preservation, And Other Issues - Volume V, Prepared by: California Department

of Transportation, Office of Environmental Planning, 120 South Spring Street, Los Angeles, CA 90012, April 8, 1998 - Prepared for: Federal Highway Administration, California Division, 980 Ninth Street, Suite 400, Sacramento, CA 95814-2724

<http://articles.latimes.com/2011/mar/17/opinion/la-ed-carpool-20110317/2> If L.A. freeways aren't free Los Angeles Times, March 17, 2011 Both Rep. Gary G. Miller (R-Diamond Bar) and Rep. Maxine Waters (D-Los Angeles) have said they will try to block the demonstration project even though it is in the late planning stages. Waters says it sets up "a traffic system of haves and have-nots." Opponents of the plan see something fundamentally undemocratic and inequitable about such "congestion pricing." Freeways are a public benefit, traditionally available to all. Yet now, critics say, the roads would be operated under a two-tier system that would allow those with money to speed to their destinations while poor people would watch unhappily from the traffic-jammed sidelines. What's next? Wealthy people paying for faster ambulance service or buying their way out of jury duty? Both Rep. Gary G. Miller (R-Diamond Bar) and Rep. Maxine Waters (D-Los Angeles) have said they will try to block the demonstration project even though it is in the late planning stages. Waters says it sets up "a traffic system of haves and have-nots."

## Value Capture

<http://cdn.publicinterestnetwork.org/assets/24d1f7a858b544c68fc9eadfdf8a88a/ARRA-jobs-report.pdf> The latest data on stimulus spending show that funds spent on public transportation were a more effective job creator than stimulus funds spent on highways.

<http://www.vtpi.org/smith.pdf> Financing Transit Systems Through Value Capture An Annotated Bibliography This paper summarizes the findings of nearly 100 studies concerning the impacts of transit service on nearby property values, and the feasibility of capturing this additional value to finance transit improvements. The results indicate that proximity to transit often increases property values enough to offset some or all of transit system capital costs.

<http://www.transportationequity.org/images/downloads/MoreTransit=MoreJobs-final.pdf> The Impact of Increasing Funding for Public Transit - More Transit = More Jobs By Todd Swanstrom, Will Winter, and Laura Wiedlocher, Public Policy Research Center, University of Missouri–St. Louis, Transportation Equity Network, [www.transportationequity.org](http://www.transportationequity.org)

## Miscellaneous

<http://www.wired.com/autopia/2010/01/jobs-for-main-street-act/>  
**To Create Jobs, Build Public Transit, Not Highways** By Keith Barry January 21, 2010, 9:20 am, Autopia. **If we'd spent as much federal stimulus money on public transportation as we spent on highways, we would have created twice as much work and put a bigger dent in the unemployment rate.** That's the analysis of stimulus spending by Smart Growth America, the Center for Neighborhood Technology and U.S. PIRG, the public-policy lobbying group. **Smart Growth America found that every billion dollars spent on public transportation produced 16,419 job-months, while the same amount spent on highway infrastructure projects produced 8,781 job-months.** Now it is warning that the Jobs for Main Street Act of 2010 (.pdf), the \$154 billion jobs bill the House of Representatives passed last month, could make the same mistake in funding the wrong priorities. The legislation, which the Senate is expected to take up early this year.. allocates \$27.1 billion for highways and other surface transportation and just \$8.4 billion for public transportation. That's a mistake. "When the Senate takes the bill up and it goes back to the House, they ought to take a look at their own data and readjust the proportions," William

Schroeer, state policy director for Smart Growth America, told Wired.com. "Since it's a jobs bill, that seems to us to be something they ought to think very seriously about." By splitting public transportation and highway funding equally, Schroeer said, the bill could provide 71,415 more job-months of work than it would by favoring highway spending. That is enough work to give 6,000 more people full-time year-round employment. According to SGA, public transportation spending leads more directly to job growth than highway spending for several reasons. First, less money is spent acquiring land, which means more money is spent actually building something. Second, all those buses, trains and subways need people to operate them and maintain the infrastructure. And third, public transit requires a workforce with more diverse skills than highway construction. Even better, Schroeer said, public transit can help save jobs because it allows people to get to work — and those are jobs Smart Growth America didn't include in its analysis. When transit programs are cut or don't exist to begin with, "there's a negative impact on folks' mobility to get to work, to get to education," Schroeer said. "It's part of the fabric of communities, whether you use it or not." One reason public transit got short shrift in the stimulus package and some policymakers don't see the merit of such projects is the misconception that transit projects aren't "shovel-ready," and — as a result — job growth would lag. The report proves that myth wrong. "In today's environment, there are so many public transportation needs, and as a result there are so many public transportation projects that are ready to go, there's no difference in the spend rates between roads and public transportation," Schroeer said.... The bottom line is, investing heavily in public transportation puts more people to work while creating or improving infrastructure we need more of. It's a win-win.