# Cost Control CP

[Cost Control CP 1](#_Toc331148048)

[1NC 4](#_Toc331148049)

[\*\*\*\*\*Top Shelf\*\*\*\*\* 10](#_Toc331148050)

[2NC Overview 11](#_Toc331148051)

[2NC TI = Cost Overruns 14](#_Toc331148052)

[\*\*\*\*\*Critical 2NC Blocks\*\*\*\*\* 16](#_Toc331148053)

[2NC ‘Punishment key’ 17](#_Toc331148054)

[AT: Perm Do Both 19](#_Toc331148055)

[AT: Perm Do the CP 21](#_Toc331148056)

[AT: Permute – Lie to Congress 22](#_Toc331148057)

[AT CP Illegitimate 23](#_Toc331148058)

[AT: Solvency Deficit 24](#_Toc331148059)

[CP is a pre-requisite 25](#_Toc331148060)

[AT: Delay 26](#_Toc331148061)

[AT: When is the Cost Control 27](#_Toc331148062)

[AT: CP = Normal Means 28](#_Toc331148063)

[AT: Better Now 29](#_Toc331148064)

[AT: Regs Fail 30](#_Toc331148065)

[Competition 32](#_Toc331148066)

[AT: No Data 34](#_Toc331148067)

[Consequence Key 35](#_Toc331148068)

[Theory-Type Cards 36](#_Toc331148069)

[\*\*\*\*\*2NC Solvency Cards\*\*\*\*\* 37](#_Toc331148070)

[General Card 38](#_Toc331148071)

[Aviation Solvency 39](#_Toc331148072)

[Solvency: Gas Tax 40](#_Toc331148073)

[Solvency: Generic 41](#_Toc331148074)

[Solvency (Generic) 44](#_Toc331148075)

[Solvency (Rail) 45](#_Toc331148076)

[Solvency: (Rail/Freight) 46](#_Toc331148077)

[Solvency (CCS) 47](#_Toc331148078)

[Solvency (Airplanes) 48](#_Toc331148079)

[Solvency (Next Gen) 49](#_Toc331148080)

[Solvency (HSR) 50](#_Toc331148081)

[Solvency (HSR) 51](#_Toc331148082)

[Solvency (HSR) 52](#_Toc331148083)

[Solvency (HTF/Highways) 53](#_Toc331148084)

[Solvency: (Port Dredging) 55](#_Toc331148085)

[Solvency (Title XI) 58](#_Toc331148086)

[Solvency (Roads) 59](#_Toc331148087)

[Solvency (Roads/TI) 60](#_Toc331148088)

[\*\*\*\*\*Plan’s Condition Key\*\*\*\*\* 62](#_Toc331148089)

[Performance Measures Key 63](#_Toc331148090)

[Performance Measures Solve Fraud/Waste 65](#_Toc331148091)

[Establishing Performance and Funding Standards key 66](#_Toc331148092)

[Performance Measures key 67](#_Toc331148093)

[Tying Performance to Funding Key 68](#_Toc331148094)

[Solvency: Sudits 69](#_Toc331148095)

[Solvency: Performance Measures 70](#_Toc331148096)

[Non-Process Fails (Roads) 71](#_Toc331148097)

[Non-Process Fails (Urban Mass Transit) 73](#_Toc331148098)

[Conditions Key 74](#_Toc331148099)

[\*\*\*\*\*Net Benefits\*\*\*\*\* 75](#_Toc331148100)

[Plan overstates benefits/understates costs 76](#_Toc331148101)

[\*\*\*Ptix\*\*\* 78](#_Toc331148102)

[\*\*\*Cost Overruns\*\*\* 80](#_Toc331148103)

[Turns Economy 83](#_Toc331148104)

[Plan Fails—laundry list 84](#_Toc331148105)

[Almost all transportation infrastructure projects overestimate traffic 84](#_Toc331148106)

[AT: Cost Underestimation Inevitable 85](#_Toc331148107)

[\*\*\*Competitiveness Net Benefit\*\*\* 88](#_Toc331148108)

[\*\*\*\*\*Plan = Cost Overruns\*\*\*\*\* 92](#_Toc331148109)

[Cost Overruns 93](#_Toc331148110)

[TI = Cost Overruns (Generic) 94](#_Toc331148111)

[Pipelines = COv 97](#_Toc331148112)

[Laundry List = COv 98](#_Toc331148113)

[Rail = COv 99](#_Toc331148114)

[Gas tax fails 100](#_Toc331148115)

[States Solve Cost Overruns 101](#_Toc331148116)

[\*\*\*\*\*Aff Answers\*\*\*\*\* 102](#_Toc331148117)

[Status Quo Solves Accountability 103](#_Toc331148118)

[Alt Causes 104](#_Toc331148119)

[Cost Underestimation Inevitable 105](#_Toc331148120)

[Cost Overruns Inevitable 108](#_Toc331148121)

[Cost Overruns Inevitable 109](#_Toc331148122)

[Cost Overruns Decreasing Now 113](#_Toc331148123)

[NIB Solves 114](#_Toc331148124)

[Cost Control Fails 117](#_Toc331148125)

[Controls Now/Normal Means 118](#_Toc331148126)

[Can Add Controls 119](#_Toc331148127)

[Cost Overruns Exaggerated 121](#_Toc331148128)

[Make sure we have cut these: 125](#_Toc331148129)

## 1NC

#### Text: If, and only if, the program cost of \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ does not exceed initial cost estimates by 10 percent or more before completion of such investment, should the United States federal government \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. If the program cost of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ does exceed initial cost estimates by 10 percent before completion, the United States federal government should terminate the program.

#### The Counterplan solves and competes – it establishes an explicit cost-threshold for the plan BEFORE implementation

**Puentes 2k8 (“A Bridge to Somewhere Rethinking American Transportation For The 21st Century,” g online @** [**http://www.brookings.edu/~/media/research/files/reports/2008/6/transportation%20puentes/06\_transportation\_puentes\_report.pdf**](http://www.brookings.edu/~/media/research/files/reports/2008/6/transportation%20puentes/06_transportation_puentes_report.pdf) **//um-ef)**

Lost in the dominant discussion about how much money we are spending on the federal transportation program is the question about **how we can spend that money better**. To be sure, federal investments in transportation are substantial; **yet there is broad agreement that this level of investment is not enough**. Why not? **Prior to the discussion about how much money to spend**, we need a frank and rigorous debate about **how to spend that money better**. Simply put, we cannot afford a free-rider program any longer. The prioritization of transportation policy and spending means the federal program should focus on those places where positive returns are certain. **Therefore, the first order of business is to re-orient transportation policy so the federal government and its state and metropolitan partners are** purposeful, **accountable, and outcome-based**. In order to rebuild the public trust, the rationale for the federal program should be abundantly clear to the American people to which **a tangible set of outcomes must be explicitly tied**. **The recipients of federal dollars should then be held accountable for meeting these goals**. This is not a new idea and is one that was embraced by the NSTPRSC in their call to “begin anew.” The regular and predictable pushback from the states and metropolitan areas is the oft-cited complaint that the nation is too broad and diverse for national standards. No doubt this is an important consideration. Yet this is not a call for rigid, uniform rules but for an intentional, evidence-based program structured **around broad national goals**. It should be up to the federal transportation partners on the state and metropolitan level to demonstrate how they will meet or exceed those goals. As mentioned, **there is substantial federal precedent for such a national accountability framework in education and welfare**, for example. **Why recipients of federal transportation dollars should be exempt from such stewardship has yet to be fully explained**. The transportation system of governance and finance shares similarities with many other areas of domestic policy—and should operate under **similar accountability**. Recognizing the political hurdles in linking funding to outcomes, performance, and accountability**, states should be allowed to opt-out** of the revamped federal transportation program. Those states would be free from most federal regulations but would also forgo their allocation of transportation trust fund revenues. They would still be required, however, to maintain and preserve their portion of the interstate highway system through whatever means they deem appropriate but failure to do so would jeopardize their opt-out status. 14 However, there is no doubt that as large, bureaucratic agencies that state DOTs should strive to improve their internal management and operations in order to improve project delivery, **reduce cost overruns**, and keep the existing system in state of good repair. These are basic elements of a functioning system. However, one thing is certain: broad based outcomes must be part of the conversation and they must begin to move away from transportation-for-transportation’s-sake notions and toward investments that deliver an America that is more economically competitive and productive, improves the environment, and provides greater mobility and access to opportunity. These three categories clearly overlap and there are many options here: To serve the nation’s economy, congestion costs should be reduced for both providers and users as well as passengers and increasing the velocity of freight at international gateways and internal hubs. Agglomerations of economic activity, especially around labor markets, should be enhanced at the same time that new markets are built such as around alternative fuels and new technology. There is also a basic imperative to make the transportation safe and secure for all travelers. Reducing transportation-related deaths and injuries by making the system safe and secure is paramount. In this way, certain transportation investments could also reduce the nation’s massive health care costs which would have a positive impact on the economy. To improve the environment, several states as well as the federal government have already articulated a desire to reduce transportation-related mobile source emissions in order to confirm with the transportation provisions of the Clean Air Act. We should go further and in addition to a net reduction in carbon dioxide emissions a reduced dependence on foreign oil is also critical (which is a clear benefit to the national economy). To that end, the federal program should support all three legs of the stool—vehicle efficiency, fuels standards and alternatives, as well as demand reduction strategies promoting efficient development patterns, telecommuting, and increasing travel options for people and goods. To provide greater mobility and access to opportunity the range of transportation choices must be expanded. This must be done in such a way that increases travel reliability and affords better access to a range of employment, services, educational, and recreational opportunities. Such improvements would address another key outcome: saving taxpayers’ money and reducing the share of household budgets dedicated to transportation. Certain groups could be explicitly targeted such as low income households or the elderly. Once there are clear goals and objectives the federal program needs to augment and enforce new accountability and performance standards, dramatically improve data collection, information, and transparency, and reorganize the U.S. DOT to optimize its performance. a. Augment existing accountability efforts and reward performance Unfortunately, today the states and MPOs are not equipped to deliver an outcome-driven structure for transportation. No doubt, **in recent years several states have developed certain measures to monitor their performance on transportation-related outcomes.** Yet they need to go beyond the traditional measures **and reorient their planning and programming processes to clearly demonstrate how they will meet the broad set of national outcomes**. In this way, the federal government can foster a climate of shared responsibility with its partners on the state and metropolitan level. Given the wide variation among federal transportation grantees around the nation, broad flexibility should be afforded to states and MPOs to deliver on the outcomes consistent with their particular circumstances. Yet this should not neuter the federal role as is done now with the planning factors by prohibiting courts from reviewing grantees’ progress toward considering these goals. Indeed, **the U.S. DOT should assess state and metropolitan transportation plans to ensure they are consistent with the goals and purpose articulated in the federal program as a condition for them to continue to receive federal funding**. While no simple analytical tool can provide all the answers, in this era of fiscal austerity the federal government should also take steps to ensure grantees apply rigorous **benefit/cost analyses to any project that uses federal funds**. In this way there can be some assurances that high returns are being generated and that smaller scale investments are properly evaluated. Yet in order for such analyses to be truly useful in making investment decisions, they need to be tightly coordinated with the full range of decisions that local, state, and metropolitan officials make. For one land use measures should be improved and incorporated into any economic analysis. They should also examine the distribution of the benefits and costs of investments across social and income groups, as well as geographic areas. Finally, these newfangled analyses need to understand the rapidly changing travel patterns and characteristics of people and goods. Congress should then allow the U.S. DOT to maintain an incentive pool to reward states and metropolitan areas that consistently perform at an exceptional level. This includes those places that take full advantage of meritbased decisionmaking utilizing relevant empirical evidence resulting in projects that generate very high returns even after accounting for the full range of environmental, social, and geographic impacts. The department should also give high performers relief from regulatory and administrative requirements in order to accelerate project delivery where appropriate. By the same token, **the federal DOT should consider possible intervention strategies for consistent low performers.** (In designating high and low performers, DOT should take into account the difficult challenges facing state agencies and MPOs in large and multi-state metropolitan areas). Another idea would be to reorient the discussion to reward states and metropolitan areas that can demonstrate how they are achieving national priority goals such as GHG and oil consumption reduction. One way to approach this is to overhaul existing out-of-date funding formulas so federal funds are not distributed based on factors that potentially increase greenhouse gas emissions, overly simplistic equity provisions, or on the basis of earmarking. Serious consideration should be given as to whether VMT and gasoline consumption make sense at all as a basis for apportionments. By the same token, bonus allocations should be considered for those states and metropolitan areas that reduce their VMT and gasoline consumption through demand management techniques and strategies. Recognizing that state DOT certification is non-existent and MPO certification is process-driven and weak, a new framework that emphasizes performance is necessary. Every three years the federal government should assess how well its transportation partners on the state and metropolitan level are meeting federal laws and regulations, and what progress they are making to meting the articulated national goals. The accreditation of these agencies should be based on meeting these accountability standards in order to make it a meaningful process and direct loss of federal funds should be a genuine consequence.

And, 10 percent ought to be the cost-threshold – federal asset programs are the perfect model for the cp

GAO ‘97

(Government Accountability Office, “Transportation Infrastructure Managing the Costs of Large-Dollar Highway Projects,” pg online @ <http://www.gao.gov/assets/160/155775.pdf> //um-ef)

While FHWA’s formal review of safety and quality issues provides opportunities to influence states’ cost management of highway projects, FHWA has no mandate to encourage or require practices to contain costs of large-dollar highway projects. Unlike direct procurement programs, such as Department of Defense weapons procurement, that have specific cost management requirements, the federal-aid highway program is a federally assisted, state-administered partnership. As a result, FHWA has few requirements that ensure cost containment is an integral part of state highway project management. **Several initiatives already underway at the federal level are designed to help the federal government manage its operations and projects in a cost effective way.** The Vice President’s National Performance Review in 1993, for example, identified widespread concern about the need for the federal government to better manage the planning, budgeting, and acquisition of fixed assets and suggested improvements. Furthermore, the Government Performance and Results Act of 1993 generally requires that federal agencies target resources and develop specific, measurable goals and plans to achieve them. **For federal agencies acquiring large-dollar capital assets** such as buildings, equipment, and information systems, the Office of Management and Budget (**OMB) requires cost containment practices. OMB requires federal agencies to prepare baseline cost and schedule estimates and to track how well actual costs and schedules perform against that baseline**. **If actual costs or schedules exceed the estimate by more than 10 percent**, agencies are required to report the reasons for this to OMB and to identify corrective actions to bring the project back within its baseline costs or schedule. If estimates indicate these baseline goals are not achievable, the agency may revise them with OMB approval. However, it must continue to report the original baseline as well as the new goals. **These requirements apply to programs managed by and acquisitions made by federal agencies** and not to federally assisted state programs. Nevertheless, **these cost management concepts could be an appropriate model for management of large-dollar highway projects.**

#### And, failure to build-in a termination condition ensures cost-overruns – the plan’s advantages are gross over-estimations

**Postrel 11 [Virginia Postrel writes about commerce and culture, innovation, economics and public policy. She's the author of "The Future and Its Enemies. Postrel was described by Sam Tanenhaus as "a master D.J. who sequences the latest riffs from the hard sciences, the social sciences, business, and technology, to name only a few sources." She has been a columnist for The Wall Street Journal, The Atlantic, The New York Times and Forbes. From July 1989 to January 2000, Postrel was the editor of Reason magazine, which under her leadership was a finalist for the National Magazine Awards three times for essays and public interest journalism. A graduate of Princeton University, she lives in Los Angeles. “Too Many Public Works Built on Rosy Scenarios: Virginia Postrel” Bloomberg, 7/8/11, http://www.bloomberg.com/news/2011-07-08/too-many-public-works-built-on-rosy-scenarios-virginia-postrel.html, accessed 7/17/12]//DLi**

“Infrastructure” may be one of the least glamorous words in the English language, but with the right touch the concrete and steel of roads, bridges, tunnels, dams and railroads can look as alluring as a movie star. Witness the sleekly seductive illustrations produced for today’s California High-Speed Rail Authority or the midcentury pictures of effortlessly flowing superhighways, a genre that reached its apotheosis in Walt Disney’s “Magic Highway U.S.A.” in 1958. This glamorizing extends not just to imagery but also to forecasts. Project promoters routinely overstate benefits and understate costs -- and not just a little bit. “Cost overruns in the order of 50 percent in real terms are common for major infrastructure, and overruns above 100 percent are not uncommon,” Bent Flyvbjerg, a professor of major program management at the University of Oxford’s Said Business School, writes in the Oxford Review of Economic Policy. “Demand and benefit forecasts that are wrong by 20-70 percent compared with actual development are common.” To draw these conclusions, Flyvbjerg analyzed results from 258 projects in 20 countries over 70 years, **the largest** such **database ever compiled**. Like the “stars without makeup” features in celebrity tabloids, his research provides a disillusioning reality check. “It is not the best projects that get implemented, but the projects that look best on paper,” Flyvbjerg writes. “And the projects that look best on paper are the projects with the largest **cost underestimates and benefit overestimates**, other things being equal.” Flyvbjerg got curious about forecasts when, as a young professor in Denmark, he watched the Great Belt rail tunnel, connecting Scandinavia with continental Europe, go “terribly wrong,” with long delays and cost overruns of 120 percent. “I began to wonder not only why that was the case, but also whether it was common or not for that to happen,” he recalls in a telephone conversation. (The tunnel opened in 1997.) Finding no comprehensive data available, he assembled his own -- and found that the big picture looked very much like the little one. “It’s very common to have cost overruns in big construction projects,” he says. “It’s the norm. It’s not the exception.” On average, urban and intercity rail projects run over budget by 45 percent, roads by 20 percent, and bridges and tunnels by 34 percent. And the averages tell only part of the story. Rail projects are especially prone to cost underestimation. Seventy-five percent run at least 24 percent over projections, while 25 percent go over budget by at least 60 percent, Flyvbjerg finds. By comparison, 75 percent of roads exceed cost estimates by at least 5 percent, and 25 percent do so by at least 32 percent. California Dreaming Promoters of rail and toll-road projects also tend to substantially overstate future use, making those projects look more appealing to whoever is footing the bill. Rail projects attract only about half the expected passengers, on average, while in new research still in progress, Flyvbjerg finds that toll roads (including road bridges and tunnels) fall 20 percent short. (Non-toll roads also miss their traffic projections, but their errors go in both directions.) Rail-ridership predictions are especially over- optimistic in the U.S., where the average gap between expectations and reality is 60 percent, compared with 23 percent in Europe. So a back-of-the-envelope calculation would suggest that California High-Speed Rail can expect to carry only 15.6 million passengers a year by 2035, rather than the 39 million projected. Using the average cost overrun, California should also expect to spend almost $8 billion, rather than the estimated $5.5 billion, for the project’s first 100-mile (161-kilometer) leg from Borden to Corcoran, the “train to nowhere” in the Central Valley. Raising the estimate by the average overrun, however, means that you still have a 50 percent chance of spending even more. As the toll roads suggest, overruns aren’t unique to government projects. Even privately built chemical- processing plants suffer from similar, though less drastic, underestimates of cost and overestimates of capacity. As many a Dilbert comic strip has pointed out, salespeople often close a deal by promising more than they can deliver. So why do these mistakes happen again and again? Project managers often blame a combination of bad luck, unexpected delays and changes of plan -- the same things that inflate the costs of remodeling your bathroom, only on a grand scale. It’s true that planners change their minds. “They decide to have higher safety standards,” Flyvbjerg says, “or higher environmental standards, so the cost of the project goes up. Often you will find that the geology of the project was not well covered. So when you start digging, you find things in the ground that you didn’t expect, and the costs go up.” But a smart project manager should anticipate the unanticipated and adjust the budget accordingly. Professionals, after all, generally have far more experience than the average homeowner. They know the sorts of things that can go wrong. “It’s nothing new that geology is difficult,” Flyvbjerg says. “We know that geology is difficult. No matter. It’s ignored in project after project. Therefore, the problem is not geology itself but the fact that we disregard geology.” Bias of Optimism A charitable explanation is that promoters are starry- eyed and suffer from what psychologists call optimism bias. But it’s suspicious that forecasters rarely seem to learn, even over decades of experience. Alas, contractors, local governments and other advocates have strong incentives **to underplay costs and exaggerate benefits** to sell their services or attract funding. “**Some forecasts are** so **grossly misrepresented** that we need to consider not only firing the forecasters but suing them, too -- perhaps even having a few serve time,” Flyvbjerg writes in his Oxford Review of Economic Policy article. Even with his gloomy findings, Flyvbjerg is an optimist. “**Things don’t have to be like this,”** he says. “It’s not like the weather. It’s a human artifact that we are producing, and hence **we can do differently**.” He would like to see better incentives -- **punishment for errors,** rewards for accuracy -- **combined with a requirement** that forecasts not only consider the expected characteristics of the specific project but, once that calculation is made, adjust the estimate based on an “outside view,” reflecting the **cost overruns** of similar projects. That way, the “unexpected” problems that happen over and over again would be taken into consideration. Such scrutiny would, of course, make some projects look much less appealing -- which is exactly what has happened in the U.K., where “reference-class forecasting” is now required. “**The government stopped a number of projects dead in their tracks when they saw the forecasts**,” Flyvbjerg says. “This had never happened before.” Unfortunately, the world’s biggest infrastructure projects, including the recently opened high-speed rail line between Beijing and [Shanghai](http://topics.bloomberg.com/shanghai/), are subject to no such checks, or even to scholarly examination. Flyvbjerg has been trying for years to get data on project costs in [China](http://topics.bloomberg.com/china/), to no avail. “Their data are simply not reliable,” he says. He quotes an unidentified Chinese colleague who said, “If the party says there’s no cost overrun, there’s no cost overrun.”

#### That’s key to solvency and U.S. Economic Competitiveness

**Puentes 2k8 (“A Bridge to Somewhere Rethinking American Transportation For The 21st Century,” g online @** [**http://www.brookings.edu/~/media/research/files/reports/2008/6/transportation%20puentes/06\_transportation\_puentes\_report.pdf**](http://www.brookings.edu/~/media/research/files/reports/2008/6/transportation%20puentes/06_transportation_puentes_report.pdf) **//um-ef)**

Right now, federal transportation decisionmaking is misaligned with the geographic realities of travel patterns, goods movements, commute trips, and everyday errands. It is an antiquated, anachronistic, and ultimately **wasteful approach to transportation policy.** As such it functions mainly as a Rube Goldbergian revenue generation and distribution system for the gas tax it collects. In an era of declining revenues, of continued transportation problems, and **a fiercely competitive global economic environment**, **American transportation policy should be about more than just dividing the spoils**. All states should not be robotically guaranteed a certain level of funding based on who buys gasoline within their borders. The nation does not operate in this fashion with social security, education, or homeland security spending and it should no longer do so for transportation. Reform of the federal transportation program must target those regions most critical to ensuring national success: its largest metropolitan areas. Federal policy must place a greater emphasis on policies that allow robust, inclusive, and resource-efficient growth to flourish in these places. This will position America to compete for high quality jobs in the global marketplace and serve as the linchpin of a new, unified, competitive and compelling vision for transportation in the U.S. By **focusing reforms** on three major policy areas—federal leadership, empowerment of metropolitan areas, and optimization of other extent programs—federal transportation policy can move from the outdated, outmoded structure that exists today to something that actually works for the nation and metropolitan America. **Emphasizing better spending and accountability** would enable policy makers to regain credibility and open the door to proposals for increased funding. Developing a coherent national purpose and targeting spending would help establish transportation as a true national priority program that focuses on congested areas, gateways and corridors, and freight hubs. Unleashing market dynamics would address finance, demand, and operational efficiencies and enable important ideas like congestion pricing to thrive. These are important reforms that can go a long way to providing a metropolitan framework for the nation’s transportation program. No doubt, even these modest reforms will not come easily to the transportation sector. The deficiencies in transportation policies and practices are deeply rooted—in constituency and money politics, in state governance, and in the history of metropolitan development. Yet **change must come if our nation is going to invest transportation resources in a way that ensures vitality and competitiveness for the U.S. economy**, our cities, and our families.

#### And, failure to restore U.S. competitiveness crushes U.S. primacy—the impact is global war

**Khalilzad 2k11 (Fellow at the Center for Strategic and International Studies, 2011 Zalmay, National Review, “The Economy and National Security,” February 8, http://www.nationalreview.com/articles/259024/economy-and-national-security-zalmay-khalilzad?pg=2, last accessed 5.25.12)**

Today, economic and fiscal trends pose the most severe long-term threat to the United States’ position as global leader. While the United States suffers from fiscal imbalances and low economic growth, the economies of rival powers are developing rapidly. The continuation of these two trends could lead to a shift from American primacy toward a multi-polar global system, leading in turn to increased geopolitical rivalry and even war among the great powers. The current recession is the result of a deep financial crisis, not a mere fluctuation in [the business](http://www.nationalreview.com/articles/259024/economy-and-national-security-zalmay-khalilzad) cycle. Recovery is likely to be protracted. The crisis was preceded by the buildup over two decades of enormous amounts of debt throughout the U.S. economy — ultimately totaling almost 350 percent of GDP — and the development of credit-fueled asset bubbles, particularly in the housing sector. When the bubbles burst, huge amounts of wealth were destroyed, and [unemployment](http://www.nationalreview.com/articles/259024/economy-and-national-security-zalmay-khalilzad) rose to over 10 percent. The decline of tax revenues and massive countercyclical spending put the U.S. government on an unsustainable fiscal path. Publicly held national debt  rose from 38 to over 60 percent of GDP in three years. Without faster economic growth and actions to reduce deficits, publicly held national debt is projected to reach dangerous proportions. If interest rates were to rise significantly, annual interest payments — which already are larger than the defense budget — would crowd out other spending or require substantial tax increases that would undercut economic growth. Even worse, if unanticipated events trigger what [economists](http://www.nationalreview.com/articles/259024/economy-and-national-security-zalmay-khalilzad) call a “sudden stop” in credit markets for U.S. debt, the United States would be unable to roll over its outstanding obligations, precipitating a sovereign-debt crisis that would almost certainly compel a radical retrenchment of the United States internationally. Such scenarios would reshape the international order. It was the economic devastation of Britain and France during World War II, as well as the rise of other powers, that led both countries to relinquish their empires. In the late 1960s, British leaders concluded that they lacked the economic capacity to maintain a presence “east of Suez.” Soviet economic weakness, which crystallized under Gorbachev, contributed to their decisions to withdraw from Afghanistan, abandon Communist regimes in Eastern Europe, and allow the Soviet Union to fragment. If the U.S. debt problem goes critical, the United States would be compelled to retrench, reducing its military spending and shedding international commitments. We face this domestic challenge while other major powers are experiencing rapid economic growth. Even though countries such as China, India, and Brazil have profound political, social, demographic, and economic problems, their economies are growing faster than ours, and this could alter the global distribution of power. These trends could in the long term produce a multi-polar world. If U.S. policymakers fail to act and other powers continue to grow, it is not a question of whether but when a new international order will emerge. The closing of the gap between the United States and its rivals could intensify geopolitical competition among major powers, increase incentives for local powers to play major powers against one another, and undercut our will to preclude or respond to international crises because of the higher risk of escalation. The stakes are high. In modern history, the longest period of peace among the great powers has been the era of U.S. [leadership](http://www.nationalreview.com/articles/259024/economy-and-national-security-zalmay-khalilzad). By contrast, multi-polar systems have been unstable, with their competitive dynamics resulting in frequent crises and major wars among the great powers. Failures of multi-polar international systems produced both world wars. American retrenchment could have devastating consequences. Without an American security blanket, regional powers could rearm in an attempt to balance against emerging threats. Under this scenario, there would be a heightened possibility of arms races, miscalculation, or other crises spiraling into all-out conflict. Alternatively, in seeking to accommodate the stronger powers, weaker powers may shift their geopolitical posture away from the United States. Either way, hostile states would be emboldened to make aggressive moves in their regions.

# \*\*\*\*\*Top Shelf\*\*\*\*\*

## 2NC Overview

The CP solves the entirety of the case but conditions the plan on establishing a cost-overrun metric PRIOR to implementing the plan – if the project the aff invests in goes 10% over budget the program is TERMINATED – this establishes a cost-control mechanism to prevent future cost overruns -

#### And, ONLY an on-going cost-benefit analysis can solve – ONLY instituting controls BEFORE the plan is not enough – projections will be wrong, resulting in overruns – there needs to be a measure of the plan AS it’s being carried out

**Flyvbjerg 2k9 (Bent, professor of planning at Aalborg University, Denmark. He is founder and director of the university’s research program on large-scale infrastructure planning, “Survival of the unfittest: why the worst infrastructure gets built—and what we can do about it,” Oxford Review of Economic Policy, Volume 25, Number 3, 2009, pp.344–367, pg online @** [**http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf**](http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf) **//um-ef)**

This does not show the uselessness of cost–benefit analysis as such, needless to say. But if informed decisions are the goal, then conventional ex ante cost–benefit analysis must be supplemented with **empirical ex post risk analysis** **focused on documented uncertainties in the estimates of costs and benefits that enter into cost–benefit analysis**. For a given major infrastructure project, this would constitute a kind of empirical due diligence of its cost– benefit analysis, something that is rarely carried out today. Given the data presented above, a key recommendation for decision-makers, investors, and voters who care about what Williams (1998) calls ‘**honest numbers’ is that they should not trust the budgets, patronage forecasts, and cost–benefit analyses produced by promoters of major infrastructure projects**. Independent studies should be carried out and, again, such studies should be strong on empirically based risk assessment. Until now it has been difficult or impossible to carry out such assessments, because empirically grounded and statistically valid figures of risk did not exist. With the study documented above, this has changed and empirical risk assessment and management has begun (Flyvbjerg, 2006). In addition to sound data, institutional checks and balances that would enforce accountability in actors towards risk are also necessary, as we will see below.

#### \*\*\*And, it turns the stimulus advantage

**Flyvbjerg 2k9 (Bent, professor of planning at Aalborg University, Denmark. He is founder and director of the university’s research program on large-scale infrastructure planning, “Survival of the unfittest: why the worst infrastructure gets built—and what we can do about it,” Oxford Review of Economic Policy, Volume 25, Number 3, 2009, pp.344–367, pg online @** [**http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf**](http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf) **//um-ef)**

In mid-2008, The Economist called current spending on infrastructure the ‘biggest investment boom in history’ (The Economist, 7 June 2008, p. 80). Spending was the largest it had ever been as a share of world GDP. When the fiscal crisis deepened and became global during the autumn to winter of 2008–9, this could have ended the infrastructure boom, as banks and capital funds radically cut back on their lending. But the opposite appears to have happened. Reductions in private funds have been offset by hundreds of billions of public dollars for stimulus spending. Heads of state, led by US president Barach Obama and China Premier Wen Jiabao, have singled out **investment in infrastructure** as a key means to create jobs and keep the economy from slumping. China was first mover when its State Council, in November 2008, passed a $586 billion stimulus plan, mainly for investment in infrastructure. In February 2009 the USA followed suit, with Congress passing President Obama’s $787 billion new New Deal. India has a $475 billion plan, and the UK, Germany, France, and many other nations have made similar arrangements. With so much money in the pipeline—and with the health of the global economy riding on the success of infrastructure investment—**the efficiency of infrastructure delivery is particularly important at present**. If done right the investment boom could become a boon, because infrastructure investment is appealing in many ways: it creates and sustains employment; there is a large element of domestic inputs relative to imports; it improves productivity and competitiveness by lowering producer costs; it benefits consumers through higher-quality services; and it improves the environment when infrastructures that are environmentally sound substitute for infrastructures that are not (Helm, 2008, p. 1). But there is a big ‘if’ here. Because **if done wrong the thrust may become a bust, with boondoggles worse than any seen yet, weakening the economy instead of improving it.** **Unfortunately the conventional way of delivering major infrastructure shows a dismal performance record.** In what follows, I document the record, explain why it is so poor, and finally describe measures that may help current stimulus spending become effective, instead of **adding to the financial and economic failures that litter the field of infrastructure investment.**

## 2NC TI = Cost Overruns

#### And, the most COMPREHENSIVE study on TI shows the plan will be subject to cost-overruns

**Flyvbjerg 2k9 (Bent, professor of planning at Aalborg University, Denmark. He is founder and director of the university’s research program on large-scale infrastructure planning, “Survival of the unfittest: why the worst infrastructure gets built—and what we can do about it,” Oxford Review of Economic Policy, Volume 25, Number 3, 2009, pp.344–367, pg online @** [**http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf**](http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf) **//um-ef)**

Major infrastructure projects generally have the following characteristics.1 Such projects are inherently risky owing to long planning horizons and complex interfaces. Technology and design are often non-standard. Decision-making, planning, and management are **typically** multi-actor processes with conflicting interests. Often there is ‘lock in’ or ‘capture’ of a certain project concept at an early stage, leaving analysis of alternatives weak or absent. The project scope or ambition level will typically change significantly over time. Statistical evidence shows that such unplanned events are often unaccounted for, leaving budget and time contingencies sorely inadequate. As a consequence, misinformation about costs, benefits, and risks is the norm throughout project development and decision-making, including in the business case. The result is cost overruns and/or benefit shortfalls during project implementation. Cost overruns in the order of 50 per cent in real terms are common for major infrastructure, and overruns above 100 per cent are not uncommon. Demand and benefit forecasts that are wrong by 20–70 per cent compared with actual development are common. Table 1 shows more detailed cost data for transportation infrastructure projects. Transportation is used as an example here and elsewhere in the article because the best data exist for transportation and because there is not enough space to present data for all project types. It should be mentioned, however, that comparative research shows that the problems identified for transportation apply to a wide range of other project types including ICT systems, buildings, aerospace projects, defence, mega-events such as the Olympics and the World Cup, water projects, dams, power plants, oil and gas extraction projects, mining, large-scale manufacturing, big science, and urban and regional development projects (Flyvbjerg et al., 2003, pp. 18–19; Altshuler and Luberoff, 2003; Priemus et al., 2008; Flyvbjerg et al., 2002, p. 286; Flyvbjerg, 2005a). The dataset in Table 1 shows cost overrun in 258 projects in 20 nations on five continents. All projects for which data were obtainable were included in the study.2 For rail, average cost overrun is 44.7 per cent measured in constant prices from the build decision. For bridges and tunnels, the equivalent figure is 33.8 per cent, and for roads 20.4 per cent. The difference in cost overrun between the three project types is statistically significant (Flyvbjerg et al., 2002). The large standard deviations shown in Table 1 are as interesting as the large average cost overruns. The size of the standard deviations demonstrates that uncertainty and risk regarding cost overruns in infrastructure are large, indeed. The following key observations pertain to cost overruns in transportation infrastructure projects: nine out of 10 projects have cost overrun; overrun is found across the 20 nations and five continents covered by the study; overrun is constant for the 70-year period covered by the study; cost estimates have not improved over time. Table 2 shows the inaccuracy of travel demand forecasts for rail and road infrastructure. The demand study covers 208 projects in 14 nations on five continents. All projects for which data were obtainable were included in the study.3 For rail, actual passenger traffic is 51.4 per cent lower than estimated traffic on average. This is equivalent to an average overestimate in rail passenger forecasts of no less than 105.6 per cent. The result is large benefit shortfalls for rail. For roads, actual vehicle traffic is on average 9.5 per cent higher than forecasted traffic. We see that rail passenger forecasts are biased, whereas this is less the case for road traffic forecasts. The difference between rail and road is statistically significant at a high level. Again the standard deviations are large, indicating that forecasting errors vary widely across projects (Flyvbjerg et al., 2005; Flyvbjerg, 2005b). The following observations hold for traffic demand forecasts: 84 per cent of rail passenger forecasts are wrong by more than ±20 per cent; nine out of 10 rail projects have overestimated traffic; 50 per cent of road traffic forecasts are wrong by more than ±20 per cent; the number of roads with overestimated and the number with underestimated traffic is about the same; inaccuracy in traffic forecasts is found in the 14 nations and five continents covered by the study; inaccuracy is constant for the 30-year period covered by the study; forecasts have not improved over time. We conclude that if techniques and skills for arriving at accurate cost and traffic forecasts have improved over time, these **improvements** have not resulted in an increase in the accuracy of forecasts. We also conclude that cost overruns and benefit shortfalls are a problem because: (i) they lead to a Pareto-inefficient allocation of resources, i.e. waste; (ii) they lead to delays and further cost overruns and benefit shortfalls; (iii) they destabilize project management; and (iv) the problem is getting bigger, because projects get bigger.

# \*\*\*\*\*Critical 2NC Blocks\*\*\*\*\*

## 2NC ‘Punishment key’ (must read)

#### And, failure to institute cost controls BEFORE the project begins means the stimulus advantage is a disad to the aff – negative repercussions for going over cost MUST be a part of the plan

**Flyvbjerg 2k9 (Bent, professor of planning at Aalborg University, Denmark. He is founder and director of the university’s research program on large-scale infrastructure planning, “Survival of the unfittest: why the worst infrastructure gets built—and what we can do about it,” Oxford Review of Economic Policy, Volume 25, Number 3, 2009, pp.344–367, pg online @** [**http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf**](http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf) **//um-ef)**

Whether stimulus infrastructure spending will improve or worsen the global economy will be decided by how well we deal with these main trends. Thus the efficiency of project delivery is both particularly important at present and particularly challenged. The major challenges are (i) not to lower standards as the project pipeline rapidly expands, (ii) to navigate the particular risks of doing more projects in emerging economies, and (iii) to harness the bull in a china shop that is ICT in major projects. Three main ingredients will help meet the challenges. First, we need honestly to acknowledge that infrastructure investment is no easy fix but is fraught with problems. For this purpose, President Obama was immensely helpful when at a 2009 White House Fiscal Responsibility Summit he openly identified ‘the costly overruns, the fraud and abuse, the endless excuses’ in public procurement as key problems (White House, 2009). The Washington Post (24 February 2009) rightly called this ‘a dramatic new form of discourse’. Before Obama it was not comme-il-faut to talk about overruns, deception, and abuse in relation to infrastructure spending, although they were of epidemic proportions then as now, and the few who did use such language were ostracized. However, we cannot solve problems we cannot talk about. So talking is the first step. Second,we must arrive at a better understanding and better management of the long, fat tails of financial and economic risks—the abundance of black swans—that apply to infrastructure investment. Risks have so far been as misunderstood and as mismanaged in infrastructure investment as in the financial markets, with equally devastating outcomes. Methods and data for better risk assessment and management were presented above. Third, incentives need to be put straight, so that bad performance is punished and good performance rewarded, and not the other way around, which is often the case today. Again, methods for how to do this were described above.

## AT: Perm Do Both

#### Doing both links to all of our net benefits – The portion that does the plan still would result in massive cost overruns – It eliminates the threat of program termination.

#### \*\*\*\*\*And, establishing cost controls is a PRE-REQUISITE – cant develop TI policies without first knowing what the policy how the policy will be implemented

**Puentes 2k8 (“A Bridge to Somewhere Rethinking American Transportation For The 21st Century,” g online @** [**http://www.brookings.edu/~/media/research/files/reports/2008/6/transportation%20puentes/06\_transportation\_puentes\_report.pdf**](http://www.brookings.edu/~/media/research/files/reports/2008/6/transportation%20puentes/06_transportation_puentes_report.pdf) **//um-ef)**

4. FUNDING FOR THE FEDERAL PROGRAM— BOTH FUNDING LEVELS AND SOURCES— SHOULD ONLY BE CONSIDERED AFTER THE REFORM IDEAS ARE PUT IN PLACE **Just as transportation is not an end in and of itself – neither is increasing funding the primary solution to the transportation problems.** However, because of the short term conundrum of the federal government obligating more federal money for transportation than it has to spend and the disdain for the annual rescissions, many are calling for the next Congress and the new President to increase the federal gas tax. **This puts the cart before the horse.** Simply put: we should not continue to pour more money into a dysfunctional system **before** serious attempts at significant **policy reform**. In other words, **the federal transportation program is not just broke; it is broken**. **The funding debate needs to shift from spending more and more taxpayer dollars on the same product to where, what, and how to spend that money better**. So in addition to just focusing on increasing revenues for the existing program the nation deserves a real conversation about **curbing the demand for transportation spending**. It is impossible to start with a funding solution or what the optimal level of investment should be when there is no agreement about what the federal role should be, what problems we are trying to solve, or what questions we are trying to answer. Indeed, although the NSTPRSC did call clearly and specifically for an increase in the fuel tax, they also maintained that adding revenues to the program in its current form would “not be acceptable.” We concur. Given the track record of the program in recent years such systemic reform may seem difficult to achieve. However, it has been argued that during their times as transportation visionaries, President Dwight Eisenhower and Senator Daniel Patrick Moynihan did not so much have an inspiration for transportation as they had a revenue stream. Indeed, history has shown that e**ach new wave of transportation policy carried with it a major restructuring** in how the system is planned and financed. Looking at it another way: **no major federal transportation reform has ever occurred without a major increase in revenues**. 15 This should be another one of those times. We need a clear articulation of the goals and objectives of the federal program, and the desired outcomes. **The program should then be structured to get to those outcomes.** There then should be a frank and vigorous conversation about the revenues currently available and whether or not additional funding is necessary. At that time, **all options toward re-invigorating transportation funding should be on the table to meet the transportation challenges of the future while also ensuring financial revenues will be available**. We recommend that the federal government reinvigorate its transportation funding structures based on the three-pronged strategy to lead, empower, and maximize performance.

#### 70 years of TI proves – failure to establish performance measures ENSURSES the plan will be a cost-overrun – Cost underestimation will not stop unless it comes with a consequence

Flyvbjerg et al 02 [Bent Flyvbjerg, Mette Skamris Holm, and Søren Buhl. Flyvbjerg is a professor of planning with the Department of Development and Plan- ning, Aalborg University, Denmark. He is founder and director of the university’s re- search program on transportation infra- structure planning and was twice a Visiting Fulbright Scholar to the U.S. His latest books are Rationality and Power (University of Chicago Press, 1998) and Making Social Science Matter (Cambridge University Press, 2001). He is currently working on a book about megaprojects and risk (Cambridge University Press). Holm is an assistant pro- fessor of planning with the Department of Development and Planning, Aalborg Uni- versity, and a research associate with the university’s research program on transpor- tation infrastructure planning. Her main in- terest is economic appraisal of projects. Buhl is an associate professor with the De- partment of Mathematics, Aalborg Univer- sity, and an associate statistician with the university’s research program on transpor- tation infrastructure planning. “Underestimating Costs in Public Works Projects: Error or Lie?” Journal of the American Planning Association, Vol. 68, No. 3, Summer 2002, http://www.industrializedcyclist.com/Flyvbjerg02.pdf, accessed 7/17/12]//DLi

Figure 3 shows a plot of the differences between ac- tual and estimated costs against year of decision to build for the 111 projects in the sample for which these data are available. The diagram does not seem to indicate an effect from time on cost underestimation. Statistical analyses corroborate this impression. The null hypothe- sis that year of decision has no effect on the difference between actual and estimated costs cannot be rejected (p=0.22, F-test). A test using year of completion instead of year of decision (with data for 246 projects) gives a similar result (p=0.28, F-test). We therefore conclude that cost underestimation has not decreased over time. Underestimation today is in the same order of magnitude as it was 10, 30, and 70 years ago. If techniques and skills for estimating and forecasting costs of transportation infrastructure pro- jects have improved over time, this does not show in the data. No learning seems to take place in this important and highly costly sector of public and private decision making. This seems strange and invites speculation that the persistent existence over time, location, and project type of significant and widespread cost underestimation is a sign that an equilibrium has been reached: Strong incentives and weak disincentives for underestimation may have taught project promoters what there is to learn, namely, that cost underestimation pays off. If this is the case, underestimation must be expected and it must be expected to be intentional. We examine such speculation below. Before doing so, we compare cost un- derestimation in transportation projects with that in other projects.

#### Establishing penalties for cost-overruns is CRITICAL – the possibility of eliminating the plan is necessary to establish accountability – REGARDLESS of who implements the plan

**Flyvbjerg 2k9**

**(Bent, professor of planning at Aalborg University, Denmark. He is founder and director of the university’s research program on large-scale infrastructure planning, “Survival of the unfittest: why the worst infrastructure gets built—and what we can do about it,” Oxford Review of Economic Policy, Volume 25, Number 3, 2009, pp.344–367, pg online @** [**http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf**](http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf) **//um-ef)**

(i) Transparency and public control In order to achieve accountability through transparency and public control, the following would be required as practices embedded in the relevant institutions (the full argument for the measures may be found in Flyvbjerg et al. (2003, chs 9–11)). National-level government should not offer discretionary grants to local agencies for the sole purpose of building a specific type of project (a.k.a. ‘categorical grants’). Such grants create perverse incentives. Instead, national government should simply offer ‘block grants’ to local governments, and let local political officials spend the funds however they choose to, but make sure that every dollar they spend on one type of project reduces their ability to fund another. Cost–benefit analysis and other types of ex ante appraisal should be shifted from promoters to more neutral ground, for instance with the Treasury, in order to reduce risks of agency problems. Forecasts and business cases should bemade subject to independent peer review.Where projects involve large amounts of government funds, such review may be carried out by national or state auditing offices, such as the General Accounting Office in the USA or the National Audit Office in the UK, who have the independence and expertise to produce such reviews. Forecasts should be benchmarked against comparable forecasts, for instance using reference class forecasting as described in the previous section. For publicly funded projects, forecasts, peer reviews, and benchmarkings should be made available for public scrutiny, including by the media, as they are produced, including all relevant documentation. Public hearings, citizen juries, and the like should be organized to allow stakeholders and civil society to voice criticism and support of forecasts. Knowledge generated in this way should be integrated in project management and decision-making. Scientific and professional conferences should be organized where forecasters would present and defend their forecasts in the face of colleagues’ scrutiny and criticism. Projects with inflated benefit–cost ratios should be reconsidered and stopped if recalculated costs and benefits do not warrant implementation. Projects with realistic estimates of benefits and costs should be rewarded. Professional and occasionally even criminal penalties should be enforced for managers and forecasters who consistently and foreseeably produce deceptive forecasts (Garett and Wachs, 1996). When I first began suggesting, in lectures for project managers, promoters, and forecasters, that deception and criminal penalties may be concepts relevant to our professions, I would get headshakes, sighs, and the occasional boo. Enron and Iraq changed that, almost overnight. Today people listen and the literature has become replete with books and articles that hammer out the links between lying, forecasting, and management. For instance, a recent book about risk, the planning fallacy, and strategic misrepresentation bluntly states: ‘Anyone who causes harm by forecasting should be treated as either a fool or a liar. Some forecasters cause more damage to society than criminals’ (Taleb, 2007, p. 163). Law-making has followed suit, most prominently with the 2002 Sarbanes–Oxley Act, which stipulates up to 20 years in prison for a knowingly false forecast intended to impede, obstruct, or influence the proper administration of affairs. There is little doubt that penalties like this influence behaviour. The point is that malpractice in project management should be taken as seriously as it is in other professions, e.g. medicine and law. Failing to do this amounts to not taking the profession of project management seriously. (ii) Competition and market control In order to achieve accountability via competition and market control, the following would be required, again as practices that are both embedded in and enforced by the relevant institutions. The decision to go ahead with a major infrastructure project should, where at all possible, be made contingent on the willingness of private financiers to participate without a sovereign guarantee for at least one-third of the total capital needs.7 This should be required whether projects pass the market test or not—that is, whether projects are subsidized or not or provided for social justice reasons or not. Private lenders, shareholders, and stock-market analysts would produce their own forecasts or conduct due diligence for existing ones. If they were wrong about the forecasts, they and their organizations would be hurt. The result would be added pressure to produce realistic forecasts and reduced risk to the taxpayer. Forecasters and their organizations must share financial responsibility for covering cost overruns and benefit shortfalls resulting from misrepresentation and bias in forecasting. The participation of risk capital would not mean that government reduces control of major infrastructure projects. On the contrary, it means that government can more effectively play the role it should be playing, namely as the ordinary citizen’s guarantor for ensuring concerns about safety, environment, risk, and a proper use of public funds. Whether infrastructure projects are public, private, or public–private, they should be vested in one and only one project organization with a strong governance framework and strong contract-writing skills. The project organization may be a company or not, public or private, or a mixture. What is important is that this organization has the capacity to (i) set up and negotiate contracts that will effectively safeguard its interests, including in equity risk allocation, and (ii) enforce accountability vis-`a-vis contractors, operators, etc. In turn, the directors of the organizationmust be held accountable for any cost overruns, benefit shortfalls, faulty designs, unmitigated risks, etc. that may occur during project planning, implementation, and operations.

## AT: Perm Do the CP

The perm is severance – Voting issue for fairness and ground:

First, The counterplan does the plan if, and only if, it doesn’t surpass critical cost thresholds – The perm eliminates the certainty of the plan – Our condition mandates the plan’s termination unless SECDEF certifies it as critical to national security. We don’t mandate that determination.

#### And it severs Substantially” means certain at the present time

**Words and Phrases 64**

**(40W&P 759)**

The words" outward, open, actual, visible, substantial, and exclusive," in connection with a change of possession, mean substantially the same thing. They mean **not concealed**; not hidden; exposed to view; free from concealment, dissimulation, reserve, or disguise; in full existence; denoting that which not merely can be, but is opposed to potential, apparent, constructive, and imaginary; veritable; genuine; **certain: absolute: real at present time**, as a matter of fact, not merely nominal; opposed to fonn; actually existing; true; not including, admitting, or pertaining to any others; undivided; sole; opposed to inclusive.

#### And it severs should which means they immediately mandate the plan.

Summers, Justice for the Oklahoma Supreme Court, 11-8-94 (Pat Kelsee, Appellee, v. Dollarsaver Food Warehouse of Durant, Appellant, Appeal from the District Court of Bryan County, The Supreme Court of Oklahoma, Case Number 81862, 1994 OK 123, 885 P.2d 1353)

4 The legal question to be resolved by the court is whether the word "should"13 13 "Should" not only is used as a "present indicative" synonymous with ought but also is the past tense of "shall" with various shades of meaning not always easy to analyze. See 57 C.J. Shall § 9, Judgments § 121 (1932). O. JESPERSEN, GROWTH AND STRUCTURE OF THE ENGLISH LANGUAGE (1984); St. Louis & S.F.R. Co. v. Brown, 45 Okl. 143, 144 P. 1075, 1080-81 (1914). For a more detailed explanation, see the Partridge quotation infra note 15. Certain contexts mandate a construction of the term "should" as more than merely indicating preference or desirability. Brown, supra at 1080-81 (jury instructions stating that jurors "should" reduce the amount of damages in proportion to the amount of contributory negligence of the plaintiff was held to imply an obligation and to be more than advisory); Carrigan v. California Horse Racing Board, 60 Wash. App. 79, 802 P.2d 813 (1990) (one of the Rules of Appellate Procedure requiring that a party "should devote a section of the brief to the request for the fee or expenses" was interpreted to mean that a party is under an obligation to include the requested segment); State v. Rack, 318 S.W.2d 211, 215 (Mo. 1958) ("should" would mean the same as "shall" or "must" when used in an instruction to the jury which tells the triers they "should disregard false testimony"). in the May 18 order connotes futurity or may be deemed a ruling in praesenti.14 14 In praesenti means literally "at the present time." BLACK'S LAW DICTIONARY 792 (6th Ed. 1990). In legal parlance the phrase denotes that which in law is presently or **immediately effective**, as opposed to something that will or would become effective in the future [in futurol]. See Van Wyck v. Knevals, 106 U.S. 360, 365, 1 S.Ct. 336, 337, 27 L.Ed. 201 (1882). The answer to this query is not to be divined from rules of grammar;15 15 Nonetheless, modern English usage appears supportive of my conclusion that ". . . what the practice amounts to is this: the past subjunctive should is not only used in all persons, but it is employed as, virtually, a present indicative synonymous with ought." E. PARTRIDGE, USAGE AND ABUSAGE, p. 376 (1963). it must be governed by the age-old practice culture of legal professionals and its immemorial language usage. To determine if the omission (from the critical May 18 entry) of the turgid phrase, "and the same hereby is", (1) makes it an in futuro ruling - i.e., an expression of what the judge will or would do at a later stage - or (2) constitutes an in in praesenti resolution of a disputed law issue, the trial judge's intent must be garnered from the four corners of the entire record.16 16 Frazier v. Bryan Memorial Hosp. Authority, Okl., 775 P.2d 281, 285 (1989); Elliot v. City of Guthrie. Okl., 725 P.2d 861, 863 (1986); Mayhue v. Mayhue, Okl., 706 P.2d 890, 893 n. 6 (1985). 5 Nisi prius orders should be so construed as to give effect to every words and every part of the text, with a view to carrying out the evident intent of the judge's direction.17 17 Russell v. Freeman, 202 Okl. 417, 214 P.2d 439, 441-42 (1950); Gade v. Loffler, 171 Okl. 313, 42 P.2d 815, 818 (1935); McNeal v. Baker, 135 Okl. 159, 274 P. 655, 656 (1929); Foreman v. Riley, 88 Okl. 75, 211 P. 495, 496 (1923). The order's language ought not to be considered abstractly. The actual meaning intended by the document's signatory should be derived from the context in which the phrase to be interpreted is used.18 18 Brawn, supra note 13, 144 P. at 1080-81; Manhattan-Dickman Construction Co. v. Shawler, 113 Ariz. 549, 555, 558 P.2d 894, 900 (1976); Rack, supra. note 13, 318 S.W.2d at 215. When applied to the May 18 memorial, these told canons impel my conclusion that the judge doubtless intended his ruling as an in praesenti resolution of Dollarsaver's quest for judgment n.o.v. Approval of all counsel plainly appears on the face of the critical May 18 entry which is [885 P.2d 1358] signed by the judge.19 19 See supra note 1 for the pertinent terms and form of the May 18 memorial. True minutes20 20 Minutes are nothing more than abbreviated memoranda of what takes place in a courtroom. Mansell v. City of Lawton, Okl., 877 P.2d 1120, 1123 (1994); Hinshaw v. State, 147 Ind. 334, 47 N.E. 157, 171 (1897); State v. Larkin, 11 Nev. 314, 321 (1876); Gregory v. Frothingham, 1 Nev. 253, 260 (1865). Although the judge is authorized to draft mnemonic aids for posting on the court's appearance docket, it is ordinarily the deputy clerk, present in the courtroom, who acts as the minutes' scrivener. of a court neither call for nor bear the approval of the parties' counsel nor the judge's signature. To reject out of hand the view that in this context "should" is impliedly followed by the customary, "and the same hereby is", makes the court once again revert to medieval notions of ritualistic formalism now so thoroughly condemned in national jurisprudence and long abandoned by the statutory policy of this State. IV CONCLUSION Nisi prius judgments and orders should be construed in a manner which gives effect and meaning to the complete substance of the memorial. When a judge-signed direction is capable of two interpretations, one of which would make it a valid part of the record proper and the other would render it a meaningless exercise in futility, the adoption of the former interpretation is this court's due. A rule - that on direct appeal views as fatal to the order's efficacy the mere omission from the journal entry of a long and customarily implied phrase, i.e., "and the same hereby is" - is soon likely to drift into the body of principles which govern the facial validity of judgments. This development would make judicial acts acutely vulnerable to collateral attack for the most trivial of reasons and tend to undermine the stability of titles or other adjudicated rights. It is obvious the trial judge intended his May 18 memorial to be an in praesenti order overruling Dollarsaver's motion for judgment n.o.v. It is hence that memorial, and not the later June 2 entry, which triggered appeal time in this case. Because the petition. in error was not filed within 30 days of May 18, the appeal is untimely. I would hence sustain the appellee's motion to dismiss.21 21 Because the court's pronouncement does not give this case the prospectivity protection which might be affordable by Manning v. State ex rel. Dept. of Public Safety, Okl., 876 P.2d 667 (1994), my writing does not consider Manning's impact, if any, on this appeal's dismissibility.

## Uncertainty Key

#### And, uncertainty with the counterplan is CRITICAL – there must be performance measures put in place BEFORE the plan is ever implemented

**Flyvberg et al 2k2**

**(Big decisions, big risks. Improving accountability in mega projects Nils Bruzelius3, Bent Flyvbjerg , Werner Rothengattcr \*Lund University. Sweden ^Aalborg University. Denmark 'Institute for Economic Policy and Research. University of Karlsruhe. Kolleghim am ScMoss. Bau 4. 76I2H Karlsruhe. Germany, Transport Policy 9 (2(102) 143-154, pg online @** [**http://flyvbjerg.plan.aau.dk/News%20in%20English/BigDecArtTransportPolicyPRINT0206.pdf**](http://flyvbjerg.plan.aau.dk/News%20in%20English/BigDecArtTransportPolicyPRINT0206.pdf) **//um-ef)**

The use of performance specifications implies a goal-driven approach (o feasibility studies and decision making, iastead of the conventional technical solution-driven one. The use of a performance specification approach means thai, to the extent possible, all requirements with respect to a possible fixed link are to be decided before considering various technical alternatives for providing a tixed link and before appraising the proposed project. In engineering, the performance specification approach has in recent years become more common in the development of various types of facilities, thereby replacing in part the traditional approach, which is based on detailed technical specifications. In our view, this way of thinking should be taken further by applying it not only to technical aspects of projects but also, for example, when considering the external effects of fixed connections. In principle, performance specifications would derive from policy objectives and public interest requirements to be met by the project, for instance regarding economic performance, environmental sustainability and safety performance. More specifically, performance may relate to such things as road and road link safety, safety to passengers (e.g. requirements with respects to rescue operations in tunnels, etc.). maritime safety (navigational aspects), environmental impact (emissions, marine environment, energy consumption, etc.) and restrictions on land connections (e.g. identification of possible locations). Performance may also relate to such things as the capacity of a road link, the capacity of a rail link, minimum and maximum speed of vehicles, etc. Performance specification thus covers more than just the approach to the development of a fixed connection from a technical point of view. Performance requirements will reflect national objectives in the transport, environmental and safety sectors, among others. A requirement is. however, that specifications are formulated consistently5 and that they can be measured in an unequivocal way. The measurement requirement is necessary to enable the detailed design to be undertaken, and to allow for monitoring during possible construction and operation. One advantage to using a performance specification approach is that it forces people to focus on the ends rather than the means. Another point to be made is that major requirements should be set not only before a decision is taken, but that the performance specification process should be initiated even before major investigations have been undertaken as part of feasibility studies. The advantages of the performance specification approach is. hence, that it allows for a constructive dialogue with those who play an active role with respect to environmental, safely, economic and other issues. At the same time, the approach forces organisations and groups of people to play a constructive role in relation to how to meet the objectives they would like to see. and undermines the credibility of criticism directed at fixed connections simply because they happen to be fixed connections. Performance specifications are also advantageous from another point of view, which primarily can be exploited if projects are developed and operated in terms of a concession with a competitive tendering procedure to select the concessionaire. For such projects, a performance specification will make it possible to rely on the private sector, and on a competitive process, to identify technical solutions which meet the requirements. Such a process would allow for innovative technical designs to be introduced on the initiative of bidders, which may result in considerable cost savings in comparison with the conventional approach. In the conventional approach, the final design is normally prepared before calling for bids, leaving little scope for introducing new solutions and cost saving devices later.6

## AT: Permute – Lie to Congress

#### Lying to Congress about the costs is intrinsic – It isn’t part of the plan or the counterplan.

#### Reject the perm—it’s a lie which justifies inefficiency and it’s unethical

Flyvbjerg et al 02

[Bent Flyvbjerg, Mette Skamris Holm, and Søren Buhl. Flyvbjerg is a professor of planning with the Department of Development and Plan- ning, Aalborg University, Denmark. He is founder and director of the university’s re- search program on transportation infra- structure planning and was twice a Visiting Fulbright Scholar to the U.S. His latest books are Rationality and Power (University of Chicago Press, 1998) and Making Social Science Matter (Cambridge University Press, 2001). He is currently working on a book about megaprojects and risk (Cambridge University Press). Holm is an assistant pro- fessor of planning with the Department of Development and Planning, Aalborg Uni- versity, and a research associate with the university’s research program on transpor- tation infrastructure planning. Her main in- terest is economic appraisal of projects. Buhl is an associate professor with the De- partment of Mathematics, Aalborg Univer- sity, and an associate statistician with the university’s research program on transpor- tation infrastructure planning. “Underestimating Costs in Public Works Projects: Error or Lie?” Journal of the American Planning Association, Vol. 68, No. 3, Summer 2002, http://www.industrializedcyclist.com/Flyvbjerg02.pdf, accessed 7/17/12]//DLi

Both types of economic explanation account well for the systematic underestimation of costs found in our data. Both depict such underestimation as deliberate, and as economically rational. If we now define a lie in the conventional fashion as making a statement intended to deceive others (Bok, 1979, p. 14; Cliffe et al., 2000, p. 3), we see that deliberate cost underestimation is lying, and we arrive at one of the most basic explanations of lying, and of cost underestimation, that exists: Lying pays off, or at least economic agents believe it does. Moreover, if such lying is done for the public good (e.g., to save tax- payers’ money), political theory would classify it in that special category of lying called the “noble lie,” the lie mo- tivated by altruism. According to Bok (1979), this is the “most dangerous body of deceit of all” (p. 175). In the case of cost underestimation in public works projects, proponents of the noble lie overlook an impor- tant fact: Their core argument—that taxpayers’ money is saved by cost underestimation—is seriously flawed. Any- one with even the slightest trust in cost-benefit analysis and welfare economics must reject this argument. Un- derestimating the costs of a given project leads to a falsely high benefit-cost ratio for that project, which in turn leads to two problems. First, the project may be started despite the fact that it is not economically viable. Or, second, it may be started instead of another project that would have yielded higher returns had the actual costs of both projects been known. Both cases result in the inefficient use of resources and therefore in waste of taxpayers’ money. Thus, for reasons of economic effi- ciency alone, the argument that cost underestimation saves money must be rejected; underestimation is more likely to result in waste of taxpayers’ money. But the ar- gument must also be rejected for ethical and legal rea- sons. In most democracies, for project promoters and forecasters to deliberately misinform legislators, admin- istrators, bankers, the public, and the media would not only be considered unethical but in some instances also illegal, for instance where civil servants would misinform cabinet members or cabinet members would misinform the parliament. There is a formal “obligation to truth” built into most democratic constitutions on this point. This obligation would be violated by deliberate under- estimation of costs, whatever the reasons may be. Hence, even though economic explanations fit the data and help us understand important aspects of cost underestima- tion, such explanations cannot be used to justify it.

## AT CP Illegitimate

#### 1. Realistic and limited - forcing affs to defend responsible funding is key to limit out contrived affs that fiat “investment” without reference to what that investment IS – allowing these affs promotes a useless model of transportation policy education since it’s divorced from the real world

#### 2. Advocacy Skills- Forcing the aff to defend PIC’s out of the process of the government encourages the development of better researched and planned policies and is vital to being a competent transportation advocate because ideas aren’t enough in congress

#### 3. Vital education- Being a transportation policy maker requires in depth knowledge of HOW to spend the plan’s money

**Boehlert et al 2k8 (Congressman Sherwood Boehlert Senator Slade Gorton Congressman Martin Sabo Governor Mark Warner, “Commentary on the Report of the National Surface Transportation Policy and Revenue Study Commission (Transportation for Tomorrow),” pg online @** [**http://financecommission.dot.gov/Documents/Background%20Documents/NTPP%20Commentary%20on%20Policy%20Commission%20Report.pdf**](http://financecommission.dot.gov/Documents/Background%20Documents/NTPP%20Commentary%20on%20Policy%20Commission%20Report.pdf) **//um-ef)**

Given the substantial transportation infrastructure investments that will be needed over the next several decades, a major focus of the Commission’s report, and of the current policy debate more generally, **is funding.** Within this discussion, the question **of how to spend transportation money** more effectively is **as important**—and perhaps **more important**—than **the question of where the money will come from**. In this context, the Commission’s recommendation that the current system of transportation investment be reformed so that it is “subject to benefit-cost analysis and performance-based outcomes” **is extremely valuable** and arguably more consequential than its call for a substantial (25–40 cents over 5 years) increase in the federal gas tax3, even though the latter proposal has received far more attention in the press. The current transportation funding structure was designed to support the expansion of the Interstate Highway System. It does not reflect the many changes and new transportation needs that have arisen over the last half century.

#### 4. Reciprocity- they chose the wording and mandates of the plan for strategic reasons such as bigger advantages and solvency --- reciprocity demands they incur the strategic cost of defending against this CP – and reciprocity is the baseline for fair and educational debate

## AT: Solvency Deficit

#### And, Puentes proves that including cost control conditions solves better – It ensures that programs are completed with fewer deficiencies.

#### And, Postrel proves that including the conditions ensures that we get the technology developed faster and better than the plan.

#### And, The only way there can be a solvency deficit is if there is a cost overrun – Including the conditions we do ensures that contractors use realistic cost estimates upfront. This prevents the overruns that trigger a breach and lets us get the technology deployed FASTER than the plan.

#### Accountability is key to stop biased forecasts that result in cost overruns

**Flyvbjerg 2k9 (Bent, professor of planning at Aalborg University, Denmark. He is founder and director of the university’s research program on large-scale infrastructure planning, “Survival of the unfittest: why the worst infrastructure gets built—and what we can do about it,” Oxford Review of Economic Policy, Volume 25, Number 3, 2009, pp.344–367, pg online @** [**http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf**](http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf) **//um-ef)**

Nevertheless, seemingly rational forecasts that underestimate costs and overestimate benefits have long been an established formula for project approval as we saw above. Forecasting is here mainly another kind of rent-seeking behaviour, resulting in a make-believe world of misrepresentation which makes it extremely difficult to decide which projects deserve undertaking and which do not. The consequence is, as even one of the industry’s own organs, the Oxford-based Major Projects Association, acknowledges, that too many projects proceed that should not. One might add that many projects do not proceed that probably should, had they not lost out to projects with ‘better’ misrepresentation (Flyvbjerg et al., 2002). In this situation, the question is not so much what project managers can do to reduce inaccuracy and risk in forecasting, but what others can do to impose on project managers the checks and balances thatwould givemanagers the incentive to stop producing biased forecasts and begin to work according to their Code of Ethics. The challenge is to change the power relations that govern forecasting and project development. Better forecasting techniques and appeals to ethics will not do here; organizational change with a focus on transparency and accountability is necessary. As argued in Flyvbjerg et al. (2003), two basic types of accountability define liberal democracies: (i) public-sector accountability through transparency and public control; and (ii) private-sector accountability via competition and the market mechanism. Both types of accountability may be effective tools to curb misrepresentation in project management and to promote a culture which acknowledges and deals effectively with risk, especially where large amounts of taxpayers’ money are at stake and for projects with significant social and environmental impacts, as is common with major infrastructure projects.

## AT: Delay

#### Cost overruns lead to even more delay—negotiation process, additional funding process

**Flyvbjerg 5**, Professor of Major Programme Management at Oxford University's Saïd Business School and is Founding Director of the University's BT Centre for Major Programme Management, winner of the Fulbright Scholarship, (Bent, Policy and planning for large infrastructure : projects problems, causes, and cures, World Bank Publications, January 2005, Google Scholar)//AG

Second, **cost overrun**s of the size described above typically **lead to delays, because securing additional funding to cover overruns often takes** **time**. In addition, **projects may need to be re-negotiated or re-approved when overruns are large** as the data show they often are (Flyvbjerg 2005a). In a separate study, we demonstrated that **delays in transportation infrastructure implementation are very costly, increasing the percentage construction cost overrun measured in constant prices by 4.64 percentage points per year** of delay incurred after the time of decision to build (Flyvbjerg, Holm, and Buhl, 2004). **For a project of**, say, US**$8** **billion**—that is the size of the channel tunnel and about half the size of Boston’s Big Dig—the expected average **cost of delay would be approximately $370 million/year**, or about $1 million/day.—Benefit shortfalls are an additional consequence of dealys, because delays result in later opening dates and thus extra months or years without revenues. **Because** many large infrastructure **projects are loan financed** and have long construction periods, **they are particularly sensitive to delays, as delays result in increased debt**, increased interest payments, and longer payback periods.

## AT: When is the Cost Control

**And, the cost control measures of the counterplan follow a schedule established before the plan is implemented – this ensures on-going cost estimates and controls – that’s GAO**

## AT: CP = Normal Means

#### Not normal—no performance measures now

**Zietsman and Rilett 2**, Associate Research Scientist at the Texas Transportation Institute, and the Associate Professor at Texas A&M University, (Josias and Laurence R, SUSTAINABLE TRANSPORTATION: CONCEPTUALIZATION AND PERFORMANCE MEASURES, Southwest Region University Transportation Center—Center for Transportation Research at University of Texas at Austin, March 2002, Google Scholar)//AG

**Sustainable transportation** **attempts to address economic development, environmental stewardship, and social equity** of current and future generations. While numerous qualitative studies have been performed on this topic, **there has been little quantitative research** and/or implementation of sustainable transportation concepts. **The main reasons** for this **are related to a lack of understanding of sustainable transportation and a lack of quantified performance measures**. To address this problem, a comprehensive definition for sustainable transportation was developed, as well as a framework on how to identify, quantify, and use performance measures for sustainable transportation in the transportation planning process. The proposed framework was applied to a test bed, comprising two freeway corridors in Houston, Texas.

#### Not normal—9 out of 10 infrastructure projects underperform—increased cost-benefit analysis awareness key

**Flyvbjerg et al 5**, professor of planning at Aalborg University, Denmark. He is founder and director of the university’s research program on large-scale infrastructure planning, (Bent, “ How (In)accurate Are Demand Forecasts in Public Works Projects?”, Journal of the American Planning Association, Spring 2005, Google Scholar, http://www.honolulutraffic.com/JAPAFlyvbjerg05.pdf)//AG

**Despite the enormous sums of money being spent on transportation infrastructure**, surprisingly **little** systematic **knowledge exists about the costs**, **benefits, and risks involved**. The literature lacks statistically valid answers to the central and self-evident question of whether transportation infrastructure projects perform as forecasted. **When a project underperforms, this is often explained away as** an isolated instance of unfortunate **circumstance**; it is typically not seen as the particular expression of a general pattern of underperformance in transportation infrastructure projects. Because knowledge is wanting in this area of research, until now **it has been impossible to validly refute** or confirm ,**whether underperformance is the exception or the rule**. In three previous articles (Flyvbjerg, Holm, et al., 2002, 2003, 2004), we answered the question of project performance as regards costs and cost-related risks. **We found that projects do not perform as forecasted in terms of costs: almost 9 out of 10 projects fall victim to significant cost overrun**. **We also investigated the cause**s and cures **of such inaccurate cost projections** (see Flyvbjerg, Bruzelius, et al., 2003). In this article we focus on the benefit side of investments and answer the question of whether projects perform as forecasted in terms of demand and revenue risks. We compare forecasted demand with actual demand for a large number of projects. **Knowledge about** cost risk, **benefit risk**, and compound risk **is crucial to making informed decisions about projects**. This is not to say that costs and benefits are or should be the only basis for deciding whether to build. Clearly, **forms of rationality** other than economic rationality **are at work in most infrastructure projects** and are balanced in the broader frame of public decision making. But the costs and benefits of infrastructure projects often run in the hundreds of millions of dollars, with risks correspondingly high. Without knowledge of such risks, decisions are likely to be flawed.

#### No integrated cost controls now

**GAO 97**, Investigative arm of Congress charged with examining matters relating to the receipt and payment of public funds, (Government Accountability Office, Transportation Infrastructure: Managing the Costs of Large-Dollar Highway Projects, Government Accountability Office, February 1997,http://www.gao.gov/assets/160/155775.pdf)//AG

According to FHWA and state highway officials, **initial cost estimates are preliminary and based on a “rough footprint”** of the proposed project alternatives that broadly identifies the type of highway or structure to be built, the alignment, and the number of lanes and interchanges. **Alternatives are based on generally no more than 30 percent of design. Cost estimates are calculated based on historic state data** on the per-mile cost of highways, square-footage cost of bridges and other structures, and per-acre cost of land. Preliminary **data specific to the project may also be included, particularly where environmental impacts are expec**ted, such as wetlands mitigation and restoration. FHWA has no requirements for preparing cost estimates. We **found that each state we visited used its own standards or methods and database for compiling estimates during the environmental review stage. As a result, the estimates we reviewed differed substantially in the cost categories they included**. For example, one state we visited included the costs of designing the project while two others did not.

#### Current oversight about safety, not cost management

**GAO 97**, Investigative arm of Congress charged with examining matters relating to the receipt and payment of public funds, (Government Accountability Office, Transportation
Infrastructure: Managing the Costs of Large-Dollar Highway Projects, Government Accountability Office, February 1997,http://www.gao.gov/assets/160/155775.pdf)//AG

**FHWA’s primary goal on projects where it has “full” oversight is ensuring that the applicable safety and quality standards** contained in law and regulations are met. **Cost management** and cost containment **are not explicit statutory or regulatory goals** of FHWA’s oversight or part of its organizational culture. As a result, FHWA has few requirements that ensure cost containment is an integral part of large-dollar highway project management. **FHWA influences project costs through its review and approval of design and construction plans,** and through day-to-day interaction with state departments of transportation. We found several cost management practices that states had initiated to improve highway project management and to focus more specifically on containing project costs. **These practices included improving initial project cost estimates, establishing goals for project cost performance, and tracking the progress of projects against such goals**. **However, FHWA has not been proactive in working with states to evaluate these practices and disseminate information** on them to help other states enhance their cost management practices. Moreover, as debate begins on the reauthorization of highway programs in 1997, a range of roles exist for FHWA’s oversight of large-dollar projects.

## AT: Regs Fail

#### Rail projects deliberately overestimate costs—federal regulation uniquely key

**Flyvbjerg et al 5**, professor of planning at Aalborg University, Denmark. He is founder and director of the university’s research program on large-scale infrastructure planning, (Bent, “ How (In)accurate Are Demand Forecasts in Public Works Projects?”, Journal of the American Planning Association, Spring 2005, Google Scholar, http://www.honolulutraffic.com/JAPAFlyvbjerg05.pdf)//AG

Again the results are very different for rail and road. **For rail projects, the two most important stated causes are “uncertainty about trip distribution” and “deliberately slanted forecasts.”** Trip distribution in rail passenger models, while ideally based on cross-sectional data collected from users of transportation systems, is often adapted to fit national or urban policies aimed at boosting rail traffic. Here, too, **it is difficult for forecasters and planners to gain acceptance for realistic forecast**s that run counter to idealistic policies. But such policies frequently fail, and the result is the type of overestimated passenger forecast that we have documented above as typical for rail passenger forecasting (Flyvbjerg, Bruzelius, et al., 2003, ch. 3). As regards deliberately slanted forecasts, such **forecasts are produced by rail promoters in order to increase the likelihood that rail projects get built** (Wachs, 1990). Such **forecasts exaggerate passenger traffic and thus revenues**. Elsewhere we have shown that the **large overestimation of traffic** and revenues documented above for rail **go**es **hand-in-hand with an equally large underestimation of costs** (Flyvbjerg, Holm, et al., 2002, 2004). **The result is cost-benefit analyses of rail projects that are inflated**, with benefit-cost ratios that are useful for getting projects accepted and built.

#### Federal regulations fail—planners accept forecasting abuses to get plans passed quickly

**Flyvbjerg et al 5**, professor of planning at Aalborg University, Denmark. He is founder and director of the university’s research program on large-scale infrastructure planning, (Bent, “ How (In)accurate Are Demand Forecasts in Public Works Projects?”, Journal of the American Planning Association, Spring 2005, Google Scholar, http://www.honolulutraffic.com/JAPAFlyvbjerg05.pdf)//AG

In the present section, we consider the situation where planners and other influential actors do not find it important to get forecasts right and where planners, therefore, do not help to clarify and mitigate risk but instead generate and exacerbate it. Here **planners are part of the problem**, not the solution. This situation may need some explication, because it might sound to many like an unlikely state of affairs. After all, **it** **may be agreed that planners ought to be interested in being accurate** and unbiased in forecasting. **It is even stated as an explicit requirement** in the AICP Code of Ethics and Professional Conduct that “A planner must strive to provide full, clear and accurate information on planning issues to citizens and governmental decisionmakers” (American Planning Association, 1991, A.3), and we certainly agree with the Code. The British Royal Town Planning Institute (2001) has laid down similar obligations for its members. **However, the literature is replete with things planners and planning “must” strive to do, but which they don’t**. **Planning** must be open and communicative, but often it **is closed**. **Planning must be participatory and democratic, but often it is an instrument of domination and control.** **Planning must be about rationality, but often it is about power** (Flyvbjerg, 1998; Watson, 2003). This is the “dark side” of planning and planners identified by Flyvbjerg (1996) and Yiftachel (1998), which is remarkably underexplored by planning researchers and theorists. Forecasting, too, has its dark side. It is here that “**planners lie with numbers**,” as Wachs (1989) has aptly put it. **Planners on the dark side are busy** **not with getting forecasts right** and following the AICP Code of Ethics **but with getting projects funded and built.** And accurate forecasts are often not an effective means for achieving this objective. Indeed, accurate forecasts may be counterproductive, whereas **biased forecasts may be effective in competing for funds** and securing the go-ahead for construction. “The most effective planner,” says Wachs (1989), “is sometimes the one who can cloak advocacy in the guise of scientific or technical rationality” (p. 477). Such advocacy would stand in direct opposition to AICP’s ruling that “the planner’s primary obligation [is] to the public interest” (American Planning Association, 1991, B.2). Nevertheless, seemingly rational forecasts that underestimate costs and overestimate benefits have long been an established formula for project approval (Flyvbjerg, Bruzelius, et al., 2003). **Forecasting is here mainly another kind of rent-seeking behavior, resulting in a make-believe world of misrepresentation** that makes it extremely difficult to decide which projects deserve undertaking and which do not. **The consequence**, as even one of the industry’s own organs, the Oxford-based Major Projects Association, **acknowledges**, is **that too many projects proceed that should not**. We would like to add that many projects don’t proceed that probably should, had they not lost out to projects with “better” misrepresentation (Flyvbjerg, Holm, et al., 2002).

#### Federal action fails—bureaucratic obstacles and confusion

**Hecker 2**, Director of Physical Infrastructure Issues, (Jayetta Z., “ Cost and Oversight Issues on Major Highway and Bridge Projects”, United States Government Accountability Office: Congressional Testimony, May 1, 2002, http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA400929)//AG

FHWA and DOT have undertaken several efforts since 1997 to improve the management and oversight of major highway and bridge projects. First, FHWA implemented a legislative requirement that projects expected to cost $1 billion or more have annual finance plans, including detailed cost estimates. **So far, three projects have approved** finance **plans and FHWA has identified** five **additional projects that will** soon **require finance plans**.2 While indications are that the finance plan requirement has improved the oversight of some major projects, **many multibillion-dollar corridor projects representing a substantial investment of federal funds will not be covered by the requirement because the projects will be constructed as a series of smaller projects that will cost less than $1 billion each.** In addition, **projects of importance for reasons other than** **cost**—such as national or regional significance—**may not be included**. Second, in December 2000, a DOT task force made several recommendations to, among other things, improve the skills and qualifications of staff overseeing major projects and to conduct more rigorous financial reviews of such projects. The task force also recommended legislation to clarify FHWA's statutory authority and to resolve a potential ambiguity between the states' authority to oversee design and construction activities on certain projects and FHWA's responsibility to oversee multibillion dollar "megaprojects." **DOT did not formally implement the task force's recommendations**, according to officials, **because of the turnover in key positions and need to reevaluate policy** that came with the change in administrations in January 2001, and because of higher priorities brought on by the events of September 11, 2001. **Third, on the basis of a report by an FHWA task force**, FHWA announced a new policy in June 2001 to introduce greater risk-based oversight into its day-to-day activities. It did so, in part, because it believed that statutory changes in FHWA's oversight role since 1991 had resulted in internal confusion and wide variation in interpretations of that role. **However FHWA has not yet incorporated the new policy into its performance goals** or developed mechanisms to measure and report its results. **As a result, FHWA could not say whether the internal confusion and variation in interpretations of the agency's oversight role** identified by the task force had been resolved. While both DOT's and FHWA's task forces have identified needed improvements in FHWA's oversight of major projects, neither has addressed many of the concerns we have raised in the past. **For example, recent congressional efforts to obtain information about cost growth on major projects have continued to meet with limited success because accurate and complete data to determine the extent of and reasons for cost growth on major highway and bridge projects are not available.**

## AT: Better Now

#### Rail and Road projects consistently overestimate traffic amounts

**Flyvbjerg et al 5**, professor of planning at Aalborg University, Denmark. He is founder and director of the university’s research program on large-scale infrastructure planning, (Bent, “ How (In)accurate Are Demand Forecasts in Public Works Projects?”, Journal of the American Planning Association, Spring 2005, Google Scholar, http://www.honolulutraffic.com/JAPAFlyvbjerg05.pdf)//AG

Figures 3 and 4 show how forecast **inaccuracy varies over time for the projects in the sample for which inaccuracy could be coupled** with information about year of decision to build and/or year of project completion. **Statistical tests show there is no indication that traffic forecasts have become more accurate** over time, despite claims to the contrary (American Public Transit Association, 1990, pp. 6, 8). **For road projects** (Figure 4), **forecasts even appear to become more inaccurate** toward the end of the 30-year period studied. Statistical analyses corroborate this impression. For rail projects (Figure 3), forecast **inaccuracy is independent of both year of project commencement and year of project conclusion**. This is the case whether the two German projects (marked with “K”) are treated as statistical outliers or not. We conclude that forecasts of rail passenger traffic have not improved over time. **Rail passenger traffic has been consistently overestimated** during the 30-year period studied. The U.S. Federal Transit Administration (**FTA) has a study underway indicating that rail passenger forecasts may have become more accurate recently** (Ryan, 2004). **According to an oral presentation** of the study at the annual Transportation Research Board meeting in 2004, **of 19 new rail projects, 68% achieved actual patronage less than 80% of forecast patronage.** This is a 16 percentage point improvement over the rail projects in our sample, where 84% of rail projects achieved actual patronage less than 80% of that forecasted (see above). It is also an improvement over the situation Pickrell (1990) depicted. 2 It is unclear, however, whether this reported improvement is statistically significant, and despite the improvement, the same pattern of overestimation continues. Ryan’s (2004) preliminary conclusion thus dovetails with ours: “Risk of large errors still remains” (slide 30). A report from the FTA study is underway. **For road projects, inaccuracies are larger towards the end of the period**, with highly underestimated traffic. However, there is a difference between Danish and other road projects. For Danish road projects, we find at a very high level of statistical significance that inaccuracy varies with time (p<0.001). After 1980, Danish road traffic forecasts offered large underestimations, whereas this was not the case for Denmark before 1980 nor for other countries for which data exist. During a decade from the second half of the 1970s to the second half of the 1980s, inaccuracy of Danish road traffic forecasts increased 18 fold, from 3 to 55% (see Figure 5).

## AT: Plan has No Overruns

#### Reject the analysis of the plan – they’re authors will lie, cheat and steal to avoid the perception of overruns – ONLY enforcing the counterplan can eliminate overruns

**Flyvbjerg 2k9 (Bent, professor of planning at Aalborg University, Denmark. He is founder and director of the university’s research program on large-scale infrastructure planning, “Survival of the unfittest: why the worst infrastructure gets built—and what we can do about it,” Oxford Review of Economic Policy, Volume 25, Number 3, 2009, pp.344–367, pg online @** [**http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf**](http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf) **//um-ef)**

This article documents a much neglected topic in economics, namely the fact that ex ante estimates of ventures’ costs and benefits are often very different from actual ex post costs and benefits. The article shows that such differences between estimated and actual outcomes are pronounced for large infrastructure projects, where substantial cost underestimates often combine with equally significant benefit overestimates, rendering cost–benefit analyses of projects not only inaccurate but biased. The cause of biased cost–benefit analyses is found to be perverse incentives that encourage promoters of infrastructure projects to underestimate costs and overestimate benefits in the business cases for their projects in order to gain approval and funding. But the projects that are artificially made to look best in business cases are the projects that generate the highest cost overruns and benefit shortfalls in reality, resulting in a significant trend for ‘survival of the unfittest’ for infrastructure projects. The cure to the problem is enforcing an outside view in the planning of new projects and employing a method called reference class forecasting, based on Daniel Kahneman’s Nobel Prize-winning theories of decision-making under uncertainty. However, to be effective such new methodology must be combined with better governance structures with incentives that reward accurate estimates of costs and benefits and punish inaccurate ones. Finally, stimulus spending has recently resulted in extra money and attention for infrastructure investing. This is placing increased pressure on project delivery. Stimulus spending—together with rapidly increasing spending on infrastructure in emerging economies and on information technology in infrastructure—is driving infrastructure investment from the frying pan into the fire.

## Consequence Key

#### And, establishing penalties upfront is CRITICAL [shorter version of this is in the perm do both block]

**Flyvbjerg 2k9**

**(Bent, professor of planning at Aalborg University, Denmark. He is founder and director of the university’s research program on large-scale infrastructure planning, “Survival of the unfittest: why the worst infrastructure gets built—and what we can do about it,” Oxford Review of Economic Policy, Volume 25, Number 3, 2009, pp.344–367, pg online @** [**http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf**](http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf) **//um-ef)**

(i) Transparency and public control In order to achieve accountability through transparency and public control, the following would be required as practices embedded in the relevant institutions (the full argument for the measures may be found in Flyvbjerg et al. (2003, chs 9–11)). National-level government should not offer discretionary grants to local agencies for the sole purpose of building a specific type of project (a.k.a. ‘categorical grants’). Such grants create perverse incentives. Instead, national government should simply offer ‘block grants’ to local governments, and let local political officials spend the funds however they choose to, but make sure that every dollar they spend on one type of project reduces their ability to fund another. Cost–benefit analysis and other types of ex ante appraisal should be shifted from promoters to more neutral ground, for instance with the Treasury, in order to reduce risks of agency problems. Forecasts and business cases should bemade subject to independent peer review.Where projects involve large amounts of government funds, such review may be carried out by national or state auditing offices, such as the General Accounting Office in the USA or the National Audit Office in the UK, who have the independence and expertise to produce such reviews. Forecasts should be benchmarked against comparable forecasts, for instance using reference class forecasting as described in the previous section. For publicly funded projects, forecasts, peer reviews, and benchmarkings should be made available for public scrutiny, including by the media, as they are produced, including all relevant documentation. Public hearings, citizen juries, and the like should be organized to allow stakeholders and civil society to voice criticism and support of forecasts. Knowledge generated in this way should be integrated in project management and decision-making. Scientific and professional conferences should be organized where forecasters would present and defend their forecasts in the face of colleagues’ scrutiny and criticism. Projects with inflated benefit–cost ratios should be reconsidered and stopped if recalculated costs and benefits do not warrant implementation. Projects with realistic estimates of benefits and costs should be rewarded. Professional and occasionally even criminal penalties should be enforced for managers and forecasters who consistently and foreseeably produce deceptive forecasts (Garett and Wachs, 1996). When I first began suggesting, in lectures for project managers, promoters, and forecasters, that deception and criminal penalties may be concepts relevant to our professions, I would get headshakes, sighs, and the occasional boo. Enron and Iraq changed that, almost overnight. Today people listen and the literature has become replete with books and articles that hammer out the links between lying, forecasting, and management. For instance, a recent book about risk, the planning fallacy, and strategic misrepresentation bluntly states: ‘Anyone who causes harm by forecasting should be treated as either a fool or a liar. Some forecasters cause more damage to society than criminals’ (Taleb, 2007, p. 163). Law-making has followed suit, most prominently with the 2002 Sarbanes–Oxley Act, which stipulates up to 20 years in prison for a knowingly false forecast intended to impede, obstruct, or influence the proper administration of affairs. There is little doubt that penalties like this influence behaviour. The point is that malpractice in project management should be taken as seriously as it is in other professions, e.g. medicine and law. Failing to do this amounts to not taking the profession of project management seriously. (ii) Competition and market control In order to achieve accountability via competition and market control, the following would be required, again as practices that are both embedded in and enforced by the relevant institutions. The decision to go ahead with a major infrastructure project should, where at all possible, be made contingent on the willingness of private financiers to participate without a sovereign guarantee for at least one-third of the total capital needs.7 This should be required whether projects pass the market test or not—that is, whether projects are subsidized or not or provided for social justice reasons or not. Private lenders, shareholders, and stock-market analysts would produce their own forecasts or conduct due diligence for existing ones. If they were wrong about the forecasts, they and their organizations would be hurt. The result would be added pressure to produce realistic forecasts and reduced risk to the taxpayer. Forecasters and their organizations must share financial responsibility for covering cost overruns and benefit shortfalls resulting from misrepresentation and bias in forecasting. The participation of risk capital would not mean that government reduces control of major infrastructure projects. On the contrary, it means that government can more effectively play the role it should be playing, namely as the ordinary citizen’s guarantor for ensuring concerns about safety, environment, risk, and a proper use of public funds. Whether infrastructure projects are public, private, or public–private, they should be vested in one and only one project organization with a strong governance framework and strong contract-writing skills. The project organization may be a company or not, public or private, or a mixture. What is important is that this organization has the capacity to (i) set up and negotiate contracts that will effectively safeguard its interests, including in equity risk allocation, and (ii) enforce accountability vis-`a-vis contractors, operators, etc. In turn, the directors of the organizationmust be held accountable for any cost overruns, benefit shortfalls, faulty designs, unmitigated risks, etc. that may occur during project planning, implementation, and operations.

## AT: No Data

#### No data since federal oversight failed

**GAO 97**, Investigative arm of Congress charged with examining matters relating to the receipt and payment of public funds, (Government Accountability Office, Transportation
Infrastructure: Managing the Costs of Large-Dollar Highway Projects, Government Accountability Office, February 1997,http://www.gao.gov/assets/160/155775.pdf)//AG

The amount of and **reasons for cost increases beyond the initial cost estimates for large-dollar highway projects cannot be determined because data to track this information** over the life of a project **are not readily available from FHWA** or state highway departments. **FHWA’s information system** for highway projects records funds obligated for segments of projects that are federally funded rather than recording complete project-related costs and estimates; it also **does not document the reasons for cost growth**. **Furthermore, FHWA officials said states do not track cost increases from the initial estimate or determine the reasons for these increases as part of normal project management;** this was supported by highway officials in 13 states. **However, limited data shows that cost growth has occurred on many of the large-dollar projects for which we collected data.**

## Theory-Type Cards

#### And, in a world of scarce resources, discussions of funding issues is critical

**Frankel 1/7/11 (Emil H. Frankel, Visiting Scholar, Bipartisan Policy Center, “Austerity and Investment,” pg online @ http://transportation.nationaljournal.com/2011/01/highway-trust-fund-battles.php#1851927 //um-ef)**

The clash between enormous budget deficits and a ballooning national debt, on the one hand, and the need to promote growth in a fragile economy, **still facing** unacceptable levels of unemployment, on the other, will dominate domestic policy debates over the next few years. Transportation policy and funding decisions will not, and should not, be immune from the need to balance these competing values. The new rules for spending, proposed by the House Republican leadership and adopted earlier this week, should be analyzed in the context of the need to balance these interests. Specifically, the elimination of the highway spending guarantee and the so-called "firewall," adopted in TEA-21 and re-enacted in SAFETEA-LU, make the decisions of the authorizers subject to limits established by appropriators and by the overall budget process. So, while the debate over this issue is one between competing national interests and values, it is also another chapter in a long struggle between authorizers and appropriators. The bottom line is that we need more resources for investment in the nation's transportation infrastructure. Even in this uncertain economic environment, America must find the means to invest adequately in transportation facilities and systems. As the National Surface Transportation Infrastructure Financing Commission and the Bipartisan Policy Center's National Transportation Policy Project (NTPP) jointly stated last month, "Investment in transportation will be an important element in building the foundation for long-term economic recovery and growth. . . .[However,] it is of particular importance in these times of severe fiscal constraint that we invest scarce public resources more wisely and efficiently, in order to maximize the reach and impact of what we spend." Raising the motor fuels taxes that support the Highway Trust Fund (HTF), in order to provide more revenue for transportation investments, and reforming the way that we spend money on transportation, in order to provide accountability for national goals and interests, is the proper course of action, one that will allow us to deal with competing investment needs and fiscal constraints at the same time. However, as others have noted, increasing revenues, in order to invest in economic renewal and growth, does not appear to be a likely outcome of the debate over surface transportation legislation in the new Congress. We are, instead, likely to face the reality of fewer investment resources, even at a time when we should be investing more. The outcome over this new highway spending rule in the House of Representatives has reinforced the message that deficit spending will not be the answer for the HTF shortfall, and we already know that a gasoline tax increase is unlikely. For good or ill, the chances of a smaller surface transportation authorization bill in this Congress seem to be enhanced by the House's actions on these new spending rules. The real issue is how we respond to that reality. The transportation community should focus its energies on insuring that the funds available in these times of fiscal austerity are invested in ways that advance clear national economic, energy, environmental, and safety goals. It is now more important than ever that Congress articulate national goals for transportation programs and policies and put in place mechanisms to insure that states, localities, and MPOs are held accountable for meeting those goals with whatever federal resources that are made available to them.

# \*\*\*\*\*2NC Solvency Cards\*\*\*\*\*

## Solvency: Gas Tax

#### \*\*\*\*\*And, establishing the counterplan BEFORE instituting a gas tax is critical – establishes cost control and prevents wasteful cost-overruns

**Puentes 2k8 (“A Bridge to Somewhere Rethinking American Transportation For The 21st Century,” g online @** [**http://www.brookings.edu/~/media/research/files/reports/2008/6/transportation%20puentes/06\_transportation\_puentes\_report.pdf**](http://www.brookings.edu/~/media/research/files/reports/2008/6/transportation%20puentes/06_transportation_puentes_report.pdf) **//um-ef)**

4. FUNDING FOR THE FEDERAL PROGRAM— BOTH FUNDING LEVELS AND SOURCES— SHOULD ONLY BE CONSIDERED AFTER THE REFORM IDEAS ARE PUT IN PLACE **Just as transportation is not an end in and of itself – neither is increasing funding the primary solution to the transportation problems.** However, because of the short term conundrum of the federal government obligating more federal money for transportation than it has to spend and the disdain for the annual rescissions, many are calling for the next Congress and the new President to increase the federal gas tax. **This puts the cart before the horse.** Simply put: we should not continue to pour more money into a dysfunctional system before serious attempts at significant policy reform. In other words, **the federal transportation program is not just broke; it is broken**. **The funding debate needs to shift from spending more and more taxpayer dollars on the same product to where, what, and how to spend that money better**. So in addition to just focusing on increasing revenues for the existing program the nation deserves a real conversation about **curbing the demand for transportation spending**. It is impossible to start with a funding solution or what the optimal level of investment should be when there is no agreement about what the federal role should be, what problems we are trying to solve, or what questions we are trying to answer. Indeed, although the NSTPRSC did call clearly and specifically for an increase in the fuel tax, they also maintained that adding revenues to the program in its current form would “not be acceptable.” We concur. Given the track record of the program in recent years such systemic reform may seem difficult to achieve. However, it has been argued that during their times as transportation visionaries, President Dwight Eisenhower and Senator Daniel Patrick Moynihan did not so much have an inspiration for transportation as they had a revenue stream. Indeed, history has shown that e**ach new wave of transportation policy carried with it a major restructuring** in how the system is planned and financed. Looking at it another way: **no major federal transportation reform has ever occurred without a major increase in revenues**. 15 This should be another one of those times. We need a clear articulation of the goals and objectives of the federal program, and the desired outcomes. **The program should then be structured to get to those outcomes.** There then should be a frank and vigorous conversation about the revenues currently available and whether or not additional funding is necessary. At that time, **all options toward re-invigorating transportation funding should be on the table to meet the transportation challenges of the future while also ensuring financial revenues will be available**. We recommend that the federal government reinvigorate its transportation funding structures based on the three-pronged strategy to lead, empower, and maximize performance.

## Solvency: Generic

#### Specific government strategy and performance-based funding are key to efficiency

**Herr, 12 – Managing Director, Physical Infrastructure Issues at the GAO (3/29/12, “Testimony Before the Subcommittee on Transportation, Housing and Urban Development, and Related Agencies, Committee on Appropriations, House of Representatives: TRANSPORTATION Key Issues and Management Challenges” http://www.gao.gov/assets/590/589703.pdf)**

Long-term reauthorization provides an opportunity for Congress to fundamentally re-examine surface transportation programs as we have recommended—another reason why funding surface transportation is on GAO’s High-Risk List—and to expand on recent efforts to reform the highway program. From the standpoint of state and local governments, re-examining surface transportation programs could reduce fragmentation and the administrative expenses states face complying with myriad federal statutory and regulatory requirements. This re-examination could include the following: • Clearly define the federal role in relation to other levels of government and, thus, create a more targeted federal role focused around evident national interests. For issues in which there is a strong national interest, ongoing federal financial support and direct involvement could help meet federal goals. Where national interests are less evident, other stakeholders could assume more responsibility, and some programs and activities may better be devolved to the states or other levels of government. • Ensure accountability for entities receiving federal funds, for example, by moving to a performance-based program. Current programs lack links to transportation system performance or of grantees receiving federal funds. Most highway, transit, and safety grant funds are distributed through formulas that have only an indirect relationship to needs, and many have no relationship to performance or outcomes. Funds for highways, in particular, are distributed to return revenues to their state of origin and states have considerable flexibility to reallocate them among highway and transit programs. Legislation passed by the Senate—Moving Ahead for Progress in the 21st Century (MAP-21)—would direct DOT to develop performance targets for pavement on the Interstate Highway System and many of the nation’s bridges. If a state were not to meet the minimum condition levels for two consecutive reporting periods, it would be required to commit a specific percentage of its highway funding to the deficient area. • Employ the best approaches and analysis to direct federal funds to infrastructure with clear national interests. There is a natural tension between providing funding based on merit and performance and providing funds on a formula basis to achieve equity among states. Consequently, meritorious projects of national or regional significance, in particular those connecting multiple transportation modes or those that cross geographic boundaries, may not compete well at the state level for formula funds. We have recommended to Congress that a criteria-based selection approach be used to direct a portion of federal funds in programs designed to select transportation projects with national and regional significance.

#### Current federal programs are unfocused – setting clear national goals solves stovepiping and redundancy

**GAO, 8 – Government Accountability Office (GAO, March 2008, “Restructured Federal Approach Needed for More Focused, Performance-Based, and Sustainable Programs” http://www.gao.gov/assets/280/273317.pdf)//KX**

Since the Federal-Aid Highway Act of 1956 created the modern federal highway program, the federal role in surface transportation has expanded to include broader goals, more programs, and a variety of program structures. Although most surface transportation funds remain dedicated to highway infrastructure, federal surface transportation programs have grown in number and complexity, incorporating additional transportation, environmental, and societal goals. While some of these goals have been incorporated as new grant programs in areas such as transit, highway safety, and motor carrier safety, others have been incorporated as additional procedural requirements for receiving federal aid, such as environmental review and transportation planning requirements. This program expansion has also created a variety of grant structures and federal approaches for establishing priorities and distributing federal funds. Most highway infrastructure funds continue to be distributed to states in accordance with individual grant program formulas and eligibility requirements. However, broad program goals, eligibility requirements, and authority to transfer funds between programs give state and local governments substantial discretion for allocating highway infrastructure funds according to their priorities. Although some transit formula grant programs also give grantees considerable discretion to allocate funds, a portion of transit assistance requires grantees to compete for funding based on specific criteria and goals. Similarly, basic safety formula grant programs are augmented by smaller programs that directly target federal funds to specific goals and actions using financial incentives and penalty provisions. Federal law has also increasingly allocated infrastructure funds through provisions directing spending to specific areas or projects. For example, according to the Transportation Research Board, the most recent surface transportation reauthorization legislation, passed in 2005— the Safe, Accountable, Flexible, Efficient Transportation Equity Act – a Legacy for Users (SAFETEA-LU)—contained over 5,000 dedicated spending provisions. Additionally, state and local government responsibility for oversight has recently increased, as state and local governments have assumed oversight responsibility for the majority of highway infrastructure spending, and federal safety programs have shifted from direct program oversight to a more performance-based approach. Our summary of our prior conclusions about federal surface transportation programs found that many of these programs are not effective at addressing key transportation challenges such as increasing congestion and growing freight demand because federal goals and roles are unclear, many programs lack links to needs or performance, and the programs in some areas do not employ the best tools and approaches to ensure effective investment decisions. The goals of federal surface transportation programs are numerous and sometimes conflicting, which contributes to a corresponding lack of clarity in the federal role. For example, despite statutes and regulations that call for an intermodal approach that creates connections across modes, there is only one federal program specifically designed for intermodal infrastructure. Most highway funds are distributed through formulas that have only an indirect relationship to needs and no relationship to performance or outcomes. The largest safety and transit grants are also distributed through formulas without regard to performance. However safety grants more likely than highway grants to be focused on goals rather than specific transportation systems, and several highway safety and motor carrier safety grants allocate incentive funds on the basis of performance or states undertaking specific safety-related activities. Since the majority of surface transportation funds are distributed without regard to performance, it is difficult to assess the impact of recent record levels of federal highway expenditures, though congestion has increased in the same period. Mechanisms to link programs to goals also appear insufficient, because particularly in the Federal-Aid Highway Program, federal rules for transferring funds between different highway infrastructure programs are so flexible that the distinctions between individual programs have little meaning. Furthermore, surface transportation programs often do not employ the best tools and approaches to ensure effective investment decisions. Rigorous economic analysis is not a driving factor in most investment decisions by state and local governments—in a survey of state DOTs, 34 cited political support and public opinion as very important factors, whereas 8 said the same of the ratio of benefits to costs. The federal government also does not possess adequate data to assess outcomes or implement performance measures; for example, DOT does not have a central source of data on congestion, even though it has identified congestion as a top priority. While some funds can be transferred between highway and transit programs, modally-stovepiped funding nevertheless impedes efficient planning and project selection. State DOT officials have noted that congressionally directed spending may limit states’ ability to implement projects and efficiently use transportation funds. Additionally, tools to make better use of existing infrastructure, such as intelligent transportation systems and congestion pricing, have not been deployed to their full potential. Finally, increases in federal spending for transportation appear to reduce state spending for the same purpose, reducing the return on the federal investment—research estimates that 50 percent of each additional federal grant dollar for the highway program displaces funds that states would otherwise have spent on highways. Through our prior work on reexamining the base of government, our analysis of existing programs and other prior reports, we identified a number of principles that could help drive reexamination of federal surface transportation programs and an assessment of options for restructuring the federal surface transportation program. These principles include: (1) ensuring goals are well defined and focused on the federal interest, (2) ensuring the federal role in achieving each goal is clearly defined, (3) ensuring accountability for results by entities receiving federal funds, (4) employing the best tools and approaches to emphasize return on targeted federal investment, and (5) ensuring fiscal sustainability. The first step involves identifying issues in which there is a strong federal interest and determining what the federal goals should be related to those issues. Once the federal interest and goals have been identified, the federal role in relation to the states and local governments can be clearly defined. For issues in which there is a strong federal interest, ongoing federal financial support and direct federal involvement could help meet federal goals. But for issues in which there is little or no federal interest, programs and activities may best be devolved to other levels of government. The next step is to ensure accountability for results by incorporating performance objectives, grant incentive or penalty provisions, or more use of competitive selection procedures in awarding grants. Then, in assessing investment decisions, more emphasis could be placed on return on investment and benefit-cost analysis as criteria for comparing alternatives and directing funds. The relationship of investments to national goals also should be considered along with locally-based calculations of benefit and cost. Efficient investment decisions can be facilitated by employing the best tools and approaches, using mechanisms such as congestion pricing to make more efficient use of existing infrastructure, applying updated grant design features such as varying matching requirements and maintenance of effort provisions, supporting improved data collection, and promoting intermodal approaches. Finally, bringing revenues and expenditures into balance would ensure the fiscal sustainability of surface transportation programs. The current challenge for Congress is to structure a program responsive to these 21st century principles. With the clear unsustainability and performance issues of the current program, it is an opportune time for Congress to better define the federal role in transportation and improve the progress toward specific, nationally defined outcomes. Reforming the current approach to transportation problems will take time and it may be necessary to shift policies and programs incrementally or on a pilot basis, but a transformation of policies and programs is needed to effectively address the nation’s transportation needs and priorities. To improve the effectiveness of the federal investment in surface transportation, meet the nation’s transportation needs, and ensure a sustainable commitment to transportation infrastructure, Congress should consider reexamining and refocusing surface transportation programs to be responsive to these principles so that they: (1) have well-defined goals with direct links to an identified federal interest and federal role, (2) institute processes to make grantees more accountable by establishing more performance-based links between funding and program outcomes, (3) institute tools and approaches that emphasize the return on the federal investment, and (4) address the current imbalance between federal surface transportation revenues and spending.

## Solvency (Generic)

#### Increased cost control and oversight spill over into better future planning

**GAO 97**, Investigative arm of Congress charged with examining matters relating to the receipt and payment of public funds, (Government Accountability Office, Transportation
Infrastructure: Managing the Costs of Large-Dollar Highway Projects, Government Accountability Office, February 1997,http://www.gao.gov/assets/160/155775.pdf)//AG

**Once an initial cost estimate is developed, establishing cost performance goals based on this estimate and a strategy to accomplish them would make cost awareness and cost containment an integral part of how states manage a project over time**. This does not mean that an initial cost estimate cannot be increased if contingencies were not sufficient to cover increases generally expected through design changes; however, **any change and reason for it should be agreed to. Strategies, such as those being used on the Central Artery/Tunnel project, have the potential to improve accountability for cost increases and create a culture where cost control is part of day-to-day activities**. **Increased federal oversight** of state management of project costs **is another way to look** at a federal role. **Such actions as establishing standards for cost estimates,** including what elements should be included; evaluating the reasonableness of cost estimates and finance plans; and monitoring cost growth and financing could help to ensure that the large-dollar highway projects are being effectively and efficiently managed.

#### Complete project cost control solves—status quo incremental approval fails

**GAO 97**, Investigative arm of Congress charged with examining matters relating to the receipt and payment of public funds, (Government Accountability Office, Transportation
Infrastructure: Managing the Costs of Large-Dollar Highway Projects, Government Accountability Office, February 1997,http://www.gao.gov/assets/160/155775.pdf)//AG

The FHWA project **approval process consists of a series of incremental actions that occur over the period of years needed to plan, design, and build a project**. There is no federal approval of, or agreement to, the total cost at the outset of a project; rather, **FHWA approves the estimated cost of a large-dollar project in segments when those segments are ready** for construction. However, **by the time FHWA approves the costs** of a large-dollar project, **a public investment decision may have effectively been made because substantial funds will already have been spent on project design** and acquiring property and much of the increases in the project’s estimated costs will have already occurred. While **many factors can cause costs to increase**, we found several factors that worked together to increase costs beyond the initial estimates for projects in the six states visited: **(1) initial estimates are preliminary and not designed to be reliable predictors of a project’s cost, (2) initial estimates are modified to reflect more detailed plans and specifications as a project is designed, and (3) a project’s costs are affected by,** among other things, **inflation** and changes in scope to accommodate economic development that occurs over time as a project is designed and built. FHWA approval of a project or a segment occurs incrementally throughout the planning, environmental review, design and property acquisition, and construction stages. During the planning stage, FHWA approves concepts that identify new projects that are needed. According to FHWA officials, the agency acts in partnership with the states to identify these needs. For example, FHWA may participate in a major investment study that identifies the need for additional highway capacity to relieve congestion in a particular corridor or approve a state transportation plan that identifies a proposed highway project or segment. However, FHWA **officials emphasize that the agency’s participation in planning and approval of state transportation plans does not constitute approval** of a specific project or segment or commitment on the part of the federal government to finance it.

## Solvency (Rail)

#### Rail projects empirically fail—only institutional checks and risk assessment solves

**Flyvbjerg 7**, Professor of Major Programme Management at Oxford University's Saïd Business School and is Founding Director of the University's BT Centre for Major Programme Management, winner of the Fulbright Scholarship, (Bent, Cost Overruns and Demand Shortfalls in Urban Rail and Other Infrastructure, Transportation Planning and Technology, February 2007 Taylor and Francis Group, 8 January 2007, Google Scholar)//AG

**Absent or inadequate risk assessment and management are**, in themselves, an important source of **risk for projects**. Because, until now, no reliable measure has been available for estimating risk in urban rail projects, effective risk assessment and management have been impossible. The study described below is aimed at changing this situation. It denotes a first step toward empirically grounded and valid risk assessment and management of urban rail projects by presenting and analyzing data that allow such risk assessment and management. In addition to lack of a sound empirical basis, a **main cause of absent risk assessment** and management **is lack of institutional checks and balances that would enforce accountability with rail project promoters towards risk. Such accountability would generate a demand for knowledge about real risks that is often absent today. The study** **described** below documents **a dire need for checks, balances, and accountability** of this type. The work with developing procedures and institutional designs that, if implemented, would strengthen accountability towards risk has been begun elsewhere and will not be taken up here (Bruzelius et al., 1998; Flyvbjerg & COWI, 2004; Flyvbjerg et al., 2002, 2003, 2005). Finally, **it should be stressed that absent risk assessment is not caused by lack of relevant methods**. The methods exist and are fairly well developed, technically speaking. The problem is one of application. First, if methods of risk assessment are applied at Cost Overruns and Demand Shortfalls in Urban **Rail 11 all, applications are typically based on hypothetical, subjective data. This is due to the lack of empirical knowledge about risk mentioned above. Second, applications often have little or no bearing on real decision making, because of their lack of institutional grounding.**

## Solvency: (Rail/Freight)

#### Rail projects are prone to cost overruns –the aff’s cost estimates are falsified

**Flyvbjerg et. al. 3 – Bent Flyvbjerg is a Professor of Major Program Management at Oxford University's Saïd Business School and is Founding Director of the University's BT Centre for Major Program Management and was previously Professor of Planning at Aalborg University, Denmark and Chair of Infrastructure Policy and Planning at Delft University of Technology, Mette K. Skamris Holm is a former assistant professor of planning at Aalborg University, Søren L. Buhl is an associate professor of mathematics at Aalborg University and an associate statistician with the university's research program (“How common and how large are cost overruns in transport infrastructure projects?” Transport Reviews, 2003, Vol. 23, No. 1, 71±88, http://flyvbjerg.plan.aau.dk/COSTFREQ4.pdf)//ctc**

Statistical analyses of the data in table 1 show both means and standard deviations to be different with a high level of confidence**. Rail projects incur the highest difference between actual and estimated costs with an average of no less than 44.7%**, **followed by fixed links averaging 33.8% and roads with 20.4%.** An F-test falsifies at a very high level of statistical confidence the null hypothesis that type of project has no effect on percentage cost escalation (p 50.001). Project type matters. The substantial and significant differences between project types indicate that pooling the three types of projects in statistical analyses, as we did in the previous section, is not appropriate strictly speaking. Therefore, in the analyses that follow, **each type of project will be considered separately.** Based on the available evidence we conclude that **rail projects appear to be particularly prone to cost escalation**, followed by fixed links. **Road projects appear to be relatively less predisposed for cost escalation, although actual costs are higher than forecast costs much more often than not also for roads**. If we subdivide the sample a second time and split fixed links into tunnels and bridges **we find an average cost escalation of 48% for tunnels** (SD=44) **and 30% for bridges** (SD=67). However, by subdividing the sample this second time we reach the limits of its usefulness as a basis for statistical analysis. The number of observations in each category now becomes too small to attain significant results. The difference between tunnels and bridges is statistically non-significant. Only by further data collection for more tunnels and bridges would we be able to change this state of affairs and again arrive at statistically significant results. Similarly, **if we subdivide rail projects into high-speed rail, urban rail and conventional rail, we find that high-speed rail tops the list of cost escalation with an average of 52%** (SD=48), **followed by urban rail with 45%** (SD=37) **and conventional rail with 30%** (SD=34). Again the differences are statistically nonsignificant, and again the reason is that the subsamples are too small. Furthermore, **for high-speed rail the average conceals what might be important geographical differences** (see below). We conclude that the question of whether there are significant differences in cost escalation for rail, fixed links and roads, respectively, must be answered in the affirmative. **Average cost escalation for rail projects is substantially and significantly higher than that of roads**, with fixed links in a statistically non-significant middle position between rail and road. **Cost escalation for rail is more than twice that of roads**. For all three project types, the **evidence shows that it is sound advice for policy and decision-makers as well as investors, bankers, media and the public to take any estimate of construction costs with a grain of salt, and especially for rail projects** and fixed links.

## Solvency (CCS)

#### CCS development lead to delays and cost overruns—project uncertainty, investment times

**Finon 10**, Senior Research Fellow in Economics of the French National Center of Scientific Research (CNRS), head of the institutute d'Economie et de Polique de l'Energie (IEPE), author of the partial equilibrium energy model EFOM developed for and used widely by the European Commission, (Dominique, Efficiency of policy choices for the deployment of large scale low carbon technologies : the case of Carbon Capture and Sequestration (CCS), Gis Larsen: Laboratoire d’Analyse économique des Réseaux et des Systemes Energetiques, January 2010, Google Scholar http://www.gis-larsen.org/fr/Conferences-/Pdf/LARSEN\_WP\_27.pdf)//AG

The high upfront cost and long lead time. **Empirical literature shows that complex** and **large-scale projects tend to have large delays** **and cost overruns** (Etsy, 2002). These risks are higher for the first-of-a-kind projects1. The **increasing scale of projects in CO2 capture as well as in pipes and capacity storage increase makes risks rise in a non linear fashion**. **The size and complexity** of projects **are an important driver for the intensity of th**e learning **effect** by cumulative capacity developed by different players. It tends to countervail the effects of replication, as the recent experience of the LNG industry tends to suggest. Large-scale construction may yield low learning benefits (see Greaker and Sagen, 2008). So **the more capital intensive the CCS project is, the more the need for revenue stability for a long period** in order to trigger the investment decision in the CO2 capture project, whilst carbon market prices as well as electricity prices will not offer such a stability. **Financing a large scale investment** with ordinary risks but long lead times **is** already **not appreciated by financial institutions**, **given that** the first **revenues will come after** long **years of capital immobilization**. A 500 MW coal power plant which is equipped with capture and connected to a reservoir by a pipe represents a large unitary investment of EUR1 billion at 2000€/kW. **A first of a kind plant using CCS technology would probably take 5 years to build –before generating positive cash flows-.** Moreover with a new and complex technology, **there is the double uncertainty regarding the building time and the investment** cost which makes the payout time longer because of the increase in the cost of capital.

## Solvency (Airplanes)

#### Lack of cost control makes air traffic estimates high-risk ventures

**Knight et al 97**, professor of computer science at the University of Virginia, Summaries of Three Critical Infrastructure Applications, Computer Science Report, November 14, 1997, Google Scholar)//AG

A great deal of **work has been done studying the failure of the AAS effort** and the causes contributing to that failure. In particular, the United States General Account Office **(GAO) has conducted numerous studies** and produced many reports **detailing the current** and proposed **Air Traffic Control** system, including annual reports on the modernization effort [6], [8]. **GAO designated air traffic control as one of the high-risk infrastructure systems** for the United States [12]. The FAA has spent billions of dollars on modernization since 1981 and expects to spend $34 billion through the year 2003 [13]. **GAO has identified some of the problems that have plagued the air traffic control modernization effort, including a lack of a complete systems architecture [11] and poor cost control mechanisms [10**].

## Solvency (Next Gen)

#### \*\*\*\*And, the USFG needs to implement cost control structures before ensuring a NextGen Upgrade

GAO 2k7

(“PERFORMANCE AND ¶ ACCOUNTABILITY ¶ Transportation Challenges ¶ Facing Congress and the ¶ Department of ¶ Transportation, pg online @ <http://www.gao.gov/assets/120/115690.pdf> //um-ef)

Despite its progress, as the key implementer of NextGen, FAA needs to institutionalize improvements made and continuously improve. For example, we recommended that, before making decisions to fund systems already in service, FAA re-evaluate projects’ alignment with strategic goals and objectives, but FAA’s acquisition management guidance does not clearly indicate if this is yet the case. The agency developed a cost estimating methodology, but has yet to implement it, as well as a framework for improving system management capabilities, but has yet to institutionalize it. Additionally, we recently recommended that FAA examine its strengths and weaknesses with regard to the technical expertise and contract management expertise necessary to transition to NextGen.29 In response, FAA is considering convening a blue ribbon panel to make recommendations, which we believe could help the agency begin to address this concern. JPDO faces challenges in coordinating agencies and continuing planning necessary for implementation of NextGen. For example, work remains to synchronize NextGen’s enterprise architecture with the partner agencies’ planning documents and to keep the necessary research and development on track. In addition, JPDO has yet to provide Congress with a valid, comprehensive estimate of the costs to JPDO partner agencies for the required research, development, systems acquisitions, and systems integration.30 Finally, continuing collaboration between JPDO and the

## Solvency (HSR)

#### HSR projects always have tax overruns—empirics, shortfalls, and projected costs prove

Cox 11, international public policy consultant. He is the principal and sole owner of Wendell Cox Consultancy/Demographia, based in the St. Louis, (Wendell, The Tampa to Orlando High-Speed Rail Project: Florida Taxpayer Risk Assessment, Reason Roundation report, January 2011, <http://www.infrastructureusa.org/wp-content/uploads/2011/01/florida_high_speed_rail_analysis.pdf> (Google Scholar)//AG

1. Accuracy of Capital Cost Projections: International Experience: International **research indicates that high-speed rail projects often exceed their capital cost estimates.** European academics Bent **Flyvbjerg**, Nils Bruzelius and Werner Rothengatter **examined 258 transportation infrastructure “megaprojects**” covering 70 years in North America, Europe and elsewhere.6 They found that **capital cost escalation** from the point of project approval to completion **can be** as much as 50 percent to **100 percent above projections**. The **average capital cost overrun for passenger rail projects was 45 percent** and cost overruns above 40 percent in fixed prices are common, especially for rail projects and overruns above 80 percent are not uncommon.7 Moreover, they found that capital cost overruns were pervasive, occurring in 9 out of 10 projects. The following examples illustrate **high-speed rail risks** that **have been assumed by taxpayers**: ! The government of the **United Kingdom** has assumed £5.2 billion in debts of the builder/operator of the high-speed rail Channel Tunnel link to St. Pancras Station. This is in addition to the £1.7 billion that had been granted by the government to the builder/operator to construct the line.8 ! The UK government has decided to sell this high-speed rail line for an expected £1.5 billion after it cost at total of £6.9 billion, a loss of well over £5 billion including debt service payments.9 ! According to the president of the Korean national railway (Korail), the **South Korea** highspeed rail system had capital costs that were three to four times the original projection.10 The **Taiwan** high-speed line was to have been built by a private company and operated by them without any government funding (Florida’s plans also call for private operations without government subsidy). But due to huge losses, the Taiwanese government **has taken** control of the company's board and nearly $10 billion in **debt** has now been guaranteed **by the government**.11 ! The **projected costs of the California high-speed rail project escalated at least 50 percent from 1999 to 2008.**12 If the Tampa to Orlando high-speed rail line experiences cost escalation typical of international high-speed rail projects, it will cost between $0.54 billion and $2.7 billion more than projected. Based on averages, most likely the overrun would be about $1.2 billion, all of which would be the responsibility of Florida taxpayers. 2. Comparison to the California High-Speed Rail Project: A comparison to the costs of the recently approved first segment of the California high-speed rail project suggests a greater risk to Florida taxpayers than indicated in the international research. The **California high-speed rail project is intended to serve from Los Angeles to San Francisco** in its first phase and is currently projected to cost approximately $45 billion. **A considerable funding shortfall exists and it is not known when service will begin**. The cost of the Tampa to Orlando line is projected at $32.1 million per mile (based upon the cost of $2.7 billion), which is well below the estimated costs of the proposed California segment. **This includes all projected costs for building the track, purchasing trains and building stations and facilities**, divided by the number of miles (84). The initial segment of the California system is projected to cost $64 million per mile, for a total cost of $4.15 billion for 64 miles.13 The California segment is not being built to full high-speed rail standards, because of a legal requirement that the line be usable by conventional Amtrak services if the Los Angeles to San Francisco project is not completed.14 The line would be upgraded to full high-speed rail standards when and if the much longer route is completed.

## Solvency (HSR)

#### HSR projects always have tax overruns—empirics, shortfalls, and projected costs prove

Cox 11, international public policy consultant. He is the principal and sole owner of Wendell Cox Consultancy/Demographia, based in the St. Louis, (Wendell, The Tampa to Orlando High-Speed Rail Project: Florida Taxpayer Risk Assessment, Reason Roundation report, January 2011, <http://www.infrastructureusa.org/wp-content/uploads/2011/01/florida_high_speed_rail_analysis.pdf> (Google Scholar)//AG

1. Accuracy of Capital Cost Projections: International Experience: International **research indicates that high-speed rail projects often exceed their capital cost estimates.** European academics Bent **Flyvbjerg**, Nils Bruzelius and Werner Rothengatter **examined 258 transportation infrastructure “megaprojects**” covering 70 years in North America, Europe and elsewhere.6 They found that **capital cost escalation** from the point of project approval to completion **can be** as much as 50 percent to **100 percent above projections**. The **average capital cost overrun for passenger rail projects was 45 percent** and cost overruns above 40 percent in fixed prices are common, especially for rail projects and overruns above 80 percent are not uncommon.7 Moreover, they found that capital cost overruns were pervasive, occurring in 9 out of 10 projects. The following examples illustrate **high-speed rail risks** that **have been assumed by taxpayers**: ! The government of the **United Kingdom** has assumed £5.2 billion in debts of the builder/operator of the high-speed rail Channel Tunnel link to St. Pancras Station. This is in addition to the £1.7 billion that had been granted by the government to the builder/operator to construct the line.8 ! The UK government has decided to sell this high-speed rail line for an expected £1.5 billion after it cost at total of £6.9 billion, a loss of well over £5 billion including debt service payments.9 ! According to the president of the Korean national railway (Korail), the **South Korea** highspeed rail system had capital costs that were three to four times the original projection.10 The **Taiwan** high-speed line was to have been built by a private company and operated by them without any government funding (Florida’s plans also call for private operations without government subsidy). But due to huge losses, the Taiwanese government **has taken** control of the company's board and nearly $10 billion in **debt** has now been guaranteed **by the government**.11 ! The **projected costs of the California high-speed rail project escalated at least 50 percent from 1999 to 2008.**12 If the Tampa to Orlando high-speed rail line experiences cost escalation typical of international high-speed rail projects, it will cost between $0.54 billion and $2.7 billion more than projected. Based on averages, most likely the overrun would be about $1.2 billion, all of which would be the responsibility of Florida taxpayers. 2. Comparison to the California High-Speed Rail Project: A comparison to the costs of the recently approved first segment of the California high-speed rail project suggests a greater risk to Florida taxpayers than indicated in the international research. The **California high-speed rail project is intended to serve from Los Angeles to San Francisco** in its first phase and is currently projected to cost approximately $45 billion. **A considerable funding shortfall exists and it is not known when service will begin**. The cost of the Tampa to Orlando line is projected at $32.1 million per mile (based upon the cost of $2.7 billion), which is well below the estimated costs of the proposed California segment. **This includes all projected costs for building the track, purchasing trains and building stations and facilities**, divided by the number of miles (84). The initial segment of the California system is projected to cost $64 million per mile, for a total cost of $4.15 billion for 64 miles.13 The California segment is not being built to full high-speed rail standards, because of a legal requirement that the line be usable by conventional Amtrak services if the Los Angeles to San Francisco project is not completed.14 The line would be upgraded to full high-speed rail standards when and if the much longer route is completed.

## Solvency (HSR)

#### HSR cost overruns are huge – turns solvency because congress would cancel the plan

Larkin 11 **– Plain Dealer's editorial director from 1991 until his retirement in 2009 (Brent, “Rail money that Ohio spurned chugs into the California sunset: Brent Larkin” Cleveland.com, Dec 24, 2011, http://www.cleveland.com/opinion/index.ssf/2011/12/rail\_money\_that\_ohio\_spurned\_c.html)//ctc**

Across the country, high-speed rail projects are flying off the tracks, with states either pulling the plug on them or grappling with epic cost overruns. And nowhere are those overruns worse than in California, where most of Ohio's $400 million ended up. U.S. taxpayers have contributed $3.5 billion in federal stimulus to the initial, 178-mile leg of California's 800-mile, high-speed rail project. And while not an inch of track has been laid, the cost overruns are already staggering. A state report issued last month estimated the cost of the project at $98 billion -- nearly triple the original estimate of $33 billion. That's more than $122 million a mile. The completion date has been moved from 2020 to 2033. So gigantic are the overruns that the House Transportation and Infrastructure Committee has held two hearings to examine how a project could go so wrong so soon. And three weeks ago, California's legislative budget office said the overruns are now so great that it is "highly uncertain" the project will ever be built. With a couple of exceptions, newspaper editorial boards in the state have turned against the rail plan, as have some Democratic legislators who were once among its loudest cheerleaders. In November, a Washington Post editorial begged, "Somebody please stop this train." There is now a move afoot to put the issue before California's voters. If that happens, polls show it's doomed. The California project is managed by the Parsons Brinckerhoff engineering firm. This is the same outfit the Strickland administration handed a $23 million no-bid contract to do planning and design work on the Ohio project that Kasich killed. But California is hardly alone. Earlier this year, the Florida Supreme Court ruled that Gov. Rick Scott had every right to reject $2.4 billion in federal funds for an 84-mile rail project linking Tampa and Orlando. Explaining his decision, the governor cited huge cost overruns, high maintenance costs and wildly optimistic ridership projections. In Wisconsin, Gov. Scott Walker turned down more than $800 million in federal funds for a high-speed rail project there. In theory, high-speed rail is a great thing for the country's population centers -- a concept good for the economy and environment. But the peanut-butter approach used by the Obama administration to dispense stimulus money for high-speed rail seemed to be dictated more by politics than practicality.

## Solvency (HTF/Highways)

#### Cost overruns are inevitable with highways unless the government devotes more time to analyzing risks

Chacko 11 **– writer for USA Today (Sarah, “Road Fund Limits Loose” USA Today, Dec 11, 2011, http://www.usatoday.com/USCP/PNI/NEWS/2011-12-11-pni1211met-highwaysART0\_ST\_U.htm)//ctc**

**The federal government** spends about $40billion a year on highway construction, yet for the vast majority of projects, it **does not track how many are over budget, how much goes toward cost overruns or whether the record is getting better or worse**. Arizona has avoided big construction-cost overruns. A4 **The result is a patchwork pattern of planning lapses and design errors that push some projects into consuming more and more limited dollars**, a Gannett investigation shows. The government stepped up scrutiny of "major projects," defined as greater than $500million, after Boston's disastrous Big Dig. That road and tunnel project, completed in 2007 after almost two decades, ran more than $12billion over budget. But **most projects aren't subject to the tighter rules**. **In 2011, just 87 of 136,000 federal highway projects qualified as "major," according to the Federal Highway Administration. They accounted for $1.6billion in allocated funds, or less than 5 percent of all federal highway investment**. Federal Highway Administrator Victor Mendez says his agency monitors highway programs through division offices in each state. But state departments of transportation are ultimately responsible for managing highway and interstate projects, most of which are at least 80 percent federally funded. "The buck stops with the state DOT," Mendez said in an interview. "That's the bottom line." Kenneth Mead, the U.S. Transportation Department's inspector general from 1997 to 2006, said it shouldn't be that way. An advocate for stronger oversight, he'd like the department to collect state-performance data and post it online. "Ultimately, **if the feds are writing these checks, what comes with that is the responsibility to report on what use that money is being put to**," Mead said in an interview. "Who are the stellar performers, and **where are we having serious problems**?" **Gannett** **filed** Freedom of Information **requests to get construction costs for 21 federally funded highway projects across the U.S. None was a major project. About half wrapped up within 5 percent of the original contract. Others had significant cost overruns, delays or both**: Reconstruction of **Interstate 287** in Westchester County, N.Y., **is two years behind schedule and $78million, or 14.4 percent, over budget**. **Construction so far has cost taxpayers more than $72million per mile**. In Louisiana, roughly **eight miles of a 36-mile project to extend I-49 north from Shreveport have cost $96million, 9 percent over budget**. **Overruns include a $2.5million mistake calculating how much dirt would have to be removed**. The highway abruptly ends at the Arkansas line with no connector until at least late 2014. **Two projects**, one ongoing, **to rehabilitate 18 miles of I-295 in southern New Jersey are a combined $22million over budget, or about 15 percent**. **Project managers underestimated the asphalt and other materials needed and didn't factor in reconstructing a bridge deck**. **Work on 26 miles of U.S. 30 in central Ohio was completed in 2008, nearly a year late and $12.8million over budget, or about 13 percent**. The day before groundbreaking, $700,000 was added because the cost of replacing any wetlands destroyed during construction wasn't included. **Redesigning bridge piers added $595,000**. A **new freeway south of Reno, expected to be complete in June 2012, six months late, is $32million over budget, or 8 percent**. More than half of the extra cost came after the contractor discovered that rock it had hoped to crush for road material was unsuitable. The Federal Highway Administration concluded that the state failed to adequately study the area's geology, but **the federal agency still covered 90 percent of the added cost**. **Three phases of a project to widen 10 miles of I-10 in Tallahassee, Fla., came in a combined 9 percent over budget.** Of the $14.1million in construction overruns, nearly $1million was because the amount of unsuitable soil that had to be removed turned out to be 26 times higher than initially thought. The state-centric approach to managing most federally funded highway projects could take on added significance as those federal dollars need to be stretched. **The Highway Trust Fund's main source of revenue is the federal gas tax**, which hasn't been raised from 18.4 cents per gallon since 1993. **The fund cannot meet the growing demand**, the Transportation Department's inspector general has said. An analysis done earlier this year for the American Association of State Highway and Transportation Officials found **slightly more than half of state contracts ran over budget and 45 percent finished late**. The study looked at contracts from 2001 to 2010 in 39 states that volunteered to participate. **The worst-performing state**, which was not identified, **finished only 13 percent of its highway contracts on budget.** Georgia, Texas and California completed as much as 85 percent of contracts at or below budget, according to the analysis. The report said **high-performing states share common practices: They spend more time analyzing costs, identifying potential risks and tracking progress**. The Federal Highway Administration encourages states to adopt such proven practices but does not require them to do so. "As long as state departments of transportation work within the law, FHWA does not have the authority to mandate that states adopt specific best practices," King Gee, associate administrator of the agency's Office of Infrastructure, said in a statement. "States manage these programs -- not the federal government." The **Federal Highway Administration also can't withhold money from poor performers; federal highway funds are distributed to states based on a formula. Project overruns are paid out of that state's allocation**. The American Association of State Highway and Transportation Officials shares best practices but argues each state has unique climate, terrain and laws. "None of us are afraid of measuring our performance," said association President Kirk Steudle, who is Michigan's transportation director. "We are concerned about a national one-size-fits-all measurement that doesn't fit all." In response to Boston's Big Dig, Congress required states to submit and annually update detailed project management and finance plans for "major projects," defined as more than $500million. Of 30 active major projects with cost and schedule updates, slightly more than half have had cost increases and two-thirds anticipate delays, a Gannett review of federal data found. But some projects that might qualify to be on the major-projects list are not. The Federal Highway Administration considers New York's 8.6-mile project on I-287, at $621million for construction and counting, "a collection of projects," so it doesn't rate the extra scrutiny. An investigation by the Journal News in White Plains, N.Y., revealed **that I-287 work repeatedly went over budget and past deadline because of poor planning and lax oversight.** **The contract for one phase was changed more than 70 times**. After an independent probe, Gov. Andrew Cuomo in November called for sweeping changes in the way the state designs, contracts and oversees New York's publicly funded construction. **Also not on the Federal Highway Administration's major-projects list: a 36-mile extension of Interstate 49 in Louisiana, estimated at $622million. Federal officials say the I-49 work was divided into 11 separate segments, each costing under $100million.**

## Solvency: (Port Dredging)

#### The Army Corps of Engineers uses false data, faulty analyses, and political biases that lead to useless projects with huge cost overruns

**Edwards 9 – director of tax policy studies at Cato, former senior economist on the congressional Joint Economic Committee (Chris, “Cutting the Army Corps of Engineers” Cato Institute, March 2012,** [**http://www.downsizinggovernment.org/usace)//ctc**](http://www.downsizinggovernment.org/government-cost-overruns%29//ctc)

**The Corps has been greatly mismanaged over the decades, with problems ranging from frequent cost overruns on projects to the major engineering failures** that contributed to the disaster of Hurricane Katrina. In addition, **the dominance of special-interest politics on the agency's activities has resulted in it supporting many wasteful projects**. Fortunately, most of the Corps' activities do not need to be carried out by the federal government. Some of its activities—such as flood control and the management of recreational areas—should be turned over to state and local governments. Other activities—such as seaport dredging and hydropower generation—should be turned over to the private sector. This essay focuses on cutting the Corps' spending activities, and does not address the calls for reforming the agency's regulatory functions.3 The following sections look at the history of the Army Corps, the pork-barrel nature of its spending, its legacy of mismanagement, and its role in Hurricane Katrina. The essay concludes that the bulk of the agency's civilian activities and assets should be privatized or transferred to state and local governments. The remaining activities of the Corps that are truly federal in nature should be transferred to the Department of the Interior. The civilian side of the Army Corps should be closed down. Two Centuries of Mission Creep The U.S. military has needed engineering services since General George Washington sought French engineers to help him prosecute the Revolutionary War.4 In 1802 Congress created a separate and permanent Army Corps of Engineers focused on military support activities. However, as the 19th century progressed, the Corps became increasingly involved in civilian activities, such as river navigation and flood control. One activity led to the next, and today's sprawling Army Corps is the result of two centuries of mission creep. As an engineering-based agency, the Corps has had a pro-construction mentality since the beginning. It has always been eager to expand its budget and build new structures. At the same time, members of Congress have been eager to have the Corps tackle projects in their states and districts, especially those members from states that have major rivers, seaports, and other water resources. In 1824 the Supreme Court decision in Gibbons v. Ogden gave the green light to federal involvement in river navigation activities. The same year, Congress provided $75,000 to the Corps to improve navigation on the Ohio and Mississippi Rivers, and it also gave the Corps a role in civilian surveying activities.5 However, there have been concerns about the efficiency of the Corps' civilian activities since the beginning. In 1836 the House Ways and Means Committee called for reform because it discovered that at least 25 of the agency's projects were overbudget.6 Nonetheless, Congress kept expanding the Corps' civilian activities, and by 1882 the agency was spending $19 million annually on 371 separate projects.7 A number of congressional acts beginning in 1850 directed the Corps to aid with flood control on the Mississippi River. In 1861 an influential report set the Corps on a misguided "levees only" flood-control strategy.8 Repeated floods in subsequent decades that broke through levees did not deter the Corps from its strategy.9 After damaging floods in the early 20th century, Congress passed the Flood Control Act of 1917, which further expanded the Corps' levee-construction activities along major rivers. In 1927 one of the most damaging floods in U.S. history occurred when the Mississippi River and its tributaries broke out of extensive levee systems in many places. The flood dramatically illustrated the failure of the Corps' single-minded approach to flood control that focused on building levees. In annual reports leading up to the disastrous 1927 flood, the Corps had confidently told Congress that the Mississippi was safe from serious flooding.10 After the flood, Editorial Research Reports noted that many experts thought that the "levees only" policy was unwise, but the Corps still resisted reforms. In a 1927 story the news service said: "After each flood there has been sharp criticism of the policy of placing sole reliance on the levee system, but the Army engineers heretofore have always successfully defended their position before Congress."11 The Corps did adjust its strategy somewhat, but the scope of its construction increased under flood control acts of 1928 and later years. The agency had failed, but its budget was greatly boosted.12 Journalist Michael Grunwald noted of the "levees only" approach that worsened the 1927 flood: "Congress rewarded this failure by allowing the Corps to seize control of the entire river and its tributaries, an unprecedented big government project that foreshadowed the New Deal."13 During the 1930s, huge flood control projects were embraced as a way to create jobs, and the Corps—along with other federal agencies—spearheaded efforts to drain wetlands across the nation.14 In his classic book about federal water infrastructure, Cadillac Desert, Marc Reisner said that the Corps has "ruined more wetlands than anyone in history, except perhaps its counterpart in the Soviet Union."15 The Corps' efforts to dam rivers for flood control led to its involvement in hydroelectric power. At the beginning of the 20th century, a political battle was waged over private versus government development of hydropower. At first, the Army Corps teamed with private power companies to build plants at its dam sites. But in the 1920s Congress authorized the Corps to start building its own plants, and by the 1930s huge federal power projects were being pursued, such as Bonneville Dam in Oregon. Once the Corps was building dams and reservoirs, the next step was to build and operate recreation sites near its facilities, which Congress authorized it to do in legislation of 1944 and later years. Today, the Corps operates more than 4,200 recreation areas across the nation.16 The Corps has a history of supporting environmentally damaging projects, although it has tried to adopt a "green" image in recent years. Since 1992 the agency has expanded into municipal water supply and wastewater treatment facilities, and 400 such projects have been authorized to date.17 In 2000 the Corps helped launch an almost $8 billion effort to fix the Florida Everglades—a project that is needed in part because of the damage done by the Corps' own infrastructure in prior decades.18 For example, taxpayers paid for the Corps to straighten Florida's Kissimmee River in the 1960s, but that project was later determined to have been misguided. So today taxpayers are paying for the Corps to restore the Kissimmee River's original meandering course.19 Bad environmental decisions by the Corps have thus cost federal taxpayers doubly. While the Corps is part of the executive branch of government, the president has often had little control over its activities. The Corps has usually taken orders directly from Congress, and particularly from those members who have their hands on the agency's purse strings. For decades, presidents have complained about their lack of control over the Corps, and some have even tried to cancel its most wasteful projects. President Jimmy Carter famously tried to save taxpayer money and stop 19 environmentally damaging water resource projects in the 1970s. He wanted to "get the Corps of Engineers out of the dam-building business," but he misplayed the politics of the issue and Congress was "swift and angry" in blocking Carter's proposals.20 President Ronald Reagan's reform efforts were a bit more successful. He pushed to increase local cost-sharing for Corps' projects, and that reform passed in 1986. The reform increased "the price of pork" for project supporters, which marginally reduced the incentive for local interests to lobby for federal subsidies.21 President Bill Clinton tried to cut wasteful Corps' projects, but big-spending Republicans in Congress helped to block his efforts.22 President George W. Bush had some success at canceling wasteful Corps' projects, but a 2007 authorization bill for the agency was passed over his veto.23 Occasionally, **the Corps has tried to save money by making its operations more efficient**, such as by closing down some of its district offices. However, **Congress has usually blocked such cost-saving efforts**.24 Similarly, **members of Congress usually block efforts to close unneeded post offices or farm offices in their districts.** Such congressional parochialism is one reason why the government can never operate as efficiently as a private business. A Pork-Barrel Machine **The decentralized and congressionally dominated structure of the Army Corps has made it an unparalleled pork-barrel machine**. Virtually **all the agency's construction budget is "earmarked" for individual projects in particular states**. **Politics dominates any rational process of trying to fund only those projects that have high returns. Taxpayer money is often directed to low-value projects in the districts of powerful politicians, not to those projects that make the most economic sense**. While Corps' projects are supposed to be based on detailed economic and environmental analyses**, political pull often determines the agency's priorities**. In an investigation of the Corps in 2003, the Washington Post noted that "**powerful members of Congress dictate the selection, pace, and price tag for major projects**."25 While levee upgrades in central New Orleans were stalled prior to Hurricane Katrina, dubious projects elsewhere in Louisiana and other states moved ahead. Leading lawmakers have long used the Corps as a tool to aid farm businesses, shipping companies, barge firms, developers, and other businesses in their states. An observer of the Corps in 1952 noted that **the agency makes alliances between local businesses and "two or three congressional committee chairmen. Together they drive through the Congress whatever proposals they wish, irrespective of the public interest**."26 In recent years, many of the champions of dubious Corps' projects have been Republicans, including Sen. Thad Cochran (R-MS) and former senators Trent Lott (R-MS) and Christopher Bond (R-MO).27 **The Corps' decentralized structure**, which has been in place since 1893, **encourages pork-barrel spending**.28 The structure consists of headquarters, eight regional divisions, and 38 local district offices, which plan, construct, and maintain projects. **Members of Congress and local interest groups are plugged into the projects of their particular offices, and they resist any cuts to them**. Political scientist Melvin Dubnick noted that the Corps' "civil works management structure created a unique situation where political responsiveness was nurtured and constantly reinforced."29 A 2004 report by Taxpayers for Common Sense and the National Wildlife Federation described an "iron triangle" of interests between the Corps, members of Congress, and local special interests.30 The upshot is that **the Corps' funding of infrastructure is often misallocated**. State and local officials could better balance the costs and benefits of the Corps' local projects if their own taxpayers were paying the bills. Federal involvement in local infrastructure also creates a lack of accountability. For example, all three levels of government had responsibility for elements of flood control and hurricane response in New Orleans, but none of them had properly prepared for the disaster of Hurricane Katrina in 2005. A Legacy of Mismanagement The Army Corps has built some impressive structures, such as the Washington Monument and the Panama Canal. But **the agency's projects have been prone to large cost overruns, and they have often not produced the large benefits promised**. Some **projects have suffered from major failures**, such as the levee system in New Orleans, **while other projects have damaged the environment**. These sorts of problems started in the 19th century. Melvin Dubnick notes that in the post–Civil War period, "the wastefulness and mismanagement of Corps' operations were the subject of many articles in the professional and popular press of the time, and a growing list of fiascoes was being used by the agency's enemies to challenge its effort to develop a more comprehensive civil works program."31 In 1951 Arthur Maass wrote an influential book about the Army Corps, Muddy Waters, which detailed the agency's politically driven decisions and poor planning processes.32 In the forward to the book, former secretary of the Interior, Harold Ickes, said, "no more lawless or irresponsible federal group than the Corps of Army Engineers has ever attempted to operate in the United States, either inside or outside the law."33 The opinion of Ickes was harsh, but it reflected a common view that the Corps was outside of presidential control and working for special interests at the expense of the general public. A 1971 book by Arthur Morgan, Dams and other Disasters, was even more critical. The book rips into the Corps for its arrogant and damaging mismanagement. Morgan found that "**there have been over the past 100 years consistent and disastrous failures by the Corps in public works areas . . . result[ing] in enormous and unnecessary costs to ecology [and] the taxpayer**."34 Morgan was a former chairman of the Tennessee Valley Authority and a highly distinguished engineer, who had worked on water resource issues for decades. In his book, he documents how **the Corps—with a bullheaded mentality—consistently underestimated the costs of its projects, followed shoddy engineering practices, treated Native American tribes poorly, lied to the public, hid information, pursued environmentally damaging projects, and demonized its enemies in order to silence dissent**. Some of these charges still ring true. The nation was reacquainted with the Corps' shoddy engineering with the tragic failure of the levees in New Orleans during Hurricane Katrina. In recent years, **the Corps has hidden information from the public, and has been caught distorting economic analyses to justify wasteful projects**. **Because of its pro-construction mindset, the Corps continues to pursue projects that would damage the environment and produce limited economic benefits**. In recent decades, for example, "**the Corps has channelized dozens of rivers for barges that never arrived**."35 These longstanding problems are the result both of the agency's pro-building culture and congressional politics. **The ad hoc way that the agency's projects are funded creates further problems**. New projects are typically authorized in Water Resources Development Acts, which are passed every few years. The last of such acts was enacted in 2007 over a veto by President George W. Bush.36 After authorization, each project included may or may not receive funding a year at a time in annual appropriations bills. The problem is that **Congress has crammed far too many projects into the Corps' pipeline, with the result that progress on each project is slow and erratic**. For example, **Congress has authorized more than 400 municipal water and sewer projects for the Corps, with a total price tag of more than $5 billion. However, only about $140 million or so is actually appropriated for these projects each year**.37 The slow progress of Corps' projects contrasts with private sector construction projects, which are built as quickly as possible to hold down costs. A Government Accountability Office report on the Corps found that "**funding projects in increments hinders project efficiency by increasing costs and timelines.**"38 One Corps' official told the GAO, "**this is one of the reasons that a civil works project takes 20 years to execute**, instead of 3 if we were fully funded from the start."39 **The Corps currently has a backlog of more than 1,000 feasibility studies and construction projects worth more than $80 billion that have been authorized but not funded**.40 The Corps is an engineering and construction organization, and in our economy such activities are usually carried out by private businesses. **The Corps** has never been run like a private business—it **doesn't have an efficient structure, it doesn't pursue the highest-return projects, and it doesn't construct projects quickly and efficiently**. Former Senate majority leader Tom Daschle (D-SD) said the Corps is "one of the most incompetent and inept organizations in all the federal government."41 The good news is that we don't need a civilian Army Corps organization because most of its functions could be carried out by state and local governments and the private sector. Wasteful Projects and Faulty Analyses **The Army Corps is supposed to do a careful and detailed analysis of proposed projects to ensure that the benefits will outweigh the costs.** However, **the Corps has often pursued projects based on analyses that were theoretically flawed, had faulty data, or had been deliberately manipulated**. **The costs of projects are often underestimated and the benefits overestimated**. The Corps does the analyses of proposed projects that it will build itself, thus it usually favors big and expensive projects.42 The Pentagon's inspector general found that the Corps has a "systemic bias" towards large-scale construction.43 A number of years ago, a series of leaked internal memos by Corps' leaders revealed a strategy to "get creative" in accounting in order to "get to yes as fast as possible" on proposed projects.44 The bias in the agency's analyses has been a problem for decades. In a 1952 book, Sen. Paul Douglas (D-IL) noted that **the Corps has "never been restrained in estimating the benefits which will result from their projects and . . . in recent years [has] greatly underestimated the costs**."45 As governor of Georgia in the 1970s, Jimmy **Carter complained of "computational manipulation" and dishonesty by the Corps** regarding a proposed dam in his state.46 Arthur **Morgan's** 1971 **book provides many examples of how the Corps provided faulty analyses over many decades**.47 He concludes that "**many of the Corps' projects cost two or more times the amount of the first estimates**."48 He quotes House Appropriations chairman Clarence Cannon in 1959 saying that the Corps was either "incompetent or deliberately misleading" Congress with its routinely faulty cost estimates.49 Corps' managers and analysts are encouraged to "get to yes" by the local interests that benefit from projects and by their congressional sponsors. Over the decades, the Corps has proactively searched the nation looking for places to pour concrete.50 **The consequence of the agency's eagerness to build and the political pressure to spend is the construction of numerous white elephant projects.**51 Journalist Michael Grunwald notes that i**nvestigations "have repeatedly caught the Corps skewing its analyses to justify wasteful and destructive projects that keep its employees busy and its congressional patrons happy**."52 A 2006 Government Accountability Office report found that the analyses supporting a number of **Corps' projects were "fraught with errors, mistakes and miscalculations, and used invalid assumptions and outdated data**."53 Furthermore, the GAO report found that "the Corps' analyses often understated costs and overstated benefits."54 **Studies for inland waterway projects**, for example, **have used inflated barge traffic projections to justify approval**. In 2002 the GAO lambasted a Corps' study justifying a $332 million project to deepen a ship channel in the Delaware River. It said that **the study "was based on miscalculations, invalid assumptions, and outdated information**."55 The GAO found that "the project benefits for which there is credible support would be about $13.3 million a year, as compared to the $40.1 million a year claimed" by the Corps.56

## Solvency (Title XI)

#### Shipyards are plagued by cost overruns and delays – kills solvency because shipyards inevitably close

**Hansen 2012 – President of the Hawaii Shippers Council (Mike, “Billion Dollar Cost Overrun Shows US Shipyards Failing Navy and Commerce” Hawaii Free Press, January 16, 2012, http://www.hawaiifreepress.com/ArticlesMain/tabid/56/articleType/ArticleView/articleId/5886/Billion-Dollar-Cost-Overrun-Shows-US-Shipyards-Failing-Navy-and-Commerce.aspx)//ctc**

Reports from Reuters news agency of a billion dollars in cost overruns on construction of the USS Gerald Ford aircraft carrier at Huntington Ingalls Industries Inc. (HII) demonstrates how uncompetitive major U.S. shipbuilding yards have become under the protectionist shield of the Jones Act. Noncontiguous domestic jurisdictions of the United States – Alaska, Guam, Hawaii and Puerto Rico – depend upon these yards for large commercial ship construction. HII was formerly Northrop Grumman Shipbuilding, a division of Northrop Grumman Corporation, a major U.S. defense contractor. Grumman spun-off their shipbuilding division and it became an independent company on 03/04/2011 and is listed on the NYSE (HII.N). HII owns and operates three of the eight major U.S. shipbuilding yards as follows: Newport News Shipbuilding, Newport News, Virginia, specialize in aircraft carriers known as CVNs (carrier vessel nuclear) and attack submarines – last commercial ship delivered 06/21/1999. Avondale Shipyards, New Orleans, Louisiana, specialize in building large naval amphibian warships known as LPDs (landing platform dock) – last commercial ship delivered 06/29/2006. Ingalls Shipyards, Pascagoula, Mississippi, specialize in building large naval amphibian warships known as LPDs (landing platform dock) – last commercial ship delivered 03/04/1974. HII is scheduled to close their Avondale Shipyards in 2013 due to a lack of naval work and poor performance at the yard including missing delivery dates, cost overruns and faulty work. In fact, the LPD program building amphibious assault ships for the Navy at Avondale and Ingalls has been fraught with problems. Their Newport News yard builds nuclear aircraft carriers and has also encountered problems, but they have not been nearly as serious as with the other two yards and Newport News remains profitable. Although all three HII yards have built large commercial ships in the past, they only build naval ships today. Closure of the HII Avondale yard will reduce the number of major U.S. shipbuilding yards capable of building large deep draft self-propelled ships from 8 to 7 shipyards. Of the 7 remaining major shipbuilding yards, only three are accepting orders for large commercial ships and of the three only two are currently building commercial ships. Problems include missed delivery dates and cost overruns that even the U.S. Navy can no longer accept. These problems lead to the HII shipyards to exit the commercial shipbuilding market, because private ship owners do not have the resources to withstand these conditions as does the U.S. Government. This situation has made it very difficult for shipping operators in the noncontiguous trades of the United States to replace their ageing and inefficient ships with U.S.-built ships as required by the Jones Act because of very high costs and cumbersome contracting practices of the major U.S. shipbuilding yards.

## Solvency (Roads)

#### Project management for roads needed to align road construction—FHWA management unchanged for 40 years

**Foster 8**, member of the Intellectual Property Department, in the IP Opinion and Prosecution Practice Group at the dinsmore Security Deprment, (Eric, USING GEOGRAPHIC INFORMATION SYSTEMS TO DETERMINE STREET, ROAD, AND HIGHWAY FUNCTIONAL CLASSIFICATION ACCURACY, Northwest Missouri State University, March 2008, Google Scholar)//AG

Federal Highway Administration (**FHWA) functional classification of streets, roads, and highways** **reaches into many processes of highway planning**, design, and management. The **classification system has not been updated in forty years.** **Many issues with its definition and use, such as propagated error, bias, and ambiguity are discussed as well as the ramifications on the Highway Performance Monitoring System** (HPMS). Travel demand modeling relates to functional class in that the data used and derived from models are the same as the data used to define functional classification. Trip length, trip purpose, traffic volume, and vehicle miles traveled (VMT) all have bearing on functional class. Design criteria are tied closely to functional classification, as is funding eligibility. **The functional classification system is in need of redevelopment, as shown by the results of this comparison** of observed and prescribed criteria. GIS and travel demand model data was used to examine average daily VMT and minimum horizontal curve radius values for segments in the Kansas City metropolitan area. Statistical Chi Square tests were used to attempt to show a significant difference exists between measured, observed values and prescribed, expected values, and potential sources of error are discussed. **Samples from the Kansas City urbanized area show** that a significant **difference exists for average daily VMT**, which supports a call for better definition and procedures **regarding the FHWA functional classification system. Better definition and procedures will result in better decision making for the ailing U.S. transportation infrastructure.**

## Solvency (Roads/TI)

#### Specific LCCA would publicize and elevant cradle-to-grave project cost factors in TI

**Cement Americas 2**, Journal which provides comprehensive coverage of the North and South American cement markets from raw material extraction to delivery and tranportation to end user, (Cement Americas, CAMPAIGN ADVANCES LIFE-CYCLE BUDGETING IN INFRASTRUCTURE POLICY, Cement Americas, July/August 2011, AG)//AG

A two-week print and online Portland Cement Association ad campaign, themed "**What Are the Real Costs" and targeted to political and policy opinion leaders** in Washington, D. C, **aims to elevate cradle-to-grave project cost factors in transportation** and **infrastructure funding**. The ads appeared through July 1 in Rollcall and CQ Daily print editions and in Rollcall, National Journal, and Engineering News-Record online, **directing readers and site visitors to Whataretherealcosts.org**. **The website encourages support of the new Fiscal Accountability and Transparency in Infrastructure Spending Act**, **and references the life-cycle cost analysis (LCCA) key to research at the Massachusetts Institute of Technology-hosted Concrete Sustainability Hub**. The **legislation would require the use of a comprehensive LCCA** **of at least 50 years to account for infrastructure projects' full costs**; sponsored by Sen. David Vitter (R-LA), it dovetails federal construction interests' attempt to advance a six-year highway bill in a highly partisan Congress grappling with budget deficits and the national debt ceiling.

#### LCCA would increase transparency, cost efficiency, and solve the deficit

**Braden 11**, Economic and Energy analysis at Reuters, (Laura, Congress Should Support the Fiscal Accountability and Transparency in Infrastructure Spending Act, Reuters, Friday, March 18, 2011,http://www.reuters.com/article/2011/03/18/idUS175325+18-Mar-2011+PRN20110318)//AG

Senator David **Vitter** (R-LA) **introduced legislation this week that would require a comprehensive life-cycle cost analysis (LCCA) to be conducted for major infrastructure projects that receive at least $5 million** in federal funding. **This is great news for American taxpayers because it will drive down costs, maximize efficiency, and maximize taxpayer dollars.** It's also great news for supporters of smart infrastructure investment because it will help fund more projects and ensure that we're building infrastructure to last. This **bill couldn't come at a better time - wasteful federal spending is out of control and much of our nation's infrastructure is crumbling. We have roads over 60 years old and a highway system that was built for a country of 150 million Americans** (now trying to support 300 million). In a press release announcing the introduction of the legislation, Senator Vitter said, "the status quo of only looking at the initial cost of our nation's infrastructure projects is simply not acceptable... We need to cut government spending, but cutting programs isn't enough. **We need to spend taxpayer dollars more efficiently on infrastructure projects and we need to be honest about long-term costs**." (View the full press release at http://vitter.senate.gov/public/index.cfm?FuseAction=PressRoom.PressReleases&ContentRecord\_id=c57e47e6-0a92-199f-8e92-63e051354d85) Here are the specifics of the Fiscal Accountability and Transparency in Infrastructure Spending Act: **Requires an LCCA of at least 50 years for major infrastructure projects. Results of LCCAs must be published online within 72 hours to give taxpayers a transparent look at the real costs of projects. Roads and highways are to be built with real world conditions in mind, utilizing AASHTO's Mechanistic Empirical Pavement Design Guide (MEPDG), which allows engineers to input local conditions** (like traffic and weather) into their designs. **This prevents roads from being overdesigned and has already saved millions in limited use** at the state DOT level. And officials are encouraged to use alternate design and bidding processes to increase competition and decrease costs. This approach has spurred innovative designs and driven down costs across several states.

#### LCCA partners with the Office of Management and Budget to issue a public circular—this is the actual bill text

**112th Congress**, Legislative branch of the United states Federal Government, (Congress, S. 615, 112th Congress: First Session, March 17, 201,http://www.gpo.gov/fdsys/pkg/BILLS-112s615is/pdf/BILLS-112s615is.pdf)//AG

SEC. 3. LIFE-CYCLE COST ANALYSIS. (a) Requirement To Obtain Life-Cycle Cost Analysis- **Not later than 1 year after the date of the enactment of this Act, each agency shall obtain a life-cycle cost analysis based on the standards developed by the Office of Management and Budget pursuant to subsection (c) for each major infrastructure project prior to obligating funds**. (b) Sources of Life-Cycle Cost Analysis- The **life-cycle cost analysis required under subsection (a) may be obtained from State or local governments, or private sector entitie**s. (c) Guidance(1) DEVELOPMENT- **Not later than 6 months after the date of the enactment of this Act, the Director of the Office of Management and Budget**, in consultation with the American Association of State Highway and Transportation Officials, **shall issue a circular that provides guidance to agencies on implementing the requirements** under subsection (a). (2) REQUIREMENTS- In developing the circular required under paragraph (1), the Director shall-(A) provide the public with notice and opportunity to comment before issuing the circular; (B) consider the principles contained in section 2 of Executive Order 12893, `**Principles for Federal Infrastructure Investments'** (January 31, 1994; 59 Fed. Reg. 4233); and **(C) require that any analysis obtained pursuant to subsection** (a)-(i) **be conducted over at least a 50-year valuation perio**d; and (**ii) use actual material life and maintenance cost data.** (d) **Transparency- Any life-cycle analysis obtained by an agency pursuant to subsection (a) shall be posted on the agency's Web site not later than 72 hours after it is received.**

### Solvency: Block Grants

#### Establishing penalties for cost-overruns is CRITICAL – the possibility of eliminating the plan is necessary to establish accountability – REGARDLESS of who implements the plan

**Flyvbjerg 2k9**

**(Bent, professor of planning at Aalborg University, Denmark. He is founder and director of the university’s research program on large-scale infrastructure planning, “Survival of the unfittest: why the worst infrastructure gets built—and what we can do about it,” Oxford Review of Economic Policy, Volume 25, Number 3, 2009, pp.344–367, pg online @** [**http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf**](http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf) **//um-ef)**

(i) Transparency and public control In order to achieve accountability through transparency and public control, the following would be required as practices embedded in the relevant institutions (the full argument for the measures may be found in Flyvbjerg et al. (2003, chs 9–11)). National-level government should not offer discretionary grants to local agencies for the sole purpose of building a specific type of project (a.k.a. ‘categorical grants’). Such grants create perverse incentives. Instead, national government should simply offer ‘block grants’ to local governments, and let local political officials spend the funds however they choose to, but make sure that every dollar they spend on one type of project reduces their ability to fund another. Cost–benefit analysis and other types of ex ante appraisal should be shifted from promoters to more neutral ground, for instance with the Treasury, in order to reduce risks of agency problems. Forecasts and business cases should bemade subject to independent peer review.Where projects involve large amounts of government funds, such review may be carried out by national or state auditing offices, such as the General Accounting Office in the USA or the National Audit Office in the UK, who have the independence and expertise to produce such reviews. Forecasts should be benchmarked against comparable forecasts, for instance using reference class forecasting as described in the previous section. For publicly funded projects, forecasts, peer reviews, and benchmarkings should be made available for public scrutiny, including by the media, as they are produced, including all relevant documentation. Public hearings, citizen juries, and the like should be organized to allow stakeholders and civil society to voice criticism and support of forecasts. Knowledge generated in this way should be integrated in project management and decision-making. Scientific and professional conferences should be organized where forecasters would present and defend their forecasts in the face of colleagues’ scrutiny and criticism. Projects with inflated benefit–cost ratios should be reconsidered and stopped if recalculated costs and benefits do not warrant implementation. Projects with realistic estimates of benefits and costs should be rewarded. Professional and occasionally even criminal penalties should be enforced for managers and forecasters who consistently and foreseeably produce deceptive forecasts (Garett and Wachs, 1996). When I first began suggesting, in lectures for project managers, promoters, and forecasters, that deception and criminal penalties may be concepts relevant to our professions, I would get headshakes, sighs, and the occasional boo. Enron and Iraq changed that, almost overnight. Today people listen and the literature has become replete with books and articles that hammer out the links between lying, forecasting, and management. For instance, a recent book about risk, the planning fallacy, and strategic misrepresentation bluntly states: ‘Anyone who causes harm by forecasting should be treated as either a fool or a liar. Some forecasters cause more damage to society than criminals’ (Taleb, 2007, p. 163). Law-making has followed suit, most prominently with the 2002 Sarbanes–Oxley Act, which stipulates up to 20 years in prison for a knowingly false forecast intended to impede, obstruct, or influence the proper administration of affairs. There is little doubt that penalties like this influence behaviour. The point is that malpractice in project management should be taken as seriously as it is in other professions, e.g. medicine and law. Failing to do this amounts to not taking the profession of project management seriously. (ii) Competition and market control In order to achieve accountability via competition and market control, the following would be required, again as practices that are both embedded in and enforced by the relevant institutions. The decision to go ahead with a major infrastructure project should, where at all possible, be made contingent on the willingness of private financiers to participate without a sovereign guarantee for at least one-third of the total capital needs.7 This should be required whether projects pass the market test or not—that is, whether projects are subsidized or not or provided for social justice reasons or not. Private lenders, shareholders, and stock-market analysts would produce their own forecasts or conduct due diligence for existing ones. If they were wrong about the forecasts, they and their organizations would be hurt. The result would be added pressure to produce realistic forecasts and reduced risk to the taxpayer. Forecasters and their organizations must share financial responsibility for covering cost overruns and benefit shortfalls resulting from misrepresentation and bias in forecasting. The participation of risk capital would not mean that government reduces control of major infrastructure projects. On the contrary, it means that government can more effectively play the role it should be playing, namely as the ordinary citizen’s guarantor for ensuring concerns about safety, environment, risk, and a proper use of public funds. Whether infrastructure projects are public, private, or public–private, they should be vested in one and only one project organization with a strong governance framework and strong contract-writing skills. The project organization may be a company or not, public or private, or a mixture. What is important is that this organization has the capacity to (i) set up and negotiate contracts that will effectively safeguard its interests, including in equity risk allocation, and (ii) enforce accountability vis-`a-vis contractors, operators, etc. In turn, the directors of the organizationmust be held accountable for any cost overruns, benefit shortfalls, faulty designs, unmitigated risks, etc. that may occur during project planning, implementation, and operations.

# \*\*\*\*\*Plan’s Condition Key\*\*\*\*\*

## Performance Measures Key

#### Performance measures critical for fiscal responsibility, accountability and national interests

**GAO 2k11** **(Government Accountability Office, “The Federal Approach to Surface Transportation Is Fragmented, Lacks Clear Goals, and Is Not Accountable for Results,” http://www.gao.gov/new.items/d11318sp.pdf**

At the core of this fragmentation is the fact that federal goals and roles for the program are unclear or may conflict with other federal priorities, programs lack links to the performance of the transportation system or of the grantees, and programs do not use the best tools to target investments in transportation to the areas of greatest benefit. For example, the federal government lacks a comprehensive national strategy that defines its role in freight transportation projects, even though enhancing freight mobility is viewed as a top transportation priority. Furthermore, efforts to spur economic development through highway construction may conflict with efforts to improve air quality, and motor fuel taxes that encourage fuel consumption to finance highways may conflict with reducing carbon emissions. The largest highway, transit, and safety grant programs distribute funds through formulas that are typically not linked to performance and, in many cases, have only an indirect relationship to needs. As a result, it is difficult to assess the impact of funding on achieving transportation goals. The federal aid highway program, in particular, distributes about $40 billion a year to the states through complicated formulas that are ultimately overridden by provisions that return federal fuel excise tax revenues to their state of origin. Once DOT apportions funds, states have wide latitude to select their own projects and considerable flexibility to reallocate their funds among highway and transit programs. While these provisions give states the discretion to pursue their own priorities, the provisions may impede the targeting of federal funds toward specific national goals and objectives. To some extent, the federal aid highway program functions as a cash-transfer general-purpose grant program, rather than as a tool for pursuing a cohesive national transportation policy. Actions Needed and Potential Financial or Other Benefits A fundamental re-examination and reform of the nation’s surface transportation policies is needed. Since 2004, GAO has made several recommendations and matters for congressional consideration to address the need for a more goal-oriented approach to surface transportation, introduce greater performance and accountability for results, and break down modal stovepipes. Also, GAO has identified a number of principles that can help guide a fundamental re-examination and reform of the nation’s surface transportation policies that recognizes emerging national and global imperatives—such as reducing the nation’s dependence on foreign fuel sources and minimizing the effect of transportation systems on global climate. These principles include ensuring the federal role is defined based on identified areas of national interest and goals, incorporating accountability for results by entities receiving federal funds, employing the best tools and approaches to emphasize return on targeted federal investment, and ensuring fiscal sustainability. Applying these principles to a re-examination and reform of surface transportation programs would potentially result in a more clearly defined federal role in relation to other levels of government and thus a more targeted federal role focused around evident national interests. Where national interests are less evident—for example, where the economic benefits are more locally focused or there are varying regional preferences—other stakeholders could assume more responsibility, and some functions could potentially be assumed by the states or other levels of government. This would then result in a more streamlined federal program approach and enhance the efficient delivery of programs and services. From the standpoint of state and local governments, re-examination and reform of the federal approach could reduce the administrative expenses states face complying with myriad federal statutory and regulatory requirements. For example, in May 2009, GAO reported that consolidating the application processes for three federal transit programs that provide funding for transportation-disadvantaged populations could reduce the administrative burden for states and transit agencies applying for these funds. However, GAO has reported that estimates from the states on the costs of complying with some federal requirements are not available. Congressional reauthorization of surface transportation programs presents an opportunity to address GAO recommendations and matters for congressional consideration that have not been implemented in large part because the current multiyear authorization for surface transportation programs expired in 2009, and existing programs have been funded since then through temporary extensions. Several reform proposals have been introduced, which indicate that some of GAO’s more recent recommendations and matters for congressional consideration are gaining traction. In its 2008 report, the National Surface Transportation Policy and Revenue Study Commission, established by Congress, recommended that federal surface transportation investments be carefully aligned with defined national interests through a comprehensive performance-based approach. In a bipartisan “blueprint” for reauthorization, the leadership of the House Transportation and Infrastructure Committee proposed redefining the federal role and restructuring programs by consolidating or eliminating more than 75 programs. The American Recovery and Reinvestment Act of 2009 helped break down modal barriers by establishing a $1.5 billion discretionary grant program that placed increased emphasis on integrated solutions to transportation challenges and provided an unprecedented ability for proposed projects that cut across modes of transportation to compete for federal funding

#### More evidence

**Frankel 6/26/12 (Emil H. Frankel, Visiting Scholar, Bipartisan Policy Center, “Certainty in Reforms, As Well As In Time,” pg online @** [**http://transportation.nationaljournal.com/2012/06/why-bother.php#2220989**](http://transportation.nationaljournal.com/2012/06/why-bother.php#2220989) **//um-ef)**

Enactment of surface transortation authorization legislation presents an opportunity to Congress to address fundamental issues of defining national goals and purposes and the federal interest in surface transportation, and of establishing sustainable funding sources for these investments. For the past several years, the Bipartisan Policy Center(BPC), two national commissions, and a broad range of organizations and advocacy groups have called for fundamental reforms in national transportation policy and programs. Such reforms go beyond addressing issues of environmental streamlining and whether or not bikeways and hiking trails should be supported with HTF funds. As BPC has noted, in a time of fiscal crisis and scarce resources, we need to determine how important investment in surface transportation infrastructure is to the nation's economic growth and long-term prosperity, and how we can make better and wiser investment decisions. The values of goals, outcomes, performance, measurement, and accountability should be introduced into the capital investment programs that use federal funds.

## Performance Measures Solve Fraud/Waste

#### Performance measures solve waste—enforces timeliness and cost efficiency

**Deloitte Research 9 (“Effectively managing stimulus funds today, while creating more lasting business value tomorrow A Deloitte Research study,” pg online @** [**http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/us\_ps\_Goingbeyondcompliance\_609.pdf**](http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/us_ps_Goingbeyondcompliance_609.pdf) **//um-ef)**

Another way to create incentives for projects to come in on time and on budget is through performance-based contracting. Most waste and fraud in capital projects results from poor contracting practices: lack of competitive bidding, vaguely deﬁ ned requirements, scope creep, and inadequate capacity to monitor contractor performance, to name just a few. Time and cost overruns, the most common forms of wastes, are particularly pronounced with cost-plus and time-and-materials contracts.

## Establishing Performance and Funding Standards key

#### Establishing performance standards and funding limits key to public and congressional support

**Slone 2k11 (Sean, “Forum Examines How to Change the Conversation to Advance Infrastructure,” pg online @ http://knowledgecenter.csg.org/drupal/content/forum-examines-how-change-conversation-advance-infrastructure,”)**

Gorton: Performance Metrics, Demonstrating Return on Investment Key to Restoring Public Confidence The forum began Thursday night with an address by former U.S. Senator Slade Gorton (R-WA), who is now co-chair of the Bipartisan Policy Center’s National Transportation Policy Project (one of the event’s other co-sponsors). In his remarks, Gorton emphasized the importance of restoring the faith of the American people in government’s ability to make the right choices in meeting infrastructure needs. “The American people remember well the ‘Bridge to Nowhere’—infrastructure as it was—and they are convinced that the stimulus didn’t fulfill its lofty promises,” he said. “So they have a low degree of confidence in the government’s ability to set priorities and to carry out its promises.” Gorton said restoring that confidence and winning support for infrastructure investment will require an emphasis on return on investment and performance metrics at all levels of government. “I believe it is central to our ability to persuade Congress and the American people to support an infrastructure program we deem necessary,” Gorton said. “How do we transform our current unwillingness or inability to measure effectiveness of what we’re doing into an evidentiary and tangible return-focused investment strategy? With so many conflicting demands, data on measuring and understanding performance is absolutely essential for determining highest priorities and ensuring the best returns on the investment of now very scarce dollars.” Gorton also had a couple of other key questions he challenged meeting participants to come up with the answers to. “How do we make fundamental policy choices based on data and evidence rather than on ideology or geography,” he asked. “How do we move from the growing ambiguity of federal, state and private roles to a new federalism and an appropriate reliance on market forces in preserving and upgrading our nation’s critical infrastructure?”

## Performance Measures key

#### Performance metrics key to increase accountability

**BAFEF 2k11 (Building America’s Future Educational Fund (BAF Ed Fund) is a bipartisan coalition of elected officials dedicated to bringing about a new era of U.S. investment in infrastructure that enhances our nation’s prosperity and quality of life. Founded by former Governor Edward Rendell of Pennsylvania, former Governor Arnold Schwarzenegger of California, and Mayor Michael Bloomberg of New York, BAF Ed Fund boasts a politically diverse membership of state and local elected officials from across the nation, “Building America’s Future Falling Apart and Falling Behind,” pg online @** [**http://www.bafuture.com/sites/default/files/Report\_0.pdf**](http://www.bafuture.com/sites/default/files/Report_0.pdf) **//um-ef)**

Increase accountability in the **federal funding** and project delivery **process.** This means including performance metrics in the funding award process; streamlining the project delivery process; **and implementing “use it or lose it” policies.** House Transportation Committee Chair John Mica has proposed a “437-Day Plan”—modeled after the Minneapolis bridge reconstruction slated for three years but completed in 437 days—to serve as a guide for improving project delivery.

## Solvency: Audits

#### Audits should be performed- empirically proven to save millions

**Puentes 11 (Robert is a senior fellow at brookings, Prior to joining Brookings, Robert was the director of infrastructure programs at the Intelligent Transportation Society of America. He holds a master’s degree from the University of Virginia where he served on the Alumni Advisory Board, and is an affiliated professor with Georgetown University's Public Policy Institute. “State Transportation Reform: Cut to Invest in Transportation to Deliver the Next Economy” http://www.brookings.edu/~/media/research/files/papers/2011/2/22%20infrastructure%20puentes/0222\_infrastructure\_puentes.pdf feb 22, 2011) CANOVA**

Governors should order a full audit of their state’s transportation program to ensure it is functioning in the most efficient, effective manner possible. The audit should start with standard (and useful) examinations of the inner workings of transportation departments’ accounting, procurement rules, fleet management, and training. When he took over as Governor of Virginia in January 2010, Bob McDonnell called for an independent assessment of his transportation department’s organizational structure, programs, and operations. His request was approved by the state legislature and in September 2010, the audit found over $600 million in immediate savings due mainly to better contracting and project acceleration. audit of Idaho’s transportation department found over $30 million in one-time savings over five years, and $6 million annually thereafter. But **the audit must go farther, to investigate the entire scope of how transportation investment decisions are made** within a state. For example, how closely aligned are project decisions to a cohesive strategic vision for economic growth? How coordinated are infrastructure projects? **It makes no sense to make efficiency gains in a program that needs a thorough overhaul**. For example, a recent audit of the Texas department of transportation recommended organizational changes intended to diminish the “singular, deeply entrenched culture” of the agency and more emphasis on business and financial management including the use of metrics to determine performance. Governors and legislators should also recognize that the fiscal crisis creates the opportunity to talk about new sources of transportation revenues – including sources that were previously considered politically infeasible.

## Solvency: Performance Measures

#### Counterplan solves—Performance measures spur planning and more sustainable TI

**Zietsman and Rilett 2**, Associate Research Scientist at the Texas Transportation Institute, and the Associate Professor at Texas A&M University, (Josias and Laurence R, SUSTAINABLE TRANSPORTATION: CONCEPTUALIZATION AND PERFORMANCE MEASURES, Southwest Region University Transportation Center—Center for Transportation Research at University of Texas at Austin, March 2002, Google Scholar)//AG

**Performance measures** or indicators **are** very **important in the context of sustainable development** **and** sustainable **transportation**. Agenda 21 of the United Nations Conference on Environment and Development considers the function of performance measures as follows (56): ì **indicators of sustainable development need to be developed to provide** solid **bases for decision-making at all levels** and to contribute to a self-regulating sustainability of integrated environment and development systems.î **Performance measures are broadly used for simplification, quantification, and communication.** They are able to translate data and statistics into succinct information that can be readily understood and used by several groups of people including scientists, administrators, politicians, and the general public (57,58). A **comprehensive performance measure would include measurements of the condition, trends over time, and the share attributed to the different agencies** and/or actors (56). ISTEA **and TEA-21 recognize performance monitoring as a critical part of transportation planning** and have called for a more performance-based approach. This requires that the performance of transportation systems must be quantitatively measured for a variety of modes and criteria (22). Apart from the requirements of legislation, **performance measures can be very powerful planning** and management **tools.** The following are some of the most important uses of **performance measures** (31,59): provide a broad perspective; assess facility or system performance; calibrate models; identify problems; develop and assess improvements; **formulate programs and priorities**; educate a wide range of interest groups; **and set policies**. Although performance measures have a wide range of applications, there are instances where they should not be used, such as to (59): isolate the effects of individual regulations; provide a full economic analysis; define acceptable levels of impact; and set final priorities**. Performance measures** **are**, therefore**, able to provide the decision-maker with the quantitative information necessary to make informed decisions.**

#### Performance measures facilitate better policy action and collaboration

**EPA 11**, Environmental Protection Agency, agency of the United States federal government which was created for the purpose of protecting human health and the environment, (EPA, “Guide to sustainable Transportation Performance”, United States Environmental Protection Agency, August 2011, Google Scholar)//AG

Long-range **transportation planning provides the foundation for all other aspects of transportation decision-making** by establishing the vision and goals for transportation and identifying strategies and project concepts for implementation. The outcome of **long-range transportation planning should be broad-based consensus** and support for the transportation strategies and project concepts that are recommended. **Collaboration with partners** and stakeholders **is essential if these decisions are to be recognized** and built upon during subsequent corridor planning and project development. **Performance measures can be used in several ways during transportation planning. Once a community has established goals and objectives** for the transportation system, **performance measures can be used to explore how different policy and investment packages can help achieve the objectives.** At this visioning stage of the long-range transportation planning process, individual projects are not well defined, and **planners create deliberately distinct policy and investment packages to illustrate the effects of various bundles of policies.** Figure 2 illustrates five alternatives considered in the development of the Puget Sound Regional Council’s (PSRC’s) Transportation 2040 Plan.3

## Non-Process Fails (Roads)

#### Road construction only partly monitored by the Highway Administration—small projects create their own estimates and give them to states

**Hecker 2**, Director of Physical Infrastructure Issues, (Jayetta Z., “ Cost and Oversight Issues on Major Highway and Bridge Projects”, United States Government Accountability Office: Congressional Testimony, May 1, 2002, http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA400929)//AG

**While FHWA approves state transportation plans**, environmental impact assessments, and the acquisition of property for highway projects, its role in approving the design and construction of projects varies. Relatively **few projects are subject to "full" oversight in which FHWA** prescribes design and construction standards, **approves design** plans and **estimates, approves contract awards, inspects construction progress, and renders final acceptance** on projects when they are completed. **Under** the Transportation Equity Act for the 21st Century **(TEA-21),** **FHWA exercises full oversight of certain high-cost Interstate system projects.**4 On projects that are not located on the Interstate system but are part of the National Highway System,5 the states may assume responsibility for overseeing the design and construction of projects unless the state or FHWA determines that this responsibility is not appropriate**. For projects not located on the National Highway System, states are required to assume oversight responsibility** for the design and construction of projects **unless they determine that it is not appropriate** for them to do so. TEA-21 requires FHWA and each state to enter into an agreement documenting the types of projects for which the state will assume these oversight responsibilities. In TEA-21, **Congress required states to submit annual finance plans to DOT for highway and bridge projects estimated to cost $1 billion or more. Congress further required each finance plan to be based on detailed estimates of the cost** to complete the project, and on reasonable assumptions about future increases in such costs.

#### Current oversight fails—FHWA and state department projects empirically have cost overruns

**Hecker 2**, Director of Physical Infrastructure Issues, (Jayetta Z., “ Cost and Oversight Issues on Major Highway and Bridge Projects”, United States Government Accountability Office: Congressional Testimony, May 1, 2002, http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA400929)//AG

Over the past several years, we have identified problems with the costs and oversight of major highway and bridge projects. For example, in our 1997 report on managing the costs of major highway and bridge projects,6 **we reported that overall information on the amount of and reasons for cost increases on major projects was not available because neither FHWA nor state highway departments tracked this** information **over the life of projects**. **In addition, congressional efforts to obtain information had met with limited success.** In September 1994, the **Chairman of the Subcommittee on Oversight of Government Management** and the District of Columbia, Senate Committee on Governmental Affairs, **asked FHWA to identify the 20 active highway projects, estimated to cost $100 million or more, that had experienced the highest percentage cost growth** and to identify the amounts of and the reasons for this cost growth. Lacking consolidated data, **FHWA field officials had to compile this information manually, and** in April 1995, FHWA provided the subcommittee with information on 20 projects in 17 states whose estimated total cost ranged from $205 million to $2.6 billion and whose **cost increases ranged from around 40 percent to around 400 percent**. However FHWA's information on the reasons for cost growth was incomplete and generally unreliable. For example, FHWA was unable to identify reasons for cost growth on 2 of the 20 projects, and the reasons cited for cost growth on a third project included the caveat "wild guess only." **On the projects that FHWA reported the reasons for cost growth, it did so in 74 different categories,** which made a comparative analysis of projects in different states nearly impossible. In contrast to the federal-aid highway program, our 1997 report found that, for acquisitions of major capital assets, the Office of Management and Budget requires federal agencies to prepare baseline cost and schedule estimates and to track and report the acquisitions' cost performance. These requirements apply to programs managed by and acquisitions made by federal agencies, but they do not apply to the federalaid highway program, a federally assisted state program. **While overall data on cost growth were not readily available, costs increased on many of the major highway projects** that we examined for the 1997 report. **For 30 ongoing projects initially estimated to cost over $100 million, the costs increased from the initial estimates on 23 and decreased or remained the same on 7**. **The cost increases ranged from 2 to 211 percent.** In the six states we visited, we found that although many factors can cause costs to increase, several factors worked together to increase costs on the projects we reviewed. **Most cost increases occurred during the design phase,** in part, **because the initial cost estimates were not reliable predictors** of the total costs or financing needs. Rather, these estimates were developed for the environmental review—whose purpose was to compare project alternatives, not to develop reliable cost estimates. In addition, **each state used its own methods to develop its estimates**, and the estimates included different types of costs, since FHWA had no standard requirements for preparing cost estimates. For example, one state we visited included the costs of designing a project in its estimates, while two other states did not. We also found that **costs increased on projects in the states we visited because (1) the initial estimates were modified to reflect more detailed plans and specifications as projects were designed and (2) the projects' costs were affected by**, among other things, **inflation and changes in scope to accommodate economic development** over time.

#### Current highway oversight wrong—projects approved incrementally

**Hecker 2**, Director of Physical Infrastructure Issues, (Jayetta Z., “ Cost and Oversight Issues on Major Highway and Bridge Projects”, United States Government Accountability Office: Congressional Testimony, May 1, 2002, http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA400929)//AG

In addition, we found that **FHWA's project approval process consisted of a series of incremental actions** **that occurred over** the **years** required to plan, design, and build a project. **For many major projects**, **constructed by the state as a series of smaller projects, FHWA approved the estimated cost in segments**, when individual project segments were ready for construction, **rather than agreeing to the total cost of the entire project at the outset**. **By the time FHWA approved the cost of a major project, a public investment decision might effectively have been made because substantial funds would already have been spent on designing the projec**t and acquiring property, **and** many of the **increases** **in** the project's estimated **costs would already have occurred.**

## Non-Process Fails (Urban Mass Transit)

#### Funding commitment problems for urban transit now—cost controls key

**GAO 1**, Investigative arm of Congress charged with examining matters relating to the receipt and payment of public funds, (Government Accountability Office, FTA Could Relieve New Starts Program Funding Constraints, Government Accountability Office Report, August 1, 2001,http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA393335 [Google Scholar])//AG

**FTA reports that it will have limited authority to make funding commitments** to new projects **in** fiscal year **2003**, **if it makes funding commitments to the seven projects in fiscal year 2002 as proposed.** FTA was authorized to make funding commitments of almost $10 billion for the New Starts program for fiscal years 1998 through 2003. According to FTA, it has already committed about $9 billion of this amount. The **funding commitments proposed in** FTA’s fiscal year 2002 **New Starts** **report** and budget request **would reduce its remaining commitment authority by over one-half, leaving FTA with less than $500 million** for new grant agreements in fiscal year 2003. This amount may not be enough to fund all of the projects that will be ready to begin construction in fiscal year 2003. In an effort to conserve commitment authority for future projects, **FTA’s fiscal year 2002 proposal did not allocate New Starts funds for preliminary engineering work** **as it has routinely done in the past. However, FTA could significantly increase the commitment authority available for projects competing for New Starts funds in 2003 by “releasing” amounts reserved for projects** that have been suspended. As of today, **two segments of a New Starts project in Los Angeles have been suspended for over 3 years, and FTA has informed the project’s sponsors that it no longer has funding commitments** for the suspended segments. However, FTA continues to reserve $647 million in commitment authority for the project. “Releasing” this amount for projects competing for New Starts funding would give FTA additional funding flexibility through fiscal year 2003.

## Conditions Key

#### Reform is necessary to make transportation infrastructure projects successful

**National Transportation Policy Project 9 [“Performance Driven: A New Vision for U.S. Transportation Policy”, Bipartisan Policy Center, 6-9-09, javi]**

**National transportation policy has lost direction and a** clear **sense of purpose, threatening substantial costs to our collective prosperity, security, environment, and quality of life.** **We** are **recommend**ing bold and comprehensive **reform founded on a** relatively **simple** **proposition: U.S. transportation policy needs to be more performance-driven**, more directly linked to a set of clearly articulated goals, and more accountable for results. **This is a period of** extraordinary oppor**tunity for revitalizing America’s surface transportation system.** The investments of the interstate-highway era, begun more than 50 years ago, are nearing or beyond their intended lifespan. **Existing systems are dated, in many cases strained to** (or beyond) **capacity, and** increasingly **fall** **short of delivering transportation services** at the level of quality, performance, and efficiency the American public demands. **Current funding mechanisms are not sufficient to maintain existing infrastructure, let alone provide the investments needed to expand and modernize our transportation systems. The broader fiscal outlook**—notwithstanding a near-term burst of stimulus spending—**suggests that public resources will be more constrained** than ever in the years ahead. Meanwhile, **available resources are** typically **distributed without any sense of national priorities, and there is little to no recognition of the link between transportation investments, energy, and climate.** As Congress prepares to debate a new surface transportation authorization bill, **there is growing support for fundamental reform of our nation’s transportation policies**. There is also a growing awareness that our approach to transportation must be responsive to a new set of 21st century challenges, from staying competitive in an increasingly globalized economy, to addressing urgent concerns about energy security and climate change.

#### Federal transportation investment isn’t successful – organization is necessary

**National Transportation Policy Project 9 [“Performance Driven: A New Vision for U.S. Transportation Policy”, Bipartisan Policy Center, 6-9-09, javi]**

**Without clear**ly articulated **goals, it is not surprising that there has been little accountability for the performance of most federal transportation programs** and projects to date. **The result has been an emphasis on revenue sharing** and process, rather than on results. **There is no federal requirement to optimize** “returns” **on public investments, and current programs are not structured to reward positive outcomes**, or even to document them. To remedy these deficiencies, it **is not enough just to have goals**—we also need a set of agreed-upon tools for objectively measuring how a given policy, program, or investment achieves progress toward those goals. **Such tools, or performance metrics, must be fair**, transparent, **and free of bias toward particular transportation** modes or geographic regions. Table 1 summarizes the performance metrics NTPP recommends for measuring performance with respect to each of the goals we identified at the outset (note that metropolitan accessibility and national connectivity are considered as components of economic growth). **Several further points bear emphasizing in a discussion of performance metrics.** First, **the metrics we have proposed, like the goals themselves, must be applied as a complete package, not in isolation.** That means that any **expenditure of federal funds should be targeted towards those investments that maximize benefits among all of these measures and minimize costs.** Second, **the specific metrics we have proposed represent only a starting point**. **They can and should evolve and improve over time to achieve better results**, and **to ensure that federal programs and policies remain fair and relevant**. Finally, **we recognize that substantial efforts will be needed in the area of data quality and data collection to support the rigorous and meaningful application of metrics, and to refine and update them periodically.** However, **the** relative **lack of useful data in transportation reflects the fact that we have never had a performance-based system requiring it.**

# \*\*\*\*\*Net Benefits\*\*\*\*\*

## Plan overstates benefits/understates costs

#### And, there is a FINANCIAL incentive to trump-up the benefits and underestimate the costs – don’t believe the aff hype

**Flyvbjerg 2k9 (Bent, professor of planning at Aalborg University, Denmark. He is founder and director of the university’s research program on large-scale infrastructure planning, “Survival of the unfittest: why the worst infrastructure gets built—and what we can do about it,” Oxford Review of Economic Policy, Volume 25, Number 3, 2009, pp.344–367, pg online @** [**http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf**](http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf) **//um-ef)**

Flyvbjerg and COWI (2004) interviewed public officials, planners, and consultants who had been involved in the development of large UK transportation infrastructure projects. A planner with a local transportation authority is typical of how respondents explained the basic mechanism of cost underestimation: You will often as a planner know the real costs. You know that the budget is too low but it is difficult to pass such a message to the counsellors [politicians] and the private actors. They know that high costs reduce the chances of national funding. Experienced professionals like the interviewee know that outturn costs will be higher than estimated costs, but because of political pressure to secure funding for projects they hold back this knowledge, which is seen as detrimental to the objective of obtaining funding. Similarly, an interviewee explained the basic mechanism of benefit overestimation: The system encourages people to focus on the benefits—because until now there has not been much focus on the quality of risk analysis and the robustness [of projects]. It is therefore important for project promoters to demonstrate all the benefits, also because the project promoters know that their project is up against other projects and competing for scarce resources. Competition between projects and authorities creates political and organizational pressures that in turn create an incentive structure that makes it rational for project promoters to emphasize benefits and de-emphasize costs and risks. A project that looks highly beneficial on paper is more likely to get funded than one that does not. Specialized private consultancy companies are typically engaged to help develop project proposals. In general, the interviewees found that consultants showed high professional standards and integrity. But interviewees also found that consultants appeared to focus on justifying projects rather than critically scrutinizing them. A project manager explained: Most decent consultants will write off obviously bad projects but there is a grey zone and I think many consultants in reality have an incentive to try to prolong the life of projects which means to get them through the business case. It is in line with their need to make a profit. The consultants interviewed confirmed that appraisals often focused more on benefits than on costs. But they said this was at the request of clients and that for specific projects discussed ‘there was an incredible rush to see projects realized’. One typical interviewee saw project approval as ‘passing the test’ and precisely summed up the rules of the game like this: ‘It’s all about passing the test [of project approval]. You are in, when you are in. It means that there is so much focus on showing the project at its best at this stage.’ In sum, the UK study shows that strong interests and strong incentives exist at the projectapproval stage to present projects as favourably as possible—that is, with benefits emphasized and costs and risks de-emphasized. Local authorities, local developers and land owners, local labour unions, local politicians, local officials, local MPs, and consultants all stand to benefit from a project that looks favourable on paper and they have little incentive actively to avoid bias in estimates of benefits, costs, and risks. National bodies, such as certain parts of the Department for Transport and the Ministry of Finance who fund and oversee projects, may have an interest in more realistic appraisals, but so far they have had little success in achieving such realism, although the situation may be changing with the initiatives to curb bias set out in HM Treasury (2003) and UK Department for Transport (2006). Wachs (1986, 1990) found similar results for transit planning in the USA. Taken together, the UK and US studies both account well for existing data on cost underestimation and benefit overestimation. Both studies falsify the notion that in situations with high political and organizational pressure the underestimation of costs and overestimation of benefits is caused by non-intentional technical error or optimism bias. Both studies support the view that in such situations promoters and forecasters intentionally use the following formula in order to secure approval and funding for their projects: underestimated costs + overestimated benefits = funding Using this formula, and thus ‘showing the project at its best’ as one interviewee said above, results in an inverted Darwinism, i.e the survival of the unfittest. It is not the best projects that get implemented, but the projects that look best on paper. And the projects that look best on paper are the projects with the largest cost underestimates and benefit overestimates, other things being equal. But the larger the cost underestimate on paper, the greater the cost overrun in practice. And the larger the overestimate of benefits, the greater the benefit shortfall. Therefore the projects that have been made to look best on paper in this manner become the worst, or unfittest, projects in reality, in the sense that they are the very projects that will encounter most problems during construction and operations in terms of the largest cost overruns, benefit shortfalls, and risks of non-viability. They have been designed like that, as disasters waiting to happen.

#### Turns the entire aff – cost overruns ensure corruption, ineffective stimulus

**Flyvbjerg 2k9 (Bent, professor of planning at Aalborg University, Denmark. He is founder and director of the university’s research program on large-scale infrastructure planning, “Survival of the unfittest: why the worst infrastructure gets built—and what we can do about it,” Oxford Review of Economic Policy, Volume 25, Number 3, 2009, pp.344–367, pg online @** [**http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf**](http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf) **//um-ef)**

In the introduction to this article, I mentioned that current spending on infrastructure constitutes the biggest investment boom in history, measured as share of world GDP. We also saw above that, even in the best of times, large infrastructure investments have a dismal performance record in terms of cost overruns, delays, and benefit shortfalls. Nine out of ten projects experience cost overrun, and overrun has not diminished for the 70 years for which we have data, to mention but two grim statistics. Throwing hundreds of billions of extra stimulus dollars at an underperforming business that is already at bubble-like investment levels, is therefore highly risky at best. Nevertheless, this is what China, the USA, and many other countries decided to do with their stimulus packages in 2008 and 2009. Risks include rampant pork-barrel, fast-tracking, bid-rigging, local governments pulling their funds out of on-going projects in anticipation of national funding that may not come or comes late, and projects left unfinished because of cost overruns on stimulus projects that local government cannot finance. The consequences could be dire to the economy, and to public trust in the institutions and people who administer infrastructure spending. Perhaps this is why Macquarie Bank—probably the largest and most experienced infrastructure investor in the world—began reducing its infrastructure portfolio in 2009, moving into energy instead.

#### And, next gen affs are worse than any other projects – the IT nature of the plan ENSURES collapse of the aff’s mechanism and cost-overruns

**Flyvbjerg 2k9 (Bent, professor of planning at Aalborg University, Denmark. He is founder and director of the university’s research program on large-scale infrastructure planning, “Survival of the unfittest: why the worst infrastructure gets built—and what we can do about it,” Oxford Review of Economic Policy, Volume 25, Number 3, 2009, pp.344–367, pg online @** [**http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf**](http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf) **//um-ef)**

Finally, information and communication technology (ICT) has fast become a large and rapidly increasing part of more major infrastructure projects. The consequences are often devastating, because large ICT projects appear to perform even worse than other major projects. Recently, a group of ICT experts contacted me to ask how they might learn to manage cost overruns, delays, etc. in ICT projects ‘as well as in transportation infrastructure projects’. I laughed out loud because I mistakenly thought they were making a joke. As mentioned above, the evidence is clear that most major transportation infrastructure projects performpoorly. But here is another project type, ICT, that apparently performs somuch worse that it can use transportation as a benchmark to be strived for. We did a pilot study, and sure enough, the ICT experts were right: if a major project is not already messed up, injecting a good dose of ICT will do the job (see Figure 4). As if itwere not difficult enough to develop, say, amajor newairport,we are nowdeveloping airports that depend on major new ICT for their operations, and we pay the price. Hong Kong international airport is a case in point, with initial ICT hiccups so bad that the whole Hong Kong economy suffered. Terminal 5 at London Heathrow is another example. An infrastructure planner recently told me, ‘We know how to build large, expensive tunnels by now, but we don’t know how to build the ICT safety systems that go into the tunnels; ICT busts us every time.’

## \*\*\*Ptix\*\*\*

### Obama Good is a Net Benefit

#### CP stops partisanship—accountability, transparency, reform

**BAFEF 2k12 (Building America’s Future Education Fund, “Building America’s Future,” pg online @** [**http://www.bafuture.org/sites/default/files/12.1%20NH-AdMemo\_1.pdf**](http://www.bafuture.org/sites/default/files/12.1%20NH-AdMemo_1.pdf) **//um-ef)**

BAFEF conducted focus groups and polling on the issue of transportation and infrastructure investment among 2012 Republican primary election likely voters (including Tea Party supporters) in South Carolina and New Hampshire in September and October. Among the most encouraging of these findings is that Republicans and conservatives are willing to support infrastructure spending when reform, accountability and transparency are included as part of the proposal. The importance of having a long-term strategic plan that focused on need and not politics was also a key take away.

## \*\*\*Cost Overruns\*\*\*

### Cost overruns bad

#### Cost overruns lead to misallocation of resources and destabilization of policy planning

**Flyvbjerg 5**, Professor of Major Programme Management at Oxford University's Saïd Business School and is Founding Director of the University's BT Centre for Major Programme Management, winner of the Fulbright Scholarship, (Bent, Policy and planning for large infrastructure : projects problems, causes, and cures, World Bank Publications, January 2005, Google Scholar)//AG

**Cost overruns** and benefit shortfalls **of the frequency and size described above are a problem** for the following reasons: **They lead to a Pareto0-inefficient allocation of resources**, i.e. waste. They lead to delays **and further cost overruns** and benefit shortfalls. **They destabilize policy, planning, implementation, and operations** of projects. The problem is getting bigger, because projects get bigger. Let’s consider each point in turn. First, and argument often heard in the planning of large infrastructure projects is that cost and benefit forecasts at the planning stage may be wrong, but if one assumes that forecasts are wrong by the same margin across projects, cost-benefit analysis would still identify the best projects for implementation. The ranking of projects would not be affected by the forecasting errors, according to this argument. However, the large standard deviations show in tables 1 and 2 falsify this argument. However, **the large standard deviations** shown in tables 1 and 2 falsify this argument. The standard deviations **show** that **cost and benefit estimates are not wrong by the same margin** across projects; **errors vary extensively and this will affect the ranking of projects**. **Thus we see that misinformation about costs and benefits at the planning stage is likely to lead to Pareto-inefficiency,** because in terms of standard cost-benefit analysis decision makers are likely to implement inferior projects.

### Turns Highways

#### Cost overruns kill other highway projects and take longer

**GAO 97**, Investigative arm of Congress charged with examining matters relating to the receipt and payment of public funds, (Government Accountability Office, Transportation Infrastructure: Managing the Costs of Large-Dollar Highway Projects, Government Accountability Office, February 1997,http://www.gao.gov/assets/160/155775.pdf)//AG

The **nation’s highways and bridges are vital to its economy** and national defense. **Because of limited resources** available to build and maintain them**, it is essential that highway and bridge projects be well managed.** Because **large-dollar projects generally take longer to** build and usually have more significant environmental and community impacts than the majority of federal-aid highway projects, **they have greater potential to experience substantial cost increases** and lengthy construction delays. These **cost increases can potentially overwhelm other highway projects and erode the already limited funds available** to meet overall highway needs. Effective project management related to containing costs can help ensure that cost growth resulting from schedule delays and other factors are minimized and that our transportation capital investment dollars are spent wisely and efficiently. **As reauthorization of the federal-aid highway program approaches in 1997, discussion has already begun on how the federal programs should be structured** and what the federal role should be. Balancing the states’ desire for flexibility and more autonomy with the federal role of ensuring that taxpayers get the most bang for their federal dollar, as well as safe, quality highways, is difficult**. FHWA’s “full” oversight approach does not focus on management of highway project costs. In contrast, cost management requirements promulgated by OMB for the federal government on its own large-dollar projects are very specific.** Further, from a broader perspective, the federal government has been moving in the direction of managing programs by establishing goals and measuring performance through such initiatives as the Government Performance and Results Act of 1993.

## Turns Economy

#### Large cost overruns in projects threaten economic collapse

**Flyvbjerg 5**, Professor of Major Programme Management at Oxford University's Saïd Business School and is Founding Director of the University's BT Centre for Major Programme Management, winner of the Fulbright Scholarship, (Bent, Policy and planning for large infrastructure : projects problems, causes, and cures, World Bank Publications, January 2005, Google Scholar)//AG

Finally, as **projects grow bigger, the problems with cost overruns** and benefit shortfalls **also grow bigger** and more consequential (Flyvbjerg, Holm, and Buhl, 2004: 12). Some **megaprojects are becoming so large in relation to national economies that cost overruns** and benefit shortfalls **from even a single project may destabilize the finances of a whole country** or region. **This occurred when the** billion-dollar cost overrun on the 2004 Athens Olympics affected the credit rating of Greece and when ben**efit shortfalls hit Hong Kong’s new $20 billion Chek Lap Kok airport after it opened** in 1998. **The desire to avoid national fiscal distress has recently become an important driver in attempts at reforming the planning of large infrastructure projects**, as we will see later.

### Plan Fails—laundry list

#### Almost all transportation infrastructure projects overestimate traffic

**Flyvbjerg et al 5**, professor of planning at Aalborg University, Denmark. He is founder and director of the university’s research program on large-scale infrastructure planning, (Bent, “ How (In)accurate Are Demand Forecasts in Public Works Projects?”, Journal of the American Planning Association, Spring 2005, Google Scholar, http://www.honolulutraffic.com/JAPAFlyvbjerg05.pdf)//AG

**We** follow common practice and **define the inaccuracy of a traffic forecast as actual minus forecasted traffic** in percentage of forecasted traffic. Traffic is measured as number of passengers for rail, and number of vehicles for roads Actual **traffic is counted for the first year of operations** (or the opening year). Forecasted traffic is the traffic estimate for the first year of operations (or the opening year) as estimated at the time of decision to build the project. Thus the forecast is the estimate available to decision makers when they made the decision to build the project in question. If no estimate was available at the time of decision to build, then the closest available estimate was used, typically a later estimate, resulting in a conservative bias in our measure for inaccuracy. **We measured inaccuracy of traffic forecasts in a sample of 210 transportation infrastructure projects** with comparable data for forecasted and actual traffic. **The sample comprises a project portfolio worth approximately U.S.$59 billio**n in actual costs (2004 prices). **The portfolio includes 27 rail projects and 183 road projects** completed between 1969 and 1998. The project types are **urban rail, high-speed rail, conventional rail, bridges, tunnels, highways, and freeways**. The projects are located in 14 countries on 5 continents, including both developed and developing nations: Brazil, Chile, Denmark, Egypt, France, Germany, Hong Kong, India, Mexico, South Korea, Sweden, Tunisia, the U.K., and the U.S. Projects were selected for the sample based on the availability and quality of data.1 As far as we know, **this is the largest sample of transportation infrastructure projects that has been established with comparable dat**a on forecasted and actual traffic. For a full description of the sample, data, and methods of testing for inaccuracy, please see Flyvbjerg (2004).

## AT: Cost Underestimation Inevitable

#### Cost underestimation is not caused by mistakes—hasn’t decreased over time

Flyvbjerg et al 02 [Bent Flyvbjerg, Mette Skamris Holm, and Søren Buhl. Flyvbjerg is a professor of planning with the Department of Development and Plan- ning, Aalborg University, Denmark. He is founder and director of the university’s re- search program on transportation infra- structure planning and was twice a Visiting Fulbright Scholar to the U.S. His latest books are Rationality and Power (University of Chicago Press, 1998) and Making Social Science Matter (Cambridge University Press, 2001). He is currently working on a book about megaprojects and risk (Cambridge University Press). Holm is an assistant pro- fessor of planning with the Department of Development and Planning, Aalborg Uni- versity, and a research associate with the university’s research program on transpor- tation infrastructure planning. Her main in- terest is economic appraisal of projects. Buhl is an associate professor with the De- partment of Mathematics, Aalborg Univer- sity, and an associate statistician with the university’s research program on transpor- tation infrastructure planning. “Underestimating Costs in Public Works Projects: Error or Lie?” Journal of the American Planning Association, Vol. 68, No. 3, Summer 2002, http://www.industrializedcyclist.com/Flyvbjerg02.pdf, accessed 7/17/12]//DLi

Have Estimates Improved Over Time? In the previous two sections, we saw how cost un- derestimation varies with project type and geography. In this section, we conclude the statistical analyses by studying how underestimation has varied over time. We ask and answer the question of whether project promot- ers and forecasters have become more or less inclined over time to underestimate the costs of transportation infrastructure projects. If underestimation were unin- tentional and related to lack of experience or faulty methods in estimating and forecasting costs, then, a pri- ori, we would expect underestimation to decrease over time as better methods were developed and more experi- ence gained through the planning and implementation of more infrastructure projects. Figure 3 shows a plot of the differences between ac- tual and estimated costs against year of decision to build for the 111 projects in the sample for which these data are available. The diagram does not seem to indicate an effect from time on cost underestimation. Statistical analyses corroborate this impression. The null hypothe- sis that year of decision has no effect on the difference between actual and estimated costs cannot be rejected (p=0.22, F-test). A test using year of completion instead of year of decision (with data for 246 projects) gives a similar result (p=0.28, F-test). We therefore conclude that cost underestimation has not decreased over time. Underestimation today is in the same order of magnitude as it was 10, 30, and 70 years ago. If techniques and skills for estimating and forecasting costs of transportation infrastructure pro- jects have improved over time, this does not show in the data. No learning seems to take place in this important and highly costly sector of public and private decision making. This seems strange and invites speculation that the persistent existence over time, location, and project type of significant and widespread cost underestimation is a sign that an equilibrium has been reached: Strong incentives and weak disincentives for underestimation may have taught project promoters what there is to learn, namely, that cost underestimation pays off. If this is the case, underestimation must be expected and it must be expected to be intentional. We examine such speculation below. Before doing so, we compare cost un- derestimation in transportation projects with that in other projects.

#### Cost underestimation isn’t from technical errors—studies prove

Flyvbjerg et al 02 [Bent Flyvbjerg, Mette Skamris Holm, and Søren Buhl. Flyvbjerg is a professor of planning with the Department of Development and Plan- ning, Aalborg University, Denmark. He is founder and director of the university’s re- search program on transportation infra- structure planning and was twice a Visiting Fulbright Scholar to the U.S. His latest books are Rationality and Power (University of Chicago Press, 1998) and Making Social Science Matter (Cambridge University Press, 2001). He is currently working on a book about megaprojects and risk (Cambridge University Press). Holm is an assistant pro- fessor of planning with the Department of Development and Planning, Aalborg Uni- versity, and a research associate with the university’s research program on transpor- tation infrastructure planning. Her main in- terest is economic appraisal of projects. Buhl is an associate professor with the De- partment of Mathematics, Aalborg Univer- sity, and an associate statistician with the university’s research program on transpor- tation infrastructure planning. “Underestimating Costs in Public Works Projects: Error or Lie?” Journal of the American Planning Association, Vol. 68, No. 3, Summer 2002, http://www.industrializedcyclist.com/Flyvbjerg02.pdf, accessed 7/17/12]//DLi

Technical Explanations Most studies that compare actual and estimated costs of infrastructure projects explain what they call “forecasting errors” in technical terms, such as imperfect techniques, inadequate data, honest mistakes, inherent problems in predicting the future, lack of experience on the part of forecasters, etc. (Ascher, 1978; Flyvbjerg et al., in press; Morris & Hough, 1987; Wachs, 1990). Few would dispute that such factors may be important sources of uncertainty and may result in misleading fore- casts. And for small-sample studies, which are typical of this research field, technical explanations have gained credence because samples have been too small to allow tests by statistical methods. However, the data and tests presented above, which come from the first large-sam- ple study in the field, lead us to reject technical explana- tions of forecasting errors. Such explanations simply do not fit the data. First, if misleading forecasts were truly caused by technical inadequacies, simple mistakes, and inherent problems with predicting the future, we would expect a less biased distribution of errors in cost estimates around zero. In fact, we have found with overwhelming statistical significance (p<0.001) that the distribution of such errors has a nonzero mean. Second, if imperfect techniques, inadequate data, and lack of experience were main explanations of the underestimations, we would expect an improvement in forecasting accuracy over time, since errors and their sources would be recognized and addressed through the refinement of data collection, forecasting methods, etc. Substantial resources havebeen spent over several decades on improving data and methods. Still our data show that this has had no effect on the accuracy of forecasts. Technical factors, therefore, do not appear to explain the data. It is not so-called fore- casting “errors” or cost “escalation” or their causes that need explaining. It is the fact that in 9 out of 10 cases, costs are underestimated. We may agree with proponents of technical expla- nations that it is, for example, impossible to predict for the individual project exactly which geological, environ- mental, or safety problems will appear and make costs soar. But we maintain that it is possible to predict the risk, based on experience from other projects, that some such problems will haunt a project and how this will af- fect costs. We also maintain that such risk can and should be accounted for in forecasts of costs, but typi- cally is not. For technical explanations to be valid, they would have to explain why forecasts are so consistent in ignoring cost risks over time, location, and project type.

#### No psychological explanation for cost overruns—empirically proven

Flyvbjerg et al 02

[Bent Flyvbjerg, Mette Skamris Holm, and Søren Buhl. Flyvbjerg is a professor of planning with the Department of Development and Plan- ning, Aalborg University, Denmark. He is founder and director of the university’s re- search program on transportation infra- structure planning and was twice a Visiting Fulbright Scholar to the U.S. His latest books are Rationality and Power (University of Chicago Press, 1998) and Making Social Science Matter (Cambridge University Press, 2001). He is currently working on a book about megaprojects and risk (Cambridge University Press). Holm is an assistant pro- fessor of planning with the Department of Development and Planning, Aalborg Uni- versity, and a research associate with the university’s research program on transpor- tation infrastructure planning. Her main in- terest is economic appraisal of projects. Buhl is an associate professor with the De- partment of Mathematics, Aalborg Univer- sity, and an associate statistician with the university’s research program on transpor- tation infrastructure planning. “Underestimating Costs in Public Works Projects: Error or Lie?” Journal of the American Planning Association, Vol. 68, No. 3, Summer 2002, http://www.industrializedcyclist.com/Flyvbjerg02.pdf, accessed 7/17/12]//DLi

Psychological Explanations Psychological explanations attempt to explain bi- ases in forecasts by a bias in the mental makeup of proj- ect promoters and forecasters. Politicians may have a “monument complex,” engineers like to build things, and local transportation officials sometimes have the mentality of empire builders. The most common psy- chological explanation is probably “appraisal opti- mism.” According to this explanation, promoters and forecasters are held to be overly optimistic about project outcomes in the appraisal phase, when projects are planned and decided (Fouracre et al., 1990, p. 10; Mackie & Preston, 1998; Walmsley & Pickett, 1992, p. 11; World Bank, 1994, p. 86). An optimistic cost estimate is clearly a low one. The existence of appraisal optimism in pro- moters and forecasters would result in actual costs being higher than estimated costs. Consequently, the existence of appraisal optimism would be able to account, in whole or in part, for the peculiar bias of cost estimates found in our data, where costs are systematically under- estimated. Such optimism, and associated cost under- estimation, would not be lying, needless to say, because the deception involved is self-deception and therefore not deliberate. Cost underestimation would be error ac- cording to this explanation. There is a problem with psychological explanations, however. Appraisal optimism would be an important and credible explanation of underestimated costs if esti- mates were produced by inexperienced promoters and forecasters, i.e., persons who were estimating costs for the first or second time and who were thus unknowing about the realities of infrastructure building and were not drawing on the knowledge and skills of more expe- rienced colleagues. Such situations may exist and may explain individual cases of cost underestimation. But given the fact that the human psyche is distinguished by a significant ability to learn from experience, it seems un- likely that promoters and forecasters would continue to make the same mistakes decade after decade instead of learning from their actions. It seems even more unlikely that a whole profession of forecasters and promoters would collectively be subject to such a bias and would not learn over time. Learning would result in the reduc- tion, if not elimination, of appraisal optimism, which would then result in cost estimates becoming more ac- curate over time. But our data clearly shows that this has not happened. The profession of forecasters would indeed have to be an optimistic group to keep their appraisal optimism throughout the 70-year period our study covers and not learn that they were deceiving themselves and others by underestimating costs. This would account for the data, but is not a credible explanation. As observed elsewhere, the incentive to publish and justify optimistic estimates is very strong, and the penalties for having been overop- timistic are generally insignificant (Davidson & Huot, 1989, p. 137; Flyvbjerg et al., in press). This is a better ex- planation of the pervasive existence of optimistic esti- mates than an inherent bias for optimism in the psyche of promoters and forecasters. And “optimism” calcu- lated on the basis of incentives is not optimism, of course; it is deliberate deception. Therefore, on the basis of our data, we reject appraisal optimism as a primary cause of cost underestimation.

## \*\*\*Competitiveness Net Benefit\*\*\*

### 2NC Overview

### Competitiveness

#### Competing for investment forces entities to prove they can handle the job – increase efficiency and costs

National Transportation Policy Project 9 **[“Performance Driven: A New Vision for U.S. Transportation Policy”, Bipartisan Policy Center, Page 6, 6-9-09, javi]**

To keep pace with a growing and changing nation, ongoing investment in new transportation infrastructure is needed to ensure that people and goods can continue to move efficiently and in a way that is responsive to new economic, energy security, and environmental challenges. While NTPP recommends using formula programs to fund the preservation and improvement of existing national and metropolitan systems, we recommend a new approach—built on competition—for prioritizing federal investment in new capacity. This will encourage comprehensive planning for future transportation needs and assure that federal support for system expansion furthers the achievement of national goals. Specifically, we recommend two new competitive funding programs designed to prioritize among competing proposals for federal investment in new infrastructure, which together would account for 25 percent of overall federal transportation funding. Under these programs, U.S. DOT would annually evaluate proposals using the best available data and performance measures and make recommendations to Congress, which would approve final funding on the basis of U.S. DOT’s recommendations. Although there may be some controversy about U.S. DOT’s ability to make funding recommendations that Congress will respect, we believe this approach can work smoothly, particularly as data quality and performance measurement techniques improve over time. The competitive programs we propose are designed to direct federal resources (a) toward the investments that offer the greatest returns at the lowest cost, and (b) in amounts that are proportionate to the national benefits to be gained. These programs are not intended to be prescriptive, but to allow for a bottom-up approach in which states and local areas have flexibility to develop proposals that reflect their preferred strategies for advancing national goals. Thus funding could be awarded to support a variety of policies or sets of investments, including public-private partnerships across any and all transportation modes. State and local entities would have to demonstrate that these programs are cost-effective and would produce results aligned with national goals.

#### Current funding needs to change or all transportation projects will be subject to cost overruns – IFC is key to solve

National Transportation Policy Project 9 **[“Performance Driven: A New Vision for U.S. Transportation Policy”, Bipartisan Policy Center, Page 6-7, 6-9-09, javi]**

We call the first of these new competitive programs Improving Federal Connections (IFC). It would fund the expansion of the national transportation network across modes, with a focus on all forms of freight transportation, together with investments in passenger transportation, such as intercity highway, bus, and rail links, as well as improvements to multimodal access for ports and airports. Any state, region, or locality (or collection of regional, state, or local entities) could apply for grants to fund programs, as opposed to individual projects, that improve the performance of the overall transportation network. As already noted, U.S. DOT would evaluate applications and make funding recommendations subject to Congressional approval. All the performance metrics described previously would apply, but, consistent with the focus of this program, the national connectivity metrics would receive the greatest weight. The amount of federal funding available to any particular proposal would depend on available resources and the number of other cost-beneficial applications received. Grant recipients would be responsible for reporting on whether outcomes were achieved as predicted and states would aggregate these reports to evaluate the overall success of their programs. These evaluations would then be considered in future funding cycles. In addition, NTPP recommends a second competitive program, called Improving Core Transportation (ICT), to fund transportation-system expansion across all modes in metropolitan areas with populations greater than 500,000, with a set-aside for smaller areas. Metropolitan regions would apply for grants by submitting proposals for programs (again as opposed to projects). Programs funded using this mechanism could include a coordinated mix of public and private capital projects, operating enhancements, and other financial and administrative measures that work together to improve the overall system. As with the proposed IFC program, applications would be evaluated by U.S. DOT and funding would be approved by Congress. All performance metrics would be considered, but the metropolitan accessibility metrics would receive the greatest weight. Grants awarded under this program would be expected to focus on passenger transportation improvements, but freight improvements needed to enhance the overall performance of transportation networks in major metropolitan areas would also be eligible. As before, grant amounts would depend on benefits achieved, total resources available, and the number of other cost- beneficial applications received. Recipients would be responsible for reporting afterwards on whether goals had been accomplished as predicted. It is difficult to imagine that the programmatic framework for transportation that NTPP recommends can be established in the absence of significant institutional reform at all levels of government. Throughout this report we emphasize the necessity to more clearly define and articulate the federal interest in transportation. But we also aim to propose a strategy that will allow the federal government to partner more effectively with other levels of government and with the private sector. Public sector roles and responsibilities must be reshaped and reorganized for effectively planning, funding, build building, operating, and regulating the nation’s transportation system. At the federal level U.S. DOT should be reorganized and better connected to other federal agencies to reflect these interests and values. The organizational structure of DOT should reflect the reorientation of transportation programs around broader national goals, by establishing modal coordinating mechanisms in the Office of the Secretary. Moreover, given the need to integrate policy considerations that go beyond the jurisdiction of traditional transportation agencies—such as energy, environment, housing, and community development— interagency coordination on these issues should also be improved.

# \*\*\*\*\*Plan = Cost Overruns\*\*\*\*\*

## Cost Overruns

#### Misinformation means transportation infrastructure always has cost overruns, only accountability solves

**Flyvbjerg 2k3 (Bent Flyvbjerg\*, Mette K. Skamris Holm And Séren L. Buhl Department of Development and Planning, Aalborg University, Fibigerstraede 11, DK-9220 Aalborg, Denmark, “How common and how large are cost overruns in transport infrastructure projects?,” pg online @** [**http://flyvbjerg.plan.aau.dk/COSTFREQ4.pdf**](http://flyvbjerg.plan.aau.dk/COSTFREQ4.pdf) **//um-ef)**

Despite the enormous sums of money being spent on infrastructure development around the world, surprisingly little systematic and reliable knowledge exists about the costs, bene®ts and risks involved. The objective of the study reported here is to produce such knowledge. More specifically, the objective is to provide answers to the question of whether transport infrastructure projects perform as promised in terms of costs and bene®ts, or whether costs and bene®ts are highly uncertain phenomena involving signi®cant elements of risk? The present paper covers the cost side of transport infrastructure development, based on a sample of 258 projects worth approximately US$90 billion (constant 1995 prices). The answer to this question is, with overwhelming statistical signi®cance, **No**, **transport infrastructure projects do not perform as promised**, **and, Yes, costs are highly uncertain involving substantial elements of downside risk**. The main ®ndings from the study are (all highly signi®cant, and most likely conservative) the following: . Nine out of 10 transport infrastructure projects fall victim to cost escalation. . For rail average cost escalation is 45% (SD=38). . For ®xed links (tunnels and bridges) average cost escalation is 34% (SD=62). . For roads average cost escalation is 20% (SD=30). . For all project types average cost escalation is 28% (SD=39). . Cost escalation exists across 20 nations and ®ve continents; it appears to be a global phenomenon. . Cost escalation appears to be more pronounced in developing nations than in North America and Europe (data for rail only). . Cost escalation has not decreased over the past 70 years. No learning seems to take place. Or, alternatively, project promoters and forecasters have learned what there is to learn, namely that cost escalation pays o; cost escalation is a simple consequence of cost underestimation and underestimation is used tactically to get projects approved and built. We conclude that cost estimates used in public debates, media coverage and decision-making for transport infrastructure development are highly, systematically and signi®cantly deceptive. Cost ± bene®t analyses are typically centrally placed in infrastructure decision-making to calculate viability and to rank projects. However, cost ± bene®t analyses will be as misleading as the estimates of the costs and bene®ts that enter into such analyses, which in turn will result in the misallocation of scarce resources. Moreover, the risks generated from misleading cost estimates are typically ignored or underplayed in infrastructure decision-making, to the detriment of social and economic welfare. Risks, therefore, have a doubly negative eect in this particular policy area, since it is one thing to take on a risk that one has calculated and is prepared to take, much as insurance companies and professional investors do, while it is quite another matter Ð that moves risk-taking to a dierent level Ð to ignore risks, especially when they are of the magnitude we have documented here. Such behaviour is bound to produce losers among those ®nancing infrastructure, be they taxpayers or private investors. If the losers, or, for future projects, potential losers, want to protect themselves, then our study shows that the risk of cost escalation, and related risk assessment and management, must be placed at the core of decision-making. Our goal with this paper has been to take a ®rst step in this direction by producing the type of knowledge that is necessary to initiate such risk assessment and management. The policy implications of our ®ndings are clear. First, the ®ndings show that a major policy problem exists for this highly expensive ®eld of public policy. **The problem is the pervasiveness of misinformation in the planning of transport infrastructure projects**, and the systematic bias of such misinformation toward justifying project implementation. Second, the size and perseverance over time of the problem of misinformation indicate that it will not go away by merely pointing out its existence and appealing to the good will of project promoters and their forecasters to make less deceptive forecasts. The problem of misinformation is an issue of power and profit and must be dealt with as such**, using the mechanisms of accountability** we commonly use in liberal democracies to control power and rent-seeking behaviour that have got out of hand. Institutional checks and balances must be put in place **to curb misinformation**, including financial, professional or even criminal penalties for ignoring or giving misleading information about risk and for consistent or foreseeable estimation `errors'. The work of developing such checks and balances has been begun in Bruzeliuset al. (1998) and Flyvbjerget al. (2003), with a focus on four basic instruments of accountability in transport infrastructure planning and policy-making: (1) increased transparency, (2) the use of performance specifications, (3) **explicit formulation of the regulatory regimes** that apply to project development and implementation and (4) the involvement of private risk capital, even in public projects.

## TI = Cost Overruns (Generic)

#### Federal projects compound cost overruns—error margins in project ranking, misinformation

**Flyvbjerg 5**, Professor of Major Programme Management at Oxford University's Saïd Business School and is Founding Director of the University's BT Centre for Major Programme Management, winner of the Fulbright Scholarship, (Bent, Policy and planning for large infrastructure : projects problems, causes, and cures, World Bank Publications, January 2005, Google Scholar)//AG

**Cost overruns** and benefit shortfalls **of the frequency and size described above are a problem** for the following reasons: **They lead to a Pareto0-inefficient allocation of resources**, i.e. waste. They lead to delays **and further cost overruns** and benefit shortfalls. **They destabilize policy, planning, implementation, and operations** of projects. The problem is getting bigger, because projects get bigger. Let’s consider each point in turn. First, and argument often heard in the planning of large infrastructure projects is that cost and benefit forecasts at the planning stage may be wrong, but if one assumes that forecasts are wrong by the same margin across projects, cost-benefit analysis would still identify the best projects for implementation. The ranking of projects would not be affected by the forecasting errors, according to this argument. However, the large standard deviations show in tables 1 and 2 falsify this argument. However, **the large standard deviations** shown in tables 1 and 2 falsify this argument. The standard deviations **show** that **cost and benefit estimates are not wrong by the same margin** across projects; **errors vary extensively and this will affect the ranking of projects**. **Thus we see that misinformation about costs and benefits at the planning stage is likely to lead to Pareto-inefficiency,** because in terms of standard cost-benefit analysis decision makers are likely to implement inferior projects.

#### Federal project promoters deliberately cause cost overruns to increase attention—counterplan solves misrepresentation

**Flyvbjerg 5**, Professor of Major Programme Management at Oxford University's Saïd Business School and is Founding Director of the University's BT Centre for Major Programme Management, winner of the Fulbright Scholarship, (Bent, Policy and planning for large infrastructure : projects problems, causes, and cures, World Bank Publications, January 2005, Google Scholar)//AG

**Political-economic explanations see planners and promoters** as deliberately and **strategically overestimating benefits and underestimating costs** when forecasting the outcomes of projects. They do this in order **to increase the likelihood that it is their projects,** and not the competition’s, **that gain approval** and funding. Political-economic explanations have been set forth by Flyvbjerg, Holm, and Buhl (2002, 2005) and Wachs (1989, 1990). According to such explanations planners and promoters purposely spin scenarios of success and gloss over the potential for failure. Again, **this results in the pursuit of ventures that are unlikely to come in on budget or on time**, or to deliver the promised benefits. Strategic misrepresentation can be traced to political and organizational pressures, for instance competition for scarce funds or jockeying for position, and it is rational in this sense. If we now define a lie in the conventional fashion as making a statement intended to deceive others (Bok, 1979: 14; Cliffe et al., 2000: 3), we see that deliberate misrepresentation of costs and benefits is lying, and we arrive at one of the most basic explanations of lying that exists: **Lying pays off**, or at least political and economic agents believe it does. Wehre there is political pressure there is misrepresentation and lying, according to this explanation, but **misrepresentation and lying can be moderated by measures of accountability.**

#### Transportation projects are affected by cost overruns – inaccurate funding estimates

**Cantarelli et. al. 10 [Chantal C. Cantarelli, Bent Flyvbjerg, Eric J.E. Molin, Bert van Wee; 1Faculty of Technology, Policy and Management, Delft University of Technology, 2Saïd Business School, University of Oxford, 3,4Faculty of Technology, Policy and Management, Delft University of Technology, “Cost Overruns in Large-scale Transportation Infrastructure Projects: Explanations and Their Theoretical Embeddedness”, EJTIR, March 2010, javi]**

**Investments in infrastructure are a** considerable **burden on a country’s** gross domestic product (**GDP**). For example, in 2005 the Dutch government invested about 8 billion euros (CBS, 2005 in KIM, 2007) in infrastructure, amounting to 1.55% of GDP. **This is of** even **greater concern if the inefficient allocation of financial resources** as the result of decisions based on misinformation **are recognised** (Flyvbjerg, 2005b, De Bruijn and Leijten, 2007). **Cost estimates are** often **inaccurate** and consequently **the ranking of projects based on project viability is also inaccurate.** Inevitably, this means **there is a danger that eventually inferior projects are implemented,** that resources are used which could have been assigned more appropriately, **and that projects that are unable to recover their costs are implemented. Inaccurate estimates make it** particularly **difficult to manage large projects and** often **lead to cost overruns, which** further **increases the burden on the country’s GDP**. The problem can be summarised as follows: **managing large-scale transportation infrastructure projects is difficult due to frequent misinformation about the costs which results in large cost overruns that** often **threaten** overall **project viability**. Various **studies have addressed the issue of cost overruns in transportation projects** (van Wee, 2007). Some studies, including a large database of projects, reach the following conclusions. The Government Accountability Office, for example, found that **77% of highway projects in the USA experienced cost escalation** (in Kaliba et al., 2008). Merewitz (1973) suggests that **the average overrun of infrastructure projects is a** little **over 50 percent** (Merewitz, 1973). **A review** by Morris and Hough (1987), **which covered** about **3500 projects, revealed that overruns are the norm**, and generally range between 40 and 200 per cent (Reichelt and Lyneis, 1999). Furthermore, a study by Flyvbjerg et al. (2003a) indicates that in **86 percent of the projects cost overruns appear to overrun by an average of 28 percent.** The problem is recognised in the literature but **the causes and explanations are still ambiguous.** To the authors’ knowledge, a **systematic investigation into the different explanations for cost overruns has not yet been conducted**. Moreover, insight into the **theories underlying these explanations has been the subject of only a few studies.** A sound theoretical basis is particularly important because it substantiates the explanation and provides opportunities to define the appropriate cures.

#### Cost overruns are common among transportation programs – studies prove

**Cantarelli et. al. 10 [Chantal C. Cantarelli, Bent Flyvbjerg, Eric J.E. Molin, Bert van Wee; 1Faculty of Technology, Policy and Management, Delft University of Technology, 2Saïd Business School, University of Oxford, 3,4Faculty of Technology, Policy and Management, Delft University of Technology, “Cost Overruns in Large-scale Transportation Infrastructure Projects: Explanations and Their Theoretical Embeddedness”, EJTIR, March 2010, javi]**

Morris (1990) conducted one of the first empirical studies with a narrow focus on cost overruns in large projects. He argues that **delays in project implementation and cost overruns have become a regular feature of public sector projects. The average cost overrun found in this study is 82%.** As far as possible causes are concerned, Morris (1990) concludes that about **20 - 25% can be attributed to price increases**, and the remaining **70-75% has to be explained in terms of real factors, such as delays in implementation**. He gives the following main factors as the causes of delays and cost overruns: poor project design and implementation, **inadequate funding of projects, bureaucratic indecision, and a lack of coordination between enterprises.** The study by **Arvan and Leite** (1990) **focuses on large-scale government sponsored procurement. They provide an explanation of cost overruns by assuming that the sponsor cannot pre-commit to the compensation paid to the contractor when the contractor has some private cost information. Wachs** (1987, 1989) reviews several forecasting models in the field of transportation. He **finds that forecasts are often inaccurate, underestimating costs and overestimating traffic demand**. He proposes two possible explanations for these optimistic forecasts. Firstly, ‘**forecasting is inherently exact and the observed errors result from imperfect techniques’**. Secondly, ‘**travel and cost forecasting is** deliberately **slanted to produce figures which constitute technical justification for public works programs favoured on the basis of political rather than economic or technical criteria’.** Because the **forecasting errors are** always **in the same direction** - always an overestimation of traffic demand and an underestimation of costs - the first explanation seems, according to Wachs, to be less valid. In line with Ascher’s argumentation (1987) he concludes that ‘**the competitive, politically charged environment of transportation forecasting has resulted in the continuous adjustment of assumptions until they produce forecasts which support politically attractive outcomes’**. He identifies three main sources of error in forecasting costs: changes of scope, assumed rates of inflation that are lower than actual rates of inflation, and delay. He concludes that about 40-90% of **the total cost overrun can be explained by these factors**, but a substantial part remains unexplained. **Other causes can be found in the funding system commonly found in rail transit projects. There is an incentive with this kind of funding system to select the most optimistic assumptions in the development of cost estimates for projects.**

#### Many transportation projects experience cost overruns

**Bhargava 9 [Abhishek, “A PROBABILISTIC EVALUATION OF HIGHWAY PROJECT COSTS”, Dissertation for the Doctorate of Philosophy, 4-29-09, page 4, javi]**

**In cost overrun studies conducted** abroad (Flyvbjerg et al., 2002; Flyvbjerg et al., 2003) it was found that **cost escalation is** a **pervasive** phenomenon **across transportation** project types, geographical locations and historical periods. **Based on the analysis of 258 transportation infrastructure projects** (worth US $90 Billion) from around the world, Flyvbjerg et al. (2002) concluded that **the cost estimates that were used to decide whether these projects should be built were highly misleading and inaccurate**. Approximately **80% of the projects were found to have a cost overrun about 50% of these projects were found to have an overrun in excess of 10%**. Flyvbjerg et al. (2004) found that **cost escalation is** strongly **influenced by the implementation phase length and project type**, and it was suggested that **decision-makers and planners should be** duly **concerned about delays and long implementation phases.** The sample of 258 projects comprised of 167 **road projects** which **experienced an average cost overrun of 20.4%** (with a standard deviation of 30%). Besides the road projects, 33 **bridge and tunnel projects** were analyzed and **were found to have an average cost escalation of 34%** (with a standard deviation of 62%). A total of 58 **rail projects were** also **analyzed and the average cost escalation across those projects was found to be 45%** (with a standard deviation of 38%). Figure 2.3 shows the distribution of cost escalation percentage across the 258 contracts.

## Pipelines = COv

#### More than half of the pipelines built had an underestimated total cost

**Rui et al 12** (Zhenhua Rui is a PhD candidate in Energy Engineering Management and MBA student at the University of Alaska Fairbanks. He alsoreceived his Master’s degree in Petroleum Engineering from the sameuniversity, in addition to his Master’s degree in Geophysics from ChinaUniversity of Petroleum, Beijing. His current research is the EngineeringEconomics of the Alaska In-state Natural Gas Pipeline.Paul A. Metz is a Professor of Department of Mining and GeologicalEngineering at the University of Alaska Fairbanks. He received his PhD From Imperial College of Science Technology and Medicine. He also received hisMS in Economic Geology and MBA from the University of Alaska. Hisresearch interest include: market and transportation analysis of mineralresources; analysis of transport systems; engineering geological mapping andsite investigation; mineral and energy resource evaluation. “An analysis of inaccuracy in pipeline construction cost estimation” http://uaf.academia.edu/zhenhuarui/Papers/1419710/An\_analysis\_of\_inaccuracy\_in\_pipeline\_construction\_cost\_estimation Int. J. Oil, Gas and Coal Technology, Vol. 5, No. 1, 2012)

If the cost overrun rate is positive, the cost is underestimated, otherwise it is over estimated. In this paper, all cost overrun rates are calculated with the above formula. The histogram of the cost overrun rate for pipeline construction components are shown in Figure 2 to Figure 6. If the cost error is small, the histogram would be narrowly concentrated around zero. If underestimated cost is as common as overestimated cost, the histogram would be symmetrically distributed around zero. It appears that five figures exhibited non-symmetric distributions, and none of them satisfied the above mentioned assumption. For material cost, 172 (42.0% of total) pipelines were underestimated, and238 (58.0% of total) were overestimated. For labour cost, 273 (66.7% of total) pipelines were underestimated, and 136 (33.3% of total) were overestimated. For miscellaneous cost, 166 (40.8% of total) pipelines were underestimated, and 241 (59.2% of total) were overestimated. For ROW cost, 174 (45.7% of total) pipelines were underestimated, and207 (54.3% of total) were overestimated. For total cost, 222 (54.0% of total) pipelines were underestimated, and 189 (46.0% of total) were overestimated.

#### Many pipelines have gone over cost—numerous examples

**Westney No Date** (Richard E. Westney is Chairman of Westney Consulting Group which he founded in 1978. Author of five books on project management, he has served as visiting faculty at Texas A&M and Stanford Universities, as well as the Norwegian Institute of Science and Technology. Currently a member of the Executive Board of the Engineering & Construction Contracting Association, he is also a Fellow and Past President of AACE International (The Association for the Advancement of Cost Engineering) and received AACE’s highest honor, the Award of Merit. He is a graduate of the City College of New York, Rensselaer Polytechnic Institute, and Harvard Business School. “Why projects overrun, and what to do about it.” http://www.westney.com/publications/Westney%20Advisor/Why%20Projects%20Overrun%20and%20What%20to%20do%20About%20It.pdf No date given) CANOVA

There is good reason for these concerns. While there is no shortage of examples, Shell’s Sakhalin II project is instructive. A huge and complex oil and gas production project at Sakhalin Island (off the east coast of Siberia), the project was sanctioned in 2003 at $10 billion (a value that exceeded Shell’s net income for the prior year). Two years later, with the project well into construction, Shell issued a 6K report announcing the cost had doubled to $20 billion (today it is over $22 billion). One does not have to look far for other examples. Many projects in the Canadian oil sands have experienced 50% to 100% cost overruns, as have numerous offshore developments, refineries, and pipelines. Effective project risk management in this environment requires early indicators of the major risk factors. What if Shell or the oil-sands operators had had a risk management system that alerted management of these potential cost trends well before sanction? What decisions might have been made differently?

## Laundry List = COv

#### Public work is always an area of cost overruns, here’s a laundry list—rail, bridges, tunnels, roads

Flyvbjerg et al 02

[Bent Flyvbjerg, Mette Skamris Holm, and Søren Buhl. Flyvbjerg is a professor of planning with the Department of Development and Plan- ning, Aalborg University, Denmark. He is founder and director of the university’s re- search program on transportation infra- structure planning and was twice a Visiting Fulbright Scholar to the U.S. His latest books are Rationality and Power (University of Chicago Press, 1998) and Making Social Science Matter (Cambridge University Press, 2001). He is currently working on a book about megaprojects and risk (Cambridge University Press). Holm is an assistant pro- fessor of planning with the Department of Development and Planning, Aalborg Uni- versity, and a research associate with the university’s research program on transpor- tation infrastructure planning. Her main in- terest is economic appraisal of projects. Buhl is an associate professor with the De- partment of Mathematics, Aalborg Univer- sity, and an associate statistician with the university’s research program on transpor- tation infrastructure planning. “Underestimating Costs in Public Works Projects: Error or Lie?” Journal of the American Planning Association, Vol. 68, No. 3, Summer 2002, http://www.industrializedcyclist.com/Flyvbjerg02.pdf, accessed 7/17/12]//DLi

Cost Underestimation by Project Type In this section, we discuss whether different types of projects perform differently with respect to cost underestimation. Figure 2 shows histograms with inaccura- cies of cost estimates for each of the following project types: (1) rail (high-speed; urban; and conventional, inter-city rail), (2) fixed link (bridges and tunnels), and (3) road (highways and freeways). Table 1 shows the ex- pected (average) inaccuracy and standard deviation for each type of project. Statistical analyses of the data in Table 1 show both means and standard deviations to be different with a high level of significance. Rail projects incur the highest difference between actual and estimated costs, with an average of no less than 44.7%, followed by fixed-link proj- ects averaging 33.8% and roads at 20.4%. An F-test falsi- fies the null hypothesis at a very high level of statistical significance that type of project has no effect on per- centage cost escalation (p<0.001). Project type matters. The substantial and significant differences among proj- ect types indicate that pooling the three types of projects in statistical analyses, as we did above, is strictly not ap- propriate. Therefore, in the analyses that follow, each type of project will be considered separately. Based on the available evidence, we conclude that rail promoters appear to be particularly prone to cost underestimation, followed by promoters of fixed-link projects. Promoters of road projects appear to be rela- tively less inclined to underestimate costs, although ac- tual costs are higher than estimated costs much more often than not for road projects as well. Further subdivisions of the sample indicate that high-speed rail tops the list of cost underestimation, fol- lowed by urban and conventional rail, in that order. Sim- ilarly, cost underestimation appears to be larger for tun- nels than for bridges. These results suggest that the complexities of technology and geology might have an effect on cost underestimation. These results are not sta- tistically significant, however. Even if the sample is the largest of its kind, it is too small to allow repeated sub- divisions and still produce significant results. This prob- lem can be solved only by further data collection from more projects. We conclude that the question of whether there are significant differences in the practice of cost underestimation among rail, fixed-link, and road projects must be answered in the affirmative. The average difference be- tween actual and estimated costs for rail projects is sub- stantially and significantly higher than that for roads, with fixed-link projects in a statistically nonsignificant middle position. The average inaccuracy for rail projects is more than twice that for roads, resulting in average cost escalations for rail more than double that for roads. For all three project types, the evidence shows that it is sound advice for policy and decision makers as well as investors, bankers, media, and the public to take any estimate of construction costs with a grain of salt, espe- cially for rail and fixed-link projects.

## Rail = COv

#### Railway projects experience cost overruns – empirics prove

**Cantarelli et. al. 10 [Chantal C. Cantarelli, Bent Flyvbjerg, Eric J.E. Molin, Bert van Wee; 1Faculty of Technology, Policy and Management, Delft University of Technology, 2Saïd Business School, University of Oxford, 3,4Faculty of Technology, Policy and Management, Delft University of Technology, “Cost Overruns in Large-scale Transportation Infrastructure Projects: Explanations and Their Theoretical Embeddedness”, EJTIR, March 2010, javi]**

**Various studies addressed cost overruns for transportation projects specifically.** For example, **Pickrell** (1992) **investigated the cost overruns and benefit shortfalls of 8 rail transit projects in the US.** In his study, Pickrell (1992) starts from the premise that **forecasters overestimate rail transit ridership and underestimate rail construction costs and operating expenses**. To understand these inaccurate forecasts, he points, on the one hand, to optimism among local officials and to inadequate planning processes on the other. He argues that **the causes of underestimated costs lie in the structure of programmes** and **the existence of dedicated funding sources that provide few incentives for local officials to seek accurate information for evaluating alternatives**. Fouracre et al. (1990) investigated cost overruns for 21 metro projects worldwide. Nearly **all the metro systems incurred costs higher than expected**. These **overruns were attributed to ‘a range of factors, including the additional costs of unforeseen service** and utility diversions and other civil works problems, which could not be offset by contingency allowances; changes in specifications; currency devaluation and rises in interest charges’. According to the authors, **most of the cost estimates were optimistic because there was little appreciation of the difficulties of the work**. In addition, **authorities lacked the management skills to mitigate errors in project planning and to keep effective control of costs.**

## Gas tax fails

#### Gas tax fails—decrease in gas consumption, doesn’t keep up with growth, weak signals

**National Transportation Policy Project 9** [“Performance Driven: A New Vision for U.S. Transportation Policy”, Bipartisan Policy Center, Page 8-9, 6-9-09, javi]

For many years the gasoline tax provided a stable and growing source of funding for federal transportation investments. **The** federal **gas tax**, however, **has not kept up with growth in road use, construction costs, and system needs.** As a result, **the resources available in the** **H**ighway **T**rust **F**und **are** increasingly **falling short, which** in turn **has necessitated transfers** **from general funds. This situation is** clearly **unsustainable**. Overall **gasoline consumption is down**—**due** first to **high** oil **prices** earlier this decade **and** now to **the** economic **recession**—**and a combination of** increased **vehicle fuel-economy standards**, the introduction of electric and plug-in electric hybrid vehicles, **and** mandated **expansion of biofuels use** **can** be expected to **continue to put downward pressure on oil demand**. This is obviously beneficial for many reasons, but it also leads to declining receipts from fuel taxes, assuming the level of those taxes is unchanged. **All of these developments** have combined to **expose flaw**s not only in the stability of the gas tax as a funding source, but also **in its long-term sustainability**. There is widespread agreement that **revenue** currently **collected** at all levels of government **is insufficient** to either maintain or improve system performance. The “gap” between transportation “needs” and current investment by all levels of government ranges between $172 billion annually to maintain existing infrastructure and $214 billion annually to improve system performance.2 Such “needs” estimates assume that it is possible to calculate an ideal level of investment—a view to which NTPP members do not subscribe. **Too many factors** (such as policy choices, technology, and prices) **can affect the performance of the system and the “need” for capacity, making any interpretation of the term “need” itself relative and shifting. The focus should be on maximizing valuable investments** where **the returns to society are measured and optimized. Transportation investment has not** traditionally **been thought of in this way**, but **an approach that seeks to maximize returns is appropriate for allocating scarce resources**. The appropriate level of overall investment is obviously important; what the federal government’s share of that investment should be is, of course, a separate but also important question. An equally fundamental concern is that existing **revenue mechanisms fail to take advantage of the fact that the performance of the transportation system can be directly influenced by how users pay for it. The gas tax** in the United States **is** very **low** relative to most developed countries, which means that **all taxpayers subsidize the full costs of road use regardless of their contribution to system costs.** **This has resulted in** artificially **high demand and a substantial shortfall in the revenues necessary to cover the costs of maintaining the transportation network**. Originally seen as a reasonable proxy for system use when first put in place in the 1950’s, **the gas tax today provides at best a weak and inaccurate price signal**; few **American**s are even aware of how much they pay through the fuel tax or that their **contribution to system maintenance and improvement has steadily decreased** over time. A recent report by the National Commission on Surface Transportation Infrastructure Financing concluded that average users pay substantially less than the full costs they impose taking into account the direct costs of wear and tear as well as indirect costs in the form of congestion, greenhouse gas emissions, and energy security impacts. An inaccurate price signal means that millions of individuals and businesses are making transportation decisions that are inefficient from a societal standpoint every day.

## Turns Infrastructure Bank

#### And, congressional action key

Dove 2k12

(Robert, Robert Dove, Managing Director, The Carlyle Group, “Building American Transportation¶ Infrastructure Through¶ Innovative Funding,” pg online @ <http://www.gpo.gov/fdsys/pkg/CHRG-112shrg72409/html/CHRG-112shrg72409.htm> //um-ef)

3. **For innovative financing practices like the infrastructure bank to ¶ be successful**, Congress must provide additional reforms to our ¶ current transportation public policy.¶ The creation of an infrastructure bank should be a manifestation of ¶ deeper, more profound changes to our national transportation policy; ¶ otherwise the bank and other innovative practices **risk contributing to ¶ existing shortcomings in our transportation financing policies**. ¶ Specifically, outcome-based performance standards should be encouraged ¶ at the baseline policy level. Clear, transparent, and concrete ¶ performance metrics are needed to measure the success and benefits of ¶ major transportation projects.¶ Life-cycle costs should be an established criterion when evaluating ¶ a major capital project. Without it, an ``apples-to-apples'' comparison ¶ of the benefits of private investment vs. public debt financing is not ¶ possible and a flawed ``cost of capital'' analysis of the private ¶ investment option is likely. Additionally, requiring rigorous standards ¶ for analysis of expected users of a project, such as traffic studies, ¶ should be implemented so that accurate projections that affect costs ¶ and benefits are possible.¶ **Congress should establish measurable performance metrics on the ¶ economic benefits of a major project**, or the environmental benefits a ¶ infrastructure project will provide.\6\ Such standards will provide ¶ financing entities like the infrastructure bank with the ability to ¶ provide more extensive and more accurate data to better assess the ¶ impact and worth of an infrastructure project.

## **States Solve Cost Overruns**

#### States are key to solve cost overruns

Edwards 9 [Chris Edwards is the director of tax policy studies at Cato and editor of www.DownsizingGovernment.org. He is a top expert on federal and state tax and budget issues. Before joining Cato, Edwards was a senior economist on the congressional Joint Economic Committee, a manager with PricewaterhouseCoopers, and an economist with the Tax Foundation. Edwards has testified to Congress on fiscal issues many times, and his articles on tax and budget policies have appeared in the Washington Post, Wall Street Journal, and other major newspapers. He is the author of Downsizing the Federal Government and co-author of Global Tax Revolution. Edwards holds a B.A. and M.A. in economics, and he was a member of the Fiscal Future Commission of the National Academy of Sciences. “Government Cost Overruns” CATO, March 2009, http://www.downsizinggovernment.org/government-cost-overruns#causes,accessed 7/16/12]

What is the solution for chronic cost overruns? Budget experts have suggested numerous ways to reform the procurement process, which would certainly be a step forward.51 But a more fundamental reform is to terminate and privatize as many federal activities as possible, and move funding for state activities, such as highways, back to the states. That way, federal policymakers could focus on ensuring that the few needed areas of federal spending, such as defense, are carried out as efficiently as possible.

# \*\*\*\*\*Aff Answers\*\*\*\*\*

## Uncertainty bad

#### Predictable funding solves cost overruns – the uncertainty of the cp kills solvency

Steenhoek, 12 – Executive Director, Soy Transportation Coalition (4/18/2012, Mike Steenhoek, “HOW RELIABILITY OF THE INLAND WATERWAY SYSTEM IMPACTS ECONOMIC COMPETITIVENESS”, <http://transportation.house.gov/news/PRArticle.aspx?NewsID=1609>)

One of the arguments our ongoing analysis is examining "how money is allocated is just as important as how much money is allocated." One of the deliverables in our research is comparing major maritime infrastructure projects in other countries and compare them to those in the U.S. - particularly in the ability to complete projects on time and within budget. It is discouraging to observe how many other countries are able to construct their major infrastructure projects much more efficiently than we can. The Panama Canal expansion project is a great example. This $5.25 billion project commenced in 2007 and is scheduled to be completed in late 2014 or early 2015. The expansion project is more imposing and complex than any project we have underway or planned in our inland waterway system, yet all indications are that the project will be completed within budget and only a handful of months behind schedule. Compare this to our Olmsted Lock and Dam project that had an original cost estimate of $775 million and has recently been updated to over $3 billion with a significant time horizon remaining before it will be completed. When examining the various reasons for our repeated cost overruns and project delays, it quickly becomes evident that a major contributing factor is the piecemeal and unpredictable manner in which we finance these projects. Major investments of any nature - particularly infrastructure investments - require a system of funding that provides the money up front in a lump sum, or at least provides certainty that the incremental installments will be allocated. Our current system provides neither. In fact, if I were to design a funding system for infrastructure projects that would guarantee repeated cost overruns and project delays, I would design the system we currently have. It is our hope that we can have a productive discussion with other stakeholders that will result in better stewardship of the scarce resources we have to allocate to these inland waterway projects. The other argument in our ongoing analysts is "a predictably good inland waterway system is better than a hypothetically great one." During this period of fiscal scarcity, we are concerned that our nation is failing not only in providing new and expanded locks and dams, but also in maintaining and preserving our current inventory. Each lock and dam is a link in a larger logistics chain. If one fails, our ability to deliver on customer demands is greatly impaired. Committing to many of these major investment projects and failing to deliver on them, while allowing our remaining locks and dams to fall further into disrepair is a recipe for disaster. A preferable approach may be to first demonstrate stewardship of current locks and dams by providing assurance to users that a lock and dam, in the event of a major failure, will be operational within 48 or 72 hours, for example. If we allocate our resources that way and can provide this degree of predictability to those who utilize our inland waterway system, we will provide a superior message to the one we are currently sending. The Soy Transportation Coalition looks forward to working with other stakeholders in examining this potential approach. Thank you for the opportunity to testify and for exploring this important topic. I would be pleased to answer any questions. Read this original document at: http://republicans.transportation.house.gov/Media/file/TestimonyWater/2012-04-18-Steenhoek.pdf The United States Congress Document CONGDP0020120419e84i00098

## Status Quo Solves Accountability

#### Institutions are beginning to do independent forecasts—privates are becoming more involved, decreases risks to the company

**Flyvbjerg 2k9 (Bent, professor of planning at Aalborg University, Denmark. He is founder and director of the university’s research program on large-scale infrastructure planning, “Survival of the unfittest: why the worst infrastructure gets built—and what we can do about it,” Oxford Review of Economic Policy, Volume 25, Number 3, 2009, pp.344–367, pg online @** [**http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf**](http://www.sbs.ox.ac.uk/centres/bt/Documents/UnfittestOXREPHelm3.4PRINT.pdf) **//um-ef)**

Moreover, with private finance in major infrastructure projects on the rise over the past 15–20 years, capital funds and banks are increasingly gaining a say in the project development and management process. Private capital is no panacea for the ills in major infrastructure project management, to be sure (Hodge and Greve, 2009). But private investors place their own funds at risk, as opposed to governments who place the taxpayer’s money at risk. Capital funds and banks can therefore be observed not to automatically accept at face value the forecasts of project managers and promoters. Banks typically bring in their own advisers to do independent forecasts, due diligence, and risk assessments, which is an important step in the right direction. The false assumption that one forecast or one business case (which is also a forecast) may contain the truth about a project is problematized. Instead project managers and promoters are getting used to the healthy fact that different stakeholders have different forecasts and that forecasts are not only products of objective science and engineering but of negotiation. Why is this more healthy? Because it is more truthful about our ability to predict the future and about the risks involved. If the institutions with responsibility for developing and building major infrastructures continued to implement, embed, and enforce such measures of accountability effectively, then the misrepresentation in cost, benefit, and risk estimates, which is widespread today, might be mitigated. If this is not done, misrepresentation is likely to continue, and the allocation of funds for major infrastructure is likely to continue to be wasteful, unethical, and sometimes even unlawful.

## CP Fails

#### And, the counterplan fails – several versions necessary

Mudge 2k9

(This report was prepared by Richard Mudge, Vice¶ President with Delcan Corporation, Michelle Maggiore,¶ now Program Director for Planning and Policy with the¶ American Association of State Highway Transportation¶ Officials (AASHTO), and Keith Jasper, a Senior Associate¶ with Delcan. Emil Frankel and Joshua Schank from the¶ Bipartisan Policy Center provided numerous helpful¶ Suggestions, “Performance Metrics¶ for the Evaluation of¶ Transportation Programs,” pg online @ <http://bipartisanpolicy.org/sites/default/files/BPC%20NTTP%20Metrics%20fnl.pdf> //um-ef)

Requiring states to measure and report on the metrics¶ identified in this report provides a first-step toward¶ accountability. However, a true performance-based¶ program will likely take several iterations of surface¶ transportation legislation. Additionally, system deficiencies¶ and maintenance needs are an important¶ component of federal funding and will also need to be¶ addressed perhaps differently than true measures of¶ system performance. In the short-term, the structure¶ of a performance-based program could include one or¶ more of the following components:¶ Stand-alone competitive programs focusing on¶ each of the key metrics identified in this report:¶ accessibility, national connectivity, and safety:¶ For each metric, states and metropolitan regions¶ (where applicable) would compete for additional¶ and substantial federal funds to implement¶ important but unfunded projects in the program.¶ Competing across all measures and awarding funds¶ based on the best complete program is one option.¶ Evaluating each program area with an emphasis on¶ one or more metrics provides an alternative.¶ n Programs to fix or overcome system deficiencies:¶ In the short-term, it may be important to consider¶ providing performance-based funding for¶ deficiencies until a performance target is reached.¶ Performance-based funding could be used to¶ help states implement the appropriate systems for¶ managing assets or collecting key data, for example,¶ with additional future year funding available for¶ those showing performance improvements. When¶ considering the idea of providing funds for deficient¶ systems, it is understandable that this could be¶ viewed as rewarding bad behavior. This could¶ be overcome by requiring a larger non-federal¶ match for states applying for funding for¶ system deficiencies.¶ n Rewards for all states based on actual¶ performance in meeting the targets set as part of¶ their regional transportation plans: This provides¶ a less cumbersome way of distributing funds since¶ little evaluation is required; however, it may take a¶ few cycles of reporting on system performance to¶ understand where the bonus thresholds should be¶ for the metrics identified in this report, particularly¶ for empirical measures. Analysis of these metrics¶ over time will help to establish thresholds for a¶ national performance bonus program.

## Alt Causes

#### Alt cause to cost overruns—technical data inevitably fails

**Flyvbjerg 5**, Professor of Major Programme Management at Oxford University's Saïd Business School and is Founding Director of the University's BT Centre for Major Programme Management, winner of the Fulbright Scholarship, (Bent, Policy and planning for large infrastructure : projects problems, causes, and cures, World Bank Publications, January 2005, Google Scholar)//AG

**Technical explanations account for cost overruns** and benefit shortfalls in **terms if imperfect forecasting techniques, inadequate data, honest mistakes, inherent problem**s in predicting the future, **lack of experience** on the part of forecasters, etc. **this is the most common type of explanation of inaccuracy** in forecasts (Ascher, 1978; Flyvbjerg, Holm, and Buhl, 2002, 2005; Morris and Hough, 1987; Wachs, 1990). Technical **error may be reduced** or eliminated **by developing better** forecasting **models** ,better data, and more experienced forecasters, according to this explanation.

## Cost Underestimation Inevitable

#### Cost underestimation inevitable—economic reasons

Flyvbjerg et al 02 [Bent Flyvbjerg, Mette Skamris Holm, and Søren Buhl. Flyvbjerg is a professor of planning with the Department of Development and Plan- ning, Aalborg University, Denmark. He is founder and director of the university’s re- search program on transportation infra- structure planning and was twice a Visiting Fulbright Scholar to the U.S. His latest books are Rationality and Power (University of Chicago Press, 1998) and Making Social Science Matter (Cambridge University Press, 2001). He is currently working on a book about megaprojects and risk (Cambridge University Press). Holm is an assistant pro- fessor of planning with the Department of Development and Planning, Aalborg Uni- versity, and a research associate with the university’s research program on transpor- tation infrastructure planning. Her main in- terest is economic appraisal of projects. Buhl is an associate professor with the De- partment of Mathematics, Aalborg Univer- sity, and an associate statistician with the university’s research program on transpor- tation infrastructure planning. “Underestimating Costs in Public Works Projects: Error or Lie?” Journal of the American Planning Association, Vol. 68, No. 3, Summer 2002, http://www.industrializedcyclist.com/Flyvbjerg02.pdf, accessed 7/17/12]//DLi

Economic Explanations Economic explanations conceive of cost underesti- mation in terms of economic rationality. **T**wo types of economic explanation exist; one explains in terms of eco-nomic self-interest, the other in terms of the public in- terest. As regards self-interest, when a project goes for- ward, it creates work for engineers and construction firms, and many stakeholders make money. If these stakeholders are involved in or indirectly influence the forecasting process, then this may influence outcomes in ways that make it more likely that the project will be built. Having costs underestimated and benefits overes- timated would be economically rational for such stake- holders because it would increase the likelihood of reve- nues and profits. Economic self-interest also exists at the level of cities and states. Here, too, it may explain cost underestimation. Pickrell (1990, 1992) pointed out that transit capital investment projects in the U.S. compete for discretionary grants from a limited federal budget each year. This creates an incentive for cities to make their projects look better, or else some other city may get the money. As regards the public interest, project promoters and forecasters may deliberately underestimate costs in order to provide public officials with an incentive to cut costs and thereby to save the public’s money. According to this type of explanation, higher cost estimates would be an incentive for wasteful contractors to spend more of the taxpayer’s money. Empirical studies have identified pro- moters and forecasters who say they underestimate costs in this manner and with this purpose (i.e., to save public money; Wachs, 1990). The argument has also been adopted by scholars, for instance Merewitz (1973b), who explicitly concludes that “keeping costs low is more im- portant than estimating costs correctly” (p. 280).

#### Cost underestimation inevitable—political incentives

Flyvbjerg et al 02 [Bent Flyvbjerg, Mette Skamris Holm, and Søren Buhl. Flyvbjerg is a professor of planning with the Department of Development and Plan- ning, Aalborg University, Denmark. He is founder and director of the university’s re- search program on transportation infra- structure planning and was twice a Visiting Fulbright Scholar to the U.S. His latest books are Rationality and Power (University of Chicago Press, 1998) and Making Social Science Matter (Cambridge University Press, 2001). He is currently working on a book about megaprojects and risk (Cambridge University Press). Holm is an assistant pro- fessor of planning with the Department of Development and Planning, Aalborg Uni- versity, and a research associate with the university’s research program on transpor- tation infrastructure planning. Her main in- terest is economic appraisal of projects. Buhl is an associate professor with the De- partment of Mathematics, Aalborg Univer- sity, and an associate statistician with the university’s research program on transpor- tation infrastructure planning. “Underestimating Costs in Public Works Projects: Error or Lie?” Journal of the American Planning Association, Vol. 68, No. 3, Summer 2002, http://www.industrializedcyclist.com/Flyvbjerg02.pdf, accessed 7/17/12]//DLi

Political Explanations Political explanations construe cost underestima- tion in terms of interests and power (Flyvbjerg, 1998). Surprisingly little work has been done that explains the pattern of misleading forecasts in such terms (Wachs, 1990, p. 145). A key question for political explanations is whether forecasts are intentionally biased to serve the in- terests of project promoters in getting projects started. This question again raises the difficult issue of lying. Questions of lying are notoriously hard to answer, be- cause in order to establish whether lying has taken place, one must know the intentions of actors. For legal, eco- nomic, moral, and other reasons, if promoters and fore- casters have intentionally fabricated a deceptive cost estimate for a project to get it started, they are unlikely to tell researchers or others that this is the case (Flyvbjerg, 1996; Wachs, 1989). When Eurotunnel, the private company that owns the tunnel under the English Channel, went public in 1987 to raise funds for the project, investors were told that building the tunnel would be relatively straight- forward. Regarding risks of cost escalation, the prospec- tus read: Whilst the undertaking of a tunneling project of this nature necessarily involves certain construc- tion risks, the techniques to be used are well proven. . . . The Directors, having consulted the Mâitre d’Oeuvre, believe that 10% . . . would be a reasonable allowance for the possible impact of un- foreseen circumstances on construction costs.2 (“Under Water,” 1989, p. 37) Two hundred banks communicated these figures for cost and risk to investors, including a large number of small investors. As observed by The Economist (“Under Water,” 1989), anyone persuaded in this way to buy shares in Eurotunnel in the belief that the cost estimate was the mean of possible outcomes was, in effect, de- ceived. The cost estimate of the prospectus was a best possible outcome, and the deception consisted in mak- ing investors believe in the highly unlikely assumption— disproved in one major construction project after an- other—that everything would go according to plan, with no delays; no changes in safety and environmental per- formance specifications; no management problems; no problems with contractual arrangements, new tech- nologies, or geology; no major conflicts; no political promises not kept; etc. The assumptions were, in other words, those of an ideal world. The real risks of cost es- calation for the Channel tunnel were many times higher than those communicated to potential investors, as evi- denced by the fact that once built, the real costs of the project were higher by a factor of two compared with forecasts. Flyvbjerg, Bruzelius, and Rothengatter (in press) document for a large number of projects that the Every- thing-Goes-According-to-Plan type of deception used for the Channel tunnel is common. Such deception is, in fact, so widespread that in a report on infrastructure and development, the World Bank (1994, pp. ii, 22) found reason to coin a special term for it: the “EGAP- principle.” Cost estimation following the EGAP-princi- ple simply disregards the risk of cost escalation result- ing from delays, accidents, project changes, etc. This is a major problem in project development and appraisal, ac- cording to the World Bank. It is one thing, however, to point out that investors, public or private, were deceived in particular cases. It is quite another to get those involved in the deceptions to talk about this and to possibly admit that deception was intentional, i.e., that it was lying. We are aware of only one study that actually succeeded in getting those in- volved in underestimating costs to talk about such is- sues (Wachs, 1986, 1989, 1990). Wachs interviewed pub- lic officials, consultants, and planners who had been involved in transit planning cases in the U.S. He found that a pattern of highly misleading forecasts of costs and patronage could not be explained by technical issues and were best explained by lying. In case after case, planners, engineers, and economists told Wachs that they had had to “cook” forecasts in order to produce numbers that would satisfy their superiors and get projects started, whether or not the numbers could be justified on tech- nical grounds (Wachs, 1990, p. 144). One typical plan- ner admitted that he had repeatedly adjusted the cost figures for a certain project downward and the patronage figures upward to satisfy a local elected official who wanted to maximize the chances of getting the project in question started. Wachs’ work is unusually penetrat- ing for a work on forecasting. But again, it is small-sam- ple research, and Wachs acknowledges that most of his evidence is circumstantial (Wachs, 1986, p. 28). The evi- dence does not allow conclusions regarding the project population. Nevertheless, based on the strong pattern of misrepresentation and lying found in his case stud- ies, Wachs goes on to hypothesize that the type of abuse he has uncovered is “nearly universal” (1990, p. 146; 1986, p. 28) and that it takes place not only in transit planning but also in other sectors of the economy where forecasting routinely plays an important role in policy debates.

#### Cost overruns are inevitable and increase project value

**Turcotte 97 – Director of Office of Program Policy Analysis And Government Accountability (John W., “Follow-Up Report on the Florida Department of Transportation’s Performance In Controlling Cost Overruns When Building Roads and Bridges” Office of Program Policy Analysis And Government Accountability, December 1997, http://www.oppaga.state.fl.us/reports/pdf/9722rpt.pdf)//ctc**

Although construction contracts specify the price to be paid and the amount of time allowed for a project to be completed, FDOT may agree to changes in contract provisions. These changes are generally made through supplemental agreements to contracts. **Cost overruns and time extensions can be either avoidable or unavoidable**. **Overruns due to design plan or project management problems are avoidable because they could have reasonably been foreseen and prevented**. **However, some cost overruns are unavoidable because they cannot be reasonably prevented, such as those due to unanticipated events**. **Cost overruns may add value to projects by producing a better product**. **Overruns may add value when extra work is done that produces a better roadway for citizens, such as adding an access road to a project. Overruns may also add value when they involve work that was omitted from design plans but clearly needed to be done**, such as adding sod to control erosion. The Florida Transportation Commission reports that **cost overruns totaled $93 million** in fiscal year 1996-97 **and** that **$82 million of the cost overruns added value to the projects.** However, some overruns may not add value and represent wasted money if they do not result in a better product. For example, no value is added when a contractor puts down an asphalt roadway, but then has to tear it out and replace it due to faulty design specifications. Of the $93 million cost overruns in fiscal year 1996-97, $11 million did not add value.

## Cost Overruns Inevitable

#### Cost overruns are inevitable – attempts to cut spending lead to more cost overruns

Edwards 12 – director of tax policy studies at Cato, former senior economist on the congressional Joint Economic Committee (Chris, “Government Cost-Cutting Leads to Cost Overruns” Cato Institute, July 10, 2012, http://www.cato-at-liberty.org/government-cost-cutting-leads-to-cost-overruns/)//ctc

The government can’t seem to do anything right! It can’t even streamline activities to cut costs without creating egregious cost overruns. Since the late 1980s, the military has gone through a number of BRAC rounds to close excess military facilities. The BRAC process has shown that Congress can pursue spending cuts if only politicians put the effort in to make it happen. However, the Washington Post’s Walter Pincus describes how the Pentagon has had a hard time saving money even when directed to do so by Congress: In its latest review of the 2005 BRAC program—the largest and most complex—the GAO found that the estimated cost of $21 billion to implement the program had grown to $35 billion by Sept. 30, 2011. … Take the consolidation of various National Geospatial-Intelligence Agency (NGA) locations at a new campus at Fort Belvoir, Va. A project that had been projected to cost $1.1 billion grew to a price tag of $2.6 billion. … Even small BRAC projects experienced giant cost growth. …At Fort Jackson, S.C., for example, the price tag for two projects grew by more than 1,000 percent. One of them, the Single Drill Sergeant School, was supposed to cost $1.8 million. But when the Army determined that its 40-year-old facilities needed new classrooms, headquarters offices and a dining area for 250 additional students, the project’s cost grew to $27.2 million, the GAO reports. I’ve described some of the causes of cost overruns in this essay. One of the fundamental factors that drives all kinds of federal government inefficiency is that costs are benefits to public-sector decisionmakers. For program administrators, it always seems as though the need for services is growing, and program expansion also brings greater personal prestige. For politicians, there is little if any downside if federal projects in their districts double or triple in cost. Indeed, cost overruns are usually a benefit to them because that means more voters in their districts will receive money from taxpayers who live elsewhere in the nation. While decisionmakers in private markets are disciplined by the need to earn profits, there is no such mechanism in the public sector to control costs. Occasional negative stories by good reporters like Pincus may embarrass the big spenders in government, but it rarely seems to change their spendthrift ways.

## Cost Overruns Inevitable

#### Structural barriers to efficiency make cost overruns inevitable

Cox 11 - Principal of the Wendell Cox Consultancy in the St. Louis metropolitan area, is a Visiting Fellow in the Thomas A. Roe Institute for Economic Policy Studies at The Heritage Foundation (Wendell, “Federal Transit Programs: Spending More and More for Less and Less” The Heritage Foundation, March 2, 2011, http://www.heritage.org/research/reports/2011/03/federal-transit-programs-spending-more-and-more-for-less-and-less)//ctc

Both the majority in the new Congress and the members of the Republican Study Committee recognize that federal transit programs have become a costly extravagance that provides minimal benefits in comparison to costs incurred. In turn, both have proposed that federal transit spending and government subsidies be cut back substantially in the last seven months of the fiscal year 2011 budget that must be enacted this month. Members of the new Congress are to be commended for this effort. The federal transit program and the transit systems that it subsidizes are among the most wasteful enterprises in the American economy, and reforming them should be among Congress’s top priorities. A System Full of Waste Just how bad America’s transit program is has been the focus of a stinging indictment by Brookings Institution economist Clifford Winston. Winston’s new book, Last Exit: Privatization and Deregulation of the U.S. Transportation System, published by the Brookings Institution Press,[1] suggests that transit subsidies are largely the result of labor productivity losses, inefficient operations, and counterproductive federal regulations. Winston finds that transit service is so underutilized that load factors (occupancy rates) were at 18 percent for rail and 14 percent for buses in the 1990s before the Federal Transit Administration stopped requiring transit agencies to report that information. A car carrying a single driver has as high a load factor as the average American transit system. Rail Systems: Extravagance Extraordinaire Winston singles out the nation’s urban rail systems, which have consumed so much of transit tax funding in recent decades, for special criticism. Winston reminds readers of the considerable literature showing that “the cost of building rail systems are notorious for exceeding expectations, while ridership levels tend to be much lower than anticipated” and that “continuing capital investments are swelling the deficit.” At the same time, he questions high subsidy levels for rail transit, noting, for example, that the average income of rail transit riders is approximately double that of bus transit riders. Winston criticizes in particular the now-under-construction Dulles Airport rail line that will become a part of the Washington, D.C.–area transit system, noting that the route is not cost-effective. He characterizes cost overruns on the Dulles rail line and the soon-to-be-under-construction Honolulu rail line as “inevitable” (this despite the fact that both lines have already experienced substantial cost escalation). Indeed, he notes that government subsidies exceed the benefits on all U.S. rail systems except for San Francisco’s BART system. Winston’s analysis can be supplemented by information from the latest Federal Transit Administration “New Starts Report.”[2] The annual capital and operating cost per new round trip weekday rider on the Dulles Airport rail line will be at least $40,000. That is about as much as the annual cost to lease each new rider a Rolls Royce—though only a bottom-of-the-line $245,000 “Ghost” model. The reality is that virtually every federally funded new rail system costs as much as leasing a car for every new rider on an annual basis, and, of course the rider would be able to use that car 24/7, in contrast to transit’s limited availability. Admittedly, sometimes it is only an economy car that equates to the cost per new rider, but just as often it has been a much more expensive car. Added to transit’s financial woes is the nearly $80 billion in deferred maintenance to restore transit systems to a state of “good repair,” according to Federal Transit Administrator Peter Rogoff.[3] Paying Hundreds of Billions and Losing Ground The problems with transit extend well beyond costly rail projects. Since 1982 (the last year before the nation’s motorists began paying for transit with their gasoline taxes), federal, state, and local taxpayers spent more than $750 billion (in 2009 dollars) in subsidies.[4] Yet transit’s market share dropped by more than one-third during that period. Part of the problem is a labor cost structure driven by perverse incentives for cost maximization rather than cost effectiveness. Winston cites the fact that dismissed transit employees may be eligible for up to six years of severance pay under requirements of federal law. Transferring services to less costly private contractors could trigger these six-year severance payments for the displaced public employees. Besides the fact that virtually no other workers in the nation have such benefits, the prospect of such payments is enough to discourage even the most courageous transit manager from seeking operating efficiencies. Winston offers an ominous conclusion: “Social desirability is hardly a demanding standard for a public enterprise to meet.” He indicates that it is rare to find a public service that does not meet that vague standard. However, with respect to transit, Winston concludes that “the fact that transit’s performance is questionable … is indicative of the extent that transit and bus rail services have been mismanaged in the public sector and been compromised by public policy.” None of this is to suggest that transit does not have a valuable role to play in urban transportation. Transit costs should be no higher than necessary, and transit improvements should cost no more than necessary. Yet the record over at least the past 40 years has been one of expenditures rising much faster than ridership.

#### Company competition means cost control measures inevitable

Headley and Vosselman 9, chairs the Institute of Photogrammetry and Remote Sensing at the Delft University of Technology, Faculty of Civil Engineering and Geosciences, The Netherlands, (Karl, COST CONTROL “HOW CAN COSTS AT TELESUR BE SYSTEMATICALLY CONTROLLED AGAINST THE BACKGROUND OF THE LIBERALIZATION OF THE TELECOM MARKET?”, Maastrict School of Management, May 24, 2009, Google Scholars)//AG

**With the increase of competition, companies are increasingly trying to improve their financial** and competitive **position**. **A company that wants to increase its profits and that wants to attract investors has to keep the costs as low as possible**. This means that management needs to understand the costs and the structure thereof, to influence the costs and furthermore to control them. In defining cost control, the author came across several definitions. **In an article of Better Management, cost control** and reduction **refers to the efforts business managers make to monitor,** evaluate, and trim **expenditures**. **These efforts might be part of a formal, company-wide program or might be informal in nature and limited to a single individual or department** (www.Bettermanagement.com). In the Accounting Dictionary cost control is defined as steps taken by management to assure that the cost objectives set down in the planning stage are attained and to assure that all segments of the organization function in a manner consistent with its policies. For effective cost control, most organizations use standard cost systems, in which the actual costs are compared against standard costs for performance evaluation and the deviations are investigated for remedial actions. Cost control is also concerned with feedback that might change any or all of the future plans, the production method, or both. (Accounting Dictionary: www.answers.com). In the Business Dictionary cost control is defined as: The application of (1) investigative procedures to detect variance of actual costs from budgeted costs, (2) diagnostic procedures to ascertain the cause(s) of variance, and (3) corrective procedures to effect realignment between actual and budgeted costs (Business Dictionary: www.businessdictionary.com/definition/cost-control.html). The Dictionary of Health Services defines cost control as: The containment, regulation, or restraint of costs. **Costs are said to be contained when the value of resources committed to an activity is not considered excessive. This determination is frequently subjective and dependent upon the specific geographic area** of the activity being measured (Dictionary of Health Services Management, 2nd Ed.) Cost control also means: The techniques used by various levels of management within an organization to ensure that the costs incurred, fall within acceptable levels (www.highbeam.com). All the definitions of cost control have in common that it concerns the keeping of costs within margins. **Cost control is very important in a competitive market. Cost control can simply be defined as getting the best results with the lowest offering of resources. A cost control system will be defined, based on this definition of cost control.**

### Cost controls Inevitable

#### Cost control policies inevitable—telecom and competition proves

Headley and Vosselman 9, chairs the Institute of Photogrammetry and Remote Sensing at the Delft University of Technology, Faculty of Civil Engineering and Geosciences, The Netherlands, (Karl, COST CONTROL “HOW CAN COSTS AT TELESUR BE SYSTEMATICALLY CONTROLLED AGAINST THE BACKGROUND OF THE LIBERALIZATION OF THE TELECOM MARKET?”, Maastrict School of Management, May 24, 2009, Google Scholars)//AG

The **liberalization process in the Telecom sector began in the 1990s**. The **aim** of the deregulation and liberalization of the telecom markets **is to create a fully operational and competitive market for telecom services.** **The liberalization and competition make the use of a strict policy of cost control inevitable for the players on the telecom market**. In the telecom sector **the following management instruments are used to control costs: Costing model, Budgeting, Balanced Scorecard and Benchmarking**. In Suriname the telecom market was liberalized in 1997 by opening it for two other players who besides Telesur provide customers with mobile services. Given the relatively small size of the Surinamese telecom market, a strict policy based on keeping cost as low as possible is needed by the incumbent if he wants to remain the market leader.

## Cost Overruns Decreasing Now

#### Cost overruns are decreasing now – they’re a result of a poor economy

Ganuza 3 – Department of Economics and Business, Universitat Pompeu Fabra (Juan-Jose, “Competition and Cost Overruns in Procurement” October 2003, http://www.recercat.cat/bitstream/handle/2072/916/772.pdf?sequence=1)//ctc

This paper proposes a rationale behind this observed pattern. We show that it may be in the interest of the procurer to underinvest in design specification. The intuition behind this result is that, by reducing the design specification, the sponsor reduces the comparative advantage of the most efficient firm in the awarding process. By making firms more homogeneous the sponsor intensifies competition and this results in a lower transfer. We also show that the more competitive the market, the better specified the initial design will be. In particular, in a perfectly competitive market, in which firms earn no rents, no design misspecification takes place. The main goal of the paper is to use the analysis of the specification design problem to study the cost overruns in public works. We find that cost overruns are decreasing in the design specification level. Then, using the relationship between competitiveness and incentives to design specification, we show that when the procurement market is more competitive cost overruns are lower. For this reason, cost overruns are argued to be a consequence of the lack of competition in the procurement market. We study a simple procurement problem in which a sponsor wants to undertake a single project. There exists a fixed number of horizontally differentiated potential contractors. Prior to the awarding process, the sponsor decides how much to invest in specifying the design (or the blueprint) and this decision becomes public information. As a result of this learning process an initial design is specified. The sponsor awards the construction of the initial design using a competitive mechanism. Once the project is awarded to a contractor and in the course of its realization, new information about the optimal design is generated, and the awarded contractor and the sponsor engage in a bilateral renegotiation to change the initial design to accommodate the new information. Cost overruns, i.e., the difference between the final price and the price announced once the project is initially awarded, are a consequence of this renegotiation. As often claimed, a low investment in the initial design specification is likely to lead to negotiating significant changes and therefore to high cost overruns.

## NIB Solves

#### NIB solves cost overruns – encourages financial discipline

McConaghy and Kessler 11

[Ryan McConaghy and Jim Kessler, Deputy Director of the Third Way Economic Program, Vice President for Policy at Third Way , Third Way - innovative and influential think-tank that creates and advances moderate policy and political ideas. We advocate for private-sector economic growth, a tough and smart security strategy, a clean energy revolution, bold education and anti-poverty reforms, and progress on divisive culture issues. “A National Infrastructure Bank”, The Economic Program Schwartz Initiative on American Economic Policy, January 2011, http://www.bernardlschwartz.com/political-initiatives/Third\_Way\_Idea\_Brief\_-\_A\_National\_Infrastructure\_Bank-1.pdf, javi]

In order to provide innovative, merit-based financing to meet America’s emerging infrastructure needs, Third Way supports the creation of a National Infrastructure Bank (NIB). The NIB would be a stand-alone entity capitalized with federal funds, and would be able to use those funds through loans, guarantees, and other financial tools to leverage private financing for projects. As such, the NIB would be poised to seize the opportunity presented by historically low borrowing costs in order to generate the greatest benefit for the lowest taxpayer cost. Projects would be selected by the bank’s independent, bipartisan leadership based on merit and demonstrated need. Evaluation criteria may include economic benefit, job creation, energy independence, congestion relief, regional benefit, and other public good considerations. Potential sectors for investment could include the full range or any combination of rail, road, transit, ports, dams, air travel, clean water, power grid, broadband, and others. As a bank, the NIB would inject accountability into the infrastructure investment process. Since the bank would offer loans and loan guarantees using a combination of public and private capital, it would have the opportunity to move away from the traditional design-bid-build model and toward project delivery mechanisms that would deliver better value to taxpayers and investors.35 By operating on principles more closely tied to return on investment and financial discipline, the NIB would help to prevent the types cost escalation and project delays that have foiled the ARC Tunnel. America’s infrastructure policy has been significantly hampered by the lack of a national strategy rooted in clear, overarching objectives used to evaluate the merit of specific projects. The politicization and lack of coordination of the process has weakened public faith in the ability of government to effectively meet infrastructure challenges. In polling, 94% of respondents expressed concern about America’s infrastructure and over 80% supported increased federal and state investment. However, 61% indicated that improved accountability should be the top policy goal and only 22% felt that the federal government was effective in addressing infrastructure challenges.36 As a stand-alone entity, the NIB would address these concerns by selecting projects for funding across sectors based on broadly demonstrated need and ability to meet defined policy goals, such as economic benefit, energy independence, improved health and safety, efficiency, and return on investment.

#### NIB is more effective and is able to solve for current infrastructure investment problems

McConaghy and Kessler 11

[Ryan McConaghy and Jim Kessler, Deputy Director of the Third Way Economic Program, Vice President for Policy at Third Way , Third Way - innovative and influential think-tank that creates and advances moderate policy and political ideas. We advocate for private-sector economic growth, a tough and smart security strategy, a clean energy revolution, bold education and anti-poverty reforms, and progress on divisive culture issues. “A National Infrastructure Bank”, The Economic Program Schwartz Initiative on American Economic Policy, January 2011, http://www.bernardlschwartz.com/political-initiatives/Third\_Way\_Idea\_Brief\_-\_A\_National\_Infrastructure\_Bank-1.pdf, javi]

The NIB would magnify the impact of federal funds by leveraging them through partnerships with private entities and other actors, providing taxpayers with more infrastructure bang for their public buck. Estimates have placed the amount of private capital readily available for infrastructure development at $400 billion,40 and as of 2007, sovereign wealth funds—another potential source of capital—were estimated to control over $3 trillion in assets with the potential to control $12 trillion by 2012.41 While these and other institutional funds have experienced declines as a result of the economic downturn, they will continue to be important sources of large, long-term investment resources. By offering loan guarantees to induce larger private investments or issuing debt instruments and securities, the NIB could tap these vast pools of private capital to generate investments much larger than its initial capitalization. In doing so, it could also lower the cost of borrowing for municipalities by lowering interest on municipal bonds for state and local governments by 50 to 100 basis points.42

#### The NIB is critical to change the current infrastructure investment system – utilizes spending best

McConaghy and Kessler 11

[Ryan McConaghy and Jim Kessler, Deputy Director of the Third Way Economic Program, Vice President for Policy at Third Way , Third Way - innovative and influential think-tank that creates and advances moderate policy and political ideas. We advocate for private-sector economic growth, a tough and smart security strategy, a clean energy revolution, bold education and anti-poverty reforms, and progress on divisive culture issues. “A National Infrastructure Bank”, The Economic Program Schwartz Initiative on American Economic Policy, January 2011, http://www.bernardlschwartz.com/political-initiatives/Third\_Way\_Idea\_Brief\_-\_A\_National\_Infrastructure\_Bank-1.pdf, javi]

Financing the infrastructure upgrades needed to support America’s economy and meet its new challenges won’t be cheap, but there are billions in efficiencies that can be wrung out of the system with real structural changes, and the economic costs of inaction will be higher. By leveraging private resources, the NIB will ensure that future spending on infrastructure will get the utmost bang for the taxpayer buck. It will also cut down on waste by supporting only projects that serve demonstrated regional or national needs and satisfy goal-based criteria.

## Cost Control Fails

#### Unless the counterplan mandates all of these steps, it can’t solve

DoT 10 – (“Linking Transportation Performance and Accountability” January 2010, http://www.international.fhwa.dot.gov/pubs/pl10009/pl10009.pdf)//ctc

The scan provided considerable insight into the evolution of performance management in nations that have practiced it for at least a decade. Their systems have matured and evolved in ways that provide lessons for the United States. The scan also validated the use of performance management as an effective means to translate broad government goals into meaningful agency practice. The performance management systems observed abroad provided transparency and accountability to transportation programs, while also allowing flexibility to meet local needs. The officials offered the scan team advice in several key areas of performance management. The following outlines their advice and the scan team’s conclusions: 1. Articulate a limited number of high-level national transportation policy goals that are linked to a clear set of measures and targets. 2. Negotiate intergovernmental agreements on how State, regional, and local agencies will achieve the national goals while translating them into State, regional, or local context and priorities. 3. Evaluate performance by tracking the measures and reporting them in clear language appropriate for the audience. 4. Collaborate with State, regional, and local agencies to achieve the targets by emphasizing incentives, training, and support—instead of penalties—as the preferred way to advance performance. 5. Perpetuate long-term improvement by understanding that the real value of performance management is the development of an improved decision making and investment process, not the achievement of many short-term targets. 6. Improve the use of benefit-cost analysis and risk management practices to demonstrate value for money. Consider major project post construction evaluations to assess whether benefits included in the original benefit-cost assessments were realized. 7. Recognize that major national visions, not achievement of narrow targets, tend to generate new investment. 8. Convert long-term deferred maintenance needs into a long-term future liability calculation. This clearly links the budget to long-term system sustainability. 9. Demonstrate accountability by producing annual performance reports on agency achievements. 10. Instead of using technical jargon, report results with language that is meaningful to the public, such as “the journey home” or “support for the journey.” Detailed, technical terms should be used for internal reporting, but translated into understandable language for the public. 11. Collaborate frequently with other cabinet agencies, including conducting periodic meetings with top leadership on cross-cutting issues such as economic development, public health, highway safety, and climate change. 12. Have a strong safety focus and document the results of safety measures, in addition to the usual measures of infrastructure condition, internal operations, transit, and on time rail performance. 13. Focus on desired outcomes for travel time reliability that lead to expanded strategies for highway operations. 14. Learn from international examples of addressing climate change that rely on improving vehicles, fuels, and modal choice, but do not mandate reductions in travel or mobility. 15. Provide resources to enable high-quality data tracking, analysis, and reporting capabilities that allow for the use of performance data in decision making. 16. Recognize that performance management is not a black box or simplistic solution; it is a culture to grow within the agency as an important consideration in the decision making and investment process.

## Controls Now/Normal Means

#### Status quo solves – state DOTs are using multiple performance measures now

Chisholm-Smith 11 – Senior program officer at the National Cooperative Highway Research Program (Gwen, “State DOT Public Transportation Performance Measures: State of the Practice and Future Needs” National Cooperative Highway Research Program, September 2011, http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp\_rrd\_361.pdf)//ctc

In a nationwide survey, approximately two-thirds of all state DOTs indicated that they have some public transportation performance measures in place (30 out of 43 respondents). A number of motivations led these DOTs to the use of public transportation performance measures, including providing accountability to stakeholders. This desire for more accountability has led some state legislatures to impose their own requirements in the use of performance measures. Some DOTs are doing more than tracking performance data and reporting it. Some are experimenting with use of performance data to improve decisions made during long-range planning, and for transit plans and capital programs. Performance measures are a way for agency leaders to communicate organizational priorities to their staff. Of the state DOTs that are using public transportation performance measures, many are using multiple performance measures. The number of public transportation performance measures used within each state varies; most DOTs indicated they have between two and six measures, though several DOTs reported using seven or more measures. Common measures include ridership measures, those focused on the level of public transportation riders using services; availability measures, those focused on the availability of services (e.g., total hours, average number of days per week available); internal cost and efficiency measures, those focused on internal utilization of resources, cost, and other measures of efficiency; quality measures, those that measure the quality of service experienced by the customer; asset management measures, those that look at the physical components of the system (e.g., age of ﬂeet, etc.); and community measures, those that focus on impacts to a community in the way of mobility, air quality, and energy savings. Findings indicate that ridership and internal cost and efficiency measures are much more widespread than measures of availability, service quality, asset management, or community impacts. Use of performance measures by State DOT public transportation divisions is driven by the business functions these divisions perform, including compliance with data reporting requirements and supporting statewide public transportation planning decisions and funding allocation. Within the survey, 17 state DOTs indicated they are using public transportation performance measures to support allocation of or formulas for public transportation operating funding, and 11 indicated they are using performance measures to support allocation of or formulas for capital funding. Several also identiﬁed that they were using performance measures to measure progress toward statewide goals (15 state DOTs) or for measuring progress toward agency targets or comparing agency services (15 state DOTs).

## Can Add Controls

#### Controls can be added to the plan – MAP-21 empirically proves that performance measures can be added later

Georgetown Climate Center 11 – the nonpartisan Georgetown Climate Center seeks to advance effective climate, energy, and transportation policies in the United States—policies that reduce greenhouse gas emissions and help communities adapt to climate change. Led by Executive Director Vicki Arroyo and Faculty Director Professor Peter Byrne of Georgetown Law, the Center also seeks to ensure that national climate and energy policy is informed by lessons from existing state efforts and that national policies maintain an ongoing role for state innovation and implementation. (“Senate Committee Passes Transportation Reauthorization Bill” November 13, 2011, http://www.georgetownclimate.org/senate-committee-passes-transportation-reauthorization-bill)//ctc

National Highway Performance Program: This new core program consolidates the Interstate Maintenance, National Highway System, and Highway Bridge programs. The new program will require states to develop asset management plans and establish performance targets in response to nationally set performance measures that will assess the condition of roads and bridges, and the performance of the system. This program will provide states with more flexibility to apply funds to the most needed projects by eliminating barriers between existing programs. However, the bill also requires that states spend a certain amount of funding on the repair of interstate pavement and national highway system bridges if they fall below minimum standards established by U.S. Department of Transportation. Transportation Mobility Program: This new core program replaces the Surface Transportation Program, and will continue to provide states and localities with flexibility to fund projects that fit their needs. The program will allow states and regions to invest in highways, transit projects, freight rail projects, and bicycle and pedestrian projects, in addition to other activities. National Freight Program: This new core program will provide funding to states by formula for projects to improve regional and national freight movements on highways, including intermodal connectors. This program will make it easier for freight mobility improvement projects to receive funding since they will compete in their own program, and not against all highway projects. Congestion Mitigation and Air Quality Improvement Program: CMAQ is an existing program that provides funds to states for transportation projects designed to reduce traffic congestion and improve air quality. MAP-21 will expand the program by including particulate matter as one of the pollutants addressed and requiring large metropolitan areas to develop performance plans. In addition, MAP-21 will reform the Transportation Enhancements (TE) program by consolidating Transportation Enhancements, Safe Routes to School, Recreational Trails, environmental mitigation, and certain types of road projects into a “reserved” pot. While this consolidation will provide states with greater spending flexibility, it may result in a decrease in bicycle and pedestrian projects that had previously received their own dedicated funding source. Highway Safety Improvement Program: MAP-21 will substantially increase the amount of funding for this existing core program, and will require states to develop and implement a safety plan that identifies highway safety programs and a strategy to address them. In addition, states will be required to create a database containing information on safety issues for all public roads, and will be required to develop performance targets on fatalities and serious injuries. States will also be required to develop a strategic highway safety plan within a year, and are required to spend additional funding on safety projects if they do not meet this deadline. Performance Measures: As mentioned above, MAP-21 will establish performance measures related to the National Highway System, NHS performance, safety, freight, congestion mitigation and air quality. In response to these performance measures, states and MPOs will establish performance targets which will be incorporated into transportation plans. Statewide transportation improvement programs (STIP) and metropolitan transportation improvement programs (TIP) must include performance measures and targets as well, and a system performance report must include progress toward achieving each state’s performance targets. These performance targets will assist states and MPOs in targeting limited resources on projects that will improve their transportation system.

## Cost Overruns Exaggerated

#### Exaggerated cost overruns are fueled by political motivations and ignore infrastructure’s positive effects on jobs, congestion and the economy

Nussbaum 4-11-12 – Inquirer Staff Writer (Paul, “U.S. report: Christie overstated tunnel costs” Philly.com, April 11, 2012, http://articles.philly.com/2012-04-11/news/31325374\_1\_michael-drewniak-tunnel-project-cost-overruns/3)//ctc

The report cited studies that estimated that New Jersey communities served by the ARC project would have had an average increase in home value of $19,000, or 4.2 percent, in part because of improved access to high-paying jobs in Manhattan. The GAO cited studies that estimated the project would have provided 59,900 jobs on site during construction and total employment of about 98,300 in the region. Ten years after completion, the project would have added 44,000 new jobs and almost $4 billion in personal income, according to the report. It would have reduced commutes by as much as 15 minutes. Supporters of the tunnel project said Tuesday that the GAO's findings showed Christie had misled state residents when he killed the tunnel. "This report from an independent, unbiased, nonpartisan entity confirms that the transportation needs of the region were sacrificed solely because of Gov. Christie's political motivations," said Kate Slevin, executive director of the Tri-State Transportation Campaign, a pro-transit organization. "The governor needlessly canceled a project that would have been an economically and environmentally prudent investment for New Jersey. . . . Gov. Christie must explain to motorists stuck in traffic and delayed transit riders how he plans to improve their commutes." State Assemblyman John S. Wisniewski (D., Middlesex), chairman of the Assembly's transportation committee, said the GAO report "essentially validates the criticism" that he and others leveled at Christie. It "documents that the governor used exaggerated claims and distorted information to reach a preordained decision," he said. "We all knew what he was doing it for: He saw an opportunity to grab that money and put it in the Transportation Trust Fund," Wisniewski said. Christie was "just building a political resumé" as a tough-talking fiscal conservative, Wisniewski said. The project - the nation's largest mass-transit project at the time it was canceled - was a generation in the making, he said, and now, commuters "will probably have to wait another generation." Lautenberg said the tunnel was "the most important transportation project of our time." "ARC was critical to the future of New Jersey's economy and it took years to plan. But Gov. Christie wiped it out with a campaign of public deception," Lautenberg said.

### Cost Underestimation Inevitable

#### Cost underestimation inevitable—economic reasons

Flyvbjerg et al 02 [Bent Flyvbjerg, Mette Skamris Holm, and Søren Buhl. Flyvbjerg is a professor of planning with the Department of Development and Plan- ning, Aalborg University, Denmark. He is founder and director of the university’s re- search program on transportation infra- structure planning and was twice a Visiting Fulbright Scholar to the U.S. His latest books are Rationality and Power (University of Chicago Press, 1998) and Making Social Science Matter (Cambridge University Press, 2001). He is currently working on a book about megaprojects and risk (Cambridge University Press). Holm is an assistant pro- fessor of planning with the Department of Development and Planning, Aalborg Uni- versity, and a research associate with the university’s research program on transpor- tation infrastructure planning. Her main in- terest is economic appraisal of projects. Buhl is an associate professor with the De- partment of Mathematics, Aalborg Univer- sity, and an associate statistician with the university’s research program on transpor- tation infrastructure planning. “Underestimating Costs in Public Works Projects: Error or Lie?” Journal of the American Planning Association, Vol. 68, No. 3, Summer 2002, http://www.industrializedcyclist.com/Flyvbjerg02.pdf, accessed 7/17/12]//DLi

Economic Explanations Economic explanations conceive of cost underesti- mation in terms of economic rationality. **T**wo types of economic explanation exist; one explains in terms of eco-nomic self-interest, the other in terms of the public in- terest. As regards self-interest, when a project goes for- ward, it creates work for engineers and construction firms, and many stakeholders make money. If these stakeholders are involved in or indirectly influence the forecasting process, then this may influence outcomes in ways that make it more likely that the project will be built. Having costs underestimated and benefits overes- timated would be economically rational for such stake- holders because it would increase the likelihood of reve- nues and profits. Economic self-interest also exists at the level of cities and states. Here, too, it may explain cost underestimation. Pickrell (1990, 1992) pointed out that transit capital investment projects in the U.S. compete for discretionary grants from a limited federal budget each year. This creates an incentive for cities to make their projects look better, or else some other city may get the money. As regards the public interest, project promoters and forecasters may deliberately underestimate costs in order to provide public officials with an incentive to cut costs and thereby to save the public’s money. According to this type of explanation, higher cost estimates would be an incentive for wasteful contractors to spend more of the taxpayer’s money. Empirical studies have identified pro- moters and forecasters who say they underestimate costs in this manner and with this purpose (i.e., to save public money; Wachs, 1990). The argument has also been adopted by scholars, for instance Merewitz (1973b), who explicitly concludes that “keeping costs low is more im- portant than estimating costs correctly” (p. 280).

#### Cost underestimation inevitable—political incentives

Flyvbjerg et al 02 [Bent Flyvbjerg, Mette Skamris Holm, and Søren Buhl. Flyvbjerg is a professor of planning with the Department of Development and Plan- ning, Aalborg University, Denmark. He is founder and director of the university’s re- search program on transportation infra- structure planning and was twice a Visiting Fulbright Scholar to the U.S. His latest books are Rationality and Power (University of Chicago Press, 1998) and Making Social Science Matter (Cambridge University Press, 2001). He is currently working on a book about megaprojects and risk (Cambridge University Press). Holm is an assistant pro- fessor of planning with the Department of Development and Planning, Aalborg Uni- versity, and a research associate with the university’s research program on transpor- tation infrastructure planning. Her main in- terest is economic appraisal of projects. Buhl is an associate professor with the De- partment of Mathematics, Aalborg Univer- sity, and an associate statistician with the university’s research program on transpor- tation infrastructure planning. “Underestimating Costs in Public Works Projects: Error or Lie?” Journal of the American Planning Association, Vol. 68, No. 3, Summer 2002, http://www.industrializedcyclist.com/Flyvbjerg02.pdf, accessed 7/17/12]//DLi

Political Explanations Political explanations construe cost underestima- tion in terms of interests and power (Flyvbjerg, 1998). Surprisingly little work has been done that explains the pattern of misleading forecasts in such terms (Wachs, 1990, p. 145). A key question for political explanations is whether forecasts are intentionally biased to serve the in- terests of project promoters in getting projects started. This question again raises the difficult issue of lying. Questions of lying are notoriously hard to answer, be- cause in order to establish whether lying has taken place, one must know the intentions of actors. For legal, eco- nomic, moral, and other reasons, if promoters and fore- casters have intentionally fabricated a deceptive cost estimate for a project to get it started, they are unlikely to tell researchers or others that this is the case (Flyvbjerg, 1996; Wachs, 1989). When Eurotunnel, the private company that owns the tunnel under the English Channel, went public in 1987 to raise funds for the project, investors were told that building the tunnel would be relatively straight- forward. Regarding risks of cost escalation, the prospec- tus read: Whilst the undertaking of a tunneling project of this nature necessarily involves certain construc- tion risks, the techniques to be used are well proven. . . . The Directors, having consulted the Mâitre d’Oeuvre, believe that 10% . . . would be a reasonable allowance for the possible impact of un- foreseen circumstances on construction costs.2 (“Under Water,” 1989, p. 37) Two hundred banks communicated these figures for cost and risk to investors, including a large number of small investors. As observed by The Economist (“Under Water,” 1989), anyone persuaded in this way to buy shares in Eurotunnel in the belief that the cost estimate was the mean of possible outcomes was, in effect, de- ceived. The cost estimate of the prospectus was a best possible outcome, and the deception consisted in mak- ing investors believe in the highly unlikely assumption— disproved in one major construction project after an- other—that everything would go according to plan, with no delays; no changes in safety and environmental per- formance specifications; no management problems; no problems with contractual arrangements, new tech- nologies, or geology; no major conflicts; no political promises not kept; etc. The assumptions were, in other words, those of an ideal world. The real risks of cost es- calation for the Channel tunnel were many times higher than those communicated to potential investors, as evi- denced by the fact that once built, the real costs of the project were higher by a factor of two compared with forecasts. Flyvbjerg, Bruzelius, and Rothengatter (in press) document for a large number of projects that the Every- thing-Goes-According-to-Plan type of deception used for the Channel tunnel is common. Such deception is, in fact, so widespread that in a report on infrastructure and development, the World Bank (1994, pp. ii, 22) found reason to coin a special term for it: the “EGAP- principle.” Cost estimation following the EGAP-princi- ple simply disregards the risk of cost escalation result- ing from delays, accidents, project changes, etc. This is a major problem in project development and appraisal, ac- cording to the World Bank. It is one thing, however, to point out that investors, public or private, were deceived in particular cases. It is quite another to get those involved in the deceptions to talk about this and to possibly admit that deception was intentional, i.e., that it was lying. We are aware of only one study that actually succeeded in getting those in- volved in underestimating costs to talk about such is- sues (Wachs, 1986, 1989, 1990). Wachs interviewed pub- lic officials, consultants, and planners who had been involved in transit planning cases in the U.S. He found that a pattern of highly misleading forecasts of costs and patronage could not be explained by technical issues and were best explained by lying. In case after case, planners, engineers, and economists told Wachs that they had had to “cook” forecasts in order to produce numbers that would satisfy their superiors and get projects started, whether or not the numbers could be justified on tech- nical grounds (Wachs, 1990, p. 144). One typical plan- ner admitted that he had repeatedly adjusted the cost figures for a certain project downward and the patronage figures upward to satisfy a local elected official who wanted to maximize the chances of getting the project in question started. Wachs’ work is unusually penetrat- ing for a work on forecasting. But again, it is small-sam- ple research, and Wachs acknowledges that most of his evidence is circumstantial (Wachs, 1986, p. 28). The evi- dence does not allow conclusions regarding the project population. Nevertheless, based on the strong pattern of misrepresentation and lying found in his case stud- ies, Wachs goes on to hypothesize that the type of abuse he has uncovered is “nearly universal” (1990, p. 146; 1986, p. 28) and that it takes place not only in transit planning but also in other sectors of the economy where forecasting routinely plays an important role in policy debates.

### Cost Controls Now

#### Company cost controls spreading now—Fedex proves

**Reuters 11**, ternational multimedia news agency, (Reuters, FedEx Credits Its Cost Controls as Profit Rises 33%, Exceeding Forecasts, reuters financial Desk, June 23, 2011, LexisNexis)//AG

The **FedEx** Corporation's **quarterly profit and outlook beat forecasts on Wednesday as higher shipping rates and tight cost controls more than offset a slowing economic recovery and high fuel prices**. The **company said it would spend more on technology and fuel-efficient aircraft**, helping to increase revenue per package. ''Our actions to improve yields continue to drive revenue and earnings growth across our transportation segments,'' FedEx's chief financial officer, Alan B. Graf Jr., said. **''Even with higher planned capital spending in fiscal 2012,** margins, **cash flows and returns are expected to improve year over year.**'' FedEx, which ranks No. 2 behind United Parcel Service among package shipping companies, has been able to pass through higher costs via fuel surcharges and still has room to raise prices without widespread retaliation from consumers, many analysts said. **''Pricing and expense control'' drove FedEx earnings up even as it navigated harsh weather, an economic soft patch and supply chain disruptions** caused by Japan's earthquake, and lofty fuel costs, said Peter Nesvold, a Jefferies & Company analyst. FedEx's chief executive, Frederick W. Smith, said the combination of rising fuel prices, the devastation in Japan and consumer sentiment contributed to the slowing of the economic recovery. However, he said he expected a turnaround now that crude oil prices were retreating. Fe**dEx predicted that consumer spending, industrial production and gross domestic product would improve in the second half of 2011.** **FedEx said its profit rose 33 percent, to $558 million, or $1.75 a share, from $419 million, or $1.33 a share, a year earlier. Analysts, on average, forecast a profit of $1.72 a share**. FedEx forecast its fiscal 2012 profit rising to $6.35 to $6.85 a share, allowing for oil's volatility, Mr. Graf said. The midpoint of $6.60 topped analyst forecasts. Revenue in the period, which ended May 31 and was the fourth quarter of FedEx's fiscal year, rose 12 percent, to $10.55 billion from $9.43 billion. FedEx Express and the less expensive ground segments, which account for more than 80 percent of the company's revenue, had revenue growth of more than 10 percent in the quarter.

Make sure we have cut these:

List of Stakeholder Restructuring Proposals Reviewed

American Association of State Highway and Transportation Officials. A New Vision for the 21st Century. July 2007

American Road and Transportation Builders Association. A New Vision and Mission for America’s Federal Surface Transportation Program. November 2007.

Bipartisan Policy Center, National Transportation Policy Project. Commentary on the Report of the National Surface Transportation Policy and Revenue Study Commission. February 26, 2008.

Brookings Institution. Blueprint for American Prosperity. A Bridge to Somewhere: Rethinking American Transportation for the 21st Century. June 2008.

National Surface Transportation Infrastructure Financing Commission. The Path Forward: Funding and Financing Our Surface Transportation System: Interim Report of the National Surface Transportation Infrastructure Financing Commission. February 2008.

National Surface Transportation Policy and Revenue Study Commission. Transportation for Tomorrow: Report of the National Surface Transportation Policy and Revenue Study Commission. January 2008.

Transportation for America Campaign. Making Transportation Work for America in the 21st Century. [www.t4america.org](http://www.t4america.org)