

peated his rosy theme that Virginia is doing better than other states, Sen. Warren E. Barry (R) retorted, “[Gilmore’s] saying today that the sky is falling, except here in the land of Oz.”

Bond Ratings Threatened

One indicator of the growing instability of states’ budgets — and growing worries of Wall Street bond rating firms — is their declining reserve funds. The National Conference of State Legislatures latest “State Budget and Tax Actions 2001 — Preliminary Report” states, “Aggregate state balances fell 22% from FY 2000 to FY 2001” for the 46 states reporting. (Aggregate balances include general fund year-end balances and rainy day funds.) It is the ratio of balances to spending which heavily influences bond ratings which states rely on to borrow funds.

Thirty-three states drew down their balances to get by, resulting in the largest percentage drop in that ratio, year-to-year, in 20 years — from 11.5% in FY 2000 to 8.2% in FY 2001. Nationally, the 8.2% in the FY 2001 is still above the Wall Street dictated 5% margin, but ten states fell below that. In fact, downgrading of bond ratings for the following states has either occurred or been threatened: Michigan, New Hampshire, North Carolina, Tennessee, and Wisconsin.

Another critical metric is the rate of revenue growth. NCSL reports that 23 states saw lower than 5%, with four of those at or below 1%: Indiana (0.6%), Iowa (1%), Ohio (0.9%), and Pennsylvania (0.1%). The national rate for states in FY 2001 was 4.5%, as compared to 8.7% in FY 2000, an almost 50% decline in one year.

Clearly, the imagined “fire wall” between the “bad news” in FY 2001 which required over one-third of states to slash spending while draining reserve funds, and the daily “bad news” of FY 2002 revenue shortfalls, does not exist. Budget battles are still ongoing in four or five states as of this writing. The tricks used to “get by” or “ride it out” undermine the citizens’ general welfare.

U.S. Infrastructure in \$8-9 Trillion Deficit

by Richard Freeman and
Mary Jane Freeman

Infrastructure and the machine-tool-design principle are two of the most critical elements in an economy, in terms of transmitting high rates of productivity and fostering real development. A nation that is serious about surviving would build up its infrastructure. But because of fatally incompetent U.S. policy, U.S. infrastructure is breaking down at an increasing rate, which contributes to the decline of America’s physical economy. Yet precisely this deficit, of obsolete, collapsed,

and non-functional infrastructure, is unmeasured.

The need to know the condition of U.S. infrastructure is elementary: to evaluate the true state of the economy as a whole, and to assess what work America must do to repair and upgrade infrastructure, to facilitate anti-entropic economic growth. The *EIR* economics staff is assembling a picture of U.S. infrastructure, and preliminarily, it estimates the U.S. infrastructure deficit to be a staggering \$8-9 trillion.

America’s breakdown has occurred in every type of infrastructure, during the last three decades. *EIR* is consulting a number of engineers, and building up a bill of materials of what is needed.

A look at the infrastructure problems was made in the March 8 report of the American Society of Civil Engineers (ASCE), which represents the engineers who design and build infrastructure. The ASCE report focusses on pre-existing infrastructure. It gave the cumulative state of U.S. infrastructure a failing grade of “D+,” and concluded that America must invest \$1.3 trillion in infrastructure over the next five years just to bring it to a functional level.

The ASCE report has value as a starting point, in that it presents the devastated condition of U.S. infrastructure, with limited, but helpful detail; it breaks down the overall \$1.3 trillion bill for infrastructure investment for each sector.

But, the infrastructure deficit is far greater than \$1.3 trillion. The glaring shortcoming of the ASCE report is what it leaves out. If America is to survive and advance, it must gather and transmit sufficient water, some of it coming from Alaska; it must build a national magnetically levitated train grid for passenger and freight transport; it must build entirely new cities. This represents a tremendous cost in the form of a bill of materials of real physical goods needed to construct these, and other necessary projects.

Such infrastructure building in America would be called into operation by the same policy transformation as would implement Lyndon LaRouche’s policy for an Eurasian Land-Bridge. In America, such infrastructure projects would create millions of jobs on the infrastructure projects themselves, and additional jobs in the industries that would be stimulated to provide goods for the infrastructure projects.

EIR presents here a first overview look at the status of the U.S. infrastructure catastrophe, including the five principal forms of infrastructure: transportation, which includes roads, bridges, waterways, ports, etc.; water management, which includes drinking water and waste disposal; education; energy generation and transmission; and health and hospital services. ASCE estimates of the cost to maintain the equipotential of each type of infrastructure, are also supplied. *EIR* then looks at the larger infrastructure needs that must be faced.

Infrastructure Breakdown

Transportation is vital to move goods and people within cities or across the nation. Improved efficiency and time saved in transport is a marker of development.

Roads: One-third of the nation’s roads are in poor or

mediocre condition, according to the Federal Highway Administration (FHA). They are also insufficient to handle traffic flow. The broken-down condition of America's roads contributes to as many as 13,800 deaths each year. During peak-hour travel, more than 70% of traffic occurs in congested areas. The congestion causes the loss, in wasted time and fuel, in just the ten most-congested areas, of \$34 billion per year.

Bridges: As of 1998, some 29% of the nation's bridges were rated structurally deficient or functionally obsolete by the FHA. Many are decomposing, with chunks of masonry and metal dropping to the streets or water below.

The ASCE estimated that America must invest \$470 billion over the next five years for roads and bridges, just to make a minimal advance, but not to clear up the full accumulated deficit.

Public transit: Public transit in U.S. cities consists of buses and light rail (subways, etc.). The overwhelming majority — 94% — of public transit route miles are bus-miles; unfortunately, the more efficient light rail is vastly underdeveloped. Ridership has been increasing at approximately 4% per year, but the construction of new transit does not keep up with it. ASCE estimated five-year investment needs at \$80 billion.

Aviation: During the past ten years, air traffic has increased 37%, as airport capacity increased 1%. Because of airport conditions, in 2000 there were 429 runway "incursions" (near-collisions between planes), up 25% from 1999. ASCE estimated five-year investment needs at \$67 billion.

Schools: Because of aging or outdated facilities, or overcrowding, 75% of America's school buildings are inadequate to meet needs.

The ASCE, using figures from the U.S. Department of Education, estimated that \$127 billion is needed to bring facilities into good overall condition, but the National Education Association says the cost is much bigger: \$268 billion.

Drinking water: A significant portion of the nation's 54,000 community water systems are aging and near the limit of their useful life, or inadequate. Some, because of leaks or disrepair, have transmitted disease-causing bacteria and parasites. These systems will have to be upgraded or replaced.

Wastewater: The nation's 16,000 wastewater systems have enormous needs. Some urban sewer systems are 100 years old. Between 35% and 45% of U.S. surface waters do not meet water quality standards. ASCE estimated five-year investment needs for drinking water and wastewater at \$250 billion.

Dams: There are more than 2,100 unsafe dams in the United States. There were 61 reported dam failures during the past two years.

The ASCE places the five-year need for investment for dams at only \$2 billion.

Energy: Since 1990, U.S. electricity-generating capacity has increased only about 7,000 megawatts per annum, an annual shortfall of 30%. The North American Electricity Reliability Council (NERC) estimates that more than

10,000 MW of capacity will have to be added each year until 2008 (80,000 MW total) to keep up with demand. (The NERC estimate includes the construction of very few nuclear plants.) The ASCE estimated five-year investment needs at \$27 billion.

To upgrade and improve America's navigable waterways and ports, and solid waste and hazardous waste disposal, the ASCE estimated five-year investment needs are \$37 billion.

The More Accurate Picture

The ASCE report gives a shocking overview of U.S. infrastructure, but that is only a starting point. If one were to address what is needed for the fundamental advance of the U.S. economy taken as a whole, not simply "adding up" systems as they exist, then one transcends the ASCE methodological limitations, and finds a far, far greater infrastructure deficit. By starting from that necessary standpoint, *EIR* came up with a much greater bill of materials, and much more work to be done. We consider the implications of just three of the limitations of the ASCE report:

1. The ASCE concentrates only on *existing* infrastructure, not fully on what is needed. This became apparent in a discussion about Houston, for example, the city with the third-largest land area in the United States, which has no light rail. Asked what it would cost to put light rail into Houston, an ASCE official said, "We didn't consider that."

2. National great infrastructure projects are critical to transform the U.S. economy. For example, the North American and Water Power Alliance (NAWAPA), to provide 33 American states with water from Alaska, would cost \$400 billion. It is also vital to construct a national magnetically levitated inter-urban train system for passengers and freight. The ASCE report does not consider these national plans.

3. America urgently needs to construct new cities, in the Far West, and other places, to provide for population growth and replace the misguided policy of suburban sprawl. These new cities require constructing an entire matrix of multiple infrastructure, such as electricity grids, etc. Dozens of new cities are needed. The ASCE report does not consider that.

From the standpoint of constructing infrastructure to transform the American economy to produce anti-entropic growth, in order to assure national survival, *EIR* estimates the infrastructure deficit to be \$8-9 trillion.

Check Out This Website:

www.larouchespeaks.com