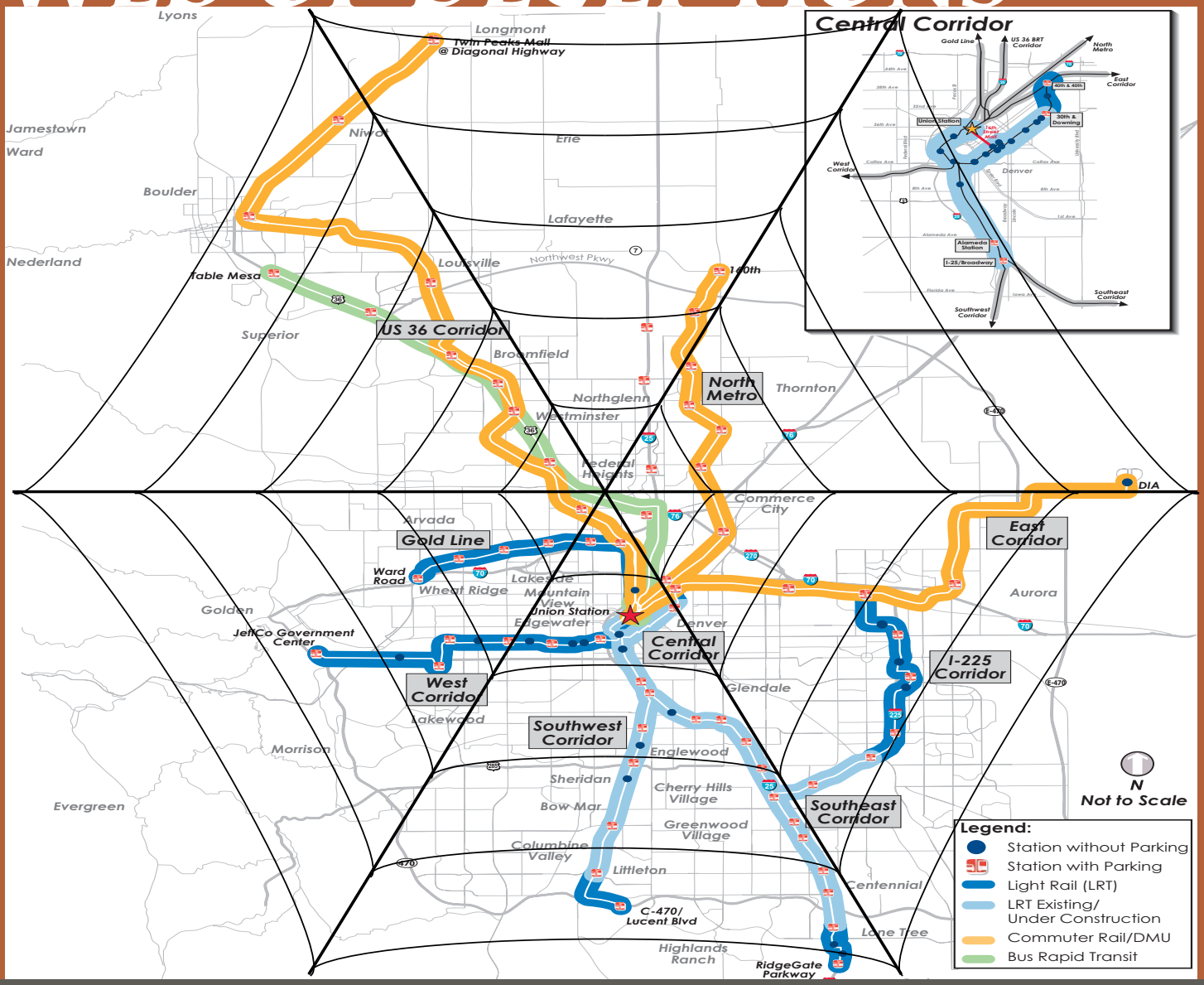
WEB OF DECEPTIONS



16 Ways RTD Deceived Voters About FasTracks

by Randal O'Toole

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Web of Deceptions:
16 Ways RTD Deceived Voters About FasTracks

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Contents

Sixteen Deceptions about FasTracks

Deception 1: RTD has always built its light-rail lines on budget.
The Truth: The Southwest light-rail line cost 28 percent more, and the Southeast line cost 59 percent more, than initial estimates.

Deception 2: RTD can build FasTracks for $4.7 billion.
The Truth: RTD's current estimate of $7.9 billion may still be understated.

Deception 3: Private railroads will fully cooperate with the FasTracks plan.
The Truth: RTD's failure to obtain agreements from the railroads before the 2004 election has so far increased the cost of FasTracks by more than $300 million.

Denver-area traffic grows by more every five months than all the cars FasTracks is expected to take off the road.

Deception 4: Sales tax revenues will grow at 6 percent per year forever.
The Truth: While long-term growth may average 6 percent, RTD's failure to allow for the likelihood that growth in some years would fall well short of 6 percent has led to a $2.8 billion revenue shortfall.

Deception 5: Public-private partnerships will save 30 percent of the cost of building rail.
The Truth: Light-rail lines built with public-private partnerships went an average of 60 percent over budget.

Denver's light rail uses more energy and generates more greenhouse gases per passenger mile than the average SUV.

Deception 6: RTD will reduce the sales tax to cover operational costs as soon as it is done paying the cost of building FasTracks.
The Truth: RTD will never reduce the tax because it will have to rebuild, replace, or rehabilitate rail lines about every 30 years.

Deception 7: Denver needs FasTracks to reduce congestion.
The Truth: Denver-area traffic grows by more every five months than all the cars FasTracks is expected to take off the road.

Deception 8: FasTracks is fast.
The Truth: Since light rail will average 24 miles per hour, and commuter trains 41 miles per hour, RTD's plan should really be called "SlowTracks."

Deception 9: Rail transit saves energy and reduces air pollution.

The Truth: Denver's light rail uses more energy and generates more greenhouse gases per passenger mile than the average SUV.

Deception 10: Rail transit is more cost effective than other alternatives.
The Truth: Every analysis RTD did of FasTracks corridors found that bus-rapid transit was far more cost effective than rail.

Deception 11: One rail line can carry as many people as four or more freeway lanes.
The Truth: Despite costing far more to build per mile than a freeway lane, Denver's light-rail lines carry less than a quarter as many people as a typical Denver-area freeway lane.

Deception 12: FasTracks will do more to relieve congestion than new highways.
The Truth: Even if FasTracks is built, the state and region will need to spend billions on highways to accommodate traffic.

Deception 13: RTD will have plenty of money left over to improve bus service.
The Truth: After paying for FasTracks, RTD won't have enough money to keep bus service at current levels, much less increase it.

Deception 14: FasTracks proponents can legitimately submit "no on FasTracks" statements to the county blue books.
The Truth: A Colorado judge said the FasTracks Yes! campaign was "morally reprehensible" for sabotaging the opposition statement in the voters' guide.

Whether FasTracks is built or not, the state will need to spend billions on highways to deal with the growth in traffic.

Deception 15: Modern cities need light-rail transit.
The Truth: Twenty-first century cities deserve something better than late nineteenth-century technology.

Deception 16: RTD will use eminent domain only for "a primary transit purpose."
The Truth: RTD is using and encouraging cities to use eminent domain to take land that it plans to sell or give to developers to build new housing and commercial developments near FasTracks stations.

Would You Buy a Used Car from This Man?

"Have I got a car for you," says Mal Carsella, the famous Denver car salesman. "It has all the latest technology." (Its technology was developed in the 1930s.) "It's fast!" (Its average speed is 24 miles per hour.)

"With this car, everyone will know you care about saving energy and protecting the environment." (The car uses as much energy and emits more greenhouse gases than the average SUV.) "Don't worry, I always keep my promises." (The last two cars he sold you ended up costing almost 30 and 60 percent more than the prices he first quoted.)

"Best of all," says Carsella, "it's cheap! On your income, you can easily afford it." (But after you sign the contract, it turns out to cost almost 70 percent more than he promised, while he overstated your income on your credit application.)

Someone who insists, as RTD did in 2004, that their forecasts are infallible is simply being deceptive.

This is the position Denver-area voters find themselves in after approving the Regional Transit District's (RTD) FasTracks plan to build a spider web of rail lines over the Denver metro area. But the real web turns out to be the web of deceptions used by RTD and FasTracks proponents to persuade Denver-area residents to support an expensive megaproject whose benefits now appear to be negligible.

At a projected cost of $4.7 billion, FasTracks was expensive enough in 2004. But RTD now admits the costs will be nearly 70 percent more than that and, unless it gets another tax increase, it will not be able to build FasTracks on time, and certainly not on budget.

RTD claims these are not deceptions but forecasting errors. "No one accurately predicted the record increases in construction materials costs" since 2004, says RTD general manager Cal Marsella.[1] A forecast error is when someone makes a prediction that turns out wrong. But someone who insists, as RTD officials did in 2004, that their forecasts are infallible, when in fact they could go wrong in any of hundreds of ways, is simply being deceptive.

Despite Marsella's emphasis on increased raw material costs, RTD itself is responsible for much of the increase in FasTracks cost projections.

In fact, the complete list of ways RTD and FasTracks supporters deceived the public is too long for a single report. This paper includes the most important 16 deceptions, but many more could be added.

RTD now offers Denver a choice: build only two-thirds of the system by 2017; build the entire system but postpone completion until as late as 2034; or increase sales taxes by at least 0.2 to 0.3 cents per dollar.[2] RTD pointedly ignores the most rational choice: replacing FasTracks with more cost-effective transit options that will move just as many people as fast or faster than FasTracks and won't require years or decades to implement.

In approving FasTracks, voters effectively signed a contract with RTD. RTD breached that contract by underestimating costs, overestimating revenues, underestimating the time it would take to build with available funds, and overpromising the benefits. Voters should demand that RTD provide an affordable transit system now rather than build an unaffordable one later.

Deceptions about Costs

Deception 1: RTD has always built its light-rail lines on budget.

The Truth: The Southwest light-rail line cost 28 percent more, and the Southeast line cost 59 percent more, than initial estimates.

Suppose contractors advertise, "we always build on budget," and they offer to build you a house for $100,000. After you hire them (and give them $100,000), they tell you that—due to unforeseen circumstances—the real cost will be $200,000. Not wanting to lose the $100,000, you reluctantly agree. When they complete the house for $200,000, they say, "We built it on budget." That's because the final budget you agreed to was $200,000.

The underestimate of light rail costs combined with an accurate estimate of highway costs severely biased the analysis in favor of rail.

This is how RTD builds its light-rail lines "on budget." First, it makes an estimate. After it gets approval to build the line, it revises the estimate upwards. Since funders are already committed to the project, they agree to the higher cost, which becomes the new budget.

One of the first steps in the process of planning a transportation corridor is the major investment study, in which rail is compared with other alternatives such as highway improvements and bus-rapid transit. After the major investment study, most of the other alternatives are discarded, so the major investment study is really the point at which the decision is made to build rail transit.

The Southwest light-rail line major investment study projected a cost of $127 million.[3] The actual cost was over $177 million.[4] After adjusting for inflation, the line cost 28 percent more than the original estimate.[5]

The Southeast light-rail line major investment study projected a cost of $445 million.[6] The actual cost was $879 million.[7] After adjusting for inflation, the line cost 59 percent more than the original estimate.

While the Southeast major investment study underestimated the cost of light rail, it accurately estimated the cost of highway alternatives. The study estimated that light rail would cost about $23 million per mile when the final cost was $45 million per mile. The study also estimated that new highway lanes would cost $15 to $25 million per lane mile.[8] The average cost of each T-REX highway lane mile was $19.3 million.[9]

The underestimate of light rail costs combined with accurate estimate of highway costs severely biased the analysis in favor of rail. One of the alternatives considered in the study was construction of high-occupancy vehicle (HOV) lanes and running bus-rapid transit on those lanes. This alternative was found to do more to relieve congestion than light rail.[10] However, its estimated cost was $756 million. RTD specifically rejected this alternative "because its capital costs are over $200 million more than the Light Rail alternative."[11]

The T-REX project ultimately widened I-25 and rebuilt or expanded dozens of bridges over the highway all for a cost of $727 million. This shows that the projected costs of the HOV/bus alternative were fairly accurate. If planners had known that light rail was going to cost $123 million more than the HOV lanes, rather than $200 million less, they would have had much less justification for selecting light rail.

Deception 2: RTD can build FasTracks for $4.7 billion.

The Truth: RTD's current estimate of $7.9 billion may still be understated.

Cox could be certain that the cost would increase because FasTracks is a megaproject, and megaprojects always go over budget.

"RTD cannot deliver the whole system for anything like $4.7 billion," predicted rail transit critic Wendell Cox in August, 2004. "Which of the six lines is not going to be built?" RTD general manager Cal Marsella immediately responded that RTD "absolutely can" build the 119-mile system for the promised price.[12]

Cox was right and Marsella was wrong. But how could Cox have known that RTD would not be able to meet its promised budget? After all, he could not foresee that steel and other materials prices would dramatically increase after 2004.

Cox could be certain that the cost would increase because FasTracks is a megaproject, and megaprojects always cost more than their initial estimates. This is because megaproject planning suffers from two flaws: optimism bias, in which the planners deceive themselves by relying on overly positive forecasts of the future; and strategic misrepresentation, in which promoters deceive the public by selectively presenting or distorting facts to make the projects appear more valuable than they really are. As this paper will show, FasTracks includes many examples of both kinds of flaws.

Danish planner Bent Flyvbjerg analyzed dozens of megaprojects in his book, *Megaprojects and Risk*. He recommends that planners use reference-class forecasting to predict how much megaprojects will go over their early cost estimates.[13] In other words, planners should examine past projects that are similar to the current one to see how much they went over budget.

Flyvbjerg's research, for example, shows that rail transit projects have the highest cost overruns of any megaprojects and historically have gone an average of 40 percent over budget.[14] This has been confirmed by researchers looking at more recent projects.[15] At the very least, then, RTD should have added 40 percent, or $1.9 billion, to its cost estimates.

Despite Marsella's emphasis on increases in materials costs, RTD itself is responsible for much of the increase in FasTracks costs projections. Since 2004, RTD has made many changes in the specifications for the various FasTracks lines.

RTD now offers Denver a choice: build only two-thirds of the system by 2017; build the entire system but postpone completion until as late as 2034; or increase sales taxes by at least 0.2 to 0.3 cents per dollar.

For example, it changed the North Metro and East routes from Diesel power to electric power, which costs more because of the cost of installing overhead wires and other electrical facilities. This is a major reason why the cost of both routes has more than doubled, from $420 and $700 million, respectively, in the 2004 plan to nearly $1.1 and $1.7 billion in the current plan.[16] RTD says that it will save enough in energy costs to pay for these added capital costs, but it has already proven that its skill at predicting future costs is very low.

FasTracks is not the end of RTD's dreams of a rail empire. The long-range transportation plan written by the Denver Regional Council of Governments (DRCOG) includes more than $7.4 billion to be spent on "other regional rapid transit lines" once FasTracks is complete.[17] Since this cost estimate was made when FasTracks was expected to cost $4.7 billion, the real cost of these other lines will likely exceed $12 billion.

Deception 3: Private railroads will fully cooperate with the FasTracks plan.

The Truth: RTD's failure to obtain agreements from the railroads before the 2004 election has increased the cost of FasTracks by more than $300 million.

RTD's failure to thoroughly consult the railroads before 2004 has added more than $300 million to the cost of FasTracks.

Another example of optimism bias was RTD's assumption regarding BNSF and Union Pacific railroad cooperation. RTD planned that three of the proposed FasTracks rail lines—the lines to Boulder/Longmont, Brighton, and DIA—would use existing railroad tracks or rail rights-of-way, in some cases sharing the tracks with freight trains. RTD also expected to be able to use railroad property in downtown Denver.

The railroads, however, have not been interested in any proposal that threatens to increase their costs or liability. RTD's failure to thoroughly consult the railroads before 2004 has added more than $300 million to the cost of FasTracks. RTD now says it will have to buy rights-of-way in some corridors where it had hoped to use railroad rights-of-way; relocate freight tracks in other areas; and put up barrier walls between passenger and freight rail in some corridors that the railroads are willing to share with RTD.[18]

RTD paid the Union Pacific Railroad $15 million for land that neither one of them wanted.

In a typical example of poor planning, RTD also hoped to relocate Union Pacific Railroad tracks from downtown Denver to Fort Lupton so that it could use the space now occupied by those tracks for a maintenance center. RTD agreed to pay for the move, so UP started buying land. When UP estimated the total cost of the move would be $700 million, RTD backed out—but still had to pay $15 million for land the UP had purchased that neither the UP or RTD wanted. Local realtors say that UP paid a premium for the land and that RTD will not be able to recover those costs by selling it.[19]

RTD general manager Cal Marsella argues that no one could have predicted the increases in steel and other material costs that have added $2.5 billion to the estimated cost of FasTracks. But anyone at RTD could have figured out whether FasTracks could use railroad rights-of-way by simply asking the railroads. RTD's failure to do so in advance of the 2004 election shows how poorly planned the FasTracks program is.

Deceptions about the Financial Plan

Deception 4: Sales tax revenues will grow at 6 percent per year forever.

The Truth: While long-run growth may average 6 percent, RTD's failure to allow for the likelihood that growth in some years would fall well short of 6 percent has led to a $2.8 billion revenue shortfall.

When RTD put together its financial plan in 2004, Denver-area sales tax revenues had not grown by 6 percent in any of the previous 3 years. Yet RTD presumed growth would return to 6 percent in 2005 and never again decline.

In a classic example of optimism bias, RTD's 2004 financial plan presumed that sales tax revenues would increase by 6 percent per year, every year, for more than 20 years after 2004. RTD justified this presumption by noting that sales tax revenues had increased by an average of 6.3 percent per year over the previous 22 years.

While the average growth in sales tax revenue had been 6.3 percent, however, actual year-to-year growth in those years ranged from –4 to 15 percent. If voters had approved FasTracks in 1984 or 2000, when the Denver economy was entering recessions, RTD would have suffered shortfalls similar to the ones it is dealing with today.[20]

When RTD put together its financial plan in 2004, Denver-area sales tax revenues had not grown by 6 percent in any of the previous 3 years. Yet RTD presumed growth would return to 6 percent in 2005 and never again decline.

Even if growth had been 6 percent in the past four years, RTD's plan left its cash reserves at dangerously low levels throughout most of the construction period between 2009 and 2017. A slowing of growth in any of those years would force RTD to either default on its bonds or severely cut transit service.

Considerng the recession, RTD's new assumptions about sales tax revenues are still optimistic, so the revenue shortfalls are likely to be even greater than $2.8 billion.

San Jose's transit agency, the Santa Clara Valley Transportation Authority (VTA), made similar assumptions during construction of its light-rail network. When Silicon Valley suffered a recession in 2001, VTA was forced to cut bus and light-rail service by nearly 20 percent and lost 33 percent of its transit riders.

RTD is still engaging in strategic misrepresentation about this issue. It currently assumes that sales tax growth will range from 2.5 to 4 percent over the next three years, exceed 4 percent in 2011 and 2012, and will be 5.5 percent in every year after that.[21] Considering that the U.S. is currently entering a recession, these assumptions are hopelessly optimistic. Given these assumptions, RTD estimates it will collect $2.8 billion less in sales taxes between 2005 and 2035 than the 2004 plan. In fact, the actual shortfall is likely to be much greater. Because of this shortfall, RTD would not be able to build the complete FasTracks plan by 2017 even if costs had not increased.

Deception 5: Public-private partnerships will save 30 percent of the cost of building rail.

The Truth: The only U.S. light-rail lines built with public-private partnerships went well over budget.

When RTD's cost projections ballooned from $4.7 to $6.5 billion, the agency suggested it would build some of its rail lines as "public-private partnerships." Doing so, the agency claimed, would save 30 percent of the cost of construction. There is absolutely no evidence that this is true.

To date, two U.S. light-rail lines have been built with public-private partnerships. Minneapolis' Hiawatha light rail was a "design-build" plan in which the state of Minnesota turned the task of planning and building the rail line over to private contractors.[22] When it was approved by the state legislature, the Hiawatha line was projected to cost $480 million. At $715 million, its final cost was almost 50 percent more than projected.[23]

The second public-private partnership was for New Jersey's Hudson-Bergen light-rail line. This was a "design-build-operate" contract in which the builders also operate the rail line (supported by New Jersey Transit subsidies).[24] Originally projected to cost $624 million, the first phase of the Hudson-Bergen line ended up costing $1.11 billion or 78 percent more than projected.[25] The main reason New Jersey Transit went with a public-private partnership was not to save money but to save time.[26]

Minnesota approved the Hiawatha light-rail line at a cost of $480 million. It was built by a public-private partnership at a cost of $715 million.

In sum, rather than save 30 percent, the only two light-rail public-private partnerships actually had cost overruns averaging more than 60 percent. The credibility of RTD's claim that public-private partnerships would save 30 percent was reduced even further by the fact that RTD only proposes to use such partnerships for two of the six main FasTracks lines.[27] If such partnerships would save so much money, why not use them for all six? And why did RTD wait until FasTracks was billions of dollars over its budget to propose them?

Deception 6: RTD will reduce the sales tax to cover operational costs as soon as it fully pays the cost of constructing FasTracks.

The Truth: RTD will never reduce the tax because it will have to rebuild, replace, or rehabilitate rail lines about every 30 years.

Even before the loans used to build FasTracks are paid off, RTD will have to borrow even more money to keep it running.

During the 2004 campaign, rail supporters often promised that the 0.4 percent tax increase was temporary. When construction loans were paid off, they promised RTD would reduce that tax to the amount needed to cover the operational cost. But RTD's plans never mention that rail transit systems—vehicles, stations, track, power facilities—must be completely replaced, rebuilt, or rehabilitated about every 30 years.

The cost of such rehabilitation is often almost as much as the original cost of construction. In other words, even before the loans used to build FasTracks are paid off, RTD will have to borrow even more money to keep it running. RTD's 2004 financial plan did not extend beyond 2025, allowing it to never reveal to the public the future costs of rehabilitating the rail lines.

The high cost of rehabilitation threatens the stability of rail transit agencies throughout the country. The first Washington, DC, Metrorail line opened for business in 1976. In 2002, just 26 years later, the Washington Metropolitan Area Transportation Authority (WMATA) estimated that it needed $12.2 billion—roughly the cost of constructing the original system—to rehabilitate the system.[28] It has not found any of this money, so the system suffers frequent breakdowns and service delays.[29]

Rail transit systems in Chicago, San Francisco, Boston, and New York also face fiscal crises. The Chicago Transit Authority is "on the verge of collapse" as it needs $16 billion it doesn't have to rehabilitate its tracks and trains.[30] Similarly, the San Francisco BART system faces a $5.8 billion shortfall to replace worn out equipment.[31] Boston borrowed $5 billion to restore its rail lines and now more than a quarter of its operating budget goes to repay this debt, which is "crushing" the system.[32]

According to one New York transit advocate, New York's Metropolitan Transportation Authority "is in deep doo-doo" because it doesn't have the money it needs to rehabilitate its system.[33] It is already spending $1.5 billion per year—an amount that is expected to reach $2 billion by 2010—repaying its debts.[34] It says it needs $30 billion to rehabilitate its system, of which it only has $13 billion.[35] As a result, it may need to cut subway, commuter rail, and bus service.[36]

Boston, Chicago, New York, Washington, and San Francisco transit agencies are facing perpetual financial crises because of the high cost of rehabilitating rail lines every thirty years.

The projected costs of rehabilitating the Washington, Chicago, San Francisco, and New York rail systems all average more than $100 million per route mile of rail. These systems are all subway or elevated lines that cost more to build and rebuild than Denver's light rail, but this shows that rehabilitation costs are high. The 0.4 percent tax approved in 2004 may or may not be enough to pay the cost of rebuilding rail lines every 30 years, but one thing is certain: if RTD builds FasTracks, it will never reduce that tax because it will need all the money to keep FasTracks trains running.

Deceptions about the Benefits

Deception 7: Denver needs FasTracks to reduce congestion.

The Truth: Denver-area traffic grows more every five months than all the cars FasTracks is expected to take off the road.

RTD and other FasTracks supporters repeatedly told voters that FasTracks would produce a "substantial reduction in congestion," as Cal Marsella wrote in March, 2004.[37] Proponents typically showed voters a table predicting that transit would carry around 250,000 riders per day in FasTracks corridors in 2025. The proponent would then say something like, "That's a lot of cars taken off the road" or even "FasTracks will take about 250,000 cars off the road each day."

DRCOG says that, in most FasTracks corridors, FasTracks won't increase travel speeds by even one mile per hour.

These are all strategic misrepresentations. FasTracks documents show that 40 percent of the 250,000 people would be riding the existing Southwest and the then-under-construction Southeast lines. Of the remaining 60 percent (185,600), half would ride the bus even if FasTracks were not built. RTD predicted that FasTracks would increase total transit ridership by just 72,000 trips per day, a far cry from 250,000.[38] Since not all of those trips will be replaced by single-occupancy vehicles if FasTracks is not built, FasTracks will not even take 72,000 auto trips off the road each day.

The Denver Regional Council of Governments (DRCOG) predicts that, without FasTracks, Denver-area residents will drive 95.5 million miles per day in 2025. With FasTracks, they will drive 95.1 million miles, meaning FasTracks will take less than half a percent of cars off the road.[39] DRCOG also says Denver-area travel is growing by 1.4 percent per year, so increased traffic will make up for all of the congestion relief provided by FasTracks in less than 5 months after construction is complete.

Despite this, RTD managed to fool such notables as Denver Mayor John Hickenlooper. "FasTracks will take at least 250,000 cars off the road," said Hickenlooper in September, 2004, "thereby relieving congestion."[40] Mayor Hickenlooper can blame RTD for deceiving him about both of these claims.

DRCOG says that FasTracks will have virtually no effects on congestion in most of the rail corridors, and only minor effects on the other corridors. In only one corridor will FasTracks take enough cars off the road to increase average speeds by more than one mile per hour; in most corridors, it won't increase speeds by even one mile per hour.[41]

Table One
Rush-Hour Driving Speeds in 2025
With and Without FasTracks
(miles per hour)

Corridor	Without	With
US-36	15	15
North Metro	11	11
East	29	30
I-225	33	36
Southeast	12	12
Southwest	10	10
West	16	17
Gold	12	12
Central	14	15

Source: Review of the RTD FasTracks Plan *(Denver, CO: DRCOG, 2004), table 3.*

FasTracks will actually increase congestion at the 158 grade crossings where traffic will be held up by scores of trains every day. Grade crossings will also delay emergency service vehicles such as ambulances and fire trucks.

West Metro Fire & Rescue Deputy Chief Dave Abbink has expressed concern about the estimated 34-second delays at grade crossings with automated arms. This added delay to victims of time-critical emergencies, and to the impact on response time goals set by communities along rail corridors, remains unaddressed.

There is no doubt that Denver needs to reduce congestion: no one wants rush-hour highway speeds to fall to 10 miles per hour. But a multi-billion-dollar rail system that will take a decade to build and take no more than six months worth of traffic growth off the road is not the way to do it.

Deception 8: FasTracks will be fast.

The Truth: Since light rail will average 24 miles per hour, and commuter trains 41 miles per hour, RTD's plan is more deserving of being called "SlowTracks."

The only way RTD can claim FasTracks will be faster than driving is by assuming a massive increase in traffic congestion that would reduce rush-hour speeds to less than 16 miles per hour.

"Travel by rail during rush hours will be 2 to 3 times faster than driving," promised RTD in 2004.[42] In fact, FasTracks trains will be faster than driving only if nothing is done to relieve future congestion.

The primary transportation route in all but one of the FasTracks corridors is a limited-access freeway with a speed limit of around 65 miles per hour. When RTD claimed that FasTracks trains will be faster than cars, many people may have been misled into believing that FasTracks trains will go faster than 65 miles per hour, or at least faster than cars move in traffic today.

In fact, RTD's plans called for light-rail trains that average, including stops, just 24 miles per hour and commuter trains that will average just 41 miles per hour. The only way RTD could claim these speeds are faster than auto speeds is by assuming that a massive increase in traffic congestion would reduce rush-hour driving speeds to less than 16 miles per hour. If anything is done to actually relieve congestion, such as the construction of additional highway lanes or HOT lanes, then FasTracks trains will lose any speed advantages and may not attract as many new riders as projected.[43]

Deception 9: Rail transit saves energy and reduces pollution.

The Truth: Denver's light rail uses more energy and generates more greenhouse gases per passenger mile than the average SUV.

FasTracks adds almost six times as much nitrogen oxides into the air as all the cars it takes off the road.

"Fewer people driving results in cleaner air," RTD told voters.[44] That's true only if those people are not taking RTD buses or trains. "O'Toole's claim that light rail increases pollution is so absurd that no response is even warranted," said Cal Marsella in reply to this author's op-ed in the Rocky Mountain News.[45] This is a strategic misrepresentation, since it implies that light rail is clean when Marsella knows perfectly well that it is not.

Improved pollution controls on automobiles have virtually eliminated problems with carbon monoxide, lead, and certain other pollutants. The only pollutants that the Environmental Protection Agency says are a problem in the Denver metro area are ozone—which is created from nitrogen oxides—and greenhouse gases. FasTracks increases both of these pollutants.

DRCOG's review of the FasTracks plan predicted that the cars taken off the road by FasTracks would save 0.15 tons of nitrogen oxide pollution per day. But FasTracks light-rail trains would add 0.28 tons; FasTracks commuter-rail trains

would add 0.67 tons; and FasTracks feeder buses would add 0.05 tons.[46] Altogether, then, FasTracks adds almost six times as much nitrogen oxides into the air as all the cars it takes off the road.

Operating the Gold line will use more energy and produce more greenhouse gases than the cars it takes off the road.

Denver's light-rail trains use 4,400 British thermal units (BTUs) and produce 0.78 pounds of CO2 per passenger mile. By comparison, the average SUV uses about 4,400 British thermal units (BTUs) and produces 0.69 pounds of CO2 per passenger mile.[47] In other words, people who ride Denver's light rail when gasoline prices rise are not saving energy: they are merely imposing their energy costs on other taxpayers. If oil prices rise again, people can save more energy by buying more fuel-efficient cars than by riding energy-intensive rail transit lines.

The energy cost of operating rail doesn't even count the huge energy and pollution cost of building rail transit. The draft environmental impact statement (EIS) for RTD's Gold line projects that constructing the line will use 430 to 498 billion BTUs.[48] The EIS also predicts that operating the Gold line will use more energy and produce more CO2 than the cars it takes off the road. But even if it saved energy in operations, the energy cost of construction would cancel that savings out.[49]

Federal law requires that, at each commuter-rail crossing, locomotive horns must be about as loud as a jet engine.

FasTracks trains will also generate noise pollution when they cross each of 158 grade crossings dozens of times every day. The Northwest rail corridor alone will have 45 grade crossings, and federal law requires that, at each crossing, locomotives horns must be 96 to 110 decibels—about as loud as a jet engine—100 feet in front of the locomotives.[50] Cities can avoid these horns by creating "quiet zones," but such zones require expensive investments in crossing protection devices. RTD has a limited amount of money for such devices and expects cities to pay for part or most of the cost. Since cities are also expected to pay 2.5 percent of the total cost of FasTracks, or almost $200 million, this becomes just one more hidden cost to local taxpayers.

Deceptions about the Alternatives

Deception 10: Rail transit is more cost-effective than other alternatives.
The Truth: Every analysis RTD made of FasTracks corridors found that bus-rapid transit was far more cost-effective than rail.

Prior to 2004, RTD prepared major investment studies (MISs) comparing the East, West, Gold, Northwest, and I-225 corridor rail proposals with highway and bus alternatives. In another strategic misrepresentation, RTD has repeatedly insisted that these studies found that rail was the most cost-effective choice in each corridor.

In fact, in almost every case, rail cost more but did less to relieve congestion than the other alternatives considered. In one case, rail was predicted to do slightly more to relieve congestion than the bus alternative, but cost far more, meaning rail was still not the cost-effective choice.

Here are the corridor-by-corridor results:

New highway lanes were almost four times more cost-effective than rail at relieving congestion in the East corridor —and that was before the projected cost of the East corridor rail line more than quadrupled.

The East corridor MIS estimated the capital cost of new general-purpose highway lanes would be $305 million and that those lanes would provide Denver-area travelers 18.4 million hours per year of congestion relief. Commuter rail was estimated to cost $374 million and provide only 8.9 million hours of congestion relief.[51] The result was that the cost of each hour saved was almost four times as great for commuter rail as for highways.

The MIS also considered high-occupancy vehicle lanes and bus-rapid transit. This alternative cost $337 million and saved 40 percent more hours per year than rail. So while it was not as cost effective as new highway lanes, it was more cost effective than rail. Commuter rail also cost more than twice as much to operate as HOV lanes and bus-rapid transit.[52]

RTD's analysis found that new highway lanes were almost 24 times more cost-effective than rail at relieving congestion in the I-225 corridor.

The West corridor MIS estimated that a high-occupancy vehicle lane and bus-rapid transit would cost half as much to build and operate as light rail. Rail was projected to reduce congestion by 12 percent more than bus-rapid transit, but due to its high cost rail was only 57 percent as cost-effective as bus-rapid transit. The West corridor MIS did not consider new general-purpose highway lanes even though the East corridor MIS found them to be the most cost-effective alternative.[53]

The I-225 corridor MIS found that two new freeway lanes would cost $28.6 million while light rail would cost $332.9 million. The new freeway lanes provided 30 percent more hours of congestion relief than light rail, making the new lanes almost 24 times as cost-effective as light rail.[54]

The Northwest corridor MIS found that bus-rapid transit was ten times more cost-effective at relieving congestion than commuter rail: it cost less than 60 percent as much to build, cost half as much to operate, and provided almost six times as much congestion relief.[55] The MIS did not consider a highway-only alternative.

The Gold corridor MIS was not as complete as the others. It found that light rail cost three times as much as new freeway lanes and 44 percent more than bus-rapid transit, but failed to estimate how much congestion relief each alternative would provide.[56] Considering that rail in this corridor costs so much more than the alternatives, and that the alternatives in most other corridors were more effective at reducing

congestion, rail is likely the least cost-effective solution in the Gold corridor.

Based on RTD's current cost and ridership estimates, bus-rapid transit is almost twenty times more cost-effective than rail at relieving congestion in the Northwest corridor.

Rail is even less cost effective today than when the MISs were written. Due to right-of-way problems, changes from Diesel to electrical power, and other factors, the cost of East corridor rail has quadrupled to nearly $1.7 billion.[57] Because they would not have the same problems, highway and bus-rapid transit cost increases would not have been as great, meaning they are even more cost-effective today, relative to rail, than they were when the MIS was written.

Similarly, since the MISs were completed, the projected cost of rail in the West corridor has increased by 180 percent; the I-225 corridor has increased by 150 percent; the Northwest corridor by 114 percent; and the Gold corridor by 74 percent.[58] Much of the difference in costs is due to changes in locations, RTD's failure to accurately anticipate right-of-way needs, and similar changes in scope and specifications that would not apply to bus-rapid transit alternatives.

The projected cost of bus-rapid transit in the Northwest corridor, for example, has increased by a mere 12 percent.[59] The MIS found that bus-rapid transit was ten times more cost-effective than rail, including both capital and operating costs. With the new cost estimates, bus-rapid transit is now almost twenty times more cost-effective than rail.

Deception 11: One rail line can carry as many people as four or more freeway lanes.

The Truth: Despite costing far more to build per mile than a freeway lane, Denver's light-rail lines carry less than a quarter as many people as a typical Denver-area freeway lane.

RTD spokesman Scott Reed says that one light-rail line carries as many people as four freeway lanes.[60] During the FasTracks campaign, the FasTracks Yes! slide show said that one line carries as many people as ten freeway lanes. These numbers are pure fantasy.

If every seat is occupied and all standing room is used, one four-car light-rail train can carry 500 passengers.[61] In the Southeast corridor—RTD's busiest—RTD expects to run fifteen trains per hour.[62] That's a maximum of 7,500 people per hour if every train is full. Commuter trains operate less frequently than light rail, so their capacity is even lower.

Compare light rail's capacity with a freeway lane, which can move 2,200 vehicles per hour.[63] If those vehicles have an average of four seats and every seat is full, then one freeway lane can move 8,800 people per hour. Of course, not every seat will be full, but then, neither will every train car be full.

In a classic example of strategic misrepresentation, RTD compares light-rail trains that are packed full of people—many of them standing—with autos that are nearly empty.[64] On average, about 1.6 people occupy each auto on the road. Commuter vehicles have just 1.1 people, which is the number RTD uses.[65] At 1.1 persons per car, 2,200 vehicles per hour carry 2,420 people per hour.

Over the course of a day, RTD light-rail cars, which have a capacity of 125 people, carry an averae of less than 14 people at a time.

Since RTD is counting actual auto occupancies, however, it is only fair to count actual light-rail occupancies as well. In 2007, RTD drove its light-rail vehicles a total of 8.7 million miles in revenue service, and carried people 120 million passenger miles.[66] Dividing passenger miles by vehicle miles reveals that light-rail cars that can hold 125 people carry an average

of less than 14 people over the course of a day. Fifteen four-car trains per hour with 14 people each represents just 840 people per hour.

RTD rail lines consume four times as much land as freeways to move the same number of people.

Each mile of RTD's light-rail lines carries about 1.5 million passenger miles per year.[67] By comparison, each lane mile of Denver-area freeways carries 5.7 million vehicle miles per year.[68] Even if we assume each vehicle had just 1.1 people, each freeway lane mile carried more than four times as many people as each mile of light rail.

RTD argues that the appropriate comparison is rush-hour use, when trains are closer to being full. Since the average train car has just 14 people over the course of a day, this tacitly admits that they are virtually empty outside of rush hour. In 2004, Cal Marsella stated that peak-hour riders on the Southwest rail line represent "the equivalent amount of traffic that one lane on Santa Fe can carry."[69] Santa Fe is not a freeway, and each of its lanes carries only about half as many vehicles as a freeway lane. Thus, the Southwest light-rail line carries about half a freeway lane during rush hour.

Rail transit thus requires far more land to move an equivalent number of people than freeways. Since the minimum right-of-way required for one track is about the width of a freeway lane, RTD would need to use more than four times as much land to move the same number of people as a freeway. RTD plans to run its commuter-rail trains even less frequently than light rail, so commuter-rail lines will move even fewer people and require more land than light rail.

This discussion hasn't even mentioned speed, which can be much faster on freeways than rail lines. Despite congestion, commute trips by auto tend to go longer distances in shorter times than commutes by rail transit. Then there is bus-rapid transit: If one out of ten vehicles on a high-occupancy lane is a bus that has every seat full, that lane will carry many times more people than a light-rail line with full trains.

Deception 12: FasTracks will do more to relieve congestion than new highways.

The Truth: Even if FasTracks is built, the state and region will need to spend billions on highways to accommodate traffic.

In a major strategic misrepresentation, FasTracks supporters told voters that the Colorado Department of Transportation's plan to spend $25 billion on highways would increase average traffic speeds by just 1 mile per hour, while FasTracks, at a fraction of the cost, would increase speeds by "up to" 3 miles per hour. As shown above in table one, FasTracks is projected to increase speeds by 3 miles per hour in only one short corridor; in most corridors, it won't increase speeds at all.

The real misrepresentation has to do with dates. The CDOT plan promises to increase speeds throughout the region by 1 mile per hour above 2004 speeds. By comparison, the FasTracks plan will increase speeds in some corridors by 1 mile per hour above 2025 speeds—which will be a lot lower than 2004 speeds if CDOT does not build new roads. (Implementing the CDOT plan would also make FasTracks even slower, relative to auto traffic, than claimed by RTD—see deception 8.)

If only one out of every ten vehicles in a high-occupancy lane is a bus, that lane can carry many more transit riders than a light-rail line.

Moreover, the $25 billion is also a strategic misrepresentation. The total cost of the CDOT plan comes to just $12.7 billion, not $25 billion. Of that, just $2.7 billion is for new state highways. Another $1.2 billion is for locally funded highways. Almost all the other money in the plan is for private street construction for housing and commercial developments, paid for by private developers, not taxpayers.[70]

FasTracks will provide so little congestion relief that CDOT will have to build the same new highways whether FasTracks is built or not.

Under DRCOG's 2035 regional transportation plan, if FasTracks costs $7.9 billion, transit capital improvements will consume 60 percent of the region's transportation capital funds over the next 25 years.[71] Yet at the end of that time, transit will carry just 2.9 percent of all daily trips—up from 2.2 percent today.[72] Since transit trips are shorter than auto trips, transit will carry an even smaller share of passenger miles.

So which makes more sense: to spend $3.7 billion on highways, paid for mostly out of gas taxes and other user fees, and see relief from current congestion throughout the region? Or to spend $7.9 billion on FasTracks, subsidized entirely by taxpayers, and see a slight amount of relief from future congestion, which will be much worse than today's, only in a few corridors?

The answer is that it is not a choice between FasTracks and highways. FasTracks will provide so little congestion relief that CDOT will need to increase highway capacities whether FasTracks is built or not. The real choice is between building highways that reduce congestion or building rail lines that do not significantly reduce congestion along with new highways that actually will reduce congestion.

After spending 60 percent of the region's transportation capital funds on transit, transit will carry just 2.9 percent of all daily trips—up from 2.2 percent today.

Other Deceptions

Deception 13: RTD will have plenty of money left over to improve bus service.

The Truth: After paying for FasTracks, RTD won't have enough money to keep bus service at current levels, much less increase it.

In addition to new rail lines, RTD's FasTracks plan promised a 36 percent increase in bus service above 2003 levels.[73] The plan promised increased frequencies on most existing routes and new services between suburbs. The plan also promised frequent "fast connects" feeder bus service to rail stations.

DRCOG projects that the Denver-area's population will grow by 40 percent between 2004 and 2025. So the 36 percent increase in bus service promised by RTD would not even be enough to keep up with population growth. But it seems highly unlikely that RTD will be able to both build FasTracks and improve bus service.

The cost of the promised bus improvements was not included in the oft-cited $4.7 billion cost of FasTracks; that money was dedicated exclusively to constructing rail lines and the bus-rapid transit route between Boulder and Denver. The improved bus services were to be funded by RTD sales taxes after paying for the rail lines.

If RTD doesn't have enough money to build FasTracks, it certainly doesn't have enough to build FasTracks and improve bus service.

We now know that rail lines are going to cost at least 68 percent more than RTD anticipated and that sales tax revenues will be well short of RTD's expectations. If RTD doesn't have enough money to build FasTracks, it certainly doesn't have enough to build FasTracks and improve bus service. RTD has already floated proposals to cut bus and rail service on current routes in response to higher-than-anticipated costs.[74]

Deception 14: FasTracks proponents can legitimately submit "no on FasTracks" statements to the county blue books.

The Truth: A Colorado judge said the FasTracks Yes! campaign was "morally reprehensible" for sabotaging the opposition statement in the voters' guide.

RTD knew perfectly well that Rebecca Barnes' argument was a fraud, but still incorporated it into the "no" argument in the voters' guide.

At 4:55 pm on September 17, 2004, just minutes before the deadline, Rebecca Barnes submitted a "no on FasTracks" argument for the voters' guide that would be sent to all voters in the RTD area. The only problem: Rebecca Barnes was the deputy campaign director of the FasTracks Yes! campaign, and the argument she submitted was in fact a deceptive ploy in favor of FasTracks.

When more than one argument is submitted for or against a measure, it is up to the government agency submitting the measure to consolidate arguments. In this case, RTD—hardly an impartial observer—knew perfectly well that Rebecca Barnes' argument was bogus, but RTD incorporated her argument into the one submitted by legitimate FasTracks opponents.

As a result, the "summary of written comments in opposition" in the voters' guide argued that FasTracks did not include enough rail transit, including "rail service along the entire Front Range, to the mountains, Fort Collins, Colorado Springs, or along E-470." The guide also argued for "double-decking on 6th Avenue, I-25, and I-70" and said that "highways should

be expanded to equal carrying capacity of a line of transit: roughly ten lanes" (which deception 11 shows is far more than the real carrying capacity of a light-rail or commuter-rail line).[75]

When their attempt to deceive the public was revealed to the media, the FasTracks Yes! campaign manager said, "we probably did use bad judgment in having her [Barnes] sign it. For that we apologize."[76] In other words, they did not apologize for submitting the phony argument; they merely apologized for having someone close to the campaign submit the argument.

"This was an attempt to subvert the initiative process, and that's one of the worst political sins," said a state district court judge.[77] Though he said he lacked authority to require a rewrite of the voters guides, the judge called Barnes' action "morally reprehensible."[78]

Deception 15: Modern cities need light-rail transit.

The Truth: Twenty-first century cities deserve something better than late nineteenth-century technology.

The first American streetcars on rails, hauled by horses, were introduced in Baltimore in 1828. The electric streetcar was perfected in the 1880s and introduced in Cleveland, Ohio; Richmond, Virginia; and Montgomery, Alabama. The first electric interurban rail line connecting a city and suburb was opened between Portland and Oregon City, Oregon, in 1893.

Between 1910 and 1966, 700 American cities switched from streetcars to buses because they knew that buses can go more places for less money than rail systems.

The first railcars that looked like modern light rail—long, articulated rail cars that could run in sets of two or three and were protected from collisions by advanced signaling systems—were introduced in service on the San Francisco-Oakland Bay Bridge in 1939. Other than the use of some silicon chips, differences between the Bay Bridge cars and today's light-rail trains are mostly cosmetic.

In 1910, more than 700 American cities had some form of electric streetcars. By 1966, only six cities still had them. Though some blame a so-called General Motors conspiracy for destroying streetcar systems, National City Lines (which General Motors partly owned) had an interest in less than 30 of those systems when they converted streetcars to buses, in many cases buying them the very year they made the conversion. All General Motors wanted to do was sell buses to the companies when they converted.[79]

The transit industry changed from streetcars to buses for a simple reason: buses can go more places yet cost less to buy, less to operate, and less to maintain than rail systems. That remains true today: the Government Accountability Office estimates that cities can install bus-rapid transit systems that can move more people at faster speeds than light rail for as little as 2 percent of the capital cost of light rail and lower operating costs as well.[80] While subways and commuter rail are useful in extremely dense places such as Manhattan and Hong Kong, rail transit in general and light rail in particular have no place in most modern American urban areas.

Deception 16: RTD will use eminent domain only for "a primary transit purpose."

The Truth: RTD is using eminent domain to take land that it plans to sell or give to developers to build new housing and commercial developments near FasTracks stations.

Lee Kemp, the chair of RTD's board, says "RTD only acquires property that the agency

needs for transit purpose."[81] This implies that it takes land only to use for transit lines, maintenance facilities, and so forth.

People living in transit-oriented developments in Los Angeles, Portland, and other cities don't use transit significantly more than other people in those cities.

In addition, however, if RTD "accidentally" takes more land than it really needs, instead of returning the surplus to its former owners, it will sell or give that land to developers to build "transit-oriented developments." "Once our transit needs are taken care of and there's an opportunity for more development there, we would like to see that not be precluded" by controversies over eminent domain, says Cal Marsella.[82]

RTD also plans to sell or give developers "air rights" above its parking areas. For example, at a Lakewood FasTracks station, RTD proposes to allow developers to build four stories of residents and offices on top of four-story parking garages.[83]

RTD also downplays the fact that it is encouraging cities on FasTracks routes to use eminent domain to buy land by rail stations to use for transit-oriented developments. Restrictions on the use of eminent domain, frets Marsella, "undermine" cities' "desire for mixed-use development."[84]

So-called transit-oriented developments (TODs) typically mix high-density housing with shops and office space. RTD says that its goal is to create a market among residents and employees in these developments for riding its trains. However, experience with existing TODs in Los Angeles, Portland, and other cities reveals that households in these developments don't use transit significantly more than similar households elsewhere.[85]

Allan Ferguson, a Denver resident who opposes high-rise developments proposed near an RTD light-rail station, points out that few people aspire to live in high-density developments. Colorado, he says, has the "space and the desire for single-family home ownership."[86] Surveys show that only 18 percent of Americans aspire to a "home in the city, close to work, public transportation, and shopping"; the other 82 percent prefer a single-family home with a yard.[87] The limited market for high-density development is probably saturated by existing high-density housing. To attract residents to transit-oriented developments, RTD or local cities will have to pour millions of dollars in subsidies into these developments.

Many developments have already received huge subsidies, including Stapleton ($294 million in subsidies), Lowry (at least $35 million), Belmar ($96 million), Broomfield's Arista ($62 million), Englewood CityCenter ($30 million), Westminster's Mandalay Gardens ($40 million) and Northgate ($74 million), and Arvada city center ($45 million).[88] Most or all of these subsidies are in anticipation of these developments being located near FasTracks rail stations.

Denver-area cities have already spent at least $676 million subsidizing transit-oriented developments.

This reveals a key difference between buses and trains. Buses are flexible and routes can be changed overnight as peoples' travel patterns change. Rails are inflexible and take years to plan and build. So when transit agencies such as RTD build rail lines, they also go into the development business, trying to manipulate land uses and imposing their ideas of how communities should be designed so they can develop a market for their transit services. Eminent domain, tax subsidies to developers, and coercive zoning are all a direct result of rail transit's inflexibility.

A Feasible Alternative

Some people want to build rail transit no matter how great the cost and how little the benefit. A more reasonable approach is to ask how the Denver region can have a better transportation system for both auto drivers and transit riders for less money than voters agreed to spend on FasTracks.

A HOT-lane network parallel to all of the congested freeways in the Denver metro area would cost less than FasTracks and give both auto drivers and bus riders far more congestion relief.

The Independence Institute provided just such an alternative in 2004. Called The Mobility Plan for Denver, the alternative focuses on finding cost-effective solutions to congestion, pollution, energy consumption, and other mobility issues. The plan is not wedded to any particular technology, but instead is based on a process of setting congestion, pollution, and other goals, estimating the cost effectiveness of a wide variety of alternative projects, and choosing the combination of projects that will meet the goals at the lowest cost.

Based on data in documents prepared by DRCOG and RTD, the Mobility Plan suggests that the most cost-effective investments include a network of high-occupancy toll (HOT) lanes adjacent to all congested non-toll freeways in the Denver-Boulder metro area; improved coordination of all traffic signals in the region; and frequent bus-rapid transit service in all major travel corridors. The plan also suggested more transit choices, safety improvements for cyclists and pedestrians, and assistance for low-income families.[89]

These projects will do far more to relieve congestion than FasTracks. With congestion relief comes energy savings and reduced pollution, as the Texas Transportation Institute estimates that congestion causes Denver-Boulder-area drivers to waste 43 million gallons of fuel per year.[90] All of these projects together will cost less than the 2004 FasTracks plan was supposed to cost, and much of that cost will be paid out of user fees rather than tax dollars.

The Denver-Boulder area has 274 miles of freeway. Not all of these freeways are congested. At an average cost of $10 million per lane mile, adding two new high-occupancy toll lanes to, say, 200 freeway miles would cost about $4 billion.[91] Most of this would be covered by the tolls collected from low-occupancy vehicles. Construction of the HOT lanes would cost taxpayers far less than FasTracks. They could be installed in most of the corridors long before the earliest possible FasTracks completion date, and they would do far more to relieve congestion than FasTracks.

Hundreds of traffic signals in the Denver metro area are not coordinated with other signals. Hundreds more are poorly coordinated with obsolete technologies. Installation of modern coordination systems at all of these intersections would cost around $20 to $30 million. Although such coordination will do more to relieve congestion, save energy, and reduce air pollution than the entire FasTracks system, it has not been deemed a “high priority,” so signals are being coordinated at a very slow rate.[92]

Bus-rapid transit does not require dedicated bus lanes, high-occupancy toll lanes, or other special facilities. Kansas City has been operating bus-rapid transit lines on ordinary streets and highways for several years, and each new line attracted an average of 30 percent new riders. Starting one new 9-mile bus-rapid transit route cost about $30 million for modest but distinctive stations and buses.[93]

Spending $30 million on traffic-signal coordination would do more to relieve congestion, save energy, and reduce pollution than the entire FasTracks system.

For about $150 million RTD could purchase 300 luxury buses

DRCOG and RTD should replace FasTracks with buses, HOT lanes, traffic signal coordination, and other cost-effective projects.

and almost immediately begin running those buses in fast, frequent service in all FasTracks corridors. Special bus-rapid transit stations might cost about $250 million more. As HOT lanes are developed in those corridors, the buses could provide even better service by using those lanes.

Even more low-cost ideas for improving Denver-area transportation are described in The Mobility Plan for Denver. A final list of cost-effective projects will no doubt differ in some respects from these suggestions. Yet in the end this process will provide more mobility at a lower cost than FasTracks.

DRCOG and RTD should make the responsible choice by replacing the budget-draining FasTracks plan with a plan using buses, HOT lanes, improved traffic signal coordination, and other cost-effective projects. This will offer better transit service, save Denver-area taxpayers billions of dollars, save more energy, and provide more congestion and pollution relief long before FasTracks lines could be opened for business.

Would You Buy an Obsolete Transit Plan from This Agency?

By the time what we now call light-rail transit was perfected in the 1930s, most cities were rapidly replacing streetcars with buses because buses cost less and were more flexible than rails. Almost every transit system in America had completed this conversion by 1966.

Since the 1980s, however, publicly owned transit agencies have jumped on the bandwagon to rebuild rail transit systems. This bandwagon was supported by planners, anti-automobile groups, and engineering firms, construction companies, and railcar manufacturers that wanted to collect millions of dollars in profits from building the systems.

Rail advocates developed a web of deceptions aimed at promoting these obsolete transit systems: rail transit was inexpensive to build (when it is phenomenally expensive); its low operating costs would make up for its capital costs (when periodic rehabilitation costs are included, buses cost far less to operate on comparable routes than rails); rail transit would reduce congestion (at best it would produce trivial amounts of congestion relief at a huge cost); rail transit would promote economic development (which in fact requires even more subsidies).

RTD's latest projections are that only about 4,400 people a day will ride the Northwest (US 36) rail line to Longmont—a 45 percent reduction from the 2004 projection of 8,000 people per day. At the same time, the projected cost of that line has risen by nearly 60 percent to $897 million. This means the cost of carrying each and every rider will average more than $60, about three times as much as the next-most expensive line.[94]

Meanwhile, bus-rapid transit in the same corridor that will cost less than one-third as much as the rail line and will offer faster, more frequent service and carry nearly three times as many people. So why does RTD insist on building the Northwest rail line? Because rail transit has nothing to do with better transportation and everything to do with making contractors rich at taxpayers' expense and spreading the pork around to every major city in the region.

The main motivation behind the recent rail transit boom was a federal law that offered transit agencies "new starts" money for rail construction on a first-come, first-served basis. Agencies that did not build rails fretted that they were losing "their share" of the pot to other cities. But once a city built its first rail line, a new lobby of rail contractors formed to promote more construction. Since the new starts money was limited, RTD decided to rely mainly on local funds to build its dream system.

As late as April, 2007, RTD General Manager Cal Marsella claimed that RTD could build the entire FasTracks system on time with available funds.[95] Now, RTD says it has a choice between building only part of the system, delaying completion as long as 17 years, or raising taxes again.

Denver-area voters who supported FasTracks in 2004 have to ask themselves: If RTD relied on so many deceptions to persuade people to vote for FasTracks then, how many more deceptions will it use to get another tax increase today? Why should voters and taxpayers trust an agency so willing to manipulate opinion and distort the truth?

The answer is that voters should not trust anything RTD says. Instead, they should seek out alternatives that will provide far greater benefits than FasTracks at far lower costs. Those alternatives could include rail transit in some corridors, but only if rail transit was proven to be the most cost effective way to reduce congestion, pollution, and energy consumption.

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About the Center for the American Dream

The Independence Institute's Center for the American Dream works to give people freedom of choice in land use and transportation while protecting urban livability and environmental quality. The "dream" of the Center for the American Dream is affordable homeownership, mobility, a clean and livable environment, and personal freedom for all Americans, not just an elite few.

The Center for the American Dream does not advocate that people drive everywhere or take public transit, live in low-density suburbs or high-density urban centers. All of these are legitimate lifestyles. The Center supports free-market solutions to urban problems such as value-priced roads and competitive transit, and opposes coercive planning efforts that attempt to engineer lifestyles through subsidies, regulation, and limits on personal and economic freedom.

About this Report

In 2004, RTD made a variety of promises to persuade Denver-area voters to approve FasTracks, including promises that it could be built on time and on budget, that it would significantly relieve congestion, and that it would save energy and reduce pollution. Now, as those promises are being broken one-by-one, it is clear that RTD wove a web of deceptions aimed at deluding and confusing voters.

In some cases, RTD planners optimistically deluded themselves into believing such things as early cost estimates and claims that the growth in sales tax revenues would never fall below 6 percent (even though it had been less than 6 percent in each of the three years before 2004). In other cases, RTD strategically misrepresented information to voters, such as a claim that FasTracks would take 250,000 cars off the road each day when RTD knew the actual number was less than 70,000.

This report reviews 16 of those deceptions and makes the case for halting the FasTracks project and instead investing in cost-effective transportation projects such as bus-rapid transit (which is 20 times more cost-effective than rail) and traffic signal coordination (which, at a cost of $30 million, would do more to relieve congestion and pollution than the entire FasTracks program).

About the Author

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