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Opinions Differ on the Merits of Revenue Risk Concessions vs. Availability Payment Models for DBFOM Delivery of U.S. Highways

This is a series of opinion pieces written by Robert W. Poole Jr. and P3 practitioners for *Public Works Financing* in which they argue the merits of the revenue risk (Poole) vs. availability payment (practitioners) models for DBFOM delivery of infrastructure projects. We begin with the first essay, published in January 2018.

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## **Time to Rethink the U.S. Highway Model**

*by Robert W. Poole, Jr.,*

*Director of Transportation Policy, Reason Foundation*

I've been writing this column for more than two decades. During this time, I've researched and written dozens of policy studies on transportation infrastructure, advised federal and state transportation agencies, and served on various transportation committees and commissions. From all of this I've concluded that the way we fund and manage the U.S. highway system is broken and needs serious rethinking if it's going to meet the needs of 21st-century America.

The problems are legion, beginning with the huge direct cost of traffic congestion in our 200 or so urban areas—a whopping \$160 billion per year just in wasted time and fuel. And while our highways and bridges are not “crumbling,” there are chronic problems of deferred maintenance, leading to many rough roads and a surprisingly large number of structurally deficient or functionally obsolete bridges.

Our highway funding system based on per-gallon fuel taxes is breaking down, for several reasons. A growing share of the proceeds is no longer spent on highways, so people have come to view gas taxes as just another tax, which politicians are therefore leery of increasing. Yet as cars continue to get more

efficient—using fewer gallons to go a given distance—revenues from per-gallon fuel taxes can't keep pace with either the growth in driving or the cost of building and maintaining highways.

Moreover, with decisions on how to spend transportation revenues being largely political, at both state and federal levels, the billions raised and spent each year are often not spent on projects that would produce the most bang for the buck. Most federal highway and transit money is doled out by formula, and although members of Congress are no longer allowed to “ earmark ” pet projects, the overall process is based far more on politics than on sound economic principles (such as ensuring that benefits of a project exceed its costs).

I now think that a far better model would be to reconceive highways as another category of network utility, in addition to the familiar examples of electricity, water supply, telecommunications, and natural gas. Most network utilities are not run by government agencies, with key decisions made by legislators. Instead, the providers are organized as companies that sell services to customers, under government oversight. That's true regardless of whether those companies are owned by investors or are government enterprises (like municipal electric and water utilities).

If highways were provided by highway utility companies—investor-owned concession companies, government toll agencies, or nonprofit user co-ops—a great many things would be different. For example:

- People would pay for highways based on how much they used, just as we pay for water by the gallon and electricity by the kilowatt hour.
- People would be just as familiar with what highways cost, based on their monthly bill, as they are with the cost of cable, cell phones, electricity, etc.
- Per-mile highway charges would be subject to some form of regulatory oversight, based on the extent to which the highways and bridges in question had competitors or were essentially monopolies.
- Large-scale highway investments—for new highways and for replacing worn-out ones—would be financed via the capital markets, just as individuals do in buying a home and as other utilities do in building new facilities, rather than being paid for piecemeal out of annual appropriations.
- Major highway investments would be primarily business decisions, not political decisions, subject of course to the same kinds of land-use and environmental constraints faced by all other commercial developments.

- Highway operations would be managed in real time, to provide customers with the quality of services they were willing to pay for.
- Highway companies would have strong incentives to keep their facilities in excellent condition, to attract and keep customers.

That may sound like a utopian vision, but there are reasons to think we are at a point where dramatic change will be necessary. The federal government is on a path toward insolvency, where nearly all federal revenues will be consumed by entitlements, defense, and interest on the national debt. There will be no “general revenue” left over to bail out a Highway Trust Fund. Most state governments are saddled with huge unfunded pension and health-care obligations to retired public employees, so are not in a position to take up the slack from a reduced federal role. And per-gallon fuel taxes will have to be replaced by a propulsion-neutral funding source—some form of per-mile charging.

These conditions set the stage for the transformation to a new highway system, supported by three other key developments. One is the growing worldwide success of revenue-financed P3 concession projects for highways and other transport infrastructure. Compared with Australia, Chile, France, and Spain, we have hardly scratched the surface of what is possible.

Second is the emergence of global infrastructure investment funds, which have amassed over \$350 billion of equity to invest in revenue-producing infrastructure in the past five years. Most of this is being invested in European, Asia-Pacific, and Latin American infrastructure—but these funds clearly desire to invest far more in the United States, if only there were a “pipeline of projects.” Our aging, hyper-congested highway system could offer an ample pipeline.

A third development is the increasingly recognized need for public pension funds to diversify their portfolios by investing more in revenue-producing infrastructure. That’s hard to do in U.S. transportation, because nearly all airports, highways, and seaports are owned and operated by governments. But P3 concessions open such infrastructure to serious investment by non-profit pension funds as well as for-profit investment funds.

The transformation of U.S. highways from state-owned enterprises to highway utility companies could not happen overnight. But in my forthcoming book, *Rethinking America’s Highways: A 21st Century Vision for Better Infrastructure* (University of Chicago Press, June 2018), I lay out scenarios showing how a several-decades transition could occur. The book shows that investor-owned toll roads have a long European and U.S. history that was overlooked once motor vehicles arrived on the scene. The concept was rediscovered in post-World War II Europe, and it spread to Australia,

China, and Latin America late in the 20th century. It is only in the last 15 years that P3 highway infrastructure has gained a toe-hold in the USA.

The preview of the White House infrastructure plan (leaked on January 22nd) offers steps toward beginning this transition. It recognizes the need to reduce the direct funding role of the federal government for infrastructure owned and operated by state and local governments. It provides for expanded P3 financing tools (PABs, TIFIA, etc.) as well as repealing the federal ban on toll-financed Interstate reconstruction and modernization. And by not embracing a federal fuel tax increase, it de-facto encourages the needed shift from per-gallon to per-mile charging, led (as it should be) by the states that own the highway infrastructure. n

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From PWF April 2018

The Comparative Benefits of Revenue Risk vs. Availability Payment P3s

A Response to "The Revival of Revenue-Risk Highway P3's" opinion piece by PWF's transportation policy columnist Robert W. Poole, Jr. in the November 2017 issue of Public Works Financing newsletter.

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The column by Bob Poole extolling the virtues of revenue-risk toll concessions and citing weaknesses in the availability payment (AP) procurement model for large transportation projects drew the thoughtful responses below from four P3 industry veterans:

- Matt Girard, Group Head, Civil Division, Plenary Group
- Joe Wingerter, Vice President, Kiewit Infrastructure Group
- David Spector, Director of the High Performance Transportation Enterprise of Colorado DOT
- Greg Ciambone, Senior Managing Director / Vice President at The Walsh Group and Walsh Investors, LLC.

### **Introduction**

In his column, Bob Poole writes: "There has been some debate about the relative pros and cons of the availability payment (AP) and revenue risk (RR) models at transportation conferences in recent years. Some state DOTs (e.g., Florida) have done only AP concessions for tolled P3 projects, preferring for the state to keep control of toll rates and revenue, despite thereby retaining

traffic and revenue risk. Several other states, including Texas and Virginia, do not permit AP concessions. For highway projects where tolling is not an option, AP concessions—based on a dedicated stream of existing transportation tax revenue—are the best choice, to obtain the benefits that long-term P3 concessions can bring. [But] for the highway sector going forward, revenue-risk concessions not only should be the preferred choice but very likely will be.”

Data supporting Poole’s opinion can be found in a new Reason Foundation study, at <http://reason.org/>

[files/infrastructure\\_availability\\_payment\\_revenue\\_risk\\_concessions.pdf](#).

### **Rebuttal:**

### **The Case for Availability Payment (AP) P3’s —The Consensus View**

Bob Poole has been an advocate for the P3 model for many years and most in the industry truly appreciate his dedication and educational efforts on the subject; he speaks with extensive experience and knowledge. P3’s, whether RR or AP, bring something no other delivery model brings—that is, beyond fixed time and cost delivery, the inclusion of lifecycle optimization into a procurement and similarly into the contract itself via risk transfer of lifecycle matters. P3’s reflect an important contractual method for effecting fixed time, fixed price, dedicated performance based contracting—all in the interest of the taxpayer. This allows the public sector to move expeditiously and work closely with the private sector to deliver complex projects in an environment where infrastructure decay and deferred maintenance has become a national epidemic. So this P3 risk transfer, whether via RR or AP, is badly needed in this country as a part of the equation to successfully embark on our infrastructure renewal. The debate then is really only whether RR is in fact better value than, and likely to become the defacto standard over AP, as Poole suggests. Some of Bob Poole’s arguments against AP (i.e. greater benefits than AP, and owners’ “preference” for RR) don’t consider the entire picture, and therefore are potentially misleading or one-sided, according to various P3 industry leaders, whose opinions are cited below.

### **Private Investment—Poole writes:**

“One of the largest benefits of the RR model is to increase the total investment going into highway projects. This occurs where the project cost is beyond what conventional highway revenue sources can fund, and where AP financing would simply divert those revenues from other projects rather than increasing the total amount of highway investment.”

**Response:**

Claiming there are “no additional funds from an AP” is not looking at the RR vs. AP as apples-to-apples. Using either model makes it possible to accelerate the completion of major transportation projects. Toll roads bring in additional revenues—period. That is a separate matter from the decision of delivering it via an RR (private sector takes the T&R risk) or AP (where the public maintains the T&R risk), but the key point is that additional toll revenues are brought into the overall revenue equation either way. Therefore, the real question (as Poole spells out) is whether the public owners or P3 developers should bear the traffic risk.

**Matt Girard:**

“I agree that certain downside risk for the public is capped if the private sector takes the traffic risk in a RR concession—that being if the estimated traffic does not materialize. But given the project revenues become the heart and focus of RR transaction financing—the public may well be paying more for this risk transfer. The issue is how much it would cost the public to retain the revenue risk in an AP project, and how that compares with the cost of allocating traffic risk to private developers in an RR project.”

**Joe Wingerter:**

“Traffic risk can be largely driven by unknowns over 30-50 year concession terms, factors such as: carpooling, free/discounted hybrid vehicle use, transit incentives; general economic downturns and awry demographic projections along with new technologies like autonomous vehicles, and overall “value of time” metrics can all impact future traffic. Collectively these elements are grouped into a basket of speculative outcomes and the mitigation becomes akin to an educated guess, increasing the risk profile, and therefore the pricing of an RR project. Even when the public sector receives an upfront payment for the rights to the future revenues, they will pay a premium for this risk transfer and give up much of the roadway value while restricting their ability to make future public policy decisions. In comparison, the AP model focuses on a fixed price (budgeted) for maintaining the roadway condition and service, the private sector is penalized when it doesn’t meet the performance requirements, meanwhile all the upside revenues and future decisions remain in full control of the public sector.”

**Matt Girard:**

“Debt lenders and rating agencies will also look to mitigate risk in the RR model—they generally require a substantially larger equity buffer (aka “gearing”) to protect the project debt. For example, instead of say ~10% of private sector equity in the capital structure for an AP, the lenders may require ~30% (or more) equity in a RR concession. Equity, by definition,

maintains more risk and is hence more expensive to the transaction than debt, and the more equity required to make the transaction work (to offset revenue risk), the higher the weighted average cost of capital. All else being equal, this higher overall cost of capital increases the cost to the public via higher tolls to cover this difference.”

**Joe Wingerter:**

“Before initiating a RR transaction, the public sector should consider the “gearing” and higher use of more expensive private sector equity in an RR concession, and compare the total cost of capital over the term of the RR concession to that of an AP—taking into account that RR contract durations are typically 10-20 (or more) years longer than AP contracts. When making this comparison—from a “total funds required perspective” the AP model will be significantly more economical than the RR model—that’s why many of the mature P3 programs worldwide have gravitated to the AP model.”

**Customer Service—Poole writes:**

“A more-subtle advantage of revenue-risk concessions is that they create a direct customer/provider relationship between the roadway user and the concessionaire. The highway becomes a business, in which the company has a powerful ongoing incentive to attract and keep customers. This can affect the design (e.g., convenient locations of on-ramps, signage, advertising) and also the operation (keeping congestion to a minimum to give customers value for their toll payments). In an AP concession where the state charges tolls, that direct customer/provider relationship does not really exist, so those incentives are far less.”

**Response:**

The mission of a public highway agency is not necessarily to “attract and keep” more customers, and incentivize more vehicle-miles driven (that goes to highway naysayers who claim that new capacity only induces more traffic). Their mission is to (continued on p. 7) provide safe travel reliability to the traveling public. Let’s take a look at some websites of DOT’s that are experienced in P3’s and have done BOTH RR and AP deals to understand the difference.

E.g. CDOT’s website (<https://www.codot.gov/about>

[/mission-and-vision.html](#)) stresses “safety, experience, and convenience.” Or FDOT’s website <http://www.fdot.gov/info/moredot/mvv.shtm>) notes its “goal of being congestion and fatality free.”

**David Spector:**

“To truly align private and public interests the goal should not be to attract as many users as possible, but to provide a safe and reliable travel time. The interests of attracting as many users as possible vs. providing a more reliable travel speed might actually be a competing interest, and hence a RR project may be against the public interest if it’s contracted incorrectly.

How does the P3 model deliver a reliable travel time? Make sure that the design and construction are of the specified quality, that the project provides the ease of automated tolling (if tolled), and it provides users with choices (ride in free lanes, carpool in managed lane, transit, or pay for managed lane and speed reliability). None of these issues are tied to whether private investors or public agencies take the traffic risk. Colorado DOT has driven all of above goals into both their US36 (RR) and C70 (AP) projects.”

### **Boondoggles—Poole writes:**

“A third advantage of highways as businesses is that this reduces the tendency of politics to implement boondoggles.”

### **Response:**

Sound highway projects should first pass a basic benefit/cost test, and in most cases a further test of return on investment. Highways like the proposed US 460 in Virginia and Illiana Expressway in Indiana and Illinois—originally proposed as RR concessions--could not meet a ROI test, and probably not a benefit/cost test, but might have been accommodated as an AP concessions for reasons that served the greater good of the constituent user group(s).

### **Joe Wingerter:**

“Just because a project may not pay for itself in a cost/benefit ratio doesn’t mean the project should not be built. There are many examples of projects simply being in the public’s best interest.”

### **Greg Ciabrone:**

“Projects should be selected by public agencies that service the public’s best interest, and be done in a transparent way with impartial oversight groups that are removed from politically driven influences. This goes for all projects, irrespective if the project is a P3 or not.

For example, the Hampton Roads Bridge Tunnel project in Virginia. Charging a toll for managed lanes will come nowhere close to paying for the expense of this project (i.e. an additional tunnel). But VDOT has made a public policy decision (and reasonably so) to advance the long-promised project as a design-build project using a mix of mainly regional sales taxes and tolls.”



## **Balance Sheet Concerns—Poole writes:**

A recent Reason Foundation study points out why in the highway sector, the use of AP concessions (at least those without robust toll revenue) cannot become the primary way we procure major highway projects (such as replacing worn-out Interstates). That's because state treasurers and finance departments are realizing, correctly, that AP obligations are liabilities that must be reflected on a state's balance sheet and counted against the state's bonding limitation.

The majority of states already have very large unfunded pension liabilities on their books. The last thing they need is to add very large AP liabilities. Especially not when revenue-risk P3 highway projects are highly desirable as "alternative investments" to diversify the investment portfolios of public-sector pension funds."

### **Response: Greg Ciabrone**

"Yes, public agencies and rating agencies typically treat AP payment obligations as a liability and they are considered in the overall financial planning of the public agency and in external credit assessments of that agency. For any long-term lease transaction, this will be more evident in January 2019 when operating leases will have to be shown "on-balance sheet" as a liability.

However, AP concessions will still play a critical role in how major highway project are procured and no one believes AP concessions will become the "primary way" states procure projects. For example, some projects just do not avail themselves to revenue or demand risk. A good example is the Pennsylvania Rapid Bridge Replacement Project. In this case, the State of Pennsylvania is replacing 558 bridges throughout the state. There is no way that bundled project could have been procured as a revenue risk transaction unless there were 558 trolls stationed at the end of each bridge that demanded payment for anyone to cross. All kidding aside, a revenue risk or demand project sometimes just does not work.

There are other projects that are AP concessions in which there is a certain, identifiable revenue stream generated by the new project. A good example of this is the ORB East End Crossing P3 Project procured by the State of Indiana. In this case, the Lewis and Clark Bridge (name of the East End Crossing Bridge) is tolled and the State of Indiana has the flexibility to use the toll revenues generated to pay the AP payments.

The tolls are not earmarked specifically for the AP payments but provide the State of Indiana flexibility to use those revenues as it sees fit. Thus, public agencies as well as rating agencies do consider these new revenues

generated as part of their respective financial planning/credit risk assessment.

The bottom line, is each project needs to be evaluated on its own merits and AP concessions will continue to be an option that state treasurers and finance departments will continue to evaluate and use in those instances in which it makes fiscal sense.”

### **Pension Fund Interest—Poole writes:**

RR highway projects are highly desirable as “alternative investments” to diversify the investment portfolios of public-sector pension funds. When Australia-based IFM Investors purchased the remaining 66 years of the Indiana Toll Road concession, the demand from U.S. pension funds to participate was intense. Some 72 of those funds took part, with CalPERS—America’s largest public pension fund—acquiring a 10% share.

### **Response**

#### **Matt Girard:**

“Just because an investment is seen as a good investment and offerings are “over subscribed” by private investors doesn’t mean any given RR project is a smart decision for the public good. Every share offering by the private investors in the Highway 407 toll concession in Toronto, has been oversold. But that 99-year deal has not been a poster child for good public policy.”

### **Conclusion**

#### **Matt Girard:**

“Both RR and AP bring value under the P3 model: fixed time, fixed price delivery with lifecycle considerations, Net Present Value (NPV) analysis, DBFOM innovation, etc. Both AP and RR options should both be on the table.

States are in budget crunches and toll roads can bring in additional revenue. Decisions on how a state procures those roads—hard-bid, Construction Manager/General Contractor, design-build or P3—should be made independently. P3’s are the leader on long-term maintenance and lifecycle benefits because of the long-term OMR component. A further decision is then how to proceed with a P3—either RR or AP, where all aspects need to be considered for a true apples-to-apples comparison.”

Public agencies need to consider all issues and all pricing impacts when deciding between RR or AP, including whether the allocation of traffic and revenue risk to private investors provides beneficial risk transfer or not—and that will vary from project to project. n

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From PWF May 2018

Further Thoughts on Revenue-Risk Concessions

by Robert W. Poole, Jr.,

Director of Transportation Policy, Reason Foundation

This is the third in a series of opinion pieces by Bob Poole and P3 practitioners in which they argue the merits of the revenue risk (Poole) and availability payment (practitioners) models for DBFOM delivery of infrastructure projects. The series is available on our website (pwfinance.net) under "Reprints".

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I appreciated last month's defense of Availability Payment (AP) concessions, and agree with much of what the authors had to say.

Design/build/finance/operate/maintain (DBFOM) is a major advance over traditional design/bid/build which focuses only on the lowest bid to build a standardized design. It's also a big improvement over design/build, since it focuses on lowest life-cycle cost. I also agree that since either form of DBFOM is better than older procurement methods, there are cases where AP concessions, all things considered, can be a good choice for a transportation agency; I provided examples in my November 2017 Reason policy paper on the subject.

My difference with last month's authors concerns only major highway projects financed with tolls. For that subset of all highway projects, I maintain that revenue-risk (RR) concessions have strong advantages that will end up with this being the mode of choice in the future. Let's get down to specifics.

First, my critics maintain that the public will pay too much for transferring revenue risk to investors. Many professional experts disagree with that assessment. World Bank economist Michael Klein says having taxpayers bear revenue risk is asking them to provide "unremunerated credit insurance" for the project. A proper value for money (VfM) analysis seeks to quantify the value of revenue risk transfer, to make transparent how much "credit insurance" the taxpayers would be taking on in such cases.

A variant of this concern was expressed as follows: "All else being equal, [the] higher cost of capital [due to a larger amount of equity] increases the cost to the public via higher tolls to cover this difference." That sounds plausible, but traffic and revenue forecasters know their Economics 101. The price charged

is based on market demand, not underlying costs. Other things equal, the demand to use a tolled corridor is the same, regardless of how it is financed. So the RR concession company cannot charge more than the market will bear, any more than the state DOT can as the tolling partner in the AP concession.

The RR company therefore has an economic incentive to increase the volume of paying customers, to generate enough revenue from market-based tolls to cover its debt service and the target return on equity. This means the RR concession company seeks to offer innovative designs that increase traffic and revenue. A number of recent RR cases involved design innovation and added connectivity that produced large differences between the winning bid and the second-place bid—for example, a \$1.3 billion difference for the LBJ Express in Dallas and \$300 million for the SH 288 project in Houston.

I referred obliquely to this in my original column, by noting the RR company's incentive to attract more traffic than an AP company. The AP concession company's compensation depends solely on keeping the facility in good condition. It has no incentive to attract additional vehicles, since it gains nothing financially by doing so, and more VMT than forecast will increase its maintenance costs.

My critics question the public benefit of a project attracting more VMT. The gains to the RR concession company (increased revenue) are obvious, but what about the costs and benefits to the public? First, if the tolled project attracts a larger fraction of the VMT heading in that general direction, this reduces traffic diversion from a roadway that is tolled onto parallel non-tolled routes. That is one clear benefit. Second, if part or all of the toll facility is variably priced, the more VMT it attracts, the larger the fraction of vehicle traffic in that general direction that will be uncongested, thereby reducing the higher emissions generated from congested traffic. As for potential safety impacts of handling more VMT, the concession agreement presumably contains the same safety requirements regardless of whether the concession is structured as AP or RR.

Another concern is that the state gives up too much control of future transportation infrastructure by agreeing to RR concession agreements, because the RR concession company usually negotiates some form of compensation clause in case the state builds competing facilities. (Since the AP concession company's availability payments do not depend on the amount of toll revenue the state DOT collects, there is no need for compensation clauses in AP concession agreements.) Compensation clauses have evolved over time. The first one, for the 91 Express Lanes in Orange County, CA, flatly forbade Caltrans from building any other lanes in the corridor. That was because the lenders had never seen a toll road with free competition just a few feet away, and insisted on that kind of protection.

Today, 25 years later, while most RR concessions do include compensation clauses (the Chicago Skyway does not), they (1) exempt all projects in the long-range transportation plan in effect when the concession is signed, and (2) put the burden of proof on the company to document the extent of diversion to a competing facility that was not in the long-range plan. This has been judged a reasonable trade-off for the benefits of RR concessions, though obviously not everyone agrees with this judgement.

The critics also object to my emphasis on the use of RR DBFOM procurement to weed out boondoggle projects beloved by politicians. They note that some projects that would not have a commercial return on investment (ROI) may nonetheless have important public benefits, justifying their development. As a long-time researcher and occasional consultant, I'm well aware of this point, and have written elsewhere that a transparent benefit/cost analysis should precede any decision to procure a large-scale transportation project. Yet the benefits of using an RR concession may still be realized if the project makes public policy sense but is unlikely to generate a commercial ROI. In such a case, the state DOT makes an equity investment in the project, in effect buying down the amount to be financed based on toll revenue. And in such cases, it is always prudent for the state to negotiate a revenue-sharing agreement, in case the revenues in the out-years turn out to be significantly higher than forecast in the base model.

Those who portray the AP concession model as the wave of the future, even for tolled mega-projects, have claimed that RR concessions are so difficult that few states are now offering them and few companies are bidding on them. Those judgements are premature, at the very least. Besides the RR concessions now under construction (I-66 Virginia, SH 288 Texas), the past year has seen three new RR megaprojects offered—each the first one in its state. And there is considerable private-sector interest in them:

- Maryland I-270/I-495 Managed Lanes: 27 firms responded to the Request for Information.
- Illinois I-55 Managed Lanes: 18 firms submitted Expressions of Interest.
- Alabama I-10 Mobile River Bridge: four consortia formed.

I will close with a broader point. In my column in the February/March issue of PWF, I argued that the 20th century U.S. highway model is broken and needs to be replaced. After three decades in transportation policy, my conclusion is that highways are in fact a vital public utility, but are not funded and operated like any of our other utilities. In electricity, natural gas, water supply, telecommunications, etc., customers pay the company directly, based on how much of specific services they use. The direct customer/provider relationship has many benefits, which are largely absent

in the highway sector—except in state-run toll roads and in RR concessions. What we should want is a highway utility system in which the providers have strong incentives to attract and please their customers, and in which customers know how much they are paying for highway services, as they do with other utilities.

Basically, our highways need to be de-politicized, to at least the same degree that applies to other vital public utilities. Even when the electricity or water provider is a government enterprise, customers pay it directly, rather than sending an electricity tax to the legislature, which then horse-trades and micromanages which facilities to add to those networks and how much to spend on maintenance. State and local toll agencies have long been the exception in highways, but now we also have RR concessions as a preview of a future highway utility industry.

Just as in electricity, highways need owners and a direct relationship between customers and providers. While AP concessions are a large improvement over traditional procurement, some can be characterized as a construction company married to a contract maintenance firm, whose only customer is the state DOT. And that state DOT depends entirely on the legislature for its funding. America has the world's best electric, gas, water, and telecommunications utilities. We should be aiming to have the world's best highway utilities, too. RR concessions are the prototype for that emerging industry.