

**Re-thinking Transportation Systems for Rural Areas: The Role of the Federal Government,
Funding Formulae and Strategic Disinvestment**

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ABSTRACT

State and federal transportation funding mechanisms, which are primarily dependent on gas and diesel taxes, are becoming increasingly inefficient due to both a reduction in overall fuel purchases and an inflationary decrease in purchasing power. The proposed solutions to this funding crisis have either limited applicability in rural areas or raise equity concerns when applied to rural areas. High occupancy toll lanes (HOT lanes), tolling, congestion pricing, and public-private partnerships are all dependant on high levels of vehicular activity, which are not usually found in rural areas. Rural transportation corridors are critical to our nations' economic and security interest, providing access to agricultural and energy resources and enabling the movement of people and goods between metropolitan areas. If the new transportation bill is to address national transportation issues, it is essential to move beyond urban-centric funding solutions. This paper outlines concepts related to rural state transportation funding issues raised during a Vermont Summit hosted in December 2008. The following concepts were identified as of critical interest to rural states: supporting a strong federal government role in transportation; being cautious with use of opt-out programs; significant changes and new variables in funding formulae; identification of diverse new federal revenue sources; questioning of non-federal match sources and requirements; further exploration of strategic disinvestment in highway infrastructure; and creation of new mobility systems designed explicitly for efficient operation in rural areas.

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INTRODUCTION

Recent federal transportation laws have resulted in increased overall federal transportation funding as well as changes in relative funding between some states. Beginning with the passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991, surface transportation has been funded and governed by a more integrated set of policies outlined in federal law. ISTEA was followed by the Transportation Equity Act for the 21st Century (TEA-21), which was signed into law in 1998, seven months after ISTEA expired. TEA-21 continued the intermodal framework of ISTEA but also increased the guaranteed funding minimum to so-called donor states again effectively reducing relative funding between some states. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), the current federal law passed in 2005, two years after the expiration of TEA-21. SAFETEA-LU is set to expire in September, 2009 making it timely to consider the relative funding needs of different states, in this case rural states, especially those without major metropolitan areas. The growing delays in passing federal transportation laws speak to the increasingly divergent opinions on how and what to fund in our transportation system. The period between the expiration of an old law and passage of a new law has typically been filled with continuing resolutions. It is unclear, as of this submission, when the successor law to SAFETEA-LU will be passed or if we will be operating under continuing resolutions and if so, for how long. However, it is unlikely that the new law will increase overall funding from the Highway Trust Fund without a change in the source or composition of revenue into the fund. It is also unlikely that the new law will allow levels of funding necessary to affect change in the overall program, especially the level of change that some stakeholders indicate may be necessary to guarantee mobility and access at current or desirable levels.

Despite these divergent views, the recent emphasis on getting federal funding into the economy—most notably observed in recent federal action on the economic recovery plan—could motivate faster action on the transportation bill than otherwise expected. On the other hand, the substantial funds for transportation infrastructure appropriated in the American Recovery and Reinvestment Act (ARRA) could also result in the attention of policy makers to carefully evaluate the possibility of radical change in the funding of the surface transportation system. Many contend that considerable change is needed in the substance and process of funding our transportation systems.

On December 8, 2008, The University of Vermont Transportation Research Center (UVM TRC) convened an invitation-only Rural Transportation Funding Summit in Burlington, Vermont. State public agency leaders and elected officials involved in managing transportation systems in rural states were invited to engage in this Summit. Attendees were from Vermont and beyond and included representatives from state agencies, local and regional planning agencies, consultants and university researchers. This Summit was informed, and in turn helped to inform, ongoing research efforts on how best to fund future transportation systems in rural areas. The context of this question is timely and relevant for the reasons discussed above, but also because the dilemmas rural areas face when confronted with transportation funding questions are significant. In short, rural areas have fewer viable options available to raise revenue for surface transportation, especially states without a large metropolitan area.

Inherent in the discussion at the Summit was the imperative that the considerations for rural areas be included as part of the national discussion on future transportation systems. The current research, pilot studies and policy discussion around future transportation funding and finance options have been more appropriate for urban and suburban areas. Research and evaluation of funding and financing options for rural areas is of great importance nationally and perhaps the challenge of proposing solutions has further limited the attention to this matter. The national dialogue about new sources of revenue to replace the declining effectiveness of the gas and diesel tax has been focused on congestion pricing, tolling and

public/private partnerships. None of these sources of revenue have much applicability in rural areas, as they require more total miles of travel than is typical in a rural area. Moreover, the discussion around vehicle miles traveled (VMT) taxes raises interesting issues for rural areas: travel distances are longer and concerns about the regressive impacts and potential unintended environmental consequences (such as driving shorter, more congested distances in stop and go traffic, versus longer mileage routes at steady speeds) of such a tax are felt more acutely. This is particularly true where household income is lower and there are longer distances to reach services.

Within this broad national context, the Summit participants and this paper address three specific questions:

- What should rural areas support as the appropriate federal role in funding a transportation system to meet the mobility needs of people and to enable the efficient movement of goods?
- The next federal authorization bill will need to be a transitional bill to move us from our current funding system that relies primarily on gas and diesel taxes to a new funding scheme. What are the key elements that must be included in the funding formulae for this transition to ensure that the unique needs of rural states and their citizens are considered?
- The increasing cost of raw materials and energy, combined with a deteriorating infrastructure, outpaces the financial ability at all levels (federal, state and local) to fund the maintenance and repair of our transportation system, particularly in rural areas. If these areas are not raising the revenue to meet the infrastructure needs, are we, in fact, disinvesting in our transportation infrastructure? If so, should we admit this directly and/or be strategic about it? Or, put more subtly, how do rural areas make the priority trade-offs between maintenance, rehabilitation, expansion and doing nothing? What are the criteria for doing so? Can we do nothing more deliberately?

CONTEXT AND BACKGROUND

Nearly 90 million Americans live in rural or small-urban (less than 50,000 population) areas of our country. Our nation's interconnected surface transportation network passes through and within many of these regions. In many cases, these links of the network through rural areas connect major urban areas. In order to meet our nation's economic development and quality of life goals, these rural links and the communities they serve must be maintained. With fewer people to help pay the cost of maintaining the transportation infrastructure in these areas, the methods of raising revenue to keep these critical links in our nation's transportation system functioning as a seamless network are challenging. Rural areas and states do not have as many options for solutions to their unique finance needs. For example, options such as public-private partnerships, toll highways, High Occupancy Toll (HOT) lanes and congestion pricing vary regionally and may have limited or no applicability in rural states. Rural areas of states with large metropolitan areas may not feel this problem so acutely. Furthermore, states without major metropolitan areas do not necessarily deal with the typical problems experienced in densely populated urban states, such as congestion.

The Summit timing of December 2008 was held within a backdrop of a national dialogue around a near-term economic stimulus package for infrastructure. It was not possible to exclude this expected infrastructure investment from the discussion. Time and again during the Summit, the national economic crisis was described as a potential "once in a lifetime" opportunity to set bold policy. Policy makers noted that while bridge and road repair were necessary, we should also look at this as an opportunity to redefine transportation policy and to include more funding for rail and bike paths, for example. New criteria were mentioned for inclusion in federal efforts to advance a holistic system of mobility and access including:

- Renewable and sustainable energy
- Regional, local energy generation

- Environmental protection
- Climate change

However the economic stimulus package seemed unlikely to be able to address such large and complex policy issues as global warming for either rural or urban areas when its primary, and important, goal was to create jobs. The key transportation system features of the economic stimulus package, which most agreed was necessary, were likely to deal with immediate infrastructure needs and creation of jobs. By necessity of time the existing funding formulas and programs have been used for much of the program. It is difficult for investment within the existing programs to be able to accomplish the broader transportation system changes, including those needed to address climate change, mobility and creating a new funding scheme. One can argue that the economic stimulus package had the potential to create the change needed, especially for rural states, in how federal funding is provided for surface transportation. However, the fast timeline required creates a challenge for accomplishing change and the full potential opportunity may not have been seized.

Several speakers at the Summit discussed the balance, and perhaps major opportunity—both financial and from a policy perspective—between a short-term economic stimulus and the next authorization bill. If time restrictions necessitate the use of existing programs for the stimulus, will this facilitate the opportunity for bold renewal in the next authorization bill? As of the writing of this paper, the transportation aspects of the American Recovery and Re-investment Act (ARRA) are mostly focused on job creation and the repair of existing infrastructure. No visionary change from the existing system was described in the ARRA. The development of a more comprehensive vision, one of renewed mobility connected to quality of life and our environment, is now left for consideration within the next surface transportation bill. For rural states, the ARRA presents a double-edged sword: while the infusion of funding might be more needed in the rural context, the institutional staffing to implement these programs is also limited. This distracts the rural state transportation leaders from being able to clearly focus on the next surface transportation bill's long-term impacts on providing mobility and access for individuals and the funding of such a system in rural areas.

There are many competing critical dimensions that must be considered in the longer term surface transportation funding package, in addition to the examination of funding systems for rural areas. During the Summit, participants suggested that these broader goals should be directly related to the funding mechanisms. This link for all portions of the transportation program would serve many interests including funding concerns in rural areas. Policy makers and the public alike often fail to realize the extent and importance of our transportation system, which encompasses significant economic, environmental, public health and social justice issues. Our ability to envision the future and provide holistic solutions to our mobility challenges is minimized by this undervaluing of the complex system's integral value to our society. Providing mobility and access for people might include a different mix of services than the highway infrastructure and automobile-dominated system we currently accept as our primary means of mobility. It may be incumbent on universities to facilitate more discussions that truly define mobility systems and what they mean in our society.

DEFINING THE FEDERAL ROLE IN TRANSPORTATION

In the first of three Summit questions, speakers and participants were asked to consider, “what is the federal role in funding a transportation system to meet the mobility needs of people and to enable the efficient movement of goods?” There is an imperative need to deliberately envision the future surface transportation system and to develop a clarification of the role of the federal government in developing, operating and funding this, system. That is, do we as researchers or policy makers have a clear vision, distinct from our existing system, of what we want the federal government to fund, support and create to

1 meet the mobility needs of citizens and strengthen and support our economy, environment and quality of
2 life?

3
4 Many Summit speakers suggested that the federal gas and diesel taxes be raised as a near-term solution to
5 address immediate problems such as funding shortfalls and fuel price stabilization which could propel
6 innovation in transportation system efficiencies (park and ride lots for example) and alternative fuels and
7 investment. But they also suggested a critical need at the national level to think beyond a near-term gas
8 and diesel tax increase, to envision a comprehensive new system including a potentially radical
9 adjustment to the federal funding formulae for local and state systems. Such a large change would have
10 equally radical challenges for rural states.

11
12 Several speakers raised concerns that the funding crisis could absorb all the focus and divert attention
13 from the important conversation about the desirable transportation future and a new system for mobility.
14 This may now be true of the ARRA and associated work. When discussion of the new federal
15 transportation bill increases we must should aim for a comprehensive policy discussion regarding how to
16 advance our system, in addition to a focused about funding the perpetuation of the current system, which
17 some see as an extension of a 1940's vision for interstate surface transportation. The legacy of this
18 Interstate Highway vision serves as evidence that federal government leadership will have enormous
19 impact.

20
21 The potential failure of federal leadership to take advantage of this opportunity for a new vision was
22 characterized by Summit participants as a potential tragedy. They expressed the belief that it is
23 completely plausible that a renewed and improved system could result from our current crisis. This
24 policy component, it was suggested, was more important than funding because it requires a complete
25 rethink of our system and the provision of mobility and accessibility. Only once our vision of the new
26 national transportation system is clear, can a funding system that leads us towards that vision be
27 implemented.

28
29 Several speakers explained the typical divisions that occur in discussing the transportation system and
30 funding for it, for example:

- 31
32 • Environmentalist vs. construction industry
33 • Surface vs. non-surface transportation
34 • Donor states vs. donee states
35 • Transit vs. highways
36

37 Participants at the Summit predicted that the upcoming discussion of the future of transportation system
38 would most likely be regional, and truly intermodal in nature, rather than assuming the traditional divides
39 listed above. Previous federal transportation bills have made strides towards modal integration, but
40 perhaps have not moved the system as effectively or quickly as is now needed. Our current funding
41 challenges could serve as the motivation for the advancement of an innovative and dramatic solution.

42
43 The divisions in these important complex debates absorb a lot of thought and effort. Participants at the
44 Summit sought to encourage transportation policy makers to find a way to break away from the old
45 debate and to address new critical policy issues such as global climate change. Researchers, especially
46 university researchers, may play a critical role in ensuring these divisions are bridged and discussed
47 within a broader community. Positions are no longer as clear cut as the old divisions suggest, and it is
48 getting difficult to believe a system dominated by one mode, one funding source, and one fuel will lead to
49 a sustainable future. Yet the general public is not informed on the challenges and limitations of the current
50 infrastructure systems. Its complexity precludes effective discussions and debate that goes beyond the

dichotomies listed above. It is difficult for there to be a rural voice when traditional urban transportation problems, such as congestion, are combined with the new global problems.

Many of the Summit speakers raised the issue of a need for a focused national vision, or role for the federal government, in transportation. The Summit organizers directly queried attendees on what they thought the appropriate federal government role in funding the highway transportation system should be. Several speakers spoke of the necessity of increased flexibility in the new bill and to make sure a “one size fits all” program is not created. This includes a more thoughtful funding mechanism that enables the transportation system in the rural areas of our nation to provide not only the access and mobility options their own small populations require, but also the mobility the goods and travelers that pass through need – a value that may not be adequately measured as a traffic volume. However, if not carefully implemented, a flexible program could weaken the ability of the federal government to lead towards a sustainable transportation system, especially in rural states.

A sizable portion of attendees agreed that federal surface transportation funding should be limited to only the federal highway system. While this is certainly worthy of discussion as a new vision is explored, the impacts of limiting funding to this one component of our system could have untenable consequences, especially in rural areas which lack the ability to generate revenue to provide true mobility and access outside of the federal highway system.

In summary, attendees clearly indicated that a strong federal role in the provision of an interstate and multi-modal mobility system was needed and should be top priority. The federal government was seen as the only viable driver of a new vision for enhanced mobility in the overall system including its funding. Our integrated economies and expectations for mobility demand an innovative change to the overall system. The desired result will not be possible by operating town by town, or state by state, but must be coordinated nationally.

FEDERAL FUNDING FORMULAE THAT TRANSITION TO NEW MOBILITY

The second of three questions raised at the Summit included the assertion that the next federal authorization bill would need to be a transitional bill to move us from our current funding system, which relies primarily on the gas and diesel tax, to a new funding scheme. Participants discussed the key elements that must be included in this transition to ensure that the unique needs of rural states and their citizens are considered. If, especially from the rural perspective, the federal government is the key leader for transportation system change, then seeking federal funding formulae that address rural mobility and access must consider 1) what to include in those formulae, 2) barriers that prevent change, and 3) sources of new revenue.

Formulae Components

The current funding formulae entrenches the existing surface transportation paradigm. Many Summit participants noted that policy goals for a “new paradigm” and the need to “think outside the box” for mobility services must be reflected in the funding formulae. For example, the need to break the inertia of decades long transportation policy to envision a new way of personal mobility was illuminated when participants commented on the changing demographics of rural states. Rural states have older populations, who require access to different services, as well as have different mobility needs and different abilities to provide their own transportation. Creating a transportation system to meet personal mobility needs, rather than one based on the goal of moving vehicles follows from the concerns raised by the demographic and land use patterns in rural areas..

Our current surface transportation funding formulae use VMT as a major component to assess transportation needs. As a population ages, they travel less (without work trips for example) and this

1 decrease in VMT results in decreased funding. While at the same time, the paratransit systems needed to
2 transport older citizens are more expensive to provide than when the traveler drove him/herself. Adding a
3 demographic component to account for these factors in our funding formulas may better measure mobility
4 needs and ensure equity. States with low VMT and/or congestion but high percentages of older
5 populations have very different mobility needs than those with the opposite (high VMT, young
6 population). Yet our current funding formulae predominantly recognize and reward VMT – miles senior
7 citizens may not travel by single occupancy vehicle and in which the use of current vehicles and fuels
8 may contribute to climate change.

9
10 It is in the best interest of rural states to break the cycle of relying on the past as a predictor of the future,
11 and to focus long term planning on what we want to see, rather than assuming a linear expansion of VMT
12 and difficulties such as peak hour traffic. Summit attendees agreed that broader eligibility of funding to
13 include maintenance and overall system mobility projects, regardless of mode, would also provide for a
14 more robust and flexible national program.

15
16 Current Vermont research was presented at the Summit and has indicated the following variables should
17 be considered for inclusion in the future funding formulae for transportation:

- 18
- 19 • age of infrastructure
- 20 • age of population
- 21 • impacts of climate change and adaptations needed
- 22 • resident vs. non-resident VMT.
- 23

24 The report by Kenyan et al. (2009) also pointed to the need to redefine “rural”—a term that currently is
25 defined by the Census Bureau in the negative, that is rural is what is not urban. However, the types of
26 rural areas, and the challenges to providing daily mobility as well as emergency access, vary dramatically.
27 Simply think of the differences between warmer and colder climates, or mountainous and plain areas.
28 Furthermore, the impact of climate change and its impact on the lifespan of transportation infrastructure
29 will vary regionally by factors not currently considered in funding formulae. For example, this is more
30 acutely felt in states that experience more freeze/thaw cycles. Coastal regions are at more risk for
31 flooding. The cost of required adaptations due to climate change should be considered when assessing the
32 type of mobility system, as well as the transportation needs of a state in future funding formulae.

33
34 Ideally, revenue and funding systems for the transportation systems should not be modal in nature but
35 seek to provide access and mobility through locally chosen options, be they roadway, bike lanes, trails,
36 sidewalks, rail or public transit. Only by looking at the transportation system holistically, and
37 deconstructing the modal funding barriers, can we create a mobility system that enables Americans to
38 access destinations (economic, social and health-related) that provide a high-level quality of life. This
39 integrated transportation mobility funding and apportionment system would need to account for rail and
40 non-motorized transport as well. This departure from tradition will be challenging, but is essential in rural
41 states that lack traffic volume.

42
43 Policy makers should consider an incentive pool for good behavior, i.e., reduced VMT, fuel usage and
44 highway crashes. Our current funding system provides financial rewards for undesirable behaviors. For
45 instance, a higher number of roadway fatalities causes a state to receive more safety money. Also, more
46 funding is received for more fuel used and higher cumulative VMTs. Summit speakers presented
47 examples of linking accountability and purpose to funding. If the transportation system goals are
48 interstate commerce, energy, environment and safety, then funding should follow those goals in a positive
49 manner.
50

1 The role of the national transportation system in global competitiveness was viewed as an important
2 factor in a new funding scheme. For example, NAFTA trade routes might be viewed differently from
3 other system components, regardless of the state they travel through. If economic competitiveness is a
4 major impetus for funding a national transportation system, funding for projects that improve efficiency
5 and build capacity along major trade corridors should be adequately funded.

6
7 A critical recurring question during the Summit was whether transportation should be viewed as a
8 common good or market commodity. The participants suggested that the appropriate funding mechanisms
9 follow from this distinction. For transportation as a common good, general fund revenue would be used to
10 support the system. But for transportation as a market commodity, user fees would be more appropriate.
11 The general consensus of attendees was that the transportation system encompassed both. Certainly, the
12 system reaches beyond the pure traditional view of a market commodity that relies solely on user fees.
13 Even within the existing system, many would argue that the system does not pay for itself and that it
14 cannot in rural areas. Unequal subsidies have been provided and will be needed for certain components
15 of the system. The breadth and depth of the impact of the transportation system is large and the view
16 that we are all users of the national system requires us to think beyond the traditional “users pay” funding
17 mechanisms, which are limited in capacity in rural areas and also dominate the national finance and
18 funding discussion. Put another way: the mobility we value is not free, and we must pay at least the base
19 price together.

20 21 **Barriers to Change in Formulae and the System**

22 It was relatively easy for Summit participants to agree upon the type of system changes needed, listed
23 above. Moreover, there was general agreement that the complexity of the current program creates barriers
24 to change. For example, there were several comments raised regarding the efficiency of having 108
25 transportation funding programs as prescribed in SAFETEA-LU. Also discussed was the proposal by the
26 National Surface Transportation Policy and Revenue Commission to reduce these into 10 broad programs
27 to lead to more efficiency and cost reductions. Another recurring theme was the need for reforms in
28 project delivery to reduce the length of time for project completion. Also heard was a correlated concern
29 of assuring that reductions in environmental protection and public involvement not be undertaken under
30 the guise of “program reform” or environmental streamlining. Advances in efficiency should
31 disproportionately benefit smaller rural states that lack the resources to work within the full complex set
32 of programs and requirements. The complexity of the current transportation program was seen as a
33 measure of inefficiency, both in terms of the number of programs with distinct eligibility criteria,
34 permitting requirements, and funding requirements as well as the number of units of government (44,000)
35 that need to be involved in making transportation choices. Summit participants raised the concern that all
36 the requirements for project planning and community input are often just exercises with no real impact in
37 the final product. These requirements take a lot of time and cost a lot of money and disproportionately
38 burden small state agency staff. Clearly these proposed changes are dramatic and include substantive
39 institutional change. The question of how to transition or change our existing programs, and move to a
40 new system of mobility and funding that mobility, is very challenging.

41
42 A proposal to change the current program by providing states with a choice to “opt out” of the federal
43 program was not viewed favorably by Summit participants. In addition to precluding the national
44 coordination needed for innovative extensive change, as described above, rural states often rely heavily
45 on federal funds in their transportation programs. The choice to opt-out would not be realistic for small
46 rural states. The potential for large states such as California, Texas or Florida to opt out of the federal
47 program would represent a negative impact on rural states as their federal gas and diesel tax revenues
48 would no longer flow to the Highway Trust Fund. That is, if all the donors left the system there would be
49 less available for the donees.

1 Congestion is often cited as a major barrier for economic competitiveness, and therefore as a driver for
2 changing our current transportation program, however, the funding mechanisms that accompany
3 congestion are really local revenue options. If congestion pricing or tolling were imposed, the funds
4 raised through these means would most likely remain with the entity that raised them and not be part of
5 the federal transportation program. Summit participants questioned the national role in a local congestion
6 problem and funding scheme. If congestion is a local problem, with local fundraising potential, it should
7 remain a local issue, not a federal problem. However, one must note that this ability of more urban areas
8 to raise local and state revenue to match federal funds actually represents an effective disadvantage to
9 rural areas. Without local or state shares, it is impossible to capitalize on federal funding. Furthermore, if
10 matching requirements require a significant portion of state and local funds, projects or programs of local
11 significance in rural states may not have access to the required match and thus not advance. The
12 congestion situation, combined with its fundraising potential for only some of the country, begs the
13 question of the equity of requiring local and state matching funds to qualify for the federal program.
14

15 In summary, opt-out programs and non-federal match requirements were seen as ineffective options for
16 creating change or transition to a new system of mobility, because of the relative inability of smaller
17 population and rural states to take advantage of these programs.
18

19 **New Sources of Revenue**

20 Significant challenges exist to accomplishing potential changes to our current transportation programs and
21 their associated funding formulae. One major specific barrier to change is the need for revenue. The status
22 of the federal Highway Trust Fund and its reliance on the gas and diesel tax is clearly in trouble, as
23 evidenced by the August 2008 transfer of \$8 billion from the General Fund to allow the Highway Trust
24 Fund (HTF) to continue functioning in support of the provisions of SAFETEA-LU. As Congress looks to
25 authorize another six-year surface transportation law, the source of funds to support the program is high
26 on the agenda.
27

28 Our current federal funding system relies on dedicated user fees deposited into the Highway Trust Fund
29 from which they are apportioned to states based on formula funding allocations. Summit attendees
30 discussed whether the federal Highway Trust Fund is still a legitimate system of holding transportation
31 funds, and whether we should continue with this system and thus shift the debate to how revenue is raised
32 to fund the Highway Trust Fund. There appeared to be support for keeping a separate dedicated fund for
33 transportation purposes. The debate would then shift to the means necessary for raising revenue to fill this
34 fund. This is of particular interest to rural states. Vermont, according to the Joint Fiscal Office of the
35 Vermont General Assembly, is highly dependent on federal transportation funds, using 42 cents of federal
36 funds for each dollar of spending. The source and amount of those federal dollars are critical, yet
37 constraining, as rural states contemplate how to raise their own revenue for transportation. We must also
38 consider whether these new revenue systems are equitable in terms of the ability of rural states to raise
39 sufficient revenue. Several speakers suggested that now would be an opportune time to set a gas and
40 diesel tax floor while adding a number of new diverse revenue sources for the Highway Trust Fund to
41 ensure robust revenues even in the face of future change.
42

43 It is clear that we face a funding issue and not a finance problem and that future funding is going to have
44 to be non-traditional. Public/private partnerships and congestion pricing were seen as state and local
45 options, and not as options for funding the federal Highway Trust Fund. Since congestion pricing would
46 need to be enacted at the local level, the political price of its passage would need to include a local
47 benefit, thus eliminating any national benefit. Since the federal government does not own any highways
48 (save the Woodrow Wilson Bridge between Virginia and Washington, D.C.) any public/private
49 partnerships would involve state or locally-owned facilities. Again, the risks and benefits would accrue to
50 the locality and not the federal Highway Trust Fund.
51

1 Assuring that any new funding system retains its purchasing power and we do not end up back in this
2 predicament in 20 years was raised as a concern at the Summit. Putting in place a long term robust
3 solution to the transportation funding crisis rather than a short term band aid will require strong public
4 support. To date that support has been found wanting as evidenced by the failure of the federal
5 government to take this action. Trends around the country to deal with the funding crisis were presented
6 and they fall into two categories: increased borrowing and program cuts. There has not been a trend
7 toward raising revenue at the state level, which leads to the final question posed to Summit attendees
8

9 **STRATEGIC DISINVESTMENT**

10
11 An issue that we expected to hear more discussion about during the Summit is the concept of “strategic
12 disinvestment”: reducing the amount of infrastructure in the current program. There is a notion that, since
13 there is a longstanding funding gap between identified needs and revenues available, governments could
14 strategically disinvest of certain components of the system. The third main question put to Summit
15 attendees was: if we are not raising the revenue to meet the infrastructure needs, are we, in fact,
16 disinvesting of transportation infrastructure and therefore should we be strategic about it and prioritize
17 trade-offs between maintenance, rehabilitation, expansion and doing nothing?
18

19 Certainly, the Summit participants raised the question of whether we as a society can afford the existing
20 system, especially in light of future energy costs. The concept of the federal government funding only the
21 federal highway systems was also touched upon. However, the notion of actually abandoning or
22 disinvesting from portions of our roadway system was difficult for the group to grasp despite repeated
23 queries from Summit leaders. We suggest that this fundamental attachment, even by the transportation
24 leaders at our Summit, to the current system should be considered a barrier to changing the current
25 program. As a society, we simply cannot conceive of a reduction in our ability to get in our car and drive
26 anywhere, at any time.
27

28 Our inability to conceive of strategic disinvestment makes the goal of generating and implementing a new
29 system of mobility even more pressing. It also points again to the opportunity for rural America to lead
30 the effort, because rural areas presently lack the alternative infrastructure or built environment and land
31 use pattern to be able to strategically disinvest from portions of our roadway network. Instead, haphazard
32 disinvestment is occurring since we are not able to fully fund our existing system. The results of this lack
33 of investment, coupled with a reluctance to explore new strategies, results in an even greater reduction in
34 mobility.
35

36 **CONCLUDING DISCUSSION**

37 Decision makers in Washington DC, together with stakeholders from state and local government are
38 beginning to focus on the authorization of a new federal transportation bill. The context for this
39 discussion is complex, much more so than in previous years. There is general agreement that a national
40 transportation policy that focuses on mobility and access for people and goods must include consideration
41 of energy, environment, public health and social equity goals. The sizable transportation funds of the
42 ARRA have provided a brief reprieve from a lack of funding to address infrastructure condition and an
43 opportunity to focus on a new comprehensive mobility vision at the federal level.
44

45 The participants at the Rural Transportation Funding Summit of December 2008 generally agreed that
46 what is needed now is the kind of innovative, visionary thinking about transportation change that led to
47 the creation of the Erie Canal, the continental railroad and the Interstate highway system. However, it is
48 still unclear how to transition to a new more robust system and what role the private, public and
49 university sectors will play. Of most interest at the Summit was how to transition beyond the current
50 system’s lack of sustainability in terms of funding, equity and environment in rural America.
51

The Summit focused primarily on discussion of the passenger vehicle highway needs and funding options for rural states, especially those without a large metropolitan area, such as Vermont. Most of the proposed new funding mechanisms for transportation are only viable in metropolitan areas and high volume corridors. Predominantly rural states are of particular concern to researchers at the UVM TRC because we believe their limited ability to raise transportation revenue using the options in discussion nationally is a problem requiring more research and special policy attention. This lack of revenue not only limits what can be accomplished in rural transportation systems directly, but also indirectly by limiting participation in federal programs due to lack of local matching funds. This requires researchers and policy makers from these rural areas to more carefully consider the optimal policies for advancing their transportation systems in the coming new era. The current system is failing first for rural areas and this provides an opportunity for rural areas to lead in the discussion on ensuring the next federal transportation bill focuses on specific, comprehensive directions for transportation mobility that assure Americans, both rural and urban, have access through an equitably funded system that is sustainable from an economic, environmental and social perspective.

Within this context, common messages for actions in the next transportation authorization law were heard throughout the Summit, both in the formal presentations and during the question and discussion periods. The general actions that would most benefit rural states can be summarized into seven areas. These actions are not considered comprehensive but rather relate to the rural perspective on the federal transportation policy leadership, programs and funding the Summit addressed. We recommend each of these being considered for further comprehensive research and discussion.

1. The Role of the Federal Government - The federal government is a critical leader in crafting and encouraging a new transportation system focused on providing safe access and mobility for individuals and goods. Mobility and access for people and goods requires a seamless network that crosses political boundaries and modes. Rural states should support a continued strong role for the federal government in a national transportation system and oppose the further devolution of transportation to state and local authorities.

2. Opt-Out Programs - Allowing opt-out programs, where states can choose to forgo federal funding in return for not collecting federal gas taxes, could have a disastrous effect on rural areas that rely on federal funds for their transportation program. If large states opt-out the decrease in overall funding for transportation will have a far greater impact on states that rely on these funds to a larger degree. If used, opt-out provisions will compromise the relative ability of rural states to participate in a new comprehensive sustainable transportation system by limiting the overall funding available.

3. Funding Formulae - Significant change is needed in federal transportation programs and their funding formulae to meet the needs of rural states. Criteria that measure the needs of the users of the system beyond current measures of vehicular use of the system such as vehicle miles traveled is essential. Most importantly demographic differences between states, especially the aging population in rural states, must be included in funding formulae so that the mobility needs of people can be addressed, even if mobility solutions are not premised on individual ownership and operation of a motor vehicle. Rural states have, by and large, a greater proportion of the aging population. The affect of this demographic on the transportation needs of these states must be taken into account when devising new federal funding formulae.

4. Federal Revenue Sources - It may be in the general interest of rural states for the federal gas and diesel tax to be raised, whether by establishing a gas and diesel price floor, indexing it to inflation, connecting to a carbon-based system, or increasing the pennies per gallon, thus increasing funding available in the Highway Trust Fund. Use of Vehicle Miles Traveled (VMT) fees should be pursued with caution as their

1 impact on rural areas, where distances traveled is greater, could prove regressive. More research is needed
2 to better understand the implications of a VMT tax in rural areas.

3
4 5. Non-federal Match Sources and Requirements - With or without an increase in federal gas tax or VMT
5 taxes, the mechanisms used to generate matching funds must be considered carefully. Even if federal
6 funding for transportation increases to rural states, their ability to benefit from this funding is limited if
7 match requirements remain constant. The use of fees, tolls, congestion pricing and public/private
8 partnerships should be pursued with caution without a concomitant increase in federal funding, or a
9 decrease in match requirements, to rural areas that are unable to access these sources of revenue.

10
11 6. Strategic Disinvestment in Highway Infrastructure - The reality that our current funding levels cannot
12 support our current transportation system requires that we have a very difficult conversation about
13 strategic disinvestment in roadways and other infrastructure. Since there is no concerted effort to raise the
14 funding identified as needed to maintain our current system, government abandonment of portions of our
15 current roadway system is effectively taking place. This abandonment, without the provision of mobility
16 options could result in disconnecting rural portions of our population and could have long-term adverse
17 economic and social impacts.

18
19 7. New Mobility Systems for Rural Areas - Changes to land use and the provision of mobility options,
20 from complete streets, bike lanes, paths, transit and sidewalks are needed as part of any new vision. This
21 is now widely recognized but most of the current designs for these components are appropriate for urban
22 not rural areas. It is critical that a transition to a new transportation system include an explicit research
23 and planning effort to develop rural-specific non-automobile based transportation systems. For example,
24 there is potential for utilizing communications technology, including social networks for optimization,
25 and providing options to the single occupancy motorized vehicle such as demand responsive public
26 transit, but alternatives to those urban-based systems must be explicitly developed and funded for rural
27 areas.

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