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MEMORANDUM

To: Fred Butler and Shelley Winters

From: Stephen Falbel

Re: NHDOT Public Transportation Policy

Date: May 11, 2018

This memorandum presents the results of an analysis of a potential policy statement regarding public transportation for NHDOT. The analysis consists of three parts: the elements of policy for operational and capital spending; a tabulation of recent (FY2017) spending for each of the policy elements; and the results of a survey of ten transit providers regarding priorities among the policy elements. Following this analysis is a draft policy statement specifying recommended priorities. *This document is intended to pertain to new projects under the purview of NHDOT that use FTA funding. The continuation of existing service is considered a priority.*

Policy Elements

Spending on Operations

The funds controlled by NHDOT currently support a wide range of types of services across the state from demand response service in rural areas to urban local service and commuter express service. Planning documents on a statewide or regional basis look to a policy statement to provide guidance on how the system should grow; that is, what are the priority needs that should be addressed when new funding is available. The policy elements in descending order of priority are as follows:

- **Basic mobility for transit-dependent people** This type of service is often called "lifeline" service as it provides mobility for essential needs such as grocery shopping, medical appointments, and other personal business. This service is often focused on people with disabilities, older adults, and low-income individuals, all of whom may be unable to drive or to afford a personal vehicle. For many people these needs are addressed by family members, friends, neighbors, or community volunteers, but some people have no access to such resources.
- Access to employment for transit-dependent people Service that allows people who may not have a car or be able to drive to get to their jobs is extremely valuable to low-income households. Being able to commute to work is the key to upward mobility for these individuals. This policy element is related to basic mobility, but is more focused on the work trip and service during commuting hours.
- **Maximizing ridership and efficiency** Public transportation works most efficiently in densely developed areas where many people are traveling in specific corridors. In such areas, frequent transit service becomes an attractive alternative to driving, drawing people out of their cars and reducing traffic congestion.

- **Supporting economic vitality** The availability of public transportation allows for increased development without the need for increased parking. Compact urban design, facilitated by public transportation, is the most sustainable form of economic growth.
- Attracting millennials/choice riders There is strong evidence that the current generation in their 20s are delaying purchasing automobiles and are more open to using public transportation. They are also more likely to live near city centers than older people. Providing a convenient alternative to driving for this generation could lead to long-term transit use as they age.

One more policy, which is qualitatively different from the others, but which will apply to all operating grants is as follows:

• Use of the lowest cost mode – There are many forms of public transportation and they have a wide range of cost per unit of service provided. A transit provider should seek to use the lowest-cost means of serving demand on a per-passenger basis. For rural areas, this will usually mean demand-response service with volunteer drivers. For small towns it is typically demand-response or deviated fixed-route service. For urban areas, it is likely fixed route service.

Spending on Capital Infrastructure

The State of New Hampshire has put an emphasis on investment in capital infrastructure, especially with regard to state-contracted commuter bus service. State policy regarding capital investments includes the following elements in descending order of priority:

- Transit fleets must be in a state of good repair A large component of the public's perception of public transit is formed by the vans and buses that operate the service. In order to promote the concept that transit is for everyone, not just transit-dependent populations, vehicles must be maintained well, kept clean, and replaced in a timely manner. Enhanced amenities, such as comfortable seating, Wi-Fi, and noise reduction, are also worthwhile investments.
- **Passenger facilities are an essential part of the public transportation system** While providing the appropriate type and level of service is critical to the efficiency of the system, passenger facilities are essential to making the system attractive and visible to all members of the public. Riders must feel safe and comfortable at bus stops and transit stations. Investments in facilities make the system more visible to all, and show that transit riders are not considered second-class citizens compared to people who drive automobiles.
- Safe pedestrian access to and from bus stops is essential Virtually all transit riders become pedestrians at one or both ends of their trip. Sidewalks, crosswalks, crossing signals, and safe places to wait for the transit vehicle are essential elements of a successful public transportation system. As facilities are constructed, provisions must be made for maintenance and snow-clearing during the winter months.
- Maximize use of technology The proliferation of smartphones allows for information about transit operations to be disseminated to the riding public much more cheaply than was possible in the past. Transit providers should make maximum use of this technology to communicate with passengers about bus arrival times, delays, schedule changes, and demand response options. Trip planning software for riders has been available for several years and is encouraged for all transit operations.

Spending on Planning

Planning funds will continue to be distributed on a case-by-case basis in response to requests from the regions, and thus should not be controlled by overall policy goals on operating and capital spending. NHDOT currently expends all available planning funds on local or statewide studies, but stakeholders believe that additional planning work could result in the more effective use of operating funds, helping parts of the state with underperforming services to increase ridership and reduce the cost per rider.

Current Spending by Policy Element

Using FY2017 budget figures provided by NHDOT, Steadman Hill Consulting prepared an analysis of spending by federal program by policy element. As shown in the table below, the analysis covered five programs (or sub-programs) for operating expenses and three programs for capital expenses. The figures represent federal dollars, not including local match.

The allocation by policy element for operations was done primarily on the basis of geography. For the most part, spending in rural areas was categorized under basic mobility, while spending in more urbanized areas was placed under some of the other categories. Planning funds in Section 5305 were distributed based on the nature of the planning effort. While Section 5311—the largest funding program—was used by three of the five rural providers exclusively to provide basic mobility, the others split the 5311 funding in the following way: for the CNHRPC region (CAT), 50% of the funds were attributed to basic mobility while the other 50% were for access to jobs; for the Upper Valley region (Advance Transit), 20% of the funding was for access to jobs, 40% was for maximizing ridership, and the remaining 40% was for economic vitality. These splits were done in consultation with NHDOT, and while they are judgment calls, they reflect the environment and the stated policies of the transit operators.

Program	Basic Mobility	Access to Jobs	Maximize Ridership	Economic Vitality	Attract Millennials	Totals
5305 Planning	\$44,793.45	\$78,980.95	\$115,412.80			\$239,187.20
5310 POS	\$917,282.03					\$917,282.03
5310 RCC	\$753,727.00					\$753,727.00
5311	\$1,318,853.00	\$622,334.80	\$652,139.60	\$652,139.60		\$3,245,467.00
5311(f)	\$202,137.62					\$202,137.62
Totals	\$3,236,793.10	\$701,315.75	\$767,552.40	\$652,139.60	\$0.00	\$5,357,800.85
Totals	60%	13%	14%	12%	0%	100%

FY 2017 Spending by Program	and Policy Element (FTA Dollars)

CAPITAL	Passenger Facilities	Access to Stops	Vehicles	Technology	Other (Ops Facility, service veh, equpmt)	Totals
5310 Capital			\$403,750.00	\$8,000.00	\$8,000.00	\$419,750.00
5339 Capital			\$1,802,850.00	\$14,000.00	\$357,470.40	\$2,174,320.40
5339 Bike-Ped	\$27,329.60					\$27,329.60
Totals	\$27,329.60	\$0.00	\$2,206,600.00	\$22,000.00	\$365,470.40	\$2,621,400.00
Totals	1%	0%	84%	1%	14%	100%

It is important to note that this analysis does not include Section 5307 urban funds which pass directly from FTA to the urban regions in Manchester and the Seacoast. If the urban regions were

included, the four policy elements other than basic mobility would see higher percentages of the total, and attract millennials would have been attributed some funding.

The allocation by policy element for capital was simpler, because it was relatively easy to categorize the capital spending into one of the four elements, or to recognize that the spending was for something else that did not fit neatly into one of the elements (such as a maintenance facility or a service vehicle).

As can be seen in the table, about 60% of federal funds for operating expenses are spent on basic mobility, with three other categories accounting for about 13% each. For capital spending, the vast majority in FY2017 was for vehicles, with almost all of the rest going to miscellaneous items not covered by the four policy elements. The majority of this "miscellaneous" spending was for upgrades to the bus maintenance facility at UNH Wildcat transit.

Survey Results

In July, the policy elements listed above were distributed to all of New Hampshire's transit providers, and they were asked to respond to a short survey on Survey Monkey to indicate their policy preferences. Specifically, they were asked to rank the operations and capital policy elements (separately) in order of preference.

They were also asked about which measures should be used to determine how to cut funding, should that be necessary, and to rank four options in order for any potential new funding that might come available. The options for measures to use to prioritize spending cuts were cost per hour/mile, cost per passenger, ridership per hour/mile, or demographic characteristics of need. The options for investment of new potential funding were increased frequency on existing routes, increased span of service on existing routes, new routes, or funding to all regions for general public demand response service.

The results of the survey largely reflected the environment and the type of service operated in each region. The table below shows the results for the first two questions on ranking the operating and capital spending policies. Note that two responses were received from SCS (in the Claremont-Charlestown area), but only one response was received from the other regions. In order that the weighting be equal, the two SCS responses were averaged. The regions are generally listed in order from north to south and west to east, but not without exception. The most rural areas are listed first.

Policy	TriCounty	SCS	VNA@HCS	AT	CNHRPC	MTA	CART	Nashua	UNH	COAST	Averages
Basic mobility	1	4	1	5	1	5	1	1	4	2	2.5
Access to employment	2	2.5	4	3	3	2	2	2	3	3	2.7
Maximizing ridership	4	5	2	2	2	1	5	4	1	5	3.1
Supporting economic vitality	5	1	3	1	4	4	3	5	5	1	3.2
Attracting millennials	3	2.5	5	4	5	3	4	3	2	4	3.6

Survey Results for Operating Spending Priorities

Overall, basic mobility received the highest ranking statewide, and it was the number one priority for five regions and the number two priority at COAST. For the other four regions, it ranked last or second to last.

Access to employment received the next highest ranking, and it was the number two or three choice of almost all of the regions. Only the Keene region (VNA@HCS) ranked it as low as fourth.

Maximizing ridership was ranked high by five of the regions, but low by the other five; there was no middle ground for this options. It tended to be ranked more highly by the more urbanized areas, including Manchester, the Upper Valley, UNH, Keene and Concord.

Supporting economic vitality was the most important policy for three of the regions, but ranked low for the other regions. Finally, attracting millennials ranked lowest overall, but it was a relatively high priority in the UNH region, as well as in SCS, Nashua and Manchester, the last of which has a growing population of young professionals.

With regard to capital spending, there was much more consensus across the state. As shown in the table below, "vehicles" was the clear winner for priority, followed by technology. It should be noted that in the Concord region, the RPC answered the survey in place of CAT, and thus likely showed more interest in passenger accommodations (shelters and pedestrian access) and less interest in vehicles than the transit operator might have shown.

Survey Results for Capital Spending Priorities

Policy	TriCounty	SCS	VNA@HCS	AT	CNHRPC	MTA	CART	Nashua	UNH	COAST	Averages
Passenger facilities	4	1.5	4	4	1	3	4	4	4	4	3.4
Safe pedestrian access	3	3.5	2	2	2	4	2	3	3	3	2.8
Vehicles	1	2.5	1	1	4	1	1	1	1	2	1.6
Technology	2	2.5	3	3	3	2	3	2	2	1	2.4

For the remainder of the survey, there was some consensus that demographic characteristics of need should be the primary measure to determine where service cuts are made if necessary (seven votes), followed by ridership measures (four votes) and cost per passenger (three votes).

There was little consensus on the priorities for new spending, and as shown in the table below, three of the options came out with the same overall score. Spending on new routes came out slightly ahead of the others, but in general, the responses were highly varied.

Survey Results for New Spending Priorities

Policy	TriCounty	SCS	VNA@HCS	AT	CNHRPC	MTA	CART	Nashua	UNH	COAST	Averages
Increased frequency	3	3.5	4	1	3	2	3	4	1	1	2.6
Increased span	4	3	3	2	4	1	1	2	2	4	2.6
New routes	1	2.5	2	3	1	3	4	1	3	2	2.3
DR funding	2	1	1	4	2	4	2	3	4	3	2.6

Respondents were also given the opportunity to offer any comments. The results are as follows:

- Please keep in mind that rural services have very different needs and priorities than the city and urban areas. Therefore the delivery of those services are very different.
- I think that having statewide policy is a good idea, I hope that it will be flexible enough to accommodate the vastly different demographics that we have here in NH. The issue of using population density to base funding decision could really hurt more rural areas of the state, unless a viable alternative transportation option for these areas is developed. VDP programs are helpful, but not the solution.
- Hopefully funding remains, at the very least, steady. Right now I think we do a good job in NH meeting transportation needs in a challenging region. If funding is cut we need to remember to focus on those who rely on public transportation to meet their basic needs.

- AT's focus on providing a viable way for people to commute to/from work has helped to focus resources, maximize ridership, attract "choice" riders, and at the same time assist more mobility dependent riders. All while lowering per trip cost and maximizing local revenue.
- NHDOT should focus on the highest ridership services and build success there to strengthen the second highest ridership and so on. In this way, a strong network across the state can be created with a vast array of supporters and stakeholders rather than a fragmented series of small services with little to no connection between communities or regions.
- Expanding volunteer driver program capacity will be key to providing basic lifeline transportation in many rural communities. Capacity to provide accessible service will be needed in tandem. Continued work to secure state funding is also needed, to provide a share of match requirements.

Consideration of 5310 and 5311 Programs

As was shown earlier, NHDOT allocates about 60% of its federal funding toward basic mobility. If one looks just at the 5311 program (excluding intercity funding), about 40% of that program is devoted to basic mobility, with about 20% going to access to jobs, maximizing ridership, and economic vitality.

The survey results support having basic mobility as the highest priority, though not, perhaps, by a ratio of 4:1 (overall) or 2:1 (within 5311) to the other policy objectives. It should be emphasized that the survey included urban direct recipients of 5307, while the spending analysis did not include that money, and thus it would be wrong to draw the conclusion that spending is out of line with the stated priorities of the transit providers. It is also the case that the providers were given one vote each, and these were not weighted by population or any other factors.

In our analysis, all 5310 money was attributed to basic mobility, and this is appropriate because the program is designed to provide lifeline service to older adults and people with disabilities. In New Hampshire, the intercity portion of 5311 is attributable to basic mobility, as 5311(f) is intended to provide access to the intercity network to those who would otherwise be excluded.

The main question, then, revolves around the distribution of non-intercity 5311 funding and whether more of it should be directed to policy goals other than basic mobility. In the recent past, NHDOT's pot of 5310 money has not been fully spent out, while there is great demand on the available 5311 funds. Prior to SAFETEA-LU in 2005, the State had the flexibility to transfer unused funds from 5310 into 5311, but that law removed that flexibility.

Federal regulations state that 55% of the funding under Section 5310 needs to be spent on capital projects that are considered "traditional" under this program, which means mainly the purchase of demand response vehicles, mobility management, and the cost of contracting for the provision of transit services for the target populations (NHDOT's Purchase of Service program fits this mold). The other 45% can be used to pay for operations that are designed to benefit seniors and people with disabilities.

Such services do not exclude people who are younger than 60 and do not have a disability, but the primary purpose of the service is for the intended populations. If a vehicle funded by section 5310 has available space, a non-senior or person without a disability can ride in that vehicle.

Some transit services (bus routes and demand response services) in rural areas that are funded by 5311 could potentially be recast as service that is designed for seniors and people with disabilities (and thereby funded with 5310), but be operated with an open door to allow others to ride. After all, if the current riders of these services are mostly seniors or people with disabilities, then it could be argued that the service is designed for that population.

Fixed routes and route deviated services would be required to be designed to meet the needs of seniors and individuals with disabilities and would be open-door to the general public so that all could ride. This may mean, for instance, that stops on fixed and deviated routes would include senior housing complexes, medical facilities, congregate meal sites, and grocery stores. Demand responsive services must also be designed to meet the needs of seniors and individuals with disabilities and would also be open door to the general public. Demand responsive services funded with 5310 funds may, for instance, not start until later in the morning to accommodate the transportation needs of seniors and individuals with disabilities seeking transportation services to medical appointments, congregate meals sites, hair appointments and the like and while the general public can utilize this service, its later start time may not be conducive to those seeking transportation to employment.

All 5310-funded projects must be included in a locally developed coordinated public transit-human services transportation plan and ensure that the service delivery and ridership continues to support a focus of providing service to the 5310-eligible population of seniors and individuals with disabilities. As such, these operations may require annual surveys to be conducted, or other similar measures, to document that the services are primarily serving and seniors and individuals with disabilities and support the continued use of 5310 funds.

In some cases, 5311 is used in rural areas to provide demand response service for non-5310 eligible individuals. When that service is operated by agency vehicles rather than a volunteer driver, it tends to be very expensive on a per-trip basis.¹ For example, the Freedom Express service operated by Carroll County Transit had an average cost per passenger of over \$42 in SFY2017. This figure is almost ten times greater than the cost per passenger of Advance Transit's fixed route service.

Another potential area of flexibility is the funding of ADA-complementary paratransit service. FTA Circular 9070.1G states that an eligible capital expense for Section 5310 (part of the 55% portion) includes "acquisition of transportation services under a contract, lease, or other arrangement. This may include acquisition of ADA-complementary paratransit services when provided by an eligible recipient or subrecipient...Both capital and operating costs associated with the contracted service are eligible capital expenses." (page III-11) For example, the three "5311" agencies that provide paratransit service spend over \$270,000 of 5311 funds on ADA-complementary paratransit service and it may be possible to fund those services with 5310 instead of 5311. The use of 5310 funds for ADA paratransit operations may require that 5311 agencies contract their paratransit service to a third party.

¹ In thinking about the "lowest-cost mode" policy shown on page 2 of this memo, NHDOT could stipulate that any 5311 money used in rural areas for demand response service must use volunteer drivers unless the agency can prove that it is infeasible to find a volunteer at the needed time. This could substantially reduce the cost of 5311 demand response service while not leaving current recipients of 5311 DR service with no mobility at all. It must be recognized that there is a shortage of volunteer drivers generally.

If some of the service now funded by 5311 could instead by funded by 5310 without violating federal rules, then more of the current 5311 money could be allocated to support policy goals other than basic mobility. This implies that more of the funding would go to bus routes in more densely-developed areas to maximize ridership, support economic vitality and improve access to jobs, as well as attracting millennials through a better quality of service.

Conclusion and Recommendation

The process of drafting and reviewing potential policy goals for public transportation in New Hampshire indicates that there is a desire for an official policy regarding the use of federal funding. While there is not necessarily a consensus on how the money should be spent, there is recognition that different areas have different needs and that some guidance how the funds should be distributed would be helpful.

It seems appropriate that Basic Mobility should be the primary goal of public transportation in the state, and current spending allocations reflect the priority of that goal. The majority of the land area in the state has rural density and there are significant transportation needs in those areas. Under this goal, however, there should be two important provisions:

- Most basic mobility service in rural areas should be targeted toward seniors and people with disabilities and funded with the 5310 program; and
- Service for non-5310 populations in rural areas should be operated with the lowest-cost mode available, specifically volunteer drivers, whenever possible.

For future funding over and above the spending levels for currently-provided service, the amount of non-intercity 5311 funding spent on basic mobility should be reduced from 40% of the total to 33% of the total, with additional funds allocated to other policy goals, especially:

- Access to jobs;
- Maximizing ridership; and
- Supporting economic vitality.

This budgeting and expenditure goal does not affect the allocation of funds for services currently in operation.

Attracting millennials, as a policy goal, received relatively less support than the other goals, and is most relevant to the urban portions of the state. Attracting millennials is a worthwhile goal, but perhaps should not be addressed by either the 5310 or 5311 programs. Instead, 5307-funded services more appropriately address this policy goal.

NHDOT reserves the right to reallocate funding from existing services if they consistently do not meet performance goals and there are no available means of improving service effectiveness. While existing services will be reviewed based on NHDOT's policy priorities once established, it is not NHDOT's intention to cut existing service in favor of a new service without first exhausting all reasonable means by which to improve the existing service.