The Shrinking, Rural Intercity Bus Network: A Problem of Immobility for Rural Residents without Automobiles and Possible Solutions

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Abstract

Intercity Bus Service in rural areas has been on a severe decline since deregulation in 1982. The number of stops has dropped from 11,820 in 1982 to 2,423 in 2008. The first portion of this paper is a problem statement discussing the history of the decline of intercity bus service, along with the fact it is an equity problem, effecting the poor, disabled or elderly. These are residents who can’t drive or can’t afford to have cars. Since 1991 the federal government has recognized this problem and now requires states to spend 15 percent of their 5311(f) rural transit funds on increasing intercity bus service. The second half of the paper evaluates four different alternatives to fixing this problem. Two of these proposed solutions, subsidizing rural routes and state-operated feeder routes, keep the current bus system and propose increasing government subsidies. These evaluations use case studies from various rural states. The other two solutions are more radical – re-regulating the industry, and nationalizing – using Canadian provinces as case study. The analysis found the preferred solutions are keeping the status quo of subsidizing rural routes by increasing federal funding.

Introduction

Immobility because of the lack of automobile access is a major issue for most people in the United States except for those living in the largest of U.S. Cities. It is a particular problem for residents of rural areas and small towns and hamlets that lack the rudimentary basic of public transportation. This basic is a stop on an intercity bus line or a connecting feeder route. This bus can take these residents to the nearest large town or city to receive important services such as health care and connect with the intercity bus network to reach the rest of the nation. The populations that normally don’t have automobiles in rural areas are our most disadvantaged. These are the poor who are unable to afford the high costs of automobile ownership and
maintenance plus the elderly and disabled who are physically unfit to drive. Some of these people perhaps can drive themselves short distances or rely on family and friends to reach the nearest bus stop but are unable to complete long distance trips using private cars. Today there is some federal funding earmarked for improving intercity bus service through 5311(f) funds but there isn’t enough funding. A long-term solution to continue increasing rural intercity bus service and creating a stable industry needs to be found.

**The History of the Decline of Intercity Bus Service to Rural Areas**

This section discusses the major causes of intercity bus service loss in rural areas in the recent past. Figure 1 shows the number of stops served by the intercity bus industry per year. Before deregulation in 1982, intercity bus travel in the United States was operated by private, for profit, companies as a regulated monopoly. The largest of these companies was Greyhound Lines with its main competition the various local franchised companies that formed the Trailways Transportation Network. The Interstate Commerce Commission (ICC) regulated the lines and routes under the Motor Carrier Act of 1935. The act intended to prevent the oversupply of transportation, under the idea that if too many competitors competed on the same route none would make any money on the service. This model made public carriers publish and adhere to fares and routes. When a new carrier wanted to enter a market, existing companies could contest the new carriers routes and if the existing carrier proved they were providing adequate service the new carrier would be turned down. (Thoms, 1984; Wash, 2000, 24-27). Regulation caused a stable landscape for intercity bus service. The service was intercity bus operators running fixed – for long periods of time – regular routes with little competition. The profitable routes between big cities would cross-subsidize rural routes that stopped in numerous small towns. This connected the entire country with intercity bus service.
The first declines in intercity bus service were a direct effect of the building of the interstate highway system starting in 1956. In the era before the interstates buses, like all traffic, had to take smaller highways that went through every town along the way and there were minimal time advantages not to make frequent stops. As interstate highways opened, bus stops were gradually discontinued in smaller communities since stopping in every small town was now more time consuming. The regulations allowed these changes. The opening of the interstates caused the first drop from 23,000 stops in 1965 to 16,000 in 1968 (GAO, 1992, Thoms, 1984).

The passage of the Bus Regulatory Reform Act of 1982 allowed bus carriers to exit marginal markets easily. It also opened the industry to competition by removing the hurdles of regulation for routes and fares (Wash, 2000, 54-55). Thoms (1984) predicted successfully that it “would remove the last means of public transportation giving access to these towns.” Deregulation immediately caused service cuts with 2,154 locations losing service in 1983 alone. (GAO, 1992, Woldeamanuel, 2012). The cuts have continued through today. For example, in 2004 Greyhound discontinued service to 267 stops in 18 states, most without other intercity services. In Oregon 35 stops were cut and only two had commercial air or rail service. These cuts accounted for 10% of all Greyhound stops nationwide but only 2.5% of ticket sales and 2.8% of revenue. These cuts continued into 2005 with 150 stops including 64 in California alone. Newspaper articles announcing these cuts note hardships like an elderly woman who used the bus twice a week to get to the big city and veterans patients using the bus to reach nearby hospitals (Alanez, 2005; Frazer, 2004; Sanders, 2004).

Today intercity bus travel is undergoing a renaissance except for service to rural areas. This has been led by the new curbside bus companies; Megabus is the largest. In 2007 for the first time in over 40 years bus ridership actually increased 6.9% (Schwieterman et. al, 2007).
Although between 2005 and 2009 the number of U.S. rural residents who had the option of taking any bus at all fell to 78 percent from 89 percent (Margonelli, 2011). The new bus companies follow a model of operating services from curbside locations – without bus terminals, ticket counters and indoor waiting areas – on non-stop or one stop intercity express routes selling tickets using variable pricing, generally with $1 fares for the first few seats on each bus. Greyhound has tried to follow this model with its new Greyhound Express routes and BoltBus subsidiary ending its “once a day milk runs to tiny hamlets” (Schweiterman, 2007).

Un fortunately the MegaBus model doesn’t seem compatible with serving rural areas. In 2012 CoachUSA, MegaBus’s parent company purchased the bankrupt Kerryville Bus Lines that operated routes in rural Texas for over 80 years. It folded the routes into Megabus, operated them for a year, found the routes unprofitable and inconsistent with the Megabus business model, and abruptly canceled the rural services (Batheja, 2013).

**Why Immobility Without a Car in Rural Areas Matters**

The first section of this paper focused on how the number of communities served by intercity buses has decreased five-fold since 1968. Why does any of this matter? Who is affected by the cuts? A study by Greyhound in 1990 found that 64% of its riders took the bus because they didn’t have access to a vehicle or didn’t have one they felt comfortable taking on a trip over 600 miles. In addition 22% of these riders were from households without a vehicle compared to 9% of the total population (GAO, 1992). The cuts to public transportation in rural areas effects two main disadvantaged demographic groups; low-income Americans who can’t afford cars or the cars they own are unreliable for long-distance trips and older and disabled Americans and others who physically can’t or don’t want to drive at all or for long distances.

For rural Americans living in poverty and those with low-incomes, transportation is an
extremely pressing matter. These people spend a huge amount of their income on transportation, particularly maintaining car ownership. For example, “Americans in the lowest 20 percent income bracket, many of whom live in rural settings, spend about 42 percent of their total annual incomes on transportation, compared to 22 percent among middle-income Americans.” (Leadership Conference Education Fund, 2011). Those poor rural Americans who do have vehicles are prone to having unreliable used cars and trucks they are not comfortable taking on long trips (GAO, 1992).

The number of seniors in the United States is increasing rapidly because of the baby boom generation aging and better healthcare increasing life expectancy. In 2002, 12% of the U.S. population was 65 or over; by 2025 this will go up 79% and become an estimated 18% of the population (Baily, 2004). The average driver will outlive their ability to drive by 7 to 10 years (Dugan, 2006, xiv) and 23% of the older population lives in rural areas (DeGood, 2011). Only 14% of the elderly living in rural areas reported having any kind of transit services within a half-mile (Rosenbloom, 2003, p. 11). Bailey (2004) found that 21% of Americans over the age of 65 don’t drive and 50% of these non-drivers stayed home on a given day because they lack transportation options. Compared to those who drive they also make 15% fewer trips to the doctor, 59% fewer shopping trips and 65% fewer trips for social, family and religious activities. Many older adults who still drive self-regulate their behavior limiting their trips to short distances, avoid high-speed roads or don’t drive at night (Houser, 2005). Immobility and fixing our rural intercity public transportation network is extremely important to this demographic. Bus routes provide trips for recreational and family activities as well as medical visits. It keeps are roads safer for everyone by decreasing the need to drive for those who are physically unfit.

Small Steps at Improvements: Greyhound’s Interlining For a Feeder Connection System
and Federal Subsidies Beginning in the 1990s.

Greyhound has been trying to help replace its discontinued rural intercity bus stops since the late 1980s with other services through interlining. Interlining offers passengers a through ticket and generally coordinated schedules on different carriers for their entire journey. In 1987 Greyhound Lines began the Rural Connection Program signing agreements with local service providers (like a four day a week van from Dunlap to Chattanooga, Tennessee) to enter local Greyhound Stations and connect passengers with through ticketing. (Treadwell, 1987). Through this program, Greyhound soon added or reinstated service to over 850 rural and small communities. Greyhounds own troubles, starting with a driver strike in 1990, and bankruptcy led it to end these agreements and cut service. (Baker 1991, “Greyhound Bus Drivers End…” 1993).

In 1991, congress passed the passage of the Intermodal Surface Transportation Efficiency Act (ISTEA). Under ISTEA states are required to designate 15% of their Section 5311 (f) funds: “Formula Grants for Other than Urbanized Areas” to subsidize rural intercity bus service unless the governor certifies that service is already adequate. ISTEA defines rural intercity bus service as a bus line open to the general public that can carry baggage and makes meaningful connections to the national intercity bus network. The program requires states or other private entities to match 50% of federal funds for operations and 80% of funds for capital expenses. Funding to each state is allocated through a formula that considers 80% of the funding based on rural population and 20% of the funding based on the state’s area (TCRP, 2002; F.T.A, n.d.). The required local matches come from state or local funding or even from private sources like the bus companies themselves making the match using a complex formula for route miles. Today all but six states use their 5311(f) funds for operating subsidies, although all Federal funding in FY 2013 was only $19.96 million (First America, 2014, National Research Council, 2011).
Today Greyhound continues to promote connecting services – with subsidized services operating as Greyhound Connect in eight states – and interlining connections with regional bus services throughout the country (Greyhound Lines, 2007). Greyhound Connect and the new 5411(f) funds has not done enough to stop the decline in rural bus service as Figure 1 shows. Case studies of how certain states are using these federal funds are the basis of analysis for two of the four alternative solutions for fixing the problem of immobility in rural areas.

**Alternative Solutions and Criteria For Selection**

Only intercity bus focused solutions were chosen to fix the problem of intercity immobility in rural areas without an automobile. The four solutions considered are:

1. Re-regulating the intercity bus industry.
2. Providing direct operating subsidies to intercity operators
3. Subsidizing state-operated feeder bus routes
4. Nationalizing the intercity bus industry

All alternatives will be evaluated for taxpayer cost, rider cost, and the amount of service that will be provided to rural areas and the long term-risk of a stable system. These evaluations were formed from case studies from direct examples. Each of these are defined in the outcome matrix, figure 2. Each alternative was evaluated on a 0 to 3 scale, 3 being the most desirable. Taxpayer cost defines the amount of money federal, state, and local taxpayers would pay to provide intercity service. It considers direct operating subsidies only, not capital costs like those for buses and terminals. Rider cost is how expensive tickets would be. A base distance ride of 150 miles was considered for analysis with fares calculated between example destinations from case study examples. A baseline cost for a 150-mile ride along an urban, major intercity route is $31 for a walk-up ticket from Washington, DC to Philadelphia. Many riders pay much less than
this such because of discounting and advanced fares. A rural 150 mile ride on an unsubsidized route is about $49 from Colorado Springs, CO to Raton, NM (Greyhound.com analysis). The amount of service to rural areas considers the effects the alternative will have in restoring bus service and reversing the trends. The Risk column assess how risky the alternative would be to the entire intercity bus industry and if the alternative is viable in the long term. Totals were then added to obtain the best outcomes.

**Alternative #1: Re-Regulate the Intercity Bus Industry**

The underlying idea of re-regulating the intercity bus industry is to go back to the structure of the industry before deregulation in 1982. Idealized, under this structure all intercity bus routes would be doled out to private operators that would operate routes as a regulatory monopoly with regulated fares. The routes would be appropriated in a way that each carrier would get a number of profitable, high-volume intercity routes connecting urban areas and in return would be required to operate a certain amount of unprofitable service on rural routes creating cross-subsidization. This would provide full connectivity and increase the number of bus stops served although it would increase travel times for the majority of riders going from downtown to downtown.

Canada, our neighbor to the north, provides an excellent case study as a place that still regulates private intercity buses on a province-by-province basis (except for Saskatchewan, where service is provincialized). The model is cross-subsidization with companies given exclusive rights to ‘profitable’ major intercity express routes in return for the requirement to operate unprofitable rural routes. Fares are not regulated. Like in the U.S., Greyhound is the main intercity carrier and covers most of the country except east of Montreal. Regulations and unprofitability led Greyhound Canada to threaten to cut all trans-Canada service by withdrawing
from Manitoba. Manitoba ended up deregulating the intercity bus industry and 12 routes were discontinued (“Greyhound drops 12 bus routes”, 2012). East of Montreal, two different local carriers provide service. These two companies have taken drastic measures to rid themselves of unprofitable rural routes as the cross-subsidy model is no longer profitable.

In the rural Canadian Maritimes the decline in rural service has been drastic with the discontinuation of Acadian Bus Lines in 2012 and replacement by another carrier, Maritime Bus with much less service. Figure 4 shows the reduction in stops and routes between 2011 and 2012. On December 2, 2011, Acadian drivers in New Brunswick and Prince Edward Island went on strike; this left these two provinces without intercity bus service (and Nova Scotia disconnected) for five-months. As the months wore on Acadian Bus Lines refused to talk to the drivers’ union citing the fact it had lost $2 million on its services in 2011, with $12 million in total losses since in 2004. The strike eventually ended in May and Acadian Bus Lines resumed some service until November 30, 2012 when it decided to shut down. It was immediately replaced by a new operator, MaritimeBus.com; operating the much smaller 2012 network (“Acadian Bus Talks Resume This Weekend,” 2012; Glynn, 2012; Alberstat, 2011; Thomson, 2012).

A final example of a Canadian province where intercity bus service is in flux comes from Quebec. Orleans Express has a monopoly for the highly traveled and still profitable Montreal to Quebec City route in return for cross-subsidizing unprofitable rural bus services throughout the province. In May 2014 it announced service cuts – that require permission from the Quebec Transportation Commission – to rural areas citing mounting losses and a drop in ridership. In 2013 the carrier lost money (the amount isn’t known) for the first time citing ridership losses in the past ten years. The proposed cuts in rural areas are drastic with total abandonment of two routes and service to the Gaspe Peninsula dropping from 3 trips per day to 1 trip. Orleans
Express cites online car sharing services with nearly professional drivers driving the route, filling the equivalent of 8 buses per day as the primary reason the Montreal to Quebec City route is no longer profitable enough to cross-subsidize the current amount of rural service. (“Orléans Express looking to reduce regional bus service,” 2014; “Orléans Express Proposed Schedule Changes,” 2014).

For the outcomes matrix (figure 3) for re-regulation, ideally the route authorities would be issued in a way that would allow for optimal cross-subsidization without any need for government funding or subsidies for rural routes. This makes taxpayer costs low (3) and the amount of rural service high (3). For risk, the Canadian bankruptcies and service cuts show that in today’s travel climate re-regulation would be extremely high so 0. For Orleans Express (calculated at OrleansExpress.com), the rider cost of a 150 mile journey seems to always be $56.80 (CAN) without any advanced purchase discounts ever offered. The fare from Montreal to Quebec City (155 miles) is the same as the fare between two rural towns, Matane to La Pocatière in the Gaspe. These prices mean fares under re-regulation are high (1). The total score is 7 points.

**Alternative #2 - Direct Subsidies For Rural Routes**

One proposal that has already been implemented in many states is to directly subsidize Greyhound and other private interlining regional carriers to operate rural long-distance routes to connect smaller communities away from interstate highways that don’t have the population density or fast travel times to be profitable. Federal funds under the 5311(f) program provide up to 50% of operating costs. Examples of the routes come from across the country with localities, states and even the carriers themselves providing the required 50% match. In Minnesota, Jefferson Lines operates 6 routes without any costs to the state or local governments using its own revenues for the 5311 (f) match (Minnesota Department of Transportation, 2014).
The population demographics of one state, Michigan provide an excellent example and case study for how direct subsidies are working. Figure 5 shows the Michigan intercity bus network. Service in more populous Southern Michigan is open market and profitable with a variety of carriers. The much more rural northern half of Michigan’s Lower Peninsula and its Upper Peninsula receive intercity bus service from five routes (each named) subsidized by the state. Indian Trails, operates each route once per-day as a comprehensive network with timed connections where routes meet. The total subsidies in 2011 were $1.8 million with 53,000 passengers riding the buses. Subsidies for the first route between Grand Rapids and Travis City began in 1990 after Greyhound cuts with Indian Trails operating it ever since, and slowly taking over other routes and fixing gaps in the network. (MARP, 2009; Michigan Department of Transportation, 2006, Michigan Department of Transportation, 2012).

For the outcomes matrix (figure 3); taxpayer cost is medium (2). There is a direct operating subsidy but even just some federal funds can motivate the private sector to provide its own match, costing the local taxpayers nothing. For the amount of service to rural areas it various (2) depending upon the size of the subsidies and how much the bus companies innovate. Running fare comparisons for a 150 mile long ride yields a fare of $28 to ride from Indian Trails in rural Michigan, Traverse City to Sault St. Marie (IndianTrails.com fare search). In Minnesota on Jefferson Lines the fare is $44 to ride a similar distance from Minneapolis to Marshall (JeffersonLines.com fare search). On other routes fares are as high as $59 from Denver to Steamboat Springs (Greyhound.com fare search). These fares very greatly so medium (2) seems like a fair score. For risk it seems low, individual rural routes may fail but they won’t bring down the entire industry and more successful routes will continue (3). The total score is a high of 9.

**Alternative #3 – Directly State and Locally Operated Feeder Routes**
One way to provide increased local service is by subsidizing shorter feeder routes that are operated by state and local agencies that provide connections to the intercity network in nearby places with interlining with Greyhound connecting to the national network. Washington State DOT’s (WSDOT) Travel Washington Intercity Bus Program is the biggest innovator in feeder routes, with four operating today. Figure 5 shows these lines and the unsubsidized intercity bus network. The four routes, serving 22 communities are all funded using 5311(f) funds by three for-profit contracted operators with fares providing the 50% local match with state funds only used for supporting costs. The routes were started when the state issued RFPs. All four routes currently use 20 person ADA compliant minibuses that were purchased using Federal Recovery Act funds in 2011. WSDOT runs a central ticketing system and is in charge of unified branding with each routes unique logo appearing on signage and on buses. The routes all started extremely quickly with the Grape Line beginning in December 2007 restoring intercity service to Walla Walla after Greyhound cut’s in 2004. The Apple and Dungeness Lines began in 2008 with the Gold Line added in 2010. Each route operates 2 to 3 times per day. WSDOT wants to expand the service and has identified three additional possible routes but the current services use up most of the state’s 5311(f) rural intercity bus funds (National Research Council, 2011, Abernathy 2012). Oregon also uses its 5311 (f) funds for local feeder routes without the same unified network.

For this alternative, the taxpayer cost is medium (2) since the subsidies are relatively small and the routes serve double-duty also connecting rural areas with nearby cities for crucial town services such as medical appointments for those who can’t drive. The size of the network is low (1) because to have a successful feeder route you need a major trunk route nearby that can support unsubsidized service. Feeder services wouldn’t work in completely remote areas like Michigan’s Upper Peninsula. For fares, $37 is the cost of the 155 mile long ride from Okanogan
to Ellensburg, Washington (appleline.us). In Oregon Brookings to Ashland (138 miles) is $42 on Southwest POINT (southwest-point.us). These example fares seem medium (2). The risk of this type of system is low (3) since if a feeder route fails the unsubsidized intercity bus industry will continue between major cities. The total score is 8.

**Alternative #4 - A Nationalized Intercity Bus Network**

One final alternative would be to nationalize the Intercity Bus Network. This idea would create a new federally mandated bus network that would connect the entire nation. Depending upon how the system would be mandated, it could require that every town bigger than a certain size, or every resident be within a certain radius of a bus stop on at least a feeder route. An optimal nationalized intercity bus system would mostly use large intercity coaches with smaller buses and vans servicing the most remote towns. The network would be intermodal with rural routes connecting to larger population centers where passengers could connect to intercity trunk bus routes, Amtrak intercity rail service, or airline service. In some areas intercity rail service could be used as the truck bus routes with various feeder bus routes providing connections.

Switzerland provides an example of a country with a nationalized unified transportation network that gives nearly all residents access to regularly scheduled transportation. For background, Switzerland has 7.8 million people with 15,940 square miles, with a density of 487 people per square mile, this is a density similar to the state of Delaware (475 people per square mile). Switzerland would be the fifth densest state if it were a U.S. State. The core of the Swiss intercity transportation network is the Swiss Federal Railways that serves 792 stations and flag stops (SBB, 2013). These railroad stations connect with a unified system of PostBuses that connect to rural and high-alpine areas throughout Switzerland. These yellow buses and minibuses travel on nearly all rural and mountain roads in Switzerland and have 14,231 total
stops. The origin of the PostBuses were rural mail routes with the first route starting in 1906 (Postbus, n.d.). The Swiss Transportation network has unified ticketing. Schedules are coordinated minimizing layovers between trains and connecting PostBuses. It is considered one of the most efficient public transportation networks in the world (Mees, 2010).

The one North American statewide operation is the Saskatchewan Transportation Company, a Provencal Crown Corporation running intercity bus service throughout the province. It was created in 1946 to serve urban areas and as many rural areas of Saskatchewan as possible. Today the system serves 287 communities in the province, and through-routes and interlines with Greyhound. The funding of STC is roughly one-third subsidized by the province, and continued losses have been cited by management because of Greyhound bus cuts in Manitoba and Alberta, decreasing inter-region connectivity. In 2014 the company received an operating grant of $10.3 million and a capital grant of $3.3 million (STC, 2014).

Adding this alternative to the outcomes matrix is quite tricky. First there is a high probability of an unsustainable system. This would be one where certain rural routes are congressionally mandated from Congress favoring certain rural Americans over others, but not providing complete rural coverage. Amtrak, the United States national railroad is our only nationalized passenger transportation service. Congressional meddling has been a problem since its creation in 1971. An example is of routes mandated by powerful Congressman Staggers in the 1970s that mandated Amtrak run extremely unprofitable, low-ridership routes through his home district in rural West Virginia (Sanders, 2006). For these reasons it seems like taxpayer costs would be high (1), but the amount of service would be high (3). In addition our political landscape isn’t like Switzerland where there is the tradition of the PostBus System so a nationalized service could have the potential to be quite risky (1). It would also stifle all
innovation on major urban intercity routes that are operated by the private sector profitably where different carriers provide different prices and service, giving riders choices. For costs, in Saskatchewan the price to go from Saskatoon to Kelvington is $43 (stcbus.com). This seems like a medium amount, but the fact that a nationalized system without competition would raise bus fares on major intercity routes where multiple carriers would no longer be competing on price, rises the rider cost to high (1). The total score is 6 points.

**The Best Solutions are #2 and #3 Subsidizing Rural Routes**

As the rank column on Figure 3, the outcome matrix shows, the best solution to improving the lack of mobility in rural areas without an automobile is to continue with the status quo by subsidizing rural routes. Re-regulation (scoring two points less) and complete nationalization (the lowest at 6) seems too extreme (and scored less) especially considering the rise in the number of intercity bus passengers in the past few years along heavily traveled downtown-to-downtown intercity routes. In addition (although it scored one point less) there is no reason to not continue subsidizing state-operated feeder routes where they are viable. These feeder routes have another benefit (not considered in the evaluations) by providing rural to urban day-trips. These are harder to provide with longer bus routes since bus times may be unfavorable. To implement these solutions additional federal funding through 5311 (f) should be raised to allow additional states to provide intercity bus service to their citizens, and solve the problem of immobility in rural areas without an automobile.

The new sharing economy is another reason to not re-regulate or nationalize the intercity bus service. The reasons come from Orleans Express’s diminishing ridership on the Montreal to Quebec City route because of ride sharing filling eight buses per day. The fare is always fixed at $56.80 for a bus ticket. Checking KangaRide.com, the most popular Canadian ride-sharing site,
for the Montreal to Quebec City route shows private automobile drivers charging $15 to $20 with departures nearly every hour. In the Northeast, where the highly competitive intercity bus market has carriers competing on price, there isn’t a ride sharing market because taking the bus is cheaper, and ride sharing wouldn't be profitable (“Orléans Express looking to reduce regional bus service,” 2014)

One additional solution not considered is flag stops. These are stops in extremely rural areas where ridership is low, and often no one wants to get on or off. Flag stops require passengers to call or purchase a ticket in advance asking for the bus to stop for them. They are a win-win because the bus doesn't have to get off the interstate, for example, at every exit (speeding travel) but only when there are customers waiting. Unfortunately Greyhound's reservation system even for interlining carriers doesn't have the ability to offer flag stops and directly inform drivers on the go if there are passengers waiting for them (Greyhound Lines, 2007). Many smaller carriers provide them. A number of rural communities in Montana lost bus service when local carrier Rimrock Stages that offered flag stop service with advanced notice on its routes was shut down by Federal regulators and its major routes were replaced by regional carrier Jefferson Lines that won't offer on-demand flag stops (Falstad, 2013).

**Conclusion**

The current system of subsidizing individual rural intercity bus lines, not nationalizing or re-regulating the entire system is the best solution to combat the problem of immobility in rural areas without an automobile. Subsidies just need to be increased, with the Federal government increasing matching funds is the best solution. The lack of intercity bus service harms our most disadvantaged citizens, the low-income, elderly and disabled. Other solutions not considered at all in this paper that could also increase mobility in rural areas could include programs to
subsidize the costs of acquiring and owning a car for those who can't afford them. There are local human service and transit agency dial-a-ride services that serve a rural area were also not well mentioned, many of these provide a few trips per week or month to the nearest major town or city for shopping and health care appointments and could also be a secondary intercity connecting service. Increasing intercity train service with frequent stops is another.

**Figure 1: The Number of Intercity Bus Stops In the United States**

Sources: GAO, 1992; Thoms, 1984; Firestine, 2011; Woldeamanuel, 2012;
## Figure 2: The Outcomes Matrix

<table>
<thead>
<tr>
<th>Solution</th>
<th>Taxpayer Cost? Ideal is Low (3)</th>
<th>Rider Cost Ideal is Low (3) (Fares are from case studies for a 150 mile ride)</th>
<th>Amount of Service (Frequency, Routes &amp; Stops) Ideal is High (3)</th>
<th>Risk (would the operations be successful in the long-term?) Ideal is Low (3)</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Re-Regulation</td>
<td>None (no subsidies) 3</td>
<td>High ($56, including major intercity routes) 1</td>
<td>Ideally High Rural Service 3</td>
<td>Extremely High (potential unprofitability) 0</td>
<td>7 – 3rd</td>
</tr>
<tr>
<td>2. Subsidize Rural Routes</td>
<td>Medium (subsidies per rural route) 2</td>
<td>Medium ($44/$59/$36/$28) 2</td>
<td>Medium – Varies Upon Subsidy 2</td>
<td>Low 3</td>
<td>9 – 1st</td>
</tr>
<tr>
<td>3. State-Operated Feeder Routes</td>
<td>Medium (subsidies per rural route) 2</td>
<td>Medium ($37/$42) 2</td>
<td>Low – Requires Nearby Profitable Intercity Route 1</td>
<td>Low 3</td>
<td>8 – 2nd</td>
</tr>
<tr>
<td>4. Nationalize the Industry</td>
<td>High 1</td>
<td>High 1 ($43), higher fares on major intercity routes</td>
<td>Becomes Political, Probably Good Service 3</td>
<td>Political and Politicsd 1</td>
<td>6 – 4th</td>
</tr>
</tbody>
</table>
Figure 3: Major Reductions in Intercity Bus Service in the Canadian Maritimes between Mid-2011 and the End of 2012

2011:

2012:

2012 Map is 2011 map modified by the author to show MaritimeBus.com routes.
Figure 4: The Michigan Intercity Bus Network

Source: Michigan Department of Transportation, May 2013, Map Modified by the author for better clarity
Figure 5: Travel Washington: The Washington State Intercity Bus Network

Source: Washington State Department of Transportation, Travel Washington Intercity Bus Program Map (modified by the author for clarity)
References


