

## Effectively Addressing the Transit Needs of Greater Minnesota

This report will introduce two models for public transit introduced by Jarrett Walker in *Human Transit: How Clearer Thinking about Public Transit Can Enrich Our Communities and Our Lives*, the ridership model and the coverage model. It will discuss the benefits of a transit system that uses policy to provide and manage both models separately but simultaneously. It will identify and review relevant policy guidelines from the 2008 Washoe County Regional Transportation Plan and identify parallels in existing MnDOT policy. It will then look at ways MnDOT could modify existing policy to incorporate both models simultaneously to address the transit needs of Greater Minnesota.



The two models introduced by Jarrett Walker in *Human Transit: How Clearer Thinking about Public Transit Can Enrich Our Communities and Our Lives* are the ridership model and the coverage model (Walker, 2011). The first model is the ridership model. According to Walker, the goal of the ridership model is “deploying service the way a private business would, with the aim of the highest possible ridership for a given service budget” (Walker, 2011, p. 118). The second model introduced is the coverage model. According to Walker, “...a Coverage Goal, says that the agency must serve everyone in its service area... Implicit in the coverage goal is that some service must be provided *regardless of how few people use it*” (Walker, 2011, p. 118). Walker illustrates that these goals are contradictory in practice (Walker, 2011). To achieve ridership goals, you must deploy service in the highest ridership areas and cut service in low ridership areas. To achieve coverage goals, you must offer some service to the entire community (in both high and low ridership areas) regardless of the resulting ridership.

The goal of the ridership model is “deploying service the way a private business would”

Two Minnesota public transit organizations have mission and vision statements that incorporate both concepts. The Minnesota Department of Transportation (MnDOT) vision statement is identified as “Plan, build, operate and maintain a safe, accessible, efficient and reliable multimodal transportation system that connects people to destinations and markets throughout the state, regionally and around the world” (MnDOT, MnDOT's Vision, 2017). Including the word “accessible”

seems to imply some coverage goals for MnDOT and including the word “efficient” seems to imply some ridership goals as well. Metro Transit, the public transportation agency that covers the Twin Cities Metro Area, lists their mission statement as “We at Metro Transit deliver environmentally sustainable transportation choices that link people, jobs and community conveniently, consistently and safely” (Metro Transit, 2017). Similarly, including the word “efficiently” seems to imply some ridership goals. The mission statement for Metro Transit seems to less strongly imply coverage goals, but to “link people, jobs and community” seems to indicate they have some goals of serving the community rather than focusing solely on maximizing ridership or return on investment.

A Coverage Goal says that the agency must serve everyone in its service area

In *Human Transit: How Clearer Thinking about Public Transit Can Enrich Our Communities and Our Lives*, Walker (2011) describes the challenges that arise from attempting to deploy both strategies at once.

When we state each goal separately, both are almost universally popular. Many people assume that their transit agencies are already pursuing both goals at once. For example, transit is often criticized for carrying too few riders with its resources. This criticism assumes that the transit agency is trying to carry as many riders as possible as its single overriding goal, which is almost never true. Often a transit agency will adopt both goals in some form but will never resolve the conflict between them. With this move, they hurl their staff in opposite directions at once. In the worst cases, the contradictory goals can make it impossible for a competent staff to do their jobs, which in turn can cause the loss of the best employees (Walker, 2011, p. 119).

To rectify the two seemingly contradictory goals, Walker (2011) goes on to describe a service allocation policy framework (Walker, 2011). A service allocation policy implements “a percentage split of resources between the different goals” (Walker, 2011, p. 132). The benefits of such a partition of transit agency budgets is described by Walker (Walker, 2011).

With that direction, the transit planners are finally given a coherent assignment. They can design services to meet those goals, document which services are which, and monitor the results. For example, services justified by the Ridership Goal would be assessed based on their ridership, whereas services justified by the Coverage Goal would be assessed on the percentage of the population that they cover and the efficiency with which they do that (Walker, 2011, p. 132)

In practice, one strategy employed by Walker (acting as an independent consultant) is to develop alternative scenarios that allocate varying percentages to each strategy and then make policy decisions based on the resulting outcomes (Walker, 2011).

One such example of this policy is the Washoe County Regional Transportation Plan. In the goals, objectives and policies chapter of their regional transportation plan, the Washoe County Regional Transportation Commission (RTC) outlines their public transportation policies. Under the provision of service, they indicate that “Approximately 80% of RTC RIDE service will be allocated to maximize productivity and 20% for coverage to provide service in less dense areas” (Washoe County Regional Transportation Commission, 2008, pp. 2-7). In the public transportation section, they elaborate on some of the specifics. Their ridership goals are defined in terms of farebox recovery. Their identified goals are “35% or more” farebox recovery for their RTC RIDE system (Washoe County Regional Transportation Commission, 2008, pp. 2-9). They also clearly define their coverage goals. One of their defined coverage goals is that “Service should be designed to provide service within ¼ mile of all residents and closer, where possible, to major destinations” (Washoe County Regional Transportation Commission, 2008, pp. 4-22). As a result, 80% of their budget is allocated to providing high ridership service that adheres to a 35% farebox recovery, and 20% of their budget is allocated to providing coverage service that states they will provide transit service within ¼ mile to everyone in the region. Both goals are clearly partitioned, defined and judged based on their respective metrics. This ensures that the transportation agency is incentivized to pursue efficiency while at the same time providing a



clearly defined base level of service for the entire community. It also ensures that the base level of coverage service provided to the community is commensurate to the budget allocated to provide the coverage service.

MnDOT has ridership metrics and coverage metrics within its existing policy framework. The ridership metric is that Greater Minnesota transit provider systems must provide at least 3 rides for every hour of service offered. This metric applies to the entire system. The transit agency may offer transit in some areas that do not meet the defined ridership metric so long as they have sufficient ridership in other areas that balances the overall ridership goal of the system. MnDOT also has coverage goals, illustrated in Table 1. The Span of Service Guidelines define coverage as the hours that service is available. This is a more relevant coverage policy for Greater Minnesota than a distance guideline since many transit systems in Greater Minnesota are demand-response systems, and the only transit service offered in Region 6W.

**MnDOT has ridership metrics and coverage metrics within its existing policy framework**

Goal Type	Service Population	Peer Group	Weekday	Saturday	Sunday
Baseline	Cities >50,000	Urban	20 hours	12 hours	9 hours
Baseline	Cities 49,999-7,000	Small Urban	12 hours	9 hours	9 hours
Baseline	Cities 6,999-2,500	Small Urban	9 hours	9 hours	0 hours
Baseline	County Seat Towns <2,500	Rural	8 hours (3 days per week)	0 hours	0 hours
Guidelines	Communities <2,500	Rural	8 hours (3 days per week)	0 hours	0 hours

Source: Greater Minnesota Transit Investment Plan

*Table 1 MnDOT Greater Minnesota Transit Span of Service Standards*

Rather than partition the transit system budgets so the two goals can be simultaneously and separately pursued, the ridership metric is prioritized. The Span of Service Guidelines can be waived if the transit system can show that the ridership metric will not be met by offering service at the days and times indicated by the guidelines. The resulting effect is a system that operates with ridership as its ultimate purpose. Important to note is that the 2014 farebox recovery for demand-response public transit systems in Greater Minnesota was 11.4% compared to the 31.4% 2008 farebox recovery for Metro Transit in the Twin Cities Metropolitan Area (Farebox recovery ratio, 2017; MnDOT, Greater Minnesota Transit Investment Plan, 2016). Greater Minnesota, with approximately one third of the expected farebox recovery potential of the Minneapolis-St. Paul Metro Area, is managed as a ridership system. It would seem that the two areas of the state could potentially lend themselves to a natural budget partition since the capacity for farebox recovery in the Twin Cities Metropolitan Area is relatively high when compared to Greater Minnesota, whose capacity for farebox recovery is relatively low.

**Farebox recovery for demand-response public transit systems in Greater Minnesota was 11.4% compared to 31.4% in the Twin Cities Metropolitan Area**

One way that Minnesota could pursue both ridership and coverage goals would be to view all Metro Transit public transit services as ridership services and deploy their services

in the Twin Cities Metro Area to maximize ridership. MnDOT could then deploy their services in Greater Minnesota as coverage services and offer services according to a span of service metric. A budget split could be agreed upon that would allow for farebox recovery palatable to the Minnesota taxpayers and service availability acceptable to the community of Greater Minnesota. This would maximize the return on investment of transit funding in the area with the most ridership potential and ensure that service is offered in Greater Minnesota that meets the needs of Greater Minnesota communities. A drawback of this approach would be that coverage service would not be provided in the Twin Cities Metro Area and the potential ridership service may not be fully realized in Greater Minnesota. Individual agencies would not be able to partition their budgets- agencies would be either a ridership or a coverage service.

**Minnesota could pursue both ridership and coverage goals by allowing individual agencies to partition their budgets into both ridership and coverage services**

Another way that Minnesota could pursue both ridership and coverage goals would be to allow individual transit agencies to partition their budgets into both ridership and coverage services. This would give more local control to the transit providers to offer ridership and coverage service without internal conflict and also allow for individual partitions to be determined. The many regions of Greater Minnesota have different needs and different budget partitions could be selected in accordance with the need. Given that every transit system in Minnesota likely has areas that would be best suited for

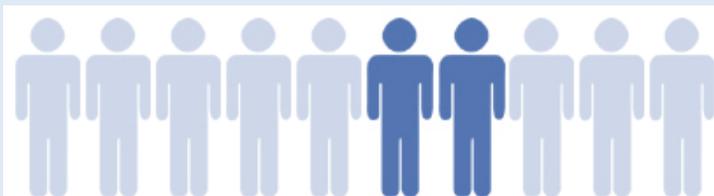
ridership service and

some areas that would be best suited for coverage service, it would allow each transit agency to deploy both. This would allow them to provide some base level of service to their entire territory and also ensure they have specific incentives and metrics designed to maximize their efficiency. Perhaps most significantly, this would make it possible for the existing transit systems to provide 100% public transit coverage to the State of Minnesota at some clearly defined base coverage level.

**This would make it possible for the existing transit systems to provide 100% public transit coverage to the State of Minnesota at some clearly defined base coverage level**

A very simplistic example of this system for Region 6W could be imagined using the 80/20 split similar to the Washoe County Regional Transportation Plan. A public transit agency in Region 6W could employ ten drivers in ten similar vehicles. Eight of the drivers could be deployed for in-town service where the highest ridership is captured. The in-town service would be limited to the areas of highest ridership and they would drive the ridership of the system up as high as they could. The remaining two drivers would be strictly regional drivers. The regional drivers would be on-call for regional rides during the same hours the

other eight drivers are operating. These two regional drivers would only offer regional rides that the in-town drivers could not and they would drive up the availability of transit in the region as high as they could. The eight in-town drivers



could be measured by the farebox recovery of their services and the two regional drivers could be measured by the number of regional rides offered (or turned down) within the specified timeframe.

In reality, there are a number of ways to implement this system. The regional drivers could drive more cost-efficient vehicles to allow the transit agency to offer regional rides outside the hours of the in-town service and remain within the allocated budget. New employees with less seniority could also be utilized as regional drivers as their wages are typically lower long-time employees of the agency. Volunteer drivers could also bill to this portion of the budget as the cost associated with volunteer drivers is lower than employed drivers and they frequently have ridership numbers significantly lower than the system average. Because the partition of the budget will determine the quality of coverage service, the coverage service will not be as convenient as the ridership service. This is because the goal of coverage service is not convenience.

The goal of coverage service is to provide some basic level of transit where transit is needed but does not meet the ridership requirements of the service.

The goal would be to achieve a split where zero regional rides are turned down and the rest of the operating budget is deployed maximizing the farebox recovery of the system. Pragmatically, the more likely outcome would be finding a mixture where both the regional riders and the in-town drivers spend the least amount of time not driving passengers. The split between the two budgets could be continually modified in accordance with the number of regional rides being turned down and the resulting farebox recovery of the ridership services. This would allow the service to simultaneously offer ridership and coverage service and avoid the internal conflict resulting from pursuing contradictory targets. This would also provide Greater Minnesota transit systems an a supplement to volunteer-based regional rides at a time when volunteers are becoming increasingly difficult to recruit and retain.

In conclusion, partitioning a Greater Minnesota transit system budget to independently pursue ridership and coverage goals could potentially reduce some of the strain imposed by the increasing difficulty of recruiting and retaining volunteer drivers while alleviating the conflicts generated by pursuing cross-purpose goals with a single budget. MnDOT currently has the existing policy metrics in place to implement both ridership and coverage goals so partitioning the budgets of transit systems at the discretion of the system and MnDOT would allow for this fundamental change in transit service.

**The goal of coverage service is to provide some basic level of transit where transit is needed but does not meet the ridership requirements**

**The overall goal would be to achieve a split where zero regional rides are turned down and the system is maximizing the farebox recovery**

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