

Chapter 7. Transfort Service Design Policy

Transfort provides a range of services with a diversity of purposes. In general, routes that are direct, frequent, reliable, and serve high-density areas are achieving the highest ridership, the lowest cost per rider, and the greatest trip reduction benefits. These routes are typically serving the CSU population, a significant Transfort ridership group (36 percent of fixed route ridership in 1999). The realignment of the Transfort system in 1991 to better serve this population led to a system that focuses on providing better service in the dense, CSU-oriented corridors. Nevertheless, non-CSU ridership groups represent the majority of Transfort's users (64%). While several of the routes that serve CSU students well are also serving the larger Fort Collins community, many of the non-CSU riders are using routes that are circuitous and long, or infrequent. These less productive routes often connect lower density residential areas with nearby key destinations, such as schools, medical services and work sites.

Transfort's Fox Trot between Fort Collins and Loveland provides the only noteworthy regional public transit connection among the North Front Range communities. The agreements in funding and coordination (Larimer County and the Cities of Loveland and Fort Collins) can serve as a model for addressing other intercity transit corridors. Fox Trot ridership has grown as the service becomes a convenient express operation. However, on-time performance problems and difficult transfers can easily deflate ridership on the service. In corridors where a reliable regional transit connection can be provided, the public responds.

What is Transit For?

As noted in Chapter 5, transit planning faces an unavoidable tradeoff between two competing goals: **Coverage** and **Productivity**.

The Social Service Objective and the Coverage Strategy

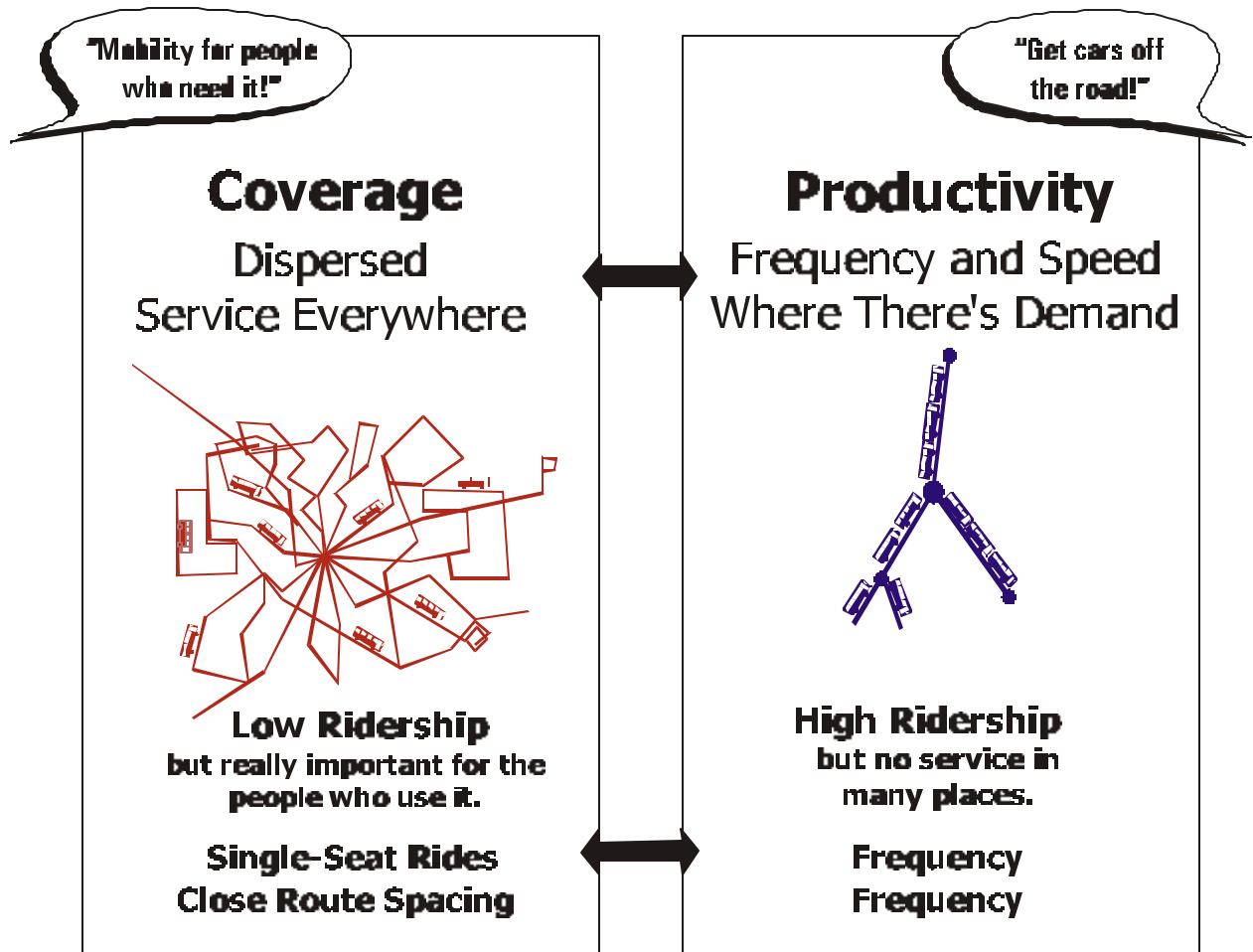
Some people believe that transit is a social service which, like other social service agencies goes wherever people need it. Since there are isolated people with mobility needs scattered everywhere, this belief tends to produce systems that scatter their service very thin, providing a little bit of service everywhere. Many agencies are designed solely on this principle, providing Dial-A-Ride service that goes anywhere in the area or hourly one-way fixed routes that cover the city but involve circuitous rides. The downside is that if you run a little service everywhere, you cannot afford to run good service anywhere, and you can't generate high ridership. But from this standpoint, which we call the Coverage Strategy, ridership is simply not transit's highest goal. The highest goal is to get to people who are "stranded", wherever they may be.

The Ridership Objective and the Productivity Strategy

Some people believe that transit is an element of the transportation infrastructure, and that its purpose is to move as many people as possible as cost-effectively as possible. Since a majority of Transfort riders would generate vehicle trips (either as drivers or chauffeured passengers) if Transfort service were not available, high ridership tends to translate into higher impacts of vehicle trip reduction. It also brings in higher fares. The Productivity Strategy, then says: "Deploy service for the maximum possible ridership." This strategy does not spread service out equally, but concentrates it where demand is greatest: high density corridors and centers where the automobile is at a disadvantage.

Figure 7-1 illustrates these tradeoffs.

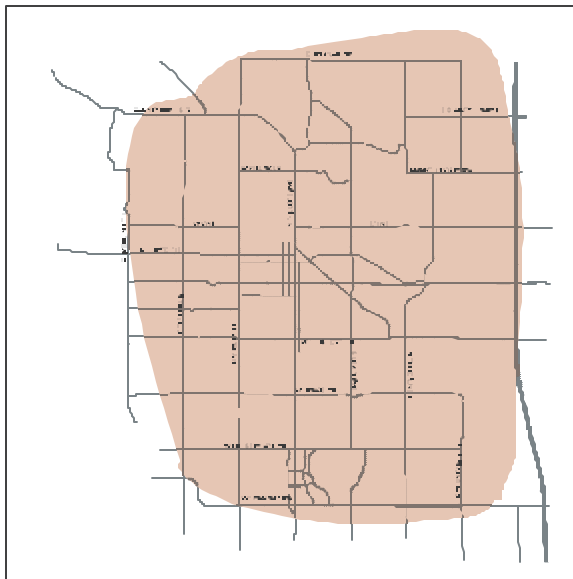
Figure 7-1 Coverage Versus Productivity Strategy



Under a purely coverage-oriented service, Transfort would provide service throughout the entire Transfort service area. Service would be relatively infrequent everywhere, but all areas of Fort Collins would have similar levels of transit access.

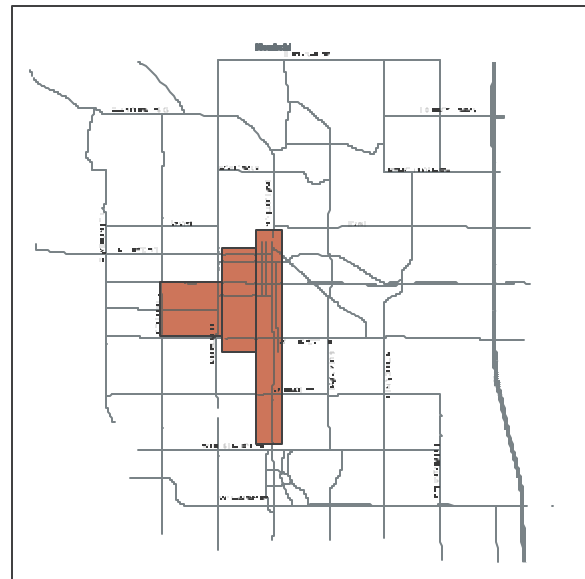
Transfort's most productive and cost-effective services are all confined to the vicinity west of CSU, downtown and the College-Mason Corridor. If Transfort were purely focused on productivity, it would narrow its focus to these most productive areas, and provide little or no service to other areas of Fort Collins. Figure 7-2 illustrates what these two extremes might mean for Fort Collins.

**Figure 7-2 Coverage Versus Productivity:
the Extremes in Fort Collins**



100% Coverage

**Large area with
infrequent service**

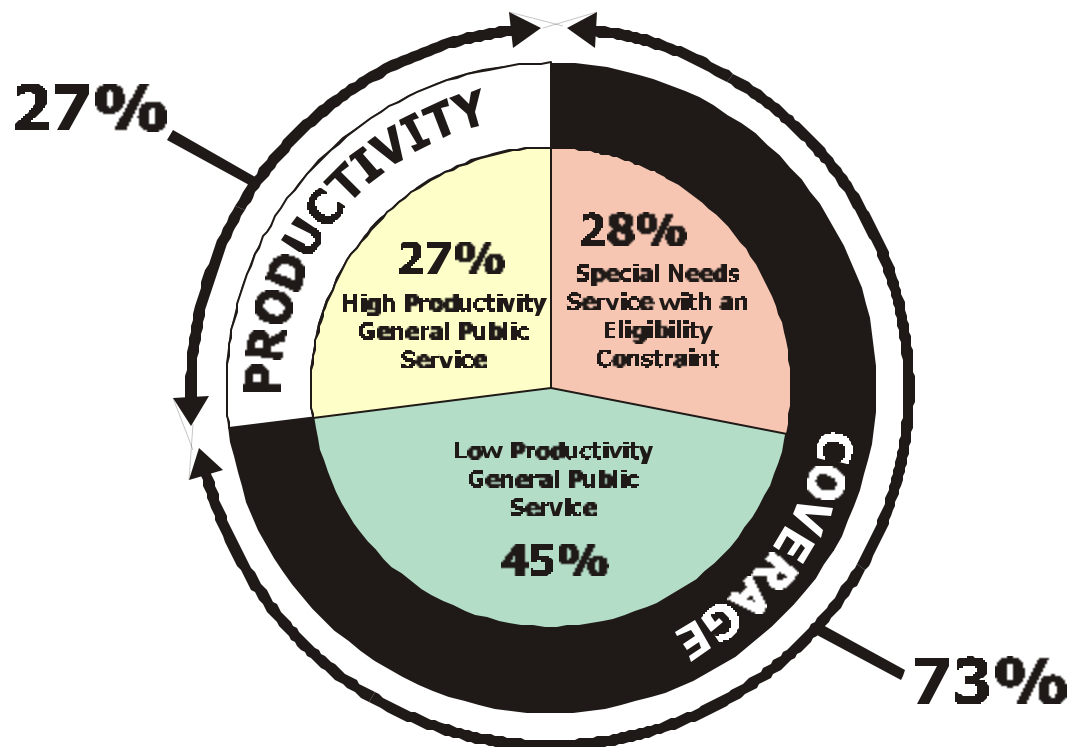


100% Productivity

**Frequent service in
a limited area**

A review of baseline services, based on operating budget allocations estimated by the consultant, suggests that just over one quarter of Transfort's services – fixed route and dial-a-ride, combined – are productivity-oriented (about 27%). The remaining services are oriented toward coverage, with a large portion dedicated to dial-a-ride services. This allocation of services is illustrated in Figure 7-3.

Figure 7-3 Current Allocation of Coverage-Focused and Productivity-Focused Services in Fort Collins



Based on input from City Council, stakeholder interviews and survey results, there is interest in a system that would maximize ridership per unit of service provided. The expectation is that transit in Fort Collins can achieve maximum impact on Vehicle Trip Reduction, as well as minimize the subsidy per passenger by moving toward a more productive system.

Of course there are social-service imperatives of transit, as well as the expectations of Fort Collins residents that they will all get some service in return for their financial contributions. Although certain coverage-oriented routes may result in low ridership, the availability of service is very important to the people who depend upon it and can be an important political consideration.

With the emphasis on productivity and increasing ridership, several other factors were considered as part of the service design process. These factors are essentially service design tools that facilitate the “productivity” orientation:

- A less complex route system
- Service reliability and on-time performance
- Improved service frequencies in key ridership areas
- A reduced service area.

Complexity

For Transfort, complexity of the fixed route system is a two-fold issue. The first question is, “How complicated are the routes?” Most of Transfort’s high-ridership routes are straight and easy to understand. By contrast, the low-ridership routes tend to have circuitous elements, typically in the form of a one-way loop. Route 14 is one example of a complicated one-way loop that can make trips for some riders very convenient in one direction but very inconvenient in the reverse direction. Route 4, the only connection between downtown and the CSU Transit Center, provides a straight link in only one direction.

A less confusing route, and one that provides direct service to connect many major destinations, is likely to be the more successful one. Fort Collins’ adopted City Plan calls for clear, straight transit corridors, including Mason Street. Some Transfort routes can potentially be redesigned for greater clarity and simplicity, which would make them easier to use.

The second question has two parts: “How well is the public informed about the system? Are complexities clearly explained?” A complex route design, unto itself, does not necessarily spell doom for a transit system. How well the system is explained to the public can significantly impact ridership. Many systems put service on the road without providing maps, signage or printed schedules. Transfort, however, has clear bus signs, well-marked vehicles, and prints and distributes a comprehensive service information booklet. The format of maps and schedules has remained mostly unchanged for many years, and a significant update may be appropriate. Survey respondents and stakeholders have remarked that while printed information is comprehensive, it is difficult to understand. Maps are not to scale and may not clearly represent confusing routings.

On-Time Performance

On-time performance must be adequate to support the timed-transfer system on which Transfort depends. Passengers need to trust major routes to make connections as scheduled.

Transfort has been successful at promoting an image of on-time reliability. Customer-friendly drivers often carefully coordinate connections on delayed runs to allow a passenger to complete a trip in a timely manner. The combination of unpredictable traffic congestion in Fort Collins, street design/signalization shortcomings, routes that operate on tight schedules, and service design inefficiencies (e.g., the lack of vehicle interlining and through-routing) make on-time operation especially stressful for dispatchers and operators. With more than 50% of sampled runs on several routes operating off-schedule at key timepoints, route and schedule design must better facilitate on-time operation and transfers between lines.

Frequency

The 1998 Fort Collins resident survey about Transfort identified frequency as an overriding concern among transit users. When describing concerns about Transfort, frequency was also noted by the majority of stakeholders, including Council members, agency representatives and business owners.

Frequency determines whether a local service is likely to be useful when you want to go, or whether you must plan your trip around the bus schedule. High-frequency service in high-density corridors is typically the recipe for the highest productivity and lowest subsidy per passenger. Significantly, Transfort's Route 11 – the only route that operates on 20-minute headways – is the system's top performer. Routes that operate on 30-minute headways perform much better than hourly services. In many communities, experience shows that a transit-dependent rider may be willing to walk a few extra blocks for more frequent service.

The issue of frequency relates closely to total operating budget, vehicle allocation, route spacing and most importantly, service policy. A community that focuses on improving transit frequency in certain corridors typically must make some service sacrifices in other areas, including service reductions. The effects of frequency enhancements on the overall system are identified in the next chapter.

Service Area

Based on the analysis presented in this report, overall transit potential is generally greatest in the CSU area and west of CSU, the College-Mason corridor between downtown and Foothill Fashion Mall (as well as the areas east and west of the mall along Horsetooth), Central Fort Collins, east to Jefferson and Riverside. In 2020, Mountain Vista may generate additional transit potential. In Fort Collins, transit attractiveness also depends on particular population groups, including CSU students, the city's youth population and senior citizens.

While youth and their respective schools are distributed throughout Fort Collins, the senior population is concentrated between Old Town and the CSU campus and around the area of Prospect and Lemay. This concentration of seniors suggests a greater level of ridership on Routes 5, 9 and 10, but only Route 5 has a significant senior ridership group (12%). Dial-A-Ride is meeting much of the transit travel demand in this area and throughout Fort Collins.

Lower median household income is concentrated around the CSU campus and north and east of Old Town, areas that also show higher transit potential ridership based on employment and household density.

Conclusion

The mix of fixed route services is only one key part of the Transfort picture. With its large dial-a-ride operation, Transfort provides a level of paratransit service that far exceeds ADA requirements for complementary transit service. In addition to persons certified with disabilities, all individuals age 60 and over are eligible for this door-to-door service. The peer review underscores the size of the dial-a-ride: other systems have a much smaller dial-a-ride operation and utilize it – with the exception of Chico, CA – only as an ADA complement to fixed route services.

There is a perception among residents and political leaders that the fixed route is for young people and CSU students. Many senior citizens note that the fixed route system is inconvenient and too “university-oriented.” A service alignment that recognizes the importance of CSU, but eliminates complex routing and transfer requirements through CSU will better reflect the travel demands of the entire Fort Collins community.