



GMT NEXT GEN TRANSIT PLAN FARE ANALYSIS FINDINGS

Advisory Committee
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EXISTING FARE STRUCTURE

EXISTING GMT FARE STRUCTURE

Very inconsistent

| County | Fare | Comment |
|--|--------------------------------------|--|
| Chittenden County Year-Round Local Commuter | Free to \$1.25 \$2 to \$4 | Tilley Drive Shuttle and the CSS are free; all others \$1.25 \$2 on regular commuter routes and intra-county trips on LINK routes |
| Washington County Year-Round Local Seasonal Commuter | Free to \$1.00 Free \$1 to \$4 | Most are free; four are \$1.00 Mad River Valley routes \$1 within the same town |
| Lamoille County Year-Round Local Seasonal Commuter | \$1.00 Free \$1 to \$2 | Morrisville routes Stowe Mountain Road Shuttle \$1 within the same town |
| FGI Counties Year-Round Local Commuter | Free to 50¢ 50¢ to \$4 | \$0.50 St.Albans Downtown Shuttle, Shopper is free Depending on route and distance traveled |

Single ride discount fares generally 50% of regular fare
10-ride tickets generally 9 times the price of single ride fares

EXISTING GMT FARE STRUCTURE

Most defining feature is lack of consistency

Urban local fares range from free to \$1.25

Rural local fares range from free to \$1.00

Most free, one is 50¢, four are \$1.00

Commuter fares range from 50¢ to \$4

Differences based on where you live, the type of commuter service, and distance traveled

Fares essentially set by route rather than by route type

No clear reason why some riders pay more and some riders pay less

Barre to Hospital Hill (via BHH DR) = free

Montpelier to Hospital Hill = \$1.00

OTHER VERMONT TRANSIT FARE STRUCTURES

GMT fares in the middle range of Vermont Transit Providers

| Provider | Local Service | Commuter |
|---|----------------------|----------------------|
| Advance Transit | Free | Free |
| Rural Community Transportation (RCT) | Free | Free |
| Southeast Vermont Transit | Free - \$1.00 | \$1.00 - \$2.00 |
| GMT | Free - \$1.25 | 50¢ to \$4.00 |
| Addison County Transit Resources (ACTR) | Free - \$2.00 | \$4.00 |
| Marble Valley Regional Transit (The Ride) | 50¢ - \$2.00 | \$2.00 |
| Stagecoach Transportation Services | Free - \$2.00 | Free - \$3.50 |

FARE CHANGE METHODOLOGY

FARE ANALYSIS METHODOLOGY

Ridership impacts based on observed impacts at other transit systems

Used elasticities for changes with before and after fares that are greater than free

Used percentage increases and decreases in cases where fares are either now free or would be free

Fare change elasticities:

A measure that relates percentage changes in fares to percentage changes in ridership

For example, and elasticity of -0.20 means that a 1% increase in fares would produce a 0.2% decrease in ridership

FARE ANALYSIS METHODOLOGY

Percent increases and decreases based on changes in adult cash fare

Percent changes in discount fares are slightly different but not meaningful

Revenue estimates based on average fares

To include impacts of discount fares

For example, if one passenger pays a full fare of \$1 and another pays a discount fare of 50¢, average fare is 75¢

Estimates of changes in total revenue based on

Changes in average fares

Increase or decrease in ridership

All changes determined on a route-by-route basis

FARE MODEL ELASTICITIES

Developed a range of estimates:

Model A: Uses a single elasticity that reflects overall impacts in service areas of less than 1 million residents

Model B: Uses elasticities for different service types but that do not consider service area size

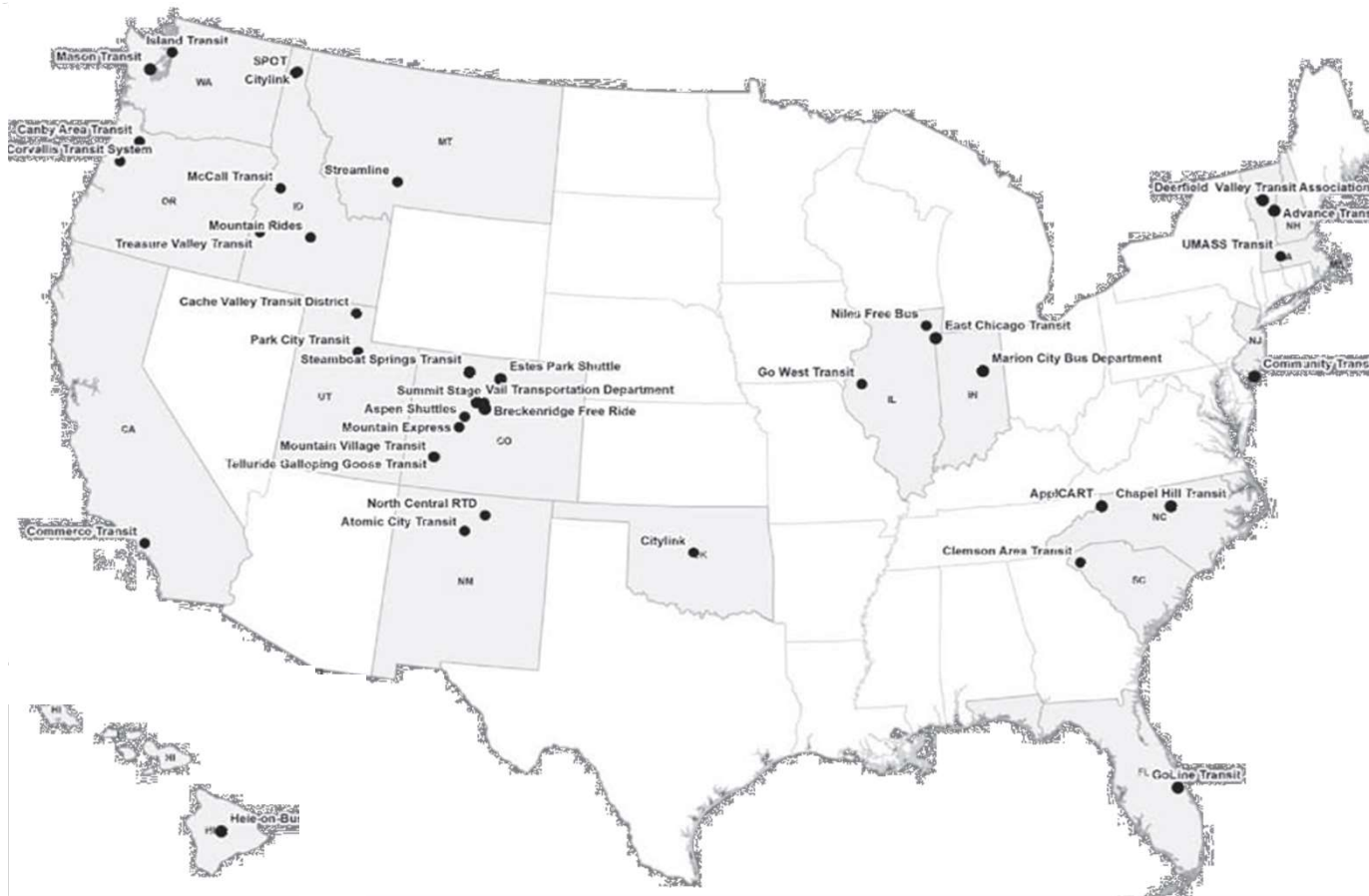
[Note: Elasticities by service types for small urban areas not available]

| Provider | Model A | Model B |
|-------------------------|---------|---------|
| Urban Local | -0.43 | -0.40 |
| Rural Local | -0.43 | -0.50 |
| Shuttle | -0.43 | -0.48 |
| Commuter | -0.27 | -0.27 |
| Express Commuter (LINK) | -0.30 | -0.30 |

Source: (www.apta.com/resources/reportsandpublications/Documents/Pham_Linsalata_Fare_Elasticity_1991.pdf)

FARE FREE CONSIDERATIONS

FARE-FREE CONSIDERATIONS: WHERE OFFERED



FARE FREE CONSIDERATIONS: MARKET TYPES

Existing fare free systems serve small/low ridership markets and/or specialty markets

| Type of Market | Does GMT Serve this Type of Market? | Does GMT Offer Fare Free Service? |
|---|--|-----------------------------------|
| Small Urban Areas with Modest Ridership | No – Burlington area ridership more than modest | No |
| Large Rural Areas with Low Ridership | Yes | No |
| Resort Communities | Yes | Yes |
| University-Dominated Communities | No – Burlington has multiple universities, but student ridership does not dominate | NA |

WHAT ARE THE LARGEST FARE-FREE SYSTEMS?

All are small

GMT would be largest fare free system in US

| Transit System | Location | Service Area Population | Number of Routes | Annual Ridership |
|--|-------------------|-------------------------|------------------|--------------------|
| GoLine | Indian County, FL | 174,000 | 14 | 850,000 |
| Hele-on Bus (free until 2011; now \$2.00) | Hawaii County, HI | 174,000 | 15 | 1.3 million |
| North Central RTD (except two "premium" routes) | Taos, NM | 218,000 | 27 | 112,000 |
| Green Mountain Transit | VT | 296,000 | 50 | 2.5 million |

HOW MUCH HAS RIDERSHIP INCREASED?

Small urban and rural systems:

32% (Lebanon, NH) to
205% (Hawaii County)

University towns:

21% (Boone, NC) to
43% (Chapel Hill, NC & Corvallis, OR)

Free fare experiments:

13% (SLC) to 86% (Topeka)

Typical:

20% to 60% increase



WHAT ARE THE COSTS?

Loss of fare revenue

Reductions in costs

Cost of collecting fares

➔ Most common reason for not charging fares is that low ridership makes fare collection not cost-effective

Increases in costs

Cost to provide more service on routes that are now at or near capacity

Costs to purchase additional buses to provide more service

(These costs would be minimal for GMT)



FARE STRUCTURE ALTERNATIVES

FARE STRUCTURE ALTERNATIVES

Alternatives developed by Advisory Committee:

| | Urban Local | Rural Local | Seasonal | LINK | Other Commuter |
|---------------|----------------|----------------|----------|-----------------|----------------|
| Existing | Free to \$1.25 | Free to \$1.00 | Free | \$2.00 - \$4.00 | 50¢ to \$2.00 |
| Alternative A | \$1.00 | \$1.00 | Free | \$3.00 | \$2.00 |
| Alternative B | \$1.25 | Free | Free | No change | \$2.00 |
| Alternative C | \$1.50 | \$1.00 | Free | No change | \$2.00 |
| Alternative D | 50¢ | 50¢ | Free | No change | \$1.00 |
| Alternative E | Free | Free | Free | Free | Free |

RIDERSHIP AND REVENUE IMPACTS

ALTERNATIVE A: RIDERSHIP & REVENUE IMPACTS

Major fare changes: Reduce Urban Local to \$1 and LINK fares to \$3

Ridership impact: +3 to 5%

Annual revenue impact: -\$255,000

| | \$1.00 Urban Local | \$1.00 Rural Local Free Tourism | \$2.00 Commuter \$3.00 LINK | Total |
|--------------------------|-----------------------|------------------------------------|--------------------------------|-----------------|
| Chittenden County | | | | |
| Ridership Change | +4 to 7% | -- | +4 to 6% | +4 to 7% |
| Revenue Change | -5 to -8% | -- | -9 to -10% | -5 to -8% |
| Washington County | | | | |
| Ridership Change | -- | -11 to -13% | +8 to 11% | -2 to -3% |
| Revenue Change | -- | +75 to 81% | -23 to -26% | -15 to -17% |
| Lamoille County | | | | |
| Ridership Change | -- | -2% | 0% | -2% |
| Revenue Change | -- | 96% | 0% | -18% |
| FGI Counties | | | | |
| Ridership Change | -- | -19 to -26% | -4 to -5% | -9 to -12% |
| Revenue Change | -- | +49 to 63% | -31 to -81% | -29 to -71% |
| Total | | | | |
| Ridership Change | +4 to 7% | -9 to -11% | +4.7 to 7% | +3 to 5% |
| Revenue Change | -5 to -8% | +72 to 79% | -24% to -29% | -11% |

ALTERNATIVE B: RIDERSHIP AND REVENUE IMPACTS

Major fare changes: Fare-free on rural and seasonal routes

Ridership impact: -1.1 to -1.2%;

Annual revenue impact: \$9,000 to \$16,000

| | \$1.25 Urban Local | Free Rural Local Free Tourism | \$2.00 Commuter \$4.00 LINK | Total |
|--------------------------|-----------------------|----------------------------------|--------------------------------|----------------------|
| Chittenden County | | | | |
| Ridership Change | -2% | -- | 0% | -2% |
| Revenue Change | 7% | -- | 0% | +6% |
| Washington County | | | | |
| Ridership Change | -- | +5 to 6% | 0% | +3% |
| Revenue Change | -- | -28 to -34% | -12% | -13 to -14% |
| Lamoille County | | | | |
| Ridership Change | -- | +2% | 0% | +2% |
| Revenue Change | -- | -100% | 0% | -19% |
| FGI Counties | | | | |
| Ridership Change | -- | +20% | -7 to -10% | +2 to 0% |
| Revenue Change | -- | -100% | -16 to -20% | -15 to -19% |
| Total | | | | |
| Ridership Change | -2% | +5 to 6% | -1.2 to -1.6% | -1.1 to -1.2% |
| Revenue Change | 7% | -42 to -47% | -10 to -11% | +0.4 to 0.7% |

ALTERNATIVE C: RIDERSHIP & REVENUE IMPACTS

Major fare changes: Urban Local fare to \$1.50 and all Rural routes at \$1.00

Ridership impact: -7 to -9%;

Annual revenue impact: \$235,000 to \$280,000

| | \$1.50 Urban Local | \$1.00 Rural Local Free Tourism | \$2.00 Commuter \$4.00 LINK | Total |
|--------------------------|-----------------------|------------------------------------|--------------------------------|-------------------|
| Chittenden County | | | | |
| Ridership Change | -7 to -9% | -- | 0% | -7 to -9% |
| Revenue Change | 18 to 21% | -- | 0% | +17 to 19% |
| Washington County | | | | |
| Ridership Change | -- | -11 to -13% | 0% | -6 to -7% |
| Revenue Change | -- | +75 to 84% | -12% | -4 to -5% |
| Lamoille County | | | | |
| Ridership Change | -- | -2% | 0% | -2% |
| Revenue Change | -- | +96% | 0% | +18% |
| FGI Counties | | | | |
| Ridership Change | -- | -19 to -26% | -7 to -10% | -11 to -15% |
| Revenue Change | -- | +49 to 63% | -19 to -20% | -18 to -19% |
| Total | | | | |
| Ridership Change | -7 to -9% | -10 to -11% | -1.2 to -1.6% | -7 to -9% |
| Revenue Change | 18 to 21% | +72 to 79% | -11% | +10 to 12% |

ALTERNATIVE D: RIDERSHIP & REVENUE IMPACTS

Major fare changes: \$0.50 Urban Local and Rural route fare, and \$1 Commuter fare

Ridership impact: +22 to 34%

Annual revenue impact: -\$619,000 to -\$733,000

| | \$0.50 Urban Local | \$0.50 Rural Local Free Tourism | \$1.00 Commuter \$4.00 LINK | Total |
|--------------------------|-----------------------|------------------------------------|--------------------------------|--------------------|
| Chittenden County | | | | |
| Ridership Change | +27 to 42% | -- | +13 to 20% | +27 to 42% |
| Revenue Change | -34 to -41% | -- | -14 to -16% | -32 to -39% |
| Washington County | | | | |
| Ridership Change | -- | -2 to 0% | +4 to 6% | 0 to 3% |
| Revenue Change | -- | +32 to 36% | -14% | -10% |
| Lamoille County | | | | |
| Ridership Change | -- | -1 to 0% | +23 to 35% | +3 to 5% |
| Revenue Change | -- | +57 to 63% | -33 to -38% | -15 to -21% |
| FGI Counties | | | | |
| Ridership Change | -- | 0% | +6 to 9% | +4 to 6% |
| Revenue Change | -- | 0% | -16 to -19% | -15 to -18% |
| Total | | | | |
| Ridership Change | +27 to 42% | -2 to 0% | +7 to 10% | +22 to 34% |
| Revenue Change | -34 to -41% | +29 to 32% | -23 to -25% | -26 to -31% |

ALTERNATIVE E: FARE FREE RIDERSHIP INCREASES

88% of ridership increases would be in Chittenden County

| | Free Urban Local | Free Rural Local | Free Link/Commuter | Total |
|--------------------------|------------------|------------------|--------------------|----------|
| Chittenden County | | | | |
| Increase | +837,300 | -- | +19,737 | +856,323 |
| % Increase | +40% | -- | +49% | +40% |
| Washington County | | | | |
| Increase | -- | +18,219 | +70,448 | +88,667 |
| % Increase | -- | +12% | +37% | +25% |
| Lamoille County | | | | |
| Current | -- | +1,938 | +4,896 | +6,834 |
| Projected | -- | +2% | +40% | +8% |
| FGI Counties | | | | |
| Current | -- | +4,129 | +20,604 | +24,733 |
| Projected | -- | +20% | +48% | +39% |
| Total | | | | |
| Current | +837,300 | +24,285 | +115,685 | +977,271 |
| Projected | +40% | +10% | +40% | +37% |

Note: Figures represent annual ridership; assumes 60% increase on routes with \$4 fares, 40% increase on routes with fares of \$1 to \$2, and 20% on routes with 50¢ fare.

ALTERNATIVE E: RIDERSHIP & REVENUE IMPACTS

Fare changes: Fare-free

Ridership impact: +37%

Annual revenue impact: -\$2,364,00

| | Free Urban Local | Free Rural Local Free Tourism | Free Commuter Free LINK | Total |
|--------------------------|------------------|-------------------------------|-------------------------|--------------|
| Chittenden County | | | | |
| Ridership Change | +40% | -- | +48% | +40% |
| Revenue Change | -100% | -- | -100% | -100% |
| Washington County | | | | |
| Ridership Change | -- | +17% | +36% | +25% |
| Revenue Change | -- | -100% | -100% | -100% |
| Lamoille County | | | | |
| Ridership Change | -- | +2% | +40% | +8% |
| Revenue Change | -- | -100% | -100% | -100% |
| FGI Counties | | | | |
| Ridership Change | -- | +20% | +48% | +39% |
| Revenue Change | -- | -100% | -100% | -100% |
| Total | | | | |
| Ridership Change | +40% | +13% | +40% | +37% |
| Revenue Change | -100% | -100% | -100% | -100% |

SUMMARY

Ridership: Highest increases with Alternative E (fare free)

Revenue: Lowest reduction with Alternative B (free Rural Local)

| | Alternative A (\$1 Urban Local; \$3 LINK) | Alternative B (Rural Local free) | Alternative C (\$1.50 Urban Local; \$1 Rural Local (all)) | Alternative D (50¢ Urban & Rural Local; \$1 Commuter) | Alternative E (Fare-Free) |
|--------------------------|---|-------------------------------------|---|--|------------------------------|
| Chittenden County | | | | | |
| Ridership Change | +4 to 7% | -2% | -7 to -9% | +27 to 42% | +40% |
| Revenue Change | -5 to -8% | +6% | +17 to 19% | -32 to -39% | -100% |
| Washington County | | | | | |
| Ridership Change | -2 to -3% | +3% | -6 to -7% | 0 to 3% | +25% |
| Revenue Change | -15 to -17% | -13 to -14% | -4 to -5% | -10% | -100% |
| Lamoille County | | | | | |
| Ridership Change | -2% | +2% | -2% | +3 to 5% | +8% |
| Revenue Change | -18% | -19% | +18% | -15 to -21% | -100% |
| FGI Counties | | | | | |
| Ridership Change | -9 to -12% | +2 to 0% | -11 to -15% | +4 to 6% | +39% |
| Revenue Change | -29 to -71% | -15 to -19% | -18 to -19% | -15 to -18% | -100% |
| Total | | | | | |
| Ridership Change | +3 to 5% | -1.1 to -1.2% | -7 to -9% | +22 to 34% | +37% |
| Revenue Change | -11% | +0.4 to 0.7% | +10 to 12% | -26 to -31% | -100% |

NEXT STEPS

ADDRESS FARE CHANGE CONSIDERATIONS

What are priorities?

Reduce fares

Improve service

How much fare revenue is needed to provide desired service?

If fares are reduced, can other revenue sources be found?

How important is consistency?

How many exceptions should be made and why?

Should riders in different areas pay different fares?

(Near universal practice is to set fares based on service type and to charge same fares in all areas)

 ***These are all policy questions that have not yet been addressed***