Chapter 8: Fare Policy Alternatives

This chapter analyzes the likely impact of alternative fare policies on ridership and fare box revenues in the Bangor region. A significant part of this task involved development of a computer spreadsheet model for Bangor that has the flexibility to predict responses of different types of bus users to a range of possible fare combinations.

This chapter reports ridership and fare box predictions generated by the fare model. It also examines some of the wider issues and implications of changing bus fares. Fare adjustments can be designed to accomplish a range of different policy goals. The choices that are made will depend to a large extent on the role envisioned for public bus service in the region.

The chapter discusses fare choices in terms of various possible policy objectives. While it suggests preferred alternatives, it recognizes that municipal officials may draw different conclusions. The chapter includes ten sections:

8.1 Description of the Fare Model

A fare model for public transportation in the Bangor region was created for this transit study by Marc Warner of Warner Transportation Consulting. The computer model predicts ridership and revenue impacts for different fare levels and different combinations of fares in the Bangor region. The model can evaluate:

- New rates for existing fares, individually or collectively
- Fare discounts for individual market groups
- New types of fares
- New or revised zone fares

The computer model generates ridership and revenue forecasts by examining the impact of proposed fare structures on highly disaggregated groups of riders. The model anticipates differing responses from different types of bus passengers. For example, a retired person who takes one transit trip a week within the city of Brewer will respond differently to a fare change than a working adult or student who regularly commutes by bus between Bangor and Orono.

The structure of the model is based on the results of a 1996 onboard passenger survey of Bangor area bus riders. The 1996 survey identified a range of rider characteristics and trip patterns. These survey results were factored to match Bangor-area transit ridership for the fiscal year ending in June 2002.

The model tests the effects of new fares on 305 distinct groups of travelers. These groups result from different combinations of:

- Rider type – full fare, seniors, University of Maine students, other college students, youth

- Trip frequency – 5 or more bus trips per week, 3 to 4 bus trips, 1-2 weekly trips, and less than one trip per week

- Origin and destination – by bus route and by fare zone

The model predicts ridership and revenue impacts separately for four different subgroups of bus routes – Bangor, Brewer, Hampden, and Veazie-Orono-Old Town. This follows the current breakdown for allocating costs and revenues among participating transit partners.

It should be noted that the model accounts separately for the large number of monthly passes sold to Bangor area social service agencies for distribution to their clients. Since recipients of these passes pay no fee, they are not sensitive to changes in fares. However, some agencies may change their pass purchases as the price goes up or down. This is important because agency sales account for 73% of revenue collected from the sale of monthly passes, which is 34% of total fare box revenues. Agency pass holders account for an estimated 19% of one-way rides.

By examining impacts at this disaggregated level, the model allows distinct coefficients and elasticities of ridership with respect to fare to be applied to different subgroups. The model can account for changes in the level of bus usage and for shifts among fare types. The model can also test the impact of limiting the eligibility of certain fares.

Elasticities measure how sensitive each group is to a change in transit fares. Elasticities used in this analysis are presented in Figure 8.1. The rates for youth (-.89) are further from zero than are those for elderly (-.21). This means that youth are more sensitive to fares – they are more willing to walk. The model applies the rates in Figure 8.1 as mid-point arc elasticities.

Figure 8.1 also shows the "alternative specific constants" and the monthly cost coefficient that the model uses to estimate the type of fare different user groups will choose from a given range of fare choices (cash, ticket, and monthly pass). The model applies the ticket ASC as a function of the number of current transit trips per week. The values in Figure 8.1 allow for the best match between (1) survey results factored to reflect current linked trips and (2) the past year's report of revenues by each fare type.

Figure 8.1 Fare Model Coefficients

coefficients				fare elasticities	
rtype	pass ASC	tickets ASC	Monthly cost	individuals	agencies
full fare	-1.275	-0.17	-0.05	-0.43	-0.05
senior	-1.275	-0.17	-0.05	-0.21	
U Maine	-1.275	-0.17	-0.05	-0.66	
youth	-0.77	-0.365	-0.15	-0.89	
student	-1.275	-0.17	-0.05	-0.66	
fare drop factor				0.5	

Figure 8.2 identifies 18 different scenarios that were tested using the fare model. The scenarios involve different combinations of cash, ticket, and monthly pass fares, along with variations in transfer fees, fare zones, ticket policies, and discounts for youth, high school, and university students.

The results generated by the fare model are summarized in Figures 8.3 and 8.4. Detailed results are presented in Figure 8.5.

Figure 8.2 Eighteen Alternative Fare Scenarios

Scenario	Cash	Ticket	Pass	VOOT transfers	VOOT zones	Maine Card*	Youth Pass**	Integrated Ticket#	Comments
Base	0.75	3	30	$.50 - $1	3 zones				
1	0.75	3	30	none	3 zones				
2	0.75	3	30	$.50 - $1	none				
3	0.75	3	30	none	none				
4	0.75	3	30	$.50 - $1	3 zones		YES		
5	0.75	3	30	$.50 - $1	3 zones		YES		50% UMaine pass
6	0.75	3	30	$.50 - $1	3 zones	YES			
7	0.85	3.4	34	$.50 - $1	3 zones				
8	1	4	40	$.50 - $1	3 zones				
9	0.85	3	30	$.50 - $1	3 zones				
10	1	3	30	$.50 - $1	3 zones				
11	0.85	3	30	none	none			YES	
12	1	3	30	none	none			YES	
13	1	3	30	none	none	YES		YES	
14	1	3	30	none	none	YES	YES	YES	
15	0.85	3.4	34	none	none	YES	YES	YES	
16	0.75	3	35	$.50 - $1	3 zones				
17	0.75	3	30	$.50	3 zones			YES	Free 1-zone transfers
18	0.85	3	34	none	none	YES	YES	YES	

* University of Maine ID card good for free rides system-wide
** 50% discount on monthly passes for high school students and other children
# Single 5-ride ticket good anywhere in the region

Figure 8.3 Summary of Fare Model Results for Seventeen Scenarios

Annual changes relative to base conditions

Scenario	*Revenue*	*Riders*
1	-3,717	1,663
2	-2,642	874
3	-5,196	2,121
4	-1,669	2,167
5	-2,875	3,243
6	-5,990	9,716
7	25,885	-16,860
8	63,431	-37,287
9	5,494	-3,662
10	10,168	-7,455
11	577	-1,251
12	5,860	-4,700
13	-278	5,176
14	-2,115	7,608
15	13,208	-897
16	20,191	-2,516
17	-3,337	1,514
18	8,311	8,565

Figure 8.4 Column Graph of Summarized Fare Model Results

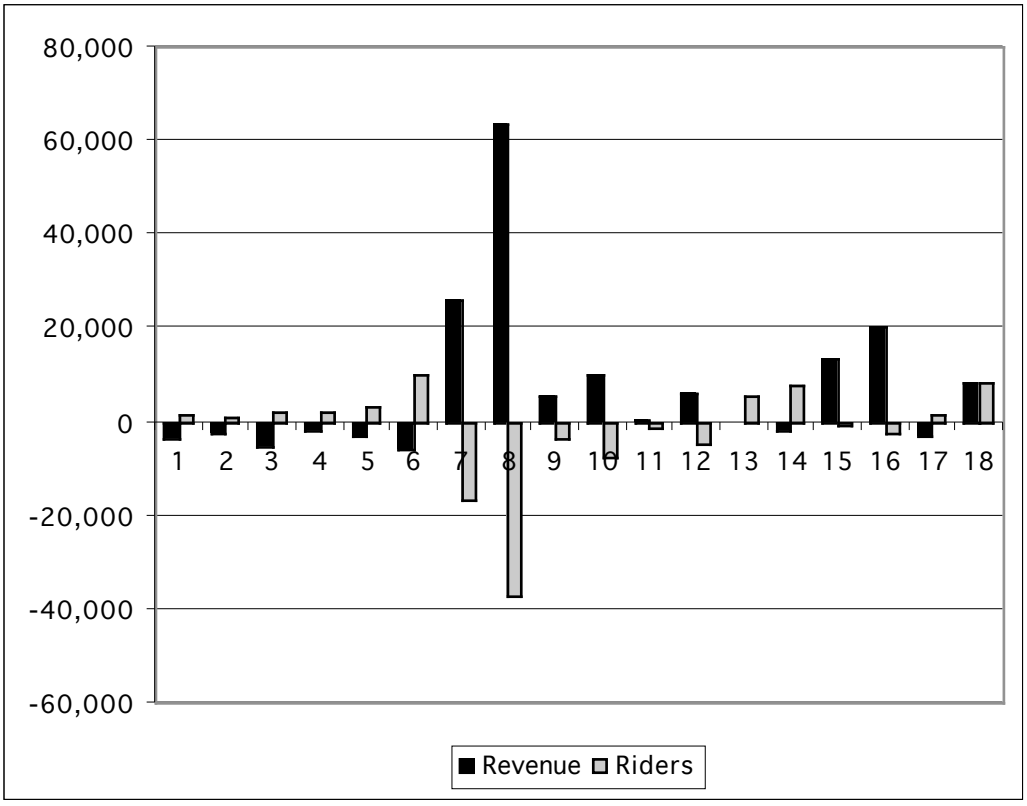

Figure 8.5 Detailed Fare Model Results

□	Change in Revenue						Change in Ridership					
Scenario	Bangor	Brewer	Hampden	VOOT	Total	Percent	Bangor	Brewer	Hampden	VOOT	Total	Percent
1	-1,159	-443	-33	-2,082	-3,717	-1.18	525	198	0	941	1,663	0.43
2	-191	-42	33	-2,442	-2,642	-0.84	178	100	0	596	874	0.23
3	-1,159	-443	-33	-3,561	-5,196	-1.65	525	198	0	1,399	2,121	0.55
4	-1,349	-319	-1	0	-1,669	-0.53	1,578	586	2	0	2,167	0.56
5	-2,043	-324	-507	0	-2,875	-0.91	1,851	589	2	801	3,243	0.84
6	-4,247	-15	-1,728	0	-5,990	-1.90	5,555	25	0	4,136	9,716	2.52
7	19,159	2,408	560	3,759	25,885	8.21	-12,685	-1,456	-311	-2,409	-16,860	-4.37
8	46,909	5,910	1,354	9,258	63,431	20.11	-28,022	-3,228	-689	-5,349	-37,287	-9.67
9	4,222	413	50	809	5,494	1.74	-2,714	-407	-82	-458	-3,662	-0.95
10	7,739	741	40	1,648	10,168	3.22	-5,461	-851	-163	-980	-7,455	-1.93
11	3,180	70	-25	-2,649	577	0.18	-2,102	-144	-72	1,067	-1,251	-0.32
12	6,994	588	-35	-1,688	5,860	1.86	-4,786	-529	-150	765	-4,700	-1.22
13	2,599	573	-1,762	-1,688	-278	-0.09	929	-505	-150	4,901	5,176	1.34
14	1,149	206	-1,782	-1,688	-2,115	-0.67	4,450	193	-127	4,901	9,417	2.44
15	12,448	1,659	-1,330	432	13,208	4.19	-4,010	-522	-309	3,944	-897	-0.23
16	14,598	2,144	379	3,071	20,191	6.40	-1,294	-164	-16	-1,042	-2,516	-0.65
17	-1,263	-461	-85	-1,527	-3,337	-1.06	401	152	0	961	1,514	0.39
18	9,278	1,368	-1,525	-811	8,311	2.63	3,626	195	-103	4,848	8,565	2.22

8.2 Maximize fare receipts to reduce municipal subsidies

A possible objective for a new fare structure might be to generate more fare revenue in an effort to reduce municipal subsidies. One way to accomplish this is to simply raise fares. As fares increase, passengers pay more to use the service. At the same time, the number of bus riders will decrease. Some individuals will decide to ride less often. Others will walk, find some other means of transportation, or simply stay home.

Public officials should use considerable caution in pursuing reduced subsidies as an overriding goal. Fare increases typically have the greatest impact on populations with the greatest transit needs. Fare increases can also discourage people who own automobiles from switching to public transportation for some trips. It is important to consider the role envisioned for the transit program in the community, both today and in the future. There may be other objectives that are more important than simply minimizing public investment.

The fare model was used to test two across-the-board increases in cash, ticket, and monthly pass fares.

Scenario number 7 raised the one-way fare from $.75 to $.85, the 5-ride ticket from $3.00 to $3.40, and the cost of a monthly pass from $30 to $34. If ticket policies, transfer fees, and zone fares remain unchanged, and if no new discounts are added, the model predicts that this fare increase will generate $25,885 in additional revenue, an 8.2% increase, while resulting in 16,860 fewer trips per year, a drop of 4.4%.

Scenario number 8 raised the one-way fare to $1.00, the 5-ride ticket to $4.00, and the monthly pass to $40. If all other policies remain unchanged, the model predicts an annual revenue increase of $63,431, a 20.1% increase, and a ridership loss of 37,287, a drop of 9.7%.

It is worth remembering that Federal Transit Administration grants are used to cover 50% of operating deficits. A fare box increase of $25,885 will result in a net system-wide local-share savings of $12,943, with an equal amount of FTA funding made available for possible use elsewhere in the region. A revenue increase of $63,431 translates into a system-wide local savings of $31,716.

Transit system partners would share operating cost savings. Under scenario 7, a 4.4% loss in ridership would save the city of Bangor $9,580. Under scenario 8, a 9.7% ridership loss would save Bangor $23,460.

Scenarios 7 and 8 include across-the-board fare increases, with no adjustments designed to shift riders to other fares, and no discounts to reduce the impact on targeted user groups. Sections 8.8 and 8.9 will discuss ways to combine fare changes to achieve more complex policy objectives. Meanwhile, it is worth focusing on at least one way to temper the impact of fare increases on overall system ridership.

Scenario 10 predicts what will happen if the one-way cash fare is increased to $1.00 without changing the cost of 5-ride tickets or monthly passes. This fare combination will result in increased sales of tickets and passes. The model predicts that fare revenues will increase $10,168, or 3.2%, while ridership will decrease by 7,455, or 1.9%. Those most likely to reduce their use of the transit system are people who ride infrequently and individuals with limited cash who cannot afford to buy multiple-ride tickets.

8.3 Simplify fares to eliminate inequities

With the current fare structure, passengers must pay an additional fare when transferring to or from the Old Town route. The transfer fare is $.25 less than the regular cash fare. This extra fee applies to all transfers that involve use of the Old Town bus, including trips that start and end within the city of Bangor.

Bangor residents who travel to or from locations along State Street in Bangor are required to pay an extra $.50 if their trip involves a downtown transfer. This is true for Bangor residents traveling to destinations on State Street – including Eastern Maine Medical Center – as well as for Bangor residents who live on or near State Street and who wish to travel to Bangor destinations located on other bus routes.

This means, for example, that State Street residents must pay $1.25 to ride to or from the Bangor Mall, while residents who live on other routes pay $.75. Bangor residents pay a one-way cash fare of $1.25 to ride to EMMC, $1.50 to ride to Orono, and $1.75 to ride to Old Town.

The fare model tested the likely impact of eliminating paid transfers for the Old Town route. Scenario 1 suggests that eliminating the transfer fee could result in a loss of $3,717 of fare box revenue. The model also predicts a ridership increase of 1,663 trips per year.

8.4 Simplify fares for customer convenience

In addition to the transfer fee for use of the Old Town route, the current fare structure includes two other features that may cause some confusion and inconvenience for potential riders: (1) It is not possible to buy one strip of tickets good for use throughout the transit system. Instead, different types of tickets are required for various bus routes. (2) Old Town passengers pay different fees depending on the length of their bus ride.

Integrated tickets

The current system requires ticket users to purchase different books of tickets for trips on buses that serve different towns. The transit system sells six different sets of tickets:

- Bangor
- Brewer
- Hampden
- Old Town – one zone
- Old Town – two zones
- Old Town – three zones

This situation is further complicated by the fact that Brewer sells both five-ride tickets ($.60 per individual ride) and ten-ride tickets ($.50 per individual ride).

A ticket user who travels between Brewer and the Bangor Mall must present a Brewer ticket to reach the Mall, and a Bangor ticket for the ride home. A Bangor resident who travels from Hammond Avenue to Eastern Maine Medical Center must present a Bangor ticket to board the Hammond Street bus and an Old Town ticket when boarding the Old Town bus at the Medical Center. In addition, this individual must pay two $.50 transfer fares at the downtown transfer center.

One approach to reducing this complexity would be to offer an integrated ticket good for single-zone rides anywhere in the transit system, while retaining extra charges for two and three-zone Old Town rides and eliminating the Brewer 10-ride ticket. Scenario 17 assumes that a single-ride ticket would be good for trips anywhere within Bangor, Brewer, Hampden, and Veazie. Two and three-zone Old Town riders would pay a transfer fare of $.50.

The model predicts that this change would result in a loss of $3,337 in fare box revenue and a gain of 1,514 riders. The revenue loss results from eliminating transfer fees for single-zone trips that start or end on the Old Town route.

This change would require the bus program to allocate ticket revenues among the various project partners. This is currently done with monthly pass revenues, because a single monthly pass is good anywhere in the transit system.

Old Town Zone Fares

Transit fares could be simplified by eliminating all zone fares on the Old Town route. This would mean that all rides on the Old Town route would cost the same as a single zone ride anywhere in the transit system.

Scenario 2 suggests that eliminating Old Town zones would result in a loss of $2,642 per year in fare box revenue and a gain of 874 riders.

Scenario 3 shows what is likely to happen if transfer fees and Old Town zones are both eliminated. The model predicts a loss of $5,196 in fares and a gain of 2,121 riders.

8.5 Adjust fares to increase use by high school students

Scenario 4 examines the impact of offering local school children a half-price monthly pass. This means that high school students and younger children would pay $15 a month for unlimited rides throughout the transit system. The model predicts that this would result in a loss of approximately $2,875 in fare box revenue and a gain of 3,243 riders.

8.6 Adjust fares to increase use by college students

Scenario 5 looks at offering half-price monthly passes to University of Maine students as well as high school students. The model predicts an additional revenue loss of $1,206 when compared with scenario 4, where discounts are limited to high school and younger students. It would add 1,076 more riders than scenario 4. The limited impact of scenario 5 is related to the fact that University of Maine students already have free rides on the Old Town route.

A more dramatic change is likely to occur if the Maine Card program offering free rides for University of Maine students is extended to include the entire transit system. This fare adjustment is tested in scenario 6. The fare model predicts a ridership increase of 9,716 trips per year, an increase of 2.5%. It also projects a loss in fare box revenues of $5,990 per year.

The University of Maine could offset this predicted revenue loss by increasing its annual Maine Card payment to the transit system to $16,000 per year, instead of the current $10,000. This would allow off-campus students living anywhere in the Bangor urban area to ride to and from the Orono campus for free. This change would be consistent with the University's goals of increasing enrollment in the face of a housing shortage, while decreasing parking requirements and automobile usage on the Orono campus.

8.7 Adjust fares to increase use by new riders

The fare model is based on findings from an onboard passenger survey. It predicts how the existing pool of potential bus riders will respond to possible fare changes. The model was not structured to account for possible new market groups that might be convinced to switch to transit for reasons other than price elasticity.

While transit fares influence transportation choices, other factors can be more important for auto drivers who are considering a switch to public transportation. In general, auto users are more likely to use a bus service if it is frequent, fast, convenient, easy to understand, and easy to use. Other important motivating factors can be parking availability and parking fees, particularly at employment sites.

Some of the changes discussed in earlier sections of this chapter may have some impact on the transit system's ability to attract new riders to an enhanced and expanded transit operation. Changes that make the system easier to understand and simpler to use can be particularly important. Examples include:

- Offer a single cash fare good for rides anywhere in the system
- Do away with paid transfers between selected routes
- Offer a single set of system-wide tickets
- Offer a low-cost student pass to appeal to high school students and their parents
- Expand the Maine Card program system wide
- Retain a low-cost monthly pass to appeal to commuters and employers

While the fare model addresses these possible changes, it does so in terms of the predicted behavior of the existing pool of potential riders. The model is conservative in that it shows possible losses in existing riders and fares, without speculating about new behavior from groups of residents who have not seriously considered use of the bus service in the past.

8.8 Increase fare revenues while minimizing ridership loss

An earlier section looked at maximizing fare revenues without regard to losses in ridership. An alternate objective might be to increase fare receipts while minimizing the number of lost riders. The various fare scenarios were screened to display only alternatives that combined (1) an increase of at least $5,000 per year in fare receipts (1.58%) and (2) a ridership loss of no more than 3%.

Six of the identified scenarios met these criteria, scenarios 9, 10, 12, 15, 16,and 18. The most dramatic results were achieved by scenario 16, which involves increasing the cost for a monthly pass to $35 while leaving all other fares unchanged. The model predicts that annual revenues will increase by $20,191, while ridership will decrease by 2,516.

This result is explained in large part by the fact that most monthly passes are purchased by social service agencies for distribution to their clients. The fare model assumed that most agencies would absorb this increase with limited change in the number of passes purchased.

While agencies might continue to purchase monthly passes, sales of monthly passes to commuters and others would likely decrease. For an individual who takes 40 one-way bus rides per month, the per-ride cost of the current monthly pass is $.75, the same as the one-way cash fare. This is fifteen cents more than the per-ride cost of five-ride tickets. If the pass price increases to $35, the per-ride cost for someone who makes 20 round trip rides in a month will increase to $.88 per one-way ride, 46% more than the cost of using five-ride tickets.

Municipal officials should remember that one of the reasons for introducing the monthly pass program was to increase the appeal of the transit system for daily commuters. Increasing the cost of a monthly pass may increase revenues collected from social service agencies, but it will likely decrease the appeal of the monthly pass for this target commuter group.

Significant results were achieved by scenario 15, which raises one-way, ticket, and monthly pass fares by 13.3%, while eliminating Old Town zones and transfer fees, expanding the scope of the University's Maine Card program, offering an integrated ticket for all routes, and offering school children a 50% discount on monthly passes. Under this scenario, the one-way cash fare would increase to $.85, five-ride tickets would sell for $3.40, and monthly passes would cost $34.

For scenario 15, the fare model projects a revenue increase of $13,208, and a ridership loss of 897 riders per year. It should be noted that this fare structure includes expansion of the University's Maine Card program. If the University increases its Maine Card contribution to cover the additional $6,000 cost for free rides system-wide, this scenario would actually result in a revenue increase of roughly $19,000, with little change in total system ridership.

It is interesting to compare scenario 15 with scenario 7, which uses the same cash, ticket, and monthly pass fares. Most of the approximately 17,000 riders driven away by the across-the-board fare increase of scenario 7 are regained in scenario 15 by eliminating transfer fees and zone fares, by adding discounts for high school students, and by expanding the scope of the Maine Card program. These changes reduce the resulting fare increase nearly by half, from an extra $25,885 to a more modest gain of $13,208.

Scenario 18 is a variation of scenario 15 that is discussed below in Section 8.10.

The other three scenarios involve lower revenue increases and more significant drops in ridership. Each involves increasing the one-way cash fare, while leaving ticket and monthly pass prices unchanged.

- Scenario 9 increases the one-way fare to $.85, and results in a revenue increase of about $5,494 and a ridership loss of 3,662.
- Scenario 10 increases the one-way fare to $1.00, and yields $10,168 more revenue and 7,455 fewer riders.
- Scenario 12 increases the one-way fare to $1.00 while also doing away with zone fares and paid transfers on the Old Town route. It generates $5,860 in additional fares and results in a ridership decrease of 4,700.

8.9 Increase ridership while minimizing revenue loss

An alternate policy objective might be to generate an increase is bus usage, while minimizing reductions in fare box receipts. The various scenarios were screened to identify fare combinations that generated a ridership increase of at least 5,000 trips

(1.30%), while limiting fare box losses to no more than 3%. Four scenarios met these criteria, scenarios 6, 13, 14, and 18.

- Scenario 6 expands the scope of the Maine Card program. It increases ridership by 9,716, while decreasing fare box receipts by $5,990 (1.9%). As noted earlier, this lost revenue could be offset by increased payment from the University.

- Scenario 13 increases the cash fare to $1, while leaving ticket and monthly pass costs unchanged. It also eliminates Old Town zones and transfer fees, expands the Maine Card program, and offers an integrated ticket for all routes. It adds 5,176 annual riders while leaving fare receipts largely unchanged (down just $278). If the University increases its payment for the Maine Card program, this scenario will actually increase receipts by more than $5,000.

- Scenario 14 is the same as scenario 13, except that it adds half-price monthly passes for high school students and school children. It projects an annual increase of 7,608 riders, and a revenue loss of $2,115. If the University increases its payment for the Maine Card program, the revenue loss would be reduced to roughly $4,000.

- Scenario 18 is a variation of scenario 15 that is discussed below in Section 8.10.

8.10 Recommended changes

In this section, the consultants offer their recommendations for preferred fare policy changes. These recommendations are based on six assumptions about what local communities hope to accomplish with the transit program. Public officials may disagree with some of these underlying goals. Depending on the degree of agreement or disagreement, they may prefer other fare alternatives.

1. Participating communities are more interested in maximizing the benefits that result from their current investment in public transportation than they are in reducing the present level of subsidy. (Past telephone surveys found that area residents strongly support continuing at least the current level of support for public bus service.)
2. Communities want the transit program to continue to provide a transportation alternative that is affordable for the area's lowest income residents.
3. Communities want the transit system to contribute to an improved quality of life by providing area residents with convenient service that is simple and easy to use.
4. The bus system should be designed and marketed to provide increased benefits for high school children and their families.
5. The transit system should attract new riders, including area commuters, to help reduce parking and auto congestion, while helping to meet development goals for downtown Bangor, Eastern Maine Medical Center, the University of Maine, and others.

6. The transit system should help the University of Maine achieve its goals of increasing enrollment and reducing the impacts of automobiles and parking on the Orono campus.

With these underlying goals in mind, the consultants suggest that participating communities should avoid an-across-the-board fare increase, unless it is accompanied by other adjustments designed to improve the overall quality of service and to increase use of buses by target groups in the community. Moreover, any increase in the single cash fare should be minimized to avoid driving away the transit system's lowest income riders.

There are a number of changes that should have clear benefits for bus riders and for the community as a whole. The consultants recommend the following adjustments:

- Simplify the ticket system by introducing a single integrated ticket good on all routes
- Eliminate cumbersome transfer fares for the Old Town route
- Simply fares by doing away with zone charges on the Old Town route
- Expand the scope of the University's Maine Card program to include all transit routes
- Offer a half-price monthly pass for high school students and younger school children

The consultants suggest that the University should pay the $6,000 annual cost of expanding the Maine Card program. The other proposed changes will result in some revenue loss, unless they are offset by a modest increase in the amount charged for cash fares, tickets, and monthly passes.

Scenarios 15 provides one good alternative. It increases cash, ticket, and single ride fares by 13.3%, while introducing an integrated five-ride ticket good anywhere in the transit system, eliminating transfer fees, expanding the scope of the Maine Card program, and doing away with zone fares on the Old Town route. This change will result in a single-ride cash fare of $.85, a five-ride ticket cost of $3.40, and a monthly pass fee of $34. Unlimited rides for high school students and other area school children would cost $17 a month.

As shown in scenario 15, these changes are projected to result in a revenue increase of approximately $13,000 per year, with a loss of 897 linked bus trips per year. If the University pays for the expansion of the Maine Card program, these changes should result in a revenue gain of approximately $19,000 per year.

Perhaps a better alternative would be to implement all of the changes included in scenario 15 except the proposed increase in the cost of five-ride tickets. If only the cash and monthly pass fares are raised, more regular transit users will shift to buying integrated tickets. The fare model predicts that this modified version of scenario 15 will result in a revenue gain of $8,311 and a ridership increase of 8,565. These results are included in Figures 8.2 through 8.5 as scenario 18. With reimbursement from the University for

expanding the Maine Card program, the net revenue gain for this alternative should equal roughly $14,000 per year.

Both of these proposed fare structures would require a new fare allocation system to assign revenues from ticket sales to the various participating communities. This is currently done with revenues from the sale of monthly passes. Monthly passes are good for rides anywhere throughout the transit system.

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