

FARELESS SQUARE
CONTEXT AND HISTORY
(1991)

I. DESCRIPTION OF THE TRI-MET SYSTEM

Service

Tri-Met operates a multi-destinational transit system in order to maximize patronage and productivity, while maintaining regional mobility for those with cars as well as those who do not have a car available. This system is composed of two fundamental route design strategies: the suburban timed-transfer system in low-density areas and the urban grid system in the more densely developed Eastside and Northwest Portland.

The grid route structure used in urban Portland is composed of a series of north-south and east-west lines generally operating every 15 minutes during the off-peak periods. The east-west radial routes serve downtown Portland, while the north-south crosstown routes serve east Portland. Transferring to continue trips in any direction is a characteristic of the grid system.

The timed-transfer system is designed to serve both intra-suburban and suburban-to-downtown Portland trips. In each area, several local feeder lines serving suburban neighborhoods and business parks terminate at a transit center. Passengers from the corridor are funnelled onto a single high-capacity route, resulting in high passengers loads between the transit center and downtown Portland. Schedules for the routes are designed such that all buses are at the transit center at the same time, facilitating transferring.

Downtown Portland is the focal point of the region's transit services. The cornerstone is the Transit Mall, two exclusive bus lanes 11 blocks long on S.W. 5th and 6th Avenues. Forty-eight of Tri-Met's 75 routes serve the Mall, making it a center for transfer activity. The Mall is also served by C-TRAN, the transit district of Vancouver, Washington. Half of all regional transit passenger trips begin or end in downtown Portland.

Fares

Tri-Met's fare system has three concentric fare zones around downtown Portland (Fareless Square). The base cash fare for trips taken within any two zones is \$.90. For \$1.20 cash, a person can travel anywhere in the system. Discounts are available when fares are purchased in advance, either as a book of 10 tickets or a monthly pass. To encourage short distance trips, Tri-Met has a special Short-Hopper fare good for travel within any one zone. Available in books of tickets, the fare provides a \$.20 discount over the cash fare. Discounts are available for elderly, disabled, and youth riders.

Downtown Portland is a free fare zone called Fareless Square. Fareless Square is generally the boundaries of downtown, bounded by the Willamette River to the east, the I-405 freeway to the south and west, and Hoyt Street to the North. These boundaries for Fareless Square were

selected because they are, for the most part, physical barriers and easily understood. Travel is free on all transit vehicles within this area. Because of the high level of transit service on the Mall and within downtown Portland, passengers usually have only a short wait to make a trip within Fareless Square.

Integration of service types (e.g. local, express, feeder), vehicles (standard buses, articulated buses and rail cars), and transit districts (Tri-Met, C-Tran, and Molalla) is an integral part of the regional transit service design. To encourage full use of the transit system, fares are fully integrated and transfers are free.

II. HISTORICAL REVIEW

Rationale Behind Fareless Square

In 1974, a staff report recommended a Fareless Square in downtown Portland. Following are the benefits and objectives cited in the report. Fareless Square:

1. Promotes transit riding by providing people who do not currently use transit an opportunity to try it;
2. Reduces auto generated air pollution by eliminating short auto trips within the free fare zone;
3. Helps provide higher mobility and coordination for travel between governmental centers and offices in the downtown;
4. Provides more opportunities for travel within downtown to retail, financial, hotel and entertainment areas.

The Transportation Control Plan outlined methods for addressing air quality problems in the Portland air shed. Fareless Square was promoted as a component of this plan. Other elements of the plan included the downtown parking lid and staggered work hours. In addition, Fareless Square was promoted as an element of downtown revitalization.

In addition to those cited in the 1974 report, the following benefits have also been attributed to Fareless Square.

- o **Fareless Square encourages commuters to use transit.** Fareless Square encourages commuters to leave their cars at home by providing alternative transportation during the day. About 23,000 people take Tri-Met to work in downtown Portland each day. Once downtown, Fareless Square service offers these transit riders free access to business and retail locations and opportunities. About 50% of transit riders downtown use Fareless Square service, according to a 1988 survey. About 3,000-4,000 trips are made in Fareless

Square each weekday. Without this benefit, downtown workers may be more inclined to drive to work rather than use transit.

- o **Fareless Square provides an attractive downtown environment for businesses to locate.** Because of the lack of free parking, Tri-Met service has been important to making downtown Portland an attractive place for retail businesses and other employers to locate. Merchants and business groups in downtown Portland feel that the elimination of Fareless Square could have a negative effect on their businesses since transit service would not be as attractive and there are parking restrictions in the downtown area.

Fareless Square is directly tied to two regional policies-the State Implementation Plan for air quality (Department of Environmental Quality) and the Downtown Parking and Circulation Policy, an element of the Central City Plan (City of Portland). A third policy document, the Regional Urban Growth Goals and Objectives (RUGGO), focuses on a regional plan for growth. Many of the concepts are integral to the success of the Downtown and for the future success of transit in the suburbs. It is important to understand the objectives of these plans and the relationship between Tri-Met's operation of Fareless Square and the policies of the State, the City of Portland, and the region.

Central City Plan. One of the Central City Plan's principal objectives is to stabilize the number of automobile trips coming into downtown. The primary purpose of this objective has been to maintain air quality and to relieve peak hour demands on the transportation system in and around downtown Portland as the city grows. It also allows for more efficient use and productive use of high value land, and encourages a pedestrian oriented downtown.

These objectives are accomplished by limiting the total number of parking spaces in the CBD and by relying on transit service to carry the increased trips that result from new development and job growth in downtown Portland. The plan places the highest density of development and the greatest restrictions on parking along the Transit Mall. The plan places fewer restrictions on parking and lower density development in the areas of the downtown that are not as accessible to transit as the Mall area. New buildings have maximum limits on the amount of parking provided, with no minimum. Currently, the downtown is almost at its maximum number of 43,914 parking spaces. If air quality off-sets are utilized, in the form of transit ridership, flex-time, employer subsidies of transit and carpools, etc., an additional 1,370 spaces may be added over the next ten years.

To keep the downtown an attractive place for businesses to locate, the Central City Plan relies on public transportation. Tri-Met has responded to the City's policies by providing the service to bring people downtown and then providing them with free travel within downtown via Fareless Square. Since 1972, when the original Downtown Plan was adopted, there has been a rapid increase in the number of transit trips to downtown. The latest draft of the Downtown Parking and Circulation Plan suggests that Tri-Met will continue to absorb most of the growth in trips to the downtown.

The City of Portland has benefitted from Tri-Met's service to downtown and Fareless Square policy. At the same time, Tri-Met has benefitted from the City's policies. The growth in

ridership to the downtown which Tri-Met has enjoyed is directly related to the transit supportive land use and parking policies of the City of Portland.

State Implementation Plan. In the mid-1970's, the air in downtown Portland violated federal health standards one day out of every three. The federal government could, at that time, impose sanctions. In an effort to clean up the air, the region adopted the Carbon Monoxide and Ozone State Implementation Plan (SIP) in 1977. Key elements of the SIP were the federal motor vehicle emissions control standards for new automobiles, the DEQ's vehicle inspection and maintenance program, and the City of Portland's downtown parking lid.

Fareless Square was included as an element of the SIP for two reasons. By offering downtown workers and shoppers free transit service within the CBD, Fareless Square would reduce short auto trips made within the CBD, thereby reducing air pollution. In addition, Fareless Square was important for making the City of Portland's parking policies work for the public by providing free intra-downtown mobility to workers and shoppers who take transit to downtown Portland.

Downtown Portland air has not violated federal air quality standards since 1984. (One day above the standard per year is allowed. Downtown air quality was above the standards once in 1985 and once in 1987.) The DEQ attributes the success of the air quality program largely to the federal emissions standards on new cars, the DEQ inspection program, the growth in the percentage of trips to downtown taken on transit since the mid-1970's, and the City of Portland's parking policies. The specific impact of Fareless Square on air quality has not been tested. However, a 1987 Tri-Met marketing study indicates that auto commuters use Fareless Square, suggesting that some intra-downtown auto trips have been diverted to transit. The study indicated that of the people who used Fareless Square at least once a month, 42% drove alone or carpoled to work, while 50% of the Fareless Square users took Tri-Met to work.

Under the Clean Air Act of 1975, the SIP is federally enforceable. Even though the specific effects of Fareless Square on air quality have not been determined, if Fareless Square were eliminated today, the Environmental Protection Agency could require the Oregon Department of Environmental Quality to find replacement measures equivalent to the estimated impact of Fareless Square. This would require extensive analysis to determine the current impact of Fareless Square as well as the impacts of any changes. Should these substitute measures fail to achieve air quality standards, the region could ultimately face federal economic sanctions, including a possible cutoff of federal highway and sewer funds.

Regional Urban Growth Goals and Objectives. To avoid the trend of urban decay of the 1970's and 1980's, the Portland region made a commitment to maintain a strong downtown. With the limited access to downtown caused by the West Hills and the Willamette River, auto congestion could reach a point where downtown growth would be severely constrained. Transit provides the solution by providing the means to get workers into downtown, while Fareless Square provides mobility within in the core area. Downtown continues to be the focal point of the region's proposed light rail system, and most bus routes serve downtown. The region continues to reinforce downtown's prominence through transportation investments, particularly light rail.

Today, the emphasis on planning has shifted from avoiding urban decay to planning for growth. Metro's Urban Growth Management Plan is intended to avoid duplicating the negative impacts of other regions experiencing high growth levels. The Regional Urban Growth Goals and Objectives include the importance of the transportation system in determining land use patterns. The goals reinforce the concept of the region developing as a strong central node (downtown Portland) with a series of secondary activity centers. The plan would foster the creation of "mini-downtowns" which have the advantages of downtown on a smaller scale, and promote increased density to avoid the auto dependence of typical suburban form. These areas would allow more cost effective transit service, and would be likely candidates for parking charges, parking restrictions, and other transportation demand management measures.

History of Fareless Square Operations in Downtown Portland

Tri-Met's Fareless Square is a well known, integral part of the fare structure. Although it appears to be a constant, in fact it has undergone many changes in its 16 year lifetime. Following is a synopsis of how Fareless Square has evolved, and its inter-dependency with the overall fare structure.

Fare Collection Before Fareless Square

The traditional method of fare payment for transit systems is pay-as-you-enter (PAYE) which works as follows: passengers enter through the front door and at that point pay their fare or show their transfer. The advantage of PAYE is that drivers can monitor fares and ensure that every rider has paid at least the base fare before completing the trip. This was the system used by Tri-Met prior to the inception of Fareless Square. All trips within the downtown area cost the base fare.

Original Operation - 1975

Modeled after Seattle's downtown "Magic Carpet" service, Tri-Met's Fareless Square began in 1975 two years before the opening of the Transit Mall. From the inception of Fareless Square, it was recognized that fare evasion and fare inspection could be a problem. To help mitigate the possible revenue loss, Tri-Met first implemented Fareless Square with PAYE on trips going towards downtown, and a pay-as-you-leave (PAYL) system on trips going away from downtown. In downtown, passengers could board through all doors.

However, PAYL did not work well on crowded buses where passengers struggled to get past standing passengers so they could pay their fare as they disembarked. PAYL resulted in travel time increases due to delays in passengers exiting the buses. This required additional buses and operating expense during the evening peak hours. Bus operators felt the PAYL system did not eliminate fare evasion. Determined evaders simply walked off the bus at the end of their trip without paying their fare.

First Revision - 1979

To eliminate the costs of the time delays, in 1979 Tri-Met suspended Fareless Square and returned to PAYE between 3-6 PM weekdays but retained Fareless Square and PAYL downtown all other hours. However, the on-again/off-again system created confusion for passengers.

Second Revision - 1982

PAYL was replaced with PAYE all directions all hours in 1982 when Tri-Met implemented self-service fare in anticipation of the start-up of MAX service. Rather than have drivers monitor fares, passengers were responsible for having valid proof of payment, either a transfer, validated ticket, or monthly pass. Checking fares became the responsibility of a force of 30 fare inspectors. Because operators were not responsible for monitoring fare payment and to take advantage of the new articulated buses with three double-wide doors, passengers were allowed to board any door. Fare evasion increased significantly during this time since passengers could enter and leave the vehicle without ever having paid a fare.

Third Revision - 1984

With the elimination of self-service fares in April 1984, Tri-Met returned to driver monitoring of fares and the fare inspection staff was eventually reduced to five. However, since passengers could still enter through the rear doors in the Mall without paying their fare, this system still did not take full advantage of driver monitoring. Fare evasion remained a problem.

Elimination Proposal - June 1986

In 1986, a proposal was taken to the public to eliminate Fareless Square. The proposal was designed to address Tri-Met revenue issues especially fare evasion and the costs of fare inspection. The proposal was dropped, however, because of public support for Fareless Square in providing intra-downtown mobility and meeting regional air quality goals.

MAX is Introduced - September 1986

MAX was designed to be fully integrated with the bus system. This design takes maximum advantage of vehicle and manpower resources, and simplifies the system as well. To simplify the fare structure, MAX and bus fares are as comparable as possible. Although fares must be purchased and validated before boarding (operators do not check fares on MAX), passengers do not need to know a completely different set of rules for MAX versus bus trips. Unlike many transit districts, the two modes are completely integrated. Buses feed MAX stations where passengers are required to transfer in order to continue their trip downtown. Since bus/MAX transfers were integral to the system, the fare structure also needed to be integrated. The fare is the same regardless of which vehicle is boarded first, transfers are free, and both MAX and the bus are free within Fareless Square.

With the opening of MAX in 1986, the number of fare inspectors was increased. Since passengers do not pass by an operator on MAX, fare inspectors assume the role of driver

monitoring. However, the number of inspectors dedicated to Fareless Square on the buses was decreased since 1986 from five to one or two.

Fourth Revision - 1988

In 1988, modification of Fareless Square was again considered in order to lower the amount of real and perceived fare evasion. Public testimony at public hearings often indicated that paying riders felt "cheated" by fare evasion associated with Fareless Square.

At the time, Tri-Met estimated that Fareless Square, the source of nearly all bus fare evasion, cost Tri-Met \$250,000 - \$300,000 annually in unpaid fares. Given the concerns with fare evasion, several options for Fareless Square were considered:

1. Eliminating Fareless Square was rejected because it did not address the regional needs for air quality improvements, and intra-downtown mobility for transit patrons and auto commuters.
2. Options for maintaining Fareless Square at only select hours or select days (e.g. 10 a.m. to 3 p.m. weekdays and all day Saturday and Sunday) were rejected. Time based fares would be inconsistent with the goal of a simple fare system that encourages ridership.
3. Allowing Fareless Square trips only at select bus stops was rejected for two reasons: 1) It would be too confusing and would defeat the goal of encouraging ridership through simplicity, 2) It would not provide a high enough level of service to meet the goal for intra-downtown mobility.
4. Charging a special fare for Fareless Square trips was rejected because it would most likely not increase passenger revenue (most would opt to take their car, walk, or not make the trip rather than pay the fare), or decrease fare evasion. Passengers could still ride past the boundaries of Fareless Square without proper fare payment.
5. Replacing Fareless Square with a downtown shopper shuttle was rejected because it was not cost effective. Further, past experience has shown that people either take their car thereby reducing the benefits of Fareless Square, walk to their destination, or do not make the trip rather than wait five or ten minutes for a shuttle.
6. Retaining Fareless Square and increasing fare inspection around Fareless Square was rejected as not cost effective. Driver monitoring of fares was seen as a more cost effective alternative to inspecting passenger fares.

Tri-Met opted to retain Fareless Square with minor modifications. To increase the ability of operators to monitor fares, decrease the potential for fare evasion, and simplify the system, Tri-Met retained PAYE and returned to front door boarding for the entire system, including within Fareless Square. All passengers are now required to enter through the front doors and either show proof of fare payment or indicate to the operator that they are only traveling within Fareless Square. No fare inspectors are permanently dedicated to Fareless Square, although

there are periodic inspections on the perimeter and on problem routes. The return to driver monitoring and PAYE has improved driver job satisfaction by allowing more control over fare evasion.

The current method of operations appears to be the most cost effective for reducing fare evasions costs. Without 100% positive checks of all passengers, the fare evasion rate for buses is probably nearing its potential lower limit. The periodic spot checks of problem routes appears to provide adequate coverage of the bus system.

A March 1990 Fare Evasion Review determined that 1.87% of all riders on buses leaving downtown evade the fare. Because riders can board the bus in Fareless Square without paying even the base fare, Fareless Square is the costliest source of bus fare evasion. The annual cost of this fare evasion is an estimated \$310,000-\$325,000. (Tri-Met, Fare Evasion Review, March 9, 1990, KPMG Peat Marwick.) Fare evasion on MAX was determined to cost between \$150,000 and \$157,000 annually, an evasion rate of 4.81%. Not all of the evasion on MAX can be attributable to Fareless Square, however, since there is no driver monitoring and the evasion could be taking place outside of Fareless Square.

Fareless Square Today - 1991

Tri-Met supports the public policy decisions which created and maintain the existing Fareless Square. Through an iterative process, the current configuration of Fareless Square and the fare structure appears to have struck a balance in terms of public policy needs and operational concerns. Although a limited amount of fare evasion does occur, Tri-Met management is satisfied with the current operations of Fareless Square.