

Session #2

IMPROVING PEDESTRIAN ACCESS TO TRANSIT:

City of Gresham's Ped-to-MAX Program

Rebecca Ocken

1333 NW Eastman Parkway

Gresham, Oregon 97030

503-618-2756

503-669-1376 fax

ocken@ci.gresham.or.us

ABSTRACT

Accommodating multi-modal travel on high speed arterials is a challenge, particularly in Gresham where numerous arterials transect the city, creating barriers to pedestrians, bicyclists, and transit users. The "Ped-to-MAX" program was created to ease these barriers and improve the pedestrian environment around Gresham's eight [light rail](#) stations and town centers, where pedestrian activity is high, even though traffic volumes are heavy and moving at fast speeds.

The Ped-to-MAX program redesigns existing street right-of-way and constructs facilities for pedestrians which will improve safety yet accommodate traffic. The program's objective is to create safe pedestrian areas where traffic speeds are slowed and the streetscape is aesthetically appealing, thereby encouraging more pedestrian activity and increase transit ridership. Improvements include texturized crosswalks, widened sidewalks, off-street pathways, mid-block crosswalks, intersection improvements, medians, curb extensions, street lighting, pedestrian plazas and other amenities.

The City of Gresham's Transportation Planning, Streets, and Parks Divisions teamed with Tri-Met, the regional transit provider, Multnomah County, and various citizen committees in developing this much needed program.

Phase I of Ped-to-MAX will be constructed in summer 1998. ISTEA is the primary source of funding for Phase I along with state and local funding. Phase II, funded through Oregon State's Transportation Growth Management Program, will begin design Fall 1998.

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INTRODUCTION

Like much of the Northwest, Gresham is growing at an overwhelming rate. In the last 10 years Gresham's population has doubled to more than 81,000 and is now the fourth largest city in Oregon. Although Gresham is served by light rail (MAX), the automobile continues to be the primary mode of travel and the City's development pattern reflects this preference. The arterial street system forms a super-grid providing great mobility for autos but a dangerous and unappealing environment for pedestrians.

To encourage walking and promote light rail use, Gresham developed Ped-to-MAX, an on-going program to improve pedestrian access to Gresham's eight light rail stations. Because the project is federally funding with Congestion Mitigation Air Quality (CMAQ) monies, the primary objective had to be to reduce vehicle miles traveled. However, this objective again focused on automobile use. The City wanted to make a commitment to better the pedestrian environment, first by improving safety with slower traffic speeds and basic pedestrian infrastructure improvements; and then go a step farther, by creating a more aesthetically appealing streetscape. If successful, pedestrian accidents rates would be reduced and more people would walk. The city believed in the theory "if you build it, they will come."

The City had eight months to design Phase I of Ped-to-MAX or risk losing CMAQ funding. The project team had little idea of what to build other than sidewalks, but quickly created a vision and continually reiterated the objective of building for people not for greater car efficiencies. This was a surprisingly difficult task.

BACKGROUND

Gresham is located 15 miles east of Portland. In 1986 light rail service between Gresham and Portland opened. During the development phase, the proposed light rail service met with great opposition by Gresham residents. As a result the light rail alignment is poorly located and was not supportive of existing land uses.

Despite the poor alignment, Gresham residents account for almost 30 percent of MAX's peak hour ridership. With such high use under truly inadequate conditions, City staff theorized that ridership could improve if the conditions around the station areas improved.

The issues facing Ped-to-MAX were many. The light rail line occupies the center median of a major arterial (Burnside) on its trip into Gresham. This creates a huge barrier for pedestrians. Because of Gresham's super grid arterial pattern, the block lengths are very long with limited safe pedestrian crossings. Also, traffic speeds are generally faster than posted speeds because of the super grid layout. The arterials have

numerous driveways and continuous center turn lanes that make left turn access to cross streets and adjoining properties readily available, but results in undesirable and unsafe conditions for pedestrians and bicyclists.

In 1994 City staff conducted a study *Accommodating Pedestrians to "MAX" Light Rail stations in Gresham*, and found that many Gresham citizens are discouraged from using transit because of both real and perceived barriers to pedestrian travel. The study identified more than 30 project areas where better pedestrian connections to MAX were needed and made design recommendations to encourage more walking throughout the City. The study also recognized the potential for enhancing community identity and prompting private investment through a public financial commitment to pedestrian infrastructure improvements.

The project team knew existing conditions in Gresham were in a sorry state. The basic infrastructure was inadequate and the walking experience was poor. Primary walking routes lacked any pedestrian amenities. However, based on the *Highway Capacity Manual's* measure of pedestrian level of service, Gresham pedestrians currently experience level of service A at most times of the day at most locations, but the City found this measure did not take into account all the factors that encourage walking and referred to 1000 Friends of Oregon's *Pedestrian Factors* as a standard measure.

Noting 1000 Friends of Oregon's *Pedestrian Factors* research, Ped-to-MAX took into account the influence convenience factors may have to encourage more walking, such as; the ease of street crossing, sidewalk continuity, street connectivity and topography. Other factors considered were the facilities themselves such as; ability to select walking speeds and avoid conflicts with others, degrees of crowding in queuing areas such as sidewalk corners and transit platforms and obstructions such as poles, and trees and street furniture that restrict the amount of pedestrian space.

The streetscape improvements proposed by Ped-to-MAX have the benefit of transit supportive land use policies now in place at the City. As required in Oregon's Transportation Planning Rule, new buildings on transit streets must have a primary entrance oriented to the street, no more than a 20-ft setback with landscaping and frontage improvements. This tool has immeasurable benefits to the pedestrian environment.

OBJECTIVE

Beyond encouraging greater transit use, the main project objective is to strengthen the pedestrian environment with safe, convenient, and aesthetically appealing streetscapes. Ultimately the project would create great pedestrian environments by developing exciting urban public spaces, which in turn enhance community identity and livability.

PED-TO-MAX PROJECTS

Of Gresham's eight light rail stations, three were prioritized for Ped-to-MAX Phase One design; Rockwood, City Hall, and Central Stations. These are the three most highly used stations in Gresham. These areas also experience high pedestrian activity even though traffic volumes are heavy and travel speeds fast.

Of the 38 projects identified in the Ped-to-MAX study, the top ten were selected for design. Because of funding constraints, only four were taken to construction.

Rockwood Station Area:

Rockwood was recently annexed by the City of Gresham and lacks basic infrastructure improvements needed to support the high density zoning recently enacted and the great pedestrian activity it currently experiences. It has a surprising number of pedestrians given the ugly, dangerous, and car-oriented environment. This conflict is made clear given that Rockwood has the highest number of pedestrian accidents in the City.

At the Rockwood Station, all of the retail buildings near the station are set back from the street and are fronted by large parking lots. Traffic moves very fast on the arterials and the pedestrian environment is difficult as well as extremely dangerous.

There are also problems with real and perceived safety in Rockwood. The negative behavior of many of the teenagers who loiter in and around the stores and transit stop detract significantly from the image of the area.

Project staff met with Gresham Police asking for their insight on the area. The Police felt it essential to add pedestrian-scale street lighting with a more horizontal cast than the typical street light. This type of lighting will decrease the shadow cast of vertical lighting and illuminate pedestrians more clearly. In the opinion of the Police Department, if nothing but proper lighting were added to the area, the project would be a success.

The Ped-to-MAX study identified two project sites in the Rockwood Station Area: the Rockwood Urban Plaza and the 188th Street Transit Center. The proposed plaza site is on private property and links bus travel with light rail.

The plaza site is located across the street from the light rail station in a high activity area in the center of the Rockwood Town Center. The site is currently vacant with two fast food restaurants as neighbors. The site is an gravel lot serving only as an eyesore to the neighborhood and is notorious for gang and drug activity.

The proposed plaza is a small 8,600 square foot area. The space is intended and designed as a respite from the busy surroundings, as well as a transit transfer station between light rail and bus. At issue was developing a pedestrian space that had an unknown development future, no physical boundaries, and would continue to be

surrounded by auto-dominated uses. Color and vertical space were the two characteristics staff wanted to include in the final design to achieve the project objective of developing energetic urban spaces.

From aerial photos, it was clear that the primary color in the neighborhood was concrete gray. After many rounds of discussion and considering the financial restrictions, it was concluded that clay bricks in red and blue tones would be the dominate material of the plaza. Phase I would add a intricate pattern in the center of the plaza until additional funds could be found to replace the central brick pattern with a fountain or other water feature.

The vertical issues were resolved in numerous ways. Grassy berms and Cherry Trees that flowered twice annually were used to shape the edge of the plaza and provide some definition. At the front of the plaza, an elevated, concrete, circular seat was designed that in the center could hold a Christmas tree. This accent was added to accommodate community gatherings. Other seasonal events could be promoted for the plaza by Rockwood neighborhoods.

Negotiations for the plaza property were drawn out for over a year, but were unsuccessful and led to the need for condemnation. Unfortunately, Gresham's City Council denied action and the plaza construction is now on hold.

With the delay of the plaza construction, the City is working to establish uses and generate activity in the area to improve image and generate more "eyes on the street." Some more short term uses being considered in the proposed plaza space and on 188th include weekend markets , which can also help to incubate new businesses for the area, and a game cart that would loan out board games in the summer months. Vending carts with espresso or flowers are also to be encouraged in the area.

The transit center on 188th is a block- long section of street improvements including sidewalk widening, mid-block crosswalk, texturized crossings, street trees, street lighting, and new covered bus stops. The only issue to arise with the transit center was placement of the mid-block crossing.

To improve pedestrian safety when crossing Stark Street, a five-lane, high speed, high volume arterial, a mid-block pedestrian crosswalk and refuge was proposed. Field observations indicate substantial pedestrian traffic crossing Stark Street to reach not only the transit station, but the many retailers in the area. Marked and unmarked pedestrian crossings across Stark Street are available, but, many, if not most pedestrians, cross at mid-block locations.

Several locations along Stark Street were evaluated as possible crosswalks. The location recommended for improvement with a marked crosswalk and pedestrian refuge island is on the east side of the Stark Street and 188th Avenue intersection. Improvements also include widened sidewalks and street trees and pedestrian scale lighting. This will not

only reduce the crossing distance for pedestrians, but change the visual environment for drivers and slow travel speeds.

The pedestrian refuge island proposed on Stark Street near 188th Avenue meets the minimum size of about 50 square feet. The refuge site does prohibit left turns into two businesses. Through one-on-one meetings they were resolved.

In the long term, the City is proposing major improvements to the arterials to slow traffic in the Rockwood Town Center by creating tree lined boulevards with on street parking, medians and other pedestrian amenities from the now five-lane arterials.

City Hall Station Area:

City Hall station is the second most highly used station of Gresham's eight stations. Most riders use the park and ride lot associated with the station. For those who walk, they must navigate a series of high speed, high volume, five lane arterials. The major of those being Division Street. The pedestrian environment in this location is bleak and visitors who may be using transit to reach downtown Gresham would have no clue how to find their destination.

The Ped-to-MAX projects will link Gresham's historic downtown and the new Gresham Civic Neighborhood, a transit-oriented development and the major destinations in between: Gresham City Hall, Gresham High School, and a major shopping center. The major street running between the two areas is Division, a five-lane, well traveled arterial with curb-to-curb widths of approximately 75-feet.

One option to improving pedestrian access is to reduce pedestrian crossing distances. The existing lane width on Division Street is 11-feet with a continuous 12-foot turning lane. City Staff wanted to reduce the 75-foot crossings to a more manageable distance of 60-feet. One possible street configuration included 10-foot travel lanes, 12-foot turn lanes and 6-foot bike lanes.

Another option would be a 14-foot wide outside or curb lane that would be shared by motor vehicles and bicyclists. This option is described in the *Oregon Bicycle and Pedestrian Plan* for use where right-of-way or topographic constraints prevent striped bike lanes. With a shared motor vehicle-bike lane, the total curb-to-curb width would be approximately 4 to 6 feet less than with designated bike lanes. This reduction in curb-to-curb width would reduce the time it takes for pedestrians to cross by 1 ½ to 2 seconds. However, City Staff eliminated this alternative given the volumes of traffic and projected speeds lowered to 35 mph would not be enough to support a shared bike lane.

The proposed project area on Division was a four block section of street calling for major changes to both the automobile and pedestrian environments. Because of this, Multnomah County, who owns and maintains the road, called for a more in-depth

study of the project and expanding the project boundaries to accommodate a better transition into downtown Gresham. Because of this, project construction was delayed and the project boundaries were expanded. The new project area is now under design through grant award from Oregon's Transportation Growth Management program. Construction funding has been earmarked in TEA 21 as a demonstration project and is scheduled for construction in 2001.

Central Station Area:

Central Station is a major bus center with links to a light rail station and the only structured park-and-ride garage in Gresham. It is near the end of the light rail line and is the closest stop to historic downtown Gresham (four blocks away).

The Gresham Downtown Development Association has been eager to improve the link between the core business community and light rail and saw Ped-to-MAX as a prime opportunity to do this. In 1990 the City redesigned Main Street through downtown by widening the sidewalks and curb extensions and narrowing travel lanes. Street trees and historic street lighting were added to the streetscape greatly improving the business district and re-energizing retail activity. With additional funding a second downtown street was improved.

The business community felt that the brick work associated with the sidewalks downtown functioned as a "yellow brick road" in that visitors would not stray from the improved streets without the brick. Through observation, city staff found this to be true. Visitors would park in downtown and follow only the streets with brick work. Once the bricks stopped so did the visitor.

To extend the "yellow brick road" and better link downtown to Gresham, Hood Street was chosen as a project for construction. Hood Street is classified as a neighborhood collector. It is one of the few through streets through town, but travel speeds and volumes were not high. The street has a mix of commercial and residential with both single family homes and multi-family apartments. High school students use the street to gather and use transit.

The focus of the Hood Street improvements was aesthetic. Travel lanes were narrowed to physically control travel speeds and provide pedestrian amenities within the given right of way. To reduce construction costs only one curb was moved. Street trees, street lights and texturized crosswalks were added to increase the awareness of pedestrian activity.

10th Street:

Mature street trees were added to 10th Street, a street perpendicular to Hood which links Main Street and Gresham High School to the Central Transit Center. The project area is noted as a top ten priority in the Ped-to-MAX study. 10th Street is a new concrete street parallel to the light rail tracks, but very bland and unfriendly. At a low

cost, (\$5,000) the city found mature 40-foot Armstrong Maple trees and planted them at the back-of-curb. This inexpensive simple improvement has made a significant difference in the pedestrian environment. It adds a much needed vertical element which better defines the pedestrian space.

Powell Main Intersection:

Also identified as a priority project in the Ped-to-MAX study is improving the link between historic downtown, Gresham's Main City Park, and the Springwater Trail, an off-street, multi-use path. This entailed improving the intersection of Main Street with State Highway 26, or Powell Boulevard. Curb extensions, bike lanes, and on-street parking were added to slow traffic, sidewalks were widened and texture was added to the crosswalks, street trees and street lighting were added to improve the pedestrian environment.

PUBLIC INVOLVEMENT

A great deal of coordination was needed for Ped-to-MAX. Not only were three City divisions involved, but Multnomah County and the Oregon Department of Transportation, because projects were located on their roads, TriMet, the transit service provider, and numerous neighborhood associations, the downtown business association, and private businesses.

The two public workshops held in each project area were so poorly attended, it became a much needed staff retreat. Project for Public Spaces (PPS), a private consulting firm, was integral in developing the project vision. PPS made project staff aware of the need to expand the project boundaries beyond sidewalk infill and create livable, enjoyable space. PPS also enforced the need to slow travel speeds if the pedestrian environment is to be improved.

PROJECT FUNDING

The City requested and received \$1 million in Federal ISTEA grant funds for project design and construction. The City's Transportation Planning Division teamed with the City's Streets and Parks Divisions to compile all necessary funding. Because gas tax monies can not be used outside of the public right of way, Parks funding (from System Development Charges) was essential. Money designated for a bike project in the State Transportation Improvement Plan was transferred to Ped-to-MAX. The City was also awarded an Oregon Department of Transportation Local Assistance Grant. The overall project construction budget is \$1.6 million or approximately \$360 a linear foot.

CONCLUSION

At issue throughout the project was how to prioritize pedestrians over automobiles. It was a reversal of thinking for the City that came slowly and painfully. It is a new way of thinking that needed constant reaffirmation.

The City lacked the initial vision of what Ped-to-MAX would be and what purpose it would serve. It wasn't until the public involvement phase that the real project began to develop. Ped-to-MAX became more than just sidewalk infill, but a comprehensive pedestrian program that included traffic calming and creating neighborhood identity.

Political support is vital to the on-going success of the project, particularly when sensitive issues such as condemnation arise. Gresham City Council and Planning Commission were well briefed on the progress of the project. To the point of one Councilor saying he'd "heard enough already." What would have been more effective is one-on-one meetings. The project team should have prepared to take condemnation action early in project development.

Providing a balanced environment of cars and people is essential. Many of the successful pedestrian improvement projects don't isolate pedestrians but effectively mix them with an active streetscape, of which cars are a part.

Construct a "show job" to show funding sources and decision makers that pedestrian projects are successful and needed. This will make continuing the program a greater reality.