

Install Six New Red Light Cameras at High Crash Intersections

FY 2006-07	\$250,000
FY 2007-08	\$0
Future	\$0
Total	\$250,000

Project Description:

Install six new red light cameras at high crash intersections.

Problems:

- Nationally, red light running is the fastest growing cause of traffic fatalities in urban areas.
- City Council's Adopted Budget for Transportation included the authority for additional six red light cameras, but did not include any funding for initial capital costs. Without \$250,000 one-time funds for capital costs, these cameras will not be installed this fiscal year.

Project cost:

Costs include \$240,000 for capital costs at six intersections – the capital cost per intersection is \$40,000. An additional \$10,000 is included to cover traffic analysis and documentation required to install new red light cameras. Ongoing operation and maintenance costs will be covered by fine revenue.

Benefits:

These new red light cameras will reduce serious injuries and fatalities.

- Portland's existing red light cameras have reduced red light running violations by 60%-87%.

Deployments of red light cameras in the eastern portions of Portland that currently do not have red light cameras. These neighborhoods have experienced tremendous loss from red light running. In addition, recent survey data shows that eastern parts of Portland have some of the highest levels of public support for red light cameras.

The following are potential red light camera locations (with number of crashes in the last four years) in Portland with high numbers of crashes attributed to red light running:

- SE Foster @ 96th (53 red light crashes)
- SE Stark @ 102nd (44 red light crashes)
- NE Glisan @ I-205 Ramp (36 red light crashes)
- SE Washington @ 103rd (35 red light crashes)
- NE Broadway @ Vancouver (28 red light crashes)
- SE Stark @ 99th (19 red light crashes)

These locations were identified as having the highest number of preventable red light crashes.

Portland's red light cameras will cover operational costs and have the potential to provide additional revenue for traffic safety services:

- The Portland Traffic Safety Coordination Council is committed to work with Multnomah County and the State to ensure that these additional resources improve traffic safety.

Since the City has already completed camera feasibility and crash analysis, following a funding commitment, red light cameras could be installed and operational within two to three months.

Install New Traffic Signal - SW Clay & 2nd

FY 2006-07	\$110,000
FY 2007-08	\$0
Future	\$0 (Future funding is needed at other locations)
Total	\$110,000

Project Description:

Install a new traffic signal at SW Clay & 2nd

Problems:

SW 2nd and Clay is the only unsignalized intersection in this area of the CBD. SW 2nd is classified as a City Walkway. There is a high pedestrian crossing demand due to the South Auditorium residential area. However, without a signalized crossing, pedestrians must wait for several minutes for a break in traffic during the AM peak if drivers do not yield. Speeds are higher than adjacent streets due to the longer distance between signals. There were 13 reported collisions in the last five years. Nine of those were due to drivers running the stop sign.

Project cost:

Costs include design, construction, and contingencies.

Benefits:

This new traffic signal will improve safety and operation by:

- Providing safer pedestrian crossings at the intersection.
- Improving the pedestrian route connectivity.
- Reducing speed of vehicles on Clay.
- Reducing crashes.

This new signal will also better meet the pedestrian related goals and policies of the Central City Transportation Management Plan (CCTMP).

Future Needs:

Examples of other intersections where new traffic signals are needed are listed below. Costs estimates for all of these locations are not available. However, some of these intersections require roadway modifications that increase the project cost significantly in addition to new traffic signals.

- SW Garden Home Rd/Multnomah Blvd
- W Burnside Rd/SW Skyline Rd
- W Burnside Rd/NW Skyline Rd
- NW Everett St/13th Ave
- NW Glisan St/13th Ave

Replace and Upgrade Traffic Signals - 122nd Ave Safety Improvements

FY 2006-07	\$500,000
FY 2007-08	\$0
Future	\$0
Total	\$500,000

Project Description:

Completely replace the traffic signals at two intersections on 122nd (SE Stark and Division).

Problems:

- 122nd Avenue from Halsey south to Division is designated as a “Safe Corridor” by the CSTSP.
- Four of the seven traffic signals in this corridor are old span wire installations with poor signal indications and inefficient vehicle detection. The signals at Halsey and Glisan are included in another project already funded this year.
- All four signalized intersections have high numbers of crashes and serious congestion.

Project cost:

Each intersection estimated to cost \$250,000.

Benefits:

The safety and operations improvements created by replacing these signals include:

- Reduce red light running by adding more and larger signal lights.
- Reduce potential for right angle crashes by detecting vehicles entering the intersection on the start of the red and delaying the start of the cross street green.
- Allow all pedestrians to more easily cross the street by using special pedestrian detectors to extend the flashing “don’t walk” time for slower pedestrians.
- Reduce congestion with more efficient vehicle detection and improved signal timing.

Install Crosswalks for Six Main Street Corridors

FY 2006-07	\$40,000
FY 2007-08	\$0
Future	\$0
Total	\$40,000

Project Description:

Mark crosswalks at intersections along Community Main Streets with high levels of pedestrian activity and traffic.

Candidate streets include:

1. NW 23rd Ave.; Burnside to Vaughn
2. NW 21st Ave.; Burnside to Northrup
3. SW Capital Highway; 31st to 38th
4. SE Belmont St.; 25th to 39th
5. NE Alberta St.; 15th to 30th
6. SE Milwaukie Blvd.; Tolman to Knapp

Problems:

Pedestrians finding crossing Main Streets along some of the City's busiest Main Street retail corridors difficult and sometimes threatening.

Project cost:

\$40,000 initial capital cost. \$9,000/year on-going maintenance cost

Benefits:

Make crosswalks visible to drivers and improve yielding for pedestrians waiting to cross.

Vehicle Safety Improvements at High Crash Intersections

FY 2006-07	\$200,000
FY 2007-08	\$1,000,000
Future	\$0
Total	\$1,200,000

Project Description:

Analyze and implement changes in the top safety problems

The Intersection Safety Analysis will provide the City with specific projects that can significantly reduce crashes and crash severity. The following are examples of improvements that would be made with additional revenue:

- ✓ Median islands to reduce conflicts
- ✓ Signage and striping changes
- ✓ Changes to signal timing
- ✓ Signal improvements to improve compliance
- ✓ Traffic calming devices
- ✓ Red light cameras
- ✓ Curb/sidewalk work to re-align intersections
- ✓ Pedestrian and bike improvements
- ✓ Transit access improvements

The following are the first ten intersections that we would to be improved with additional revenue.

First Ten Projects

1. SE Powell Blvd at 82nd
2. SE Division at 122nd Avenue
3. SE Powell Blvd at 136th
4. SE Division at 82nd
5. SE Powell Blvd at 174th
6. NW Skyline Blvd at Germantown Road
7. SW Barbur at Capitol Highway
8. N Lombard at Denver
9. SE 39th at Powell
10. NE Sandy at 82nd

Following Thirty Projects

1. SE POWELL BLVD at 122ND AVE
2. SE POWELL BLVD at 92ND AVE
3. NE HALSEY ST at 122ND AVE
4. SE STARK ST at 122ND AVE
5. NE COLUMBIA BLVD at MARTIN LUTHER KING JR BLVD
6. NE GLISAN ST at 122ND AVE
7. SE HOLGATE BLVD at 82ND AVE
8. SW WASHINGTON ST at 2ND AVE
9. SE FOSTER RD at 82ND AVE

10. SE DUKE ST at 82ND AVE
11. SE STARK ST at 102ND AVE
12. N WEIDLER ST at VANCOUVER AVE
13. NE FREMONT ST at MARTIN LUTHER KING JR BLVD
14. SE FOSTER RD at 96TH AVE/I-205 NB ON-RAMP
15. SE DIVISION ST at 162ND AVE
16. SE STARK ST at 148TH AVE
17. SE WASHINGTON ST at 96TH AVE/99TH AVE
18. N BROADWAY at VANCOUVER AVE/I-5 SB RAMP
19. SW JEFFERSON RD at CANYON RD/MURRAY LN
20. SE FOSTER RD at 92ND AVE
21. NE GLISAN ST at 102ND AVE
22. NE MARINE DR at 33RD DR
23. N BROADWAY at WILLIAMS AVE/I-5 NB RAMP
24. E BURNSIDE ST at 82ND AVE
25. SE FOSTER RD at 122ND AVE
26. W BURNSIDE ST at 23RD AVE/VISTA
27. NE GLISAN ST at 82ND AVE
28. SE WASHINGTON ST at 102ND AVE
29. SE WASHINGTON ST at 103RD DR
30. NE SANDY BLVD at 39TH AVE

Problems:

Portland has a number of high collision intersections that would benefit from traffic safety improvements. In order to select the intersections that would benefit the most from traffic safety enhancements we ranked projects based on number of crashes, severity of crashes, and rate of collisions per million entering vehicles. As a result we have identified 40 intersections that over the last four years accounted for 3,721 crashes, 10 fatalities, and 1,425 injuries. The economic cost of these crashes is over \$46 million.

Project cost:

First year, 80% analysis/engineering and 20% construction

Subsequent years, 20% analysis/engineering and 80% construction

The proposal is to spend \$200,000 in next six months, then \$1,000,000 next year. This will allow us to analyze and improve 12 intersections by the end of the next fiscal year. It is our goal to find additional resources to complete safety improvements at all of these intersections over the next five years.

Benefits:

This will improve safety and operation by:

- Reduce crashes in Portland's highest crash locations.
- Reduce serious injuries and fatalities.
- Reduce congestion resulting from frequent collisions

Bicycle Safety Improvements

FY 2006-07	\$150,000
FY 2007-08	\$300,000
Future	\$0
Total	\$450,000

Project Description:

This project will identify and complete bicycle safety engineering projects that include intersection safety/crossing improvements, missing links, bike boulevard development, green street bike safety projects.

There is currently a list of projects that was identified and endorsed by the Community and School Traffic Safety Partnership, the City of Portland Bicycle Advisory Committee, and Portland's Neighborhood District Coalitions.

Bicycle Boulevard Projects: The goal of these projects is to provide safer alternative routes to higher speed multi-lane arterials with higher crash rates.

Bicycle Boulevard Development:

- ✓ Foster Road Bypass Bicycle Boulevard (42nd & Gladstone to Lents Town Center)
- ✓ SE 26th/28th from Taggart to Salmon
- ✓ SW Vermont from Terwilliger to Capitol

Intersection Safety Project -- Curb Extensions for High Volume Street Crossings on Bicycle Boulevards:

- ✓ NW 23rd & Johnson
- ✓ NW 21st & Johnson
- ✓ NW 21st & Flanders
- ✓ SE Belmont & 42nd

General Bikeway Improvements: The goal of these projects is to improve safety on bikeways that are on higher speed, higher volume streets.

Intersection Safety Projects:

- ✓ NW 16th & Everett green curb extension and blue bike lane
- ✓ SW Terwilliger & 6th signage improvements

Bicycle Lane Development:

- ✓ NE 148th from Airport Way to I-84
- ✓ Widen westbound Hawthorne Bridge bicycle lane

Problems:

Portland's bike network continues to have specific traffic safety challenges due to incomplete segments of the bicycle network. As a result, bicyclists expose themselves to increased risk of crashes and injuries. Further, there is strong community desire to develop a stronger bicycle boulevard network that is safer and more comfortable facilities for families and seniors to ride bicycles.

Project cost:

It is estimated that 10-15% of the costs will be for engineering/public involvement and 85-90% will be for construction.

Benefits:

This will improve safety and operation by:

- Providing safer bicycle facilities.
- Decrease the number of bicycle serious injuries and fatalities.
- Increase the number of people bicycling.
- Improving bicycle network connectivity.
- Support Portland's effort to achieve Platinum Bicycle Friendly City status

Pedestrian Safety Improvements

FY 2006-07	\$150,000
FY 2007-08	\$300,000
Future	\$0
Total	\$450,000

Project Description:

This project would build medians to enhance safe pedestrian crossings on high-speed multi-lane arterials. As a result of this funding, Portland would be able to build 15 pedestrian islands over the next two years. Program would involve approximately 10% analysis/engineering and 90% construction

There is currently a list of projects that was identified and endorsed by the Community and School Traffic Safety Partnership, the City of Portland Pedestrian Advisory Committee, and Portland's Neighborhood District Coalitions.

The top ten locations were selected from the City of Portland's Pedestrian Crash Corridors. These corridors include 4% of Portland's intersections that include 58% of pedestrian serious injuries and 66% of pedestrian fatalities.

Proposed pedestrian islands where people died crossing the street over the last ten years:

1. SE 82nd at Lambert
2. NE 82nd at Pacific
3. SE 122nd at Woodward
4. SE 120th at Foster
5. SW Barbur at Primrose
6. SW Barbur near 30th
7. NE Killingsworth at 70th

Proposed pedestrian islands where people were seriously injured crossing the street over the last ten years:

8. SE 122nd at Grant
9. NW Highway 30/St. Helens Road at 112th
10. N. Portland at Willamette
11. NE Killingsworth & 52nd
12. NE Sandy at 64th
13. NE Broadway at 26th
14. SE Division at 142nd
15. N Lombard at Omaha

Problems:

Portland has numerous bus stops on high speed multi-lane arterials where pedestrians are forced to cross high speed multi-lane arterials without the benefit of an enhanced crossing. 4% of intersection in Portland comprise 66% of pedestrian fatalities and 58% of pedestrian serious injuries. These intersections are all on the types of facilities addressed by this project. An additional problem addressed by this project will be the significant number of Portlanders that limit walking, biking, or taking transit due to traffic safety concerns.

Project cost:

Assuming \$30,000 per island, this program will build 15 pedestrian refuge islands. It is estimated that 10-15% of the costs will be for engineering/public involvement and 85-90% will be for construction.

Benefits:

This will improve safety and operation by:

- Providing safer pedestrian crossings at intersections.
- Decrease the number of pedestrian serious injuries and fatalities
- Increase the number of people walking and taking transit
- Improving the pedestrian route connectivity.

Safe Routes to Schools Improvements

FY 2006-07	\$220,000
FY 2007-08	\$250,000
Future	\$0
Total	\$470,000

Project Description:

This project funding for community identified safety will identify and complete traffic safety projects that increase the safety of children travelling in Portland. In the next six months, the funds will build school zone enhancements, crossing improvements, and traffic calming projects. Next school year, this funding will allow Portland to provide engineering, education, and encouragement Safe Routes to School services at the schools identified in City Council's school and affordable housing initiative. Strong community participation will ensure a significant number of kids begin walking and biking to school on safe streets. Schools that have been identified for next school year include:

- ✓ Lent Elementary
- ✓ Humboldt Elementary
- ✓ Rieke Elementary
- ✓ Lincoln Park Elementary
- ✓ Russell Park Elementary

In addition, the following schools will continue with their ongoing Safe Routes to School Services:

- ✓ Atkinson Elementary
- ✓ Abernethy Elementary
- ✓ Boise-Eliot Elementary
- ✓ Bridlemile Elementary
- ✓ Buckman Elementary
- ✓ Capitol Hill Elementary
- ✓ Chapman Elementary
- ✓ Chief Joseph Elementary
- ✓ Faubion Elementary
- ✓ Forest Park Elementary
- ✓ Gilbert Heights Elementary
- ✓ Gilbert Park Elementary
- ✓ Kelly Elementary
- ✓ Lewis Elementary
- ✓ Prescott Elementary
- ✓ Rosa Parks Elementary
- ✓ Sacramento Elementary
- ✓ Sunnyside Elementary
- ✓ Vestal Elementary

In addition, install flashing beacons at schools where additional warning/visibility of the school zone is needed. Schools located on high traffic streets have elevated risks for children accessing the school due to the volume and speed of traffic.

Candidate schools include:

- ✓ Arthur Academy on SE Division Street
- ✓ Trinity Lutheran Church School on N.E. Killingsworth Street

Problems:

Portland currently has insufficient funds to provide basic Safe Routes to School engineering services at this year and next year's Safe Routes to School pilot schools. As a result, we will be unable to make the identified safety improvements that are selected by the school community. This may result in a reduction in safety for kids walking and bicycling to school and a reduction in the number of children walk and bicycling due to concerns about traffic safety.

Project cost:

It is estimated that 15% of the costs will be for engineering/public involvement and 85% will be for construction. Installing two school beacons is estimated to cost \$20,000.

Benefits:

This project will lead to an increase in safety for children walking and bicycling in Portland. It will result in an increase the number of kids walking and bicycling to school. This will also strengthen the overall community support for the Safe Routes to School program.

Installing new school beacons in high priority locations will alert drivers to the presence of a School Zone and improve compliance with School Speed 20 regulations.

Upgrade Unreliable School Beacons

FY 2006-07	\$96,000
FY 2007-08	\$0
Future	\$0
Total	\$96,000

Project Description:

Replace school beacon pager control units at 96 beacon locations.

Background:

In the late 1990's we converted the control of our school beacons to a pager-controlled system. Each beacon assembly has a data pager that receives pages from the commercial pager companies. Each school has a unique pager address. At our downtown office we have a dedicated PC that has the schedule for all of the schools with beacons. At the appropriate time of day / day of week, this central PC dials the commercial pager company and sends the appropriate "on" or "off" message to each pager. This method of control was vastly superior to previous time clocks and served as well for several years. We now have a total of 146 beacons assemblies associated with 61 schools in Portland.

Problems:

- Two years ago the commercial pager companies moved to using higher frequencies, causing us to change the crystal receiving chip in the pagers. These higher frequencies also reduced the effectiveness of the overall paging systems as the higher frequencies lead to more missed service areas. We added antennas in low reception areas, although not always successfully.
- Last year many of our units were moved from Arch paging to Cook paging, which lead to additional problems and a general reduction in service by the pager companies.
- Last spring we searched for a replacement for our paging system and found two-way pager controllers that were not only pager controlled, but could store the annual schedule for that beacon assembly. This two-way pager receives constant time pulse from the paging system. Also the two-way units send confirmation pages back to central when they receive a message. We bought 54 units to address what we thought were the worst locations. Those units were installed over the summer.
- As of July 1, 2006 the school zone speed law was again revised. Previously the use of beacons was merely supplemental at many locations where we had fixed 20 mph zones 24/7 as noted with fixed signs. The beacons had a message that said "fines higher when flashing". If the beacons didn't work, at least the fixed 20 mph signs were there. This summer that 24/7 20 mph zone was removed including the fixed signs. The sign under the beacon was changed to "20 mph when flashing". Now having the beacons flash at the right time became critical.
- We are continuing to have inconsistent operating problems with the remaining one-way pager beacons.

Benefits:

These new beacon controllers will improve the reliability and dependability of our school beacons which will:

- Provide a safer condition for school children at the times needed and
- Improve enforceability of the school zones

This project also helps address our infrastructure needs by replacing these one-way pager units that became obsolete.

Pothole Hotline Pilot Program

FY 2006-07	\$250,000
FY 2007-08	\$250,000
Future	\$0 (future costs TBD after pilot project)
Total	\$500,000

Project Description:

Formation of a 2-person crew dedicated to repairing potholes and targeting specific neighborhoods, moving around the entire city in a geographical equal manner. Working with PDOT's communication team and the Office of Neighborhood Involvement, we will develop materials to be advertised in local neighborhood periodicals and neighborhood and business association newsletters. An Office Support Specialist will support this team. As we develop communication materials it will be important to address the streets in the City that are not maintained by the City.

Problem:

Responding to potholes is a reactive approach to repairing hazards in the streets. Implementation of this program will allow the Bureau to be more proactive to repair hazards in the streets.

Project cost:

Annual costs are still being determined; initial estimates are approximately \$250,000 for labor, material, and equipment. Initially, we would use an existing thermolay truck. However, this shorts the existing crews one truck. The cost of a new thermolay truck is approximately \$100,000 and would need to be purchased if this program continues beyond one year.

Benefits:

- PDOT will be more proactive to repairing potholes in the streets, potentially reducing the risk claims.
- Maintain the current infrastructure in the most cost-effective manner.
- Opportunities to interact more with our community.

Road Improvement Option – Grade and Gravel Unimproved Streets

FY 2006-07	\$0
FY 2007-08	\$783,750
Future	\$50,160,000
Total	\$50,943,750

Project Description:

The project would provide rough grading and placement of gravel on one mile of unimproved street to improve the driving surface.

Problems:

This would be a major change in existing City policy of not maintaining unimproved streets. There are approximately 65 miles of unimproved streets and it is expected that all property owners adjacent to unimproved streets would expect equal treatment. Grading and graveling of unimproved streets would make some short term improvement to the driving surface but is not sustainable as keeping the street in good condition requires ongoing regular maintenance. Gravel roadway construction requires careful grading, attention to base preparation, and selection of rock mixes to maximize useful life and to minimize erosion, dust and flooding of adjacent properties.

Storm drainage facilities would need to be designed since the reshaping and graveling of these unimproved streets would change drainage patterns and divert storm water onto private property without adequate drainage facilities. The cost of maintaining newly designed drainage facilities that are not built to maintainable standards would be significant. The Bureau of Environmental Services would be responsible for this maintenance and the cost would need to be incorporated into sewer rates.

The drainage system provided for gravel roads, usually ditches and culverts, must be continually monitored to avoid plugging, buildup of debris, and/or flooding of adjacent properties.

The City presently allows abutting property owners to spread gravel on unimproved streets. The City has not undertaken this at its expense for three reasons, 1. Gravel is not a cost-effective solution for street improvements due to the high level of ongoing maintenance, 2. If the City does the work the City assumes liability for any drainage issues that may arise (redirected water onto private property), 3. The City becomes liable for claims of property damage or personal injury due to poor condition of the street.

The improvement benefits automobile access but does not address pedestrian or bicycle access needs.

This major policy change would increase the City's maintenance liability and divert funds from maintaining existing capital assets. Based on City of Gresham cost data gravel maintenance is estimated to be 1800.00 per mile per year. This appears to be a low number as gravel roads typically serve low-density areas with low traffic volumes. In Portland neighborhoods with higher densities we are assuming a higher level of maintenance will be needed. There will be additional costs for storm water facility maintenance however we can't determine how much that would be until we know the type and level of stormwater facility needed.

Project cost:

The following are very low level of confidence estimates for initial construction of an adequate and maintainable gravel street with storm water drainage and disposal. The City does not construct or maintain gravel streets so we have no historical data to use in preparing this estimate.

Assumptions: street needs to be reshaped to provide drainage, storm facilities include a ditch section, adequate storm water disposal by infiltration, and no driveway culverts needed. All work done by private contractor which requires plans, specifications, inspection and contract administration.

Initial construction

\$418,000	construct per mile
\$209,000	storm drainage per mile
\$156,750	design contract/admin per mile
TOTAL	\$783,750 per mile

Ongoing maintenance

1 mile @\$1800 per mile X 20 years	\$36,000
Contract admin & oversight @ 15%	\$ 5,400
20 year costs	\$41,400

20-year life costs

\$783,750
<u>\$ 41,400</u>
\$825,150

Annual cost per mile \$41,257.50

<u>Construct</u> 65 miles of gravel road	\$50,943,750
<u>Maintain</u> 65 miles of gravel road (20 years)	\$ 2,691,000
Total	\$53,634,750

Alternatives

Street construction to urban standards with pedestrian facilities, full Americans with Disability Act compliance and storm water drainage that meets federal and state standards is on average \$3,841,200 per mile to construct. (Ranges from \$ 3,020,160 to \$4,667,520 depending on terrain).

Benefits:

Improvement would somewhat improve motor vehicle driving surface.

Road Improvement Option – Arterial/ Collector Deferred Maintenance

FY 2006-07	\$3,000,000
FY 2007-08	\$0
Future	\$0
Total	\$3,000,000

Project Description:

Fund street improvements that were deferred due to a revenue shortfall.

Problems:

Gas tax revenues were two million dollars short from projected revenues in FY 05-06 due to the high price of gasoline. Decisions were made to defer needed maintenance on several arterial/collector streets that had been identified as projects.

Historically, asphalt costs have been steady. (See Attached) Due to recent oil refinery industry changes, the cost of asphalt has recently incurred extraordinary rises from an economic shift. These unexpected rises translate to a projected average increase in asphalt costs of over 33% by the end of the fiscal year. The paving program currently has a three million-dollar asphalt budget; this 33% rise equates to a one million-dollar shortfall.

Project cost:

Two-million dollars of this request will be utilized to fund planned work in this fiscal year that would have been deferred to future years. One Million dollars will fund projected increases in asphalt cost.

Benefits:

The following projects will be fully funded:

- W. Burnside Rd. S.W. Tichner to S.W. 48th Ave (\$750,000)
 - W. Burnside rd. & 23rd Ave. intersection reconstruction (\$300,000)
 - N.W. 23rd Avenue reconstruction from Hoyt to Lovejoy (\$950,000)
- Anticipated shortfall in asphalt budget will be funded. (\$1,000,000)

Road Improvement Option – Neighborhood Collector Improvement Planning (HALO LID development)

FY 2006-07	\$200,000
FY 2007-08	\$0
Future	\$0
Total	\$200,000

Problem:

The SW collector streets are not constructed to urban standards with sidewalks and bicycle facilities. The cost of reconstructing what was primarily a rural county road system to modern urban standards is prohibitively expensive and most of these collector streets are not eligible for funding from state or federal revenue sources. The need is to identify solutions that meet community expectations at a price the community is willing to fund.

Project Description:

Phase One

- Consultant to research if this has been done in any other jurisdiction or if any other community based funding mechanisms have been successful elsewhere.
- Identify equity issues that would need to be addressed with this type of LID.
- Solicit community input to identify type of improvements that would receive community financial support.
- Identify mandated requirements (ADA, storm water treatment and disposal).
- Recommend methods for determining level of benefit received and how to equitably allocate costs over all benefiting properties.
- Identify larger community benefit that should not be the responsibility of those in the directly impacted area.
- Solicit community input to identify streets of major concern to residents and users.

Phase Two

- With PDOT assistance, using community input on desired improvements, identify two representative major street segments.
- Solicit community input using structured meetings to determine specific improvements desired by impacted property owners and system users (motorists, bicyclists, transit, PDOT and BES).
- Develop conceptual plans for the two street segments incorporating input from affected parties (residents, motorists, bicyclists, transit, PDOT and BES). Conceptual plans should incorporate best practices for storm water management and identify best value solutions depending on site conditions. Additionally, identify if opportunities exist to provide value added opportunities for the community such as access to community gathering places or creation of community focal points.
- Solicit community and stakeholders comments on conceptual plans.
- Develop preliminary cost estimates for planning, design, construction and administration (identify, if possible, the cost attributable to each transportation mode and the storm water components) for both street segments.

Project cost:

The estimated cost for the total project is **\$200,000**. This cost will be divided as follows: Phase One totaling \$75,000; and Phase Two totaling \$125,000.

Benefits:

Improvements will provide a mechanism to equitably spread the cost of street improvements that benefit an entire neighborhood to more than just the adjacent property owners.

Road Improvement Option – LID Low Income Subsidy Program

FY 2006-07	\$0
FY 2007-08	\$500,000
Future	\$TBD
Total	\$500,000

Project Description:

Introduce City cost-sharing of direct costs of local improvement districts, which was a primary goal of the redesigned LID process, which commenced with the passage of Resolution No. 35738 on November 4, 1998 and concluded with the passage of Ordinance No. 177124 on January 10, 2003. This request would limit subsidies to owner occupied properties where the residents income is at or below 'x' percent of median income.

Problems:

- Although the LID process has been redesigned and is well positioned to take advantage of special, one-time only funding, no broad-based Citywide funding exists to defray the costs of LIDs for participants.
- A street maintenance and improvement fee (SMIF) was anticipated as a means of reducing costs to LID participants, but was repealed by Council before any funds were collected.
- Previous funding streams for street improvements, such as CDBG funding from BHCD, have generally been terminated, and PDC has not committed to funding additional street improvements in the Lents URA or to launch new street improvement programs in other URAs. Further, most dirt and gravel streets in the City are outside urban renewal areas.
- The redesigned LID process had a goal of reducing average property owners' costs to \$5K per property. The most recent valid LID petition estimates property owners' costs at \$21K per property with a relatively simple and inexpensive scope (this estimate includes contingency).
- While the LID program has been very effective in capitalizing on green street opportunities (e.g., in Lents and the SW Texas Green Street LID), additional opportunities are unlikely to be realized without City sharing of direct costs, especially for low income residents.

Project cost:

The estimated cost for the total project is in excess of \$500,000, with the property owners' share dependent on a policy decision by Council as to what proportion of cost-sharing by the City to offer. The LID funding offers leverage to the City contribution.

Benefits:

This funding would help reduce the City's backlog of 64 miles of dirt and gravel streets and would significantly increase opportunities for green street solutions on local streets. A November 2005 analysis found that the highest backlog of dirt and gravel streets (as measured in centerline miles) are in the following neighborhoods:

- Cully (NE)
- Brentwood-Darlington (SE)
- Powellhurst-Gilbert (SE)
- Multnomah (SW)

Tree Trimming Around Street Lighting Luminaires

FY 2006-07	\$0
FY 2007-08	\$100,000
Future	\$0
Total	\$100,000

Project Description:

Trim tree branches around 200+ street lighting luminaires to improve light distribution on the street.

Problems:

- As trees grow, limbs and branches often block street lights, reducing the amount of light that reaches the street. These blockages also increase lighting variability.
- Due to street lighting budget cuts, PDOT has not paid to have trim trees around street light luminaires in nearly 5 years.
- PDOT now has a list of nearly 70 residents who have requested tree trims to improve lighting on their streets. Many more have asked to not be put on the list.
- PDOT staff estimate that over 500 locations need tree trims.

Project cost:

The average cost of each tree trimming is estimated at \$500.

Benefits:

These tree trims will:

- Increase the amount of light reaching the street.
- Improve lighting uniformity, an important aspect of night time visibility.
- Respond to citizen requests for basic services.
- Maximize the dollars we already spend on keeping the lights maintained and in good working condition.
- Reduce damage to trees by trimming branches before they get too big to safely prune them.
- Reduce damage to luminaires from too large tree branches pushing against them.

While the trees will eventually grow back, this one-time shot will provide a catch-up to address this basic need. This improvement will be especially noticeable as we enter the darker time of the year.

Steel Bridge East Ramp Strengthening

FY 2006-07	\$0
FY 2007-08	\$750,000
Future	\$0
Total	\$750,000

Project Description:

- Strengthen the existing 56 year-old concrete ramp structure, which carries light rail to the Steel Bridge, so it can continue to carry light rail into the future.
- Existing ramp to be strengthened with either external post tensioning or tension fiber wrap to provide additional strength capacity to the existing members.
- It is intended that the strengthening will permit light rail to continue to operate with minimal disruption to daily operations. It may be possible to coincide strengthening operation with proposed Steel Bridge closure for downtown light rail expansion in 2008.
- Strengthening solution adopted to balance the concern of minimize disruption to light rail and provide the greatest potential for long term strengthening.
- Strengthening solution also to provide the ramp structure with a lateral system that can resist the braking forces that can be induced by light rail trains.

Problems:

- Existing ramp concrete girders had over 100 cracks that were epoxy injected in November 2005.
- Existing ramp girders and supports are showing signs of overstress, which if not addressed will prevent the ramp from carrying light rail in the future.
- The ramp structure does not currently have a lateral system that can provide adequate resistance to the light rail braking loads or seismic loads.
- In a City of Portland Bridge Seismic Retrofit prioritization study carried out in 1994 the East Ramp of the Steel Bridge was considered the City's highest priority in seismic vulnerability.
- When the East ramp was converted to light rail use, no strengthening of the ramp was carried out at that time, despite the fact that the trains exert a greater demand on the bridge that the previous vehicular traffic did.

Project cost:

The estimated cost for the total project is \$1.5 million. Tri Met has agreed in the past to contribute half cost amount, which would be \$750,000. **The City's contribution would then be \$750,000.**

Benefits:

This proposed strengthening would secure the Willamette crossing for light rail into the future.

It will provide a seismically sound and stable structure that will continue to carry the light rail trains across the East Ramp of the Steel Bridge Willamette crossing.

The Steel Bridge is the only Willamette Crossing for Light Rail. Any strength deficiency in that crossing will effect city wide Light Rail operations. This project will eliminate the known strength deficiencies in the East Ramp structure.

Platinum Bicycle Master Plan Update

FY 2006-07	\$ 50,000
FY 2007-08	\$100,000
Future	\$0
Total	\$150,000

Project Description:

This project will update the City's Bicycle Master Plan (BMP) prepared by PDOT and adopted on May 1, 1996. The plan underwent a minor amendment in 1998. The update of the BMP is component #3 of the Portland Platinum Strategy. The BMP is part of the City's Transportation System Plan.

The BMP update is scheduled over a two-year period, beginning July 1, 2006 and ending June 30, 2008. A schedule by task including intermediate milestones is in preparation.

Problem:

The update of the Bicycle Master Plan is identified in the work program for the Transportation Planning Division (TRP) this Fiscal Year. The update was identified by Commissioner Adams and the Bike Platinum Committee as a key strategy for achieving National Platinum Bike-Friendly City status. However, no additional funds were provided in the budget for the current fiscal year. Instead, staff across the PDOT bureaus is planning to conduct a limited update using existing resources. This approach is insufficient for funding a broad public involvement process and development of a comprehensive modal plan update for adoption into the Portland Transportation System Plan (TSP).

Under the current approach of utilizing existing resources, TRP will devote existing GTR funds under 'Modal Coordination' to fund the work performed by a Transportation Planning Coordinator and a Transportation Planner I. Traffic Investigations has provided \$50,000 in CSTSP funds to TRP to fund bicycle boulevard planning, network development and design concepts. Most of this work will be performed by the Transportation Planning Coordinator; only about 30 percent of his time is available for the update given other work load commitments. Work to be performed by other PDOT bureaus (BTSM, BTED and BOM) will also need to be performed through existing programs.

Project Cost:

Costs include PDOT staff and professional services.

Benefits:

Providing the requested funding will allow PDOT to conduct activities and tasks that would otherwise not be conducted. This increased effort will provide a high-quality plan, which is expected of Portland, and increase Portland's eligibility for Platinum Bike-Friendly City Status.

The approach includes:

- Broad community outreach to engage citizens citywide in the Bicycle Master Plan update. The strategy is to reach out to each city district and engage both cyclists and non-cyclists.

- Work with focus groups, the general public and community groups to identify actions that would increase bicycle use, in part by attracting new users especially less experienced cyclists
- Amend bikeway classifications where needed on the City's 4,000 miles of streets.
- Develop policy, goals and objectives needed to elevate Portland as a world-class bicycling city.
- Coordinate the Bicycle Master Plan update with the concurrent Central City Transportation Management Plan update to improve the bicycling environment in the Central City.
- Develop applications including standard drawings for innovative bicycle facilities, such as bike boxes, shared lane markings, bike boulevards, crossing treatments, etc.
- Develop applications for programmatic innovations in the area of bicycle safety education, encouragement and enforcement.

Jasmine Block Streetcar Station Funds

FY 2006-07	\$0
FY 2007-08	\$1,500,000
Future	\$0
Total	\$1,500,000

Project Description:

- Realigns the Portland Streetcar diagonally across the Jasmine Block Property between SW 4th and SW 5th
- Relocates the Northbound Streetcar stop to a mid block stop incorporated into the Jasmine Block Development

Problems:

The first northbound stop for the Portland Streetcar is located at SW Fifth and Montgomery. The Southbound Streetcar; as part of the extension to Riverplace was temporarily aligned around the Jasmine Tree block. The long-term plan was to route the Streetcar diagonally across the block, which contained the Jasmine Tree Restaurant. The Portland Mall project will require the Streetcar's Fifth and Montgomery stop to be relocated to allow for LRT operations and a station on the Mall.

PDC has recently completed an RFP process for a developer for this block. Gerding-Edlin is the successful developer, and is now proceeding with development plans. A commitment to move forward with streetcar as a part of the Jasmine Block Development must be made in early 2007.

Project cost:

The total estimated cost for the project is approximately \$2,350,000 with a low level of confidence on the estimate. The City is currently seeking an updated cost estimate. PDC is proposing to provide \$850,000 in TIF funds, with the One Time General Fund request covering the additional costs of **\$1,500,000**.

Benefits:

This investment will solve a number of problems, while at the same time creating a high quality urban design for the ground level of the Jasmine Block.

- Funds would allow for the relocation of the SW Fifth and Montgomery streetcar stop to a new location off the Mall
- Funding would eliminate the single track section of the streetcar around the Jasmine Block allowing for greater operational efficiency of the Streetcar

Funding would provide for a high quality urban design for the Jasmine Block creating an environment similar to the PSU Transit Plaza

Central City Transportation Management Plan (CCTMP) Update

FY 2006-07	\$0
FY 2007-08	\$150,000
Future	\$0
Total	\$150,000

Project Description:

The Bureau of Planning is updating the Central City Plan. The Central City Plan was adopted in 1988 and was a comprehensive planning and community involvement effort that established the overall framework for public and private investment in Portland's Central City area. This document is now nearly 20 years old and the success of this plan has resulted in significant changes in every district of the Central City-Downtown, River, South Waterfront, Lloyd, Central Eastside, Goose Hollow, University, and Lower Albina. An update of the Central City Plan is needed to address these changes and provide a new 20-year framework.

The request is to integrate the update of the Central City Transportation Management Plan (CCMTP) with the Central City Plan update process. The CCTMP is the implementing transportation framework for the Central City Plan. Coordinating the update of these two major public policy documents would improve the responsiveness to community issues and result in a comprehensive examination of the inter-relationship between land use, economic development, urban design, environmental quality and transportation. This would result in the examination of transportation policies regarding access, circulation, transit, bike, pedestrian, freight and parking.

Problem:

PDOT has previously budgeted for updating the CCTMP. However, due to budget limitations this effort was a limited update. The intent of the current effort is an Interim CCTMP Update that integrated the CCTMP into the TSP. New policy initiatives would relate to Freight Master Plan street classification issues, Bicycle Master Plan issues, and incorporating the policy consequences of transportation projects adopted since the CCTMP or TSP. For example, incorporate new transit street classifications resulting from the Portland Mall Revitalization Project's bus concept plan. A result of this interim update would be the identification of central city transportation policies that needed to be addressed as part of a larger comprehensive effort and a new budget request.

Current expenditures have focused on City Council initiatives, e.g., the Freeway Loop Study, or initiatives led by the Bureau of Planning and Portland Development Commission. These have included River District land use planning, Central Eastside zoning, and Lloyd District redevelopment projects. Additionally, the Central City transportation model was updated and currently is in the process of conversion from an emme/2 model to a new VISUM mode. This process includes updating the parking and land use inventory to reflect the high-density activities in the Central City. This updated model will be used for the budgeted work with PDC and Bureau of Planning; and includes the South Waterfront Access Study, the re-examination of the I-5 North Macadam Ramp Project, the North of Lovejoy Study, the NW Remand Study, and the East Broadway Study.

Project Cost:

Costs include Transportation Planning staff and professional services.

Initial Traffic Calming Improvements for South Portland and Homestead Neighborhood in response to South Portland Circulation Study

FY 2006-07	\$0
FY 2007-08	\$500,000
Future	\$0
Total	\$500,000

Project Description:

Design and construct safety improvements in South Portland and Homestead neighborhoods.

Safety improvements include:

- Traffic calming items, including curb extensions, median islands, and other improvements to reduce impacts of traffic on neighborhood streets.
- Pedestrian improvements, including sidewalk construction, crossing medians, median refuges, painted crosswalks, trail connections and gateway treatments.

Problems:

The South Portland and Homestead neighborhoods have been struggling with the effects of regional use of the local transportation infrastructure for years. This area is at the intersection of numerous regional traffic facilities, many without direct connections, forcing local residential streets to carry large volumes of traffic. In addition, seen as a quick and easy way to access the downtown core, travelers use local SW Portland streets to bypass adjacent congested arterials and freeways. The increased traffic on these local streets has a direct impact on the safety of local residents as they travel through their neighborhood.

Compounded by the anticipated increase in traffic due to the development of the South Waterfront District, the South Portland and Homestead neighborhoods require a series of traffic calming and pedestrian improvements to maintain neighborhood livability and safety.

Numerous studies have identified locations throughout the South Portland and Homestead neighborhood that are in need of traffic calming and pedestrian improvements. This funding would allow the Office of Transportation to complete an array of longstanding neighborhood priority projects.

Benefits:

- Increase the safety of pedestrians, bicyclists, and residents in South Portland and Homestead
- Lessen impacts to the existing transportation infrastructure in South Portland and Homestead
- Help mitigate the traffic impacts of central city development on South Portland and Homestead

SW Boones Ferry Rd & SW Stephenson St. Intersection Realignment

FY 2006-07	\$0
FY 2007-08	\$300,000
Future	\$200,000
Total	\$500,000

Project Description:

- Project provided seed money of \$50,000 from recent land use approval (appealed to City Council) to be applied to “fixing” this intersection.
- A number of design options exist to realign this intersection but require ROW acquisition of at least one property owner.
- A significant amount of development has occurred around this area and traffic continues to increase both from within the City of Portland limits as well as from Lake Oswego and Clackamas County.

Problems:

- Sight distance is severely limited and meets only minimum requirements for the posted speed.
- Drivers are required to look to extreme angles, which reduce perception time to negotiate the intersection.
- Existing intersection is deficient of striping and signing to correctly channel vehicle traffic to optimum locations however these improvements will not eliminate the problem.
- New developments in SW Portland as well as Lake Oswego are increasing traffic volumes in this location.
- No pedestrian or bike amenities exist at this location although there is a Tri-Met stop available. Both streets are classified as a City Bikeway and Walkway.

Project cost:

The estimated cost for the total project is \$750,000. **A one-time general fund request of \$300,000 will bridge the gap and allow the project to be built in the near future.** Developers will cover \$50,000 and Local Improvement District will cover \$400,000. This cost is an initial estimate provided during the recent land use appeal to council and anticipates construction within 5 years. Expediting construction with one time dollars will substantially reduce construction and property value inflation. The Arnold Creek Neighborhood Association has testified before Council that they are willing to consider forming a Local Improvement District to bridge the funding gap provided one time money and other funding sources have been exhausted.

Benefits:

This project will result in the following:

- Reduced driver apprehension to utilize existing intersection reducing out of travel trips to a safer location.
- Improved sight distance and safety for bikes, pedestrians and vehicles.

Stormwater improvements will be included

Preserve and Retain Four Vintage Trolleys in Portland

FY 2006-07	\$250,000
FY 2007-08	\$0
Future	\$0
Total	\$250,000

Project Description:

Preserve and retain four vintage trolleys at the request of Vintage Trolley, Inc. This proposal includes the participation of the City, TriMet, Willamette Shore Consortium, and Vintage Trolley, Inc.;

- The City of Portland provides a one-time payment of \$250,000 to create an endowment fund that will preserve the cars in perpetuity.
- TriMet agrees to operate one Vintage Trolley on the Transit Mall on weekends commencing in 2009 with the opening. (This requires two vehicles, with one maintained as a back-up vehicle.)
- The City of Portland transfers the other two Vintage Trolleys to the Willamette Shore Consortium, which would assume the responsibility for operation and maintenance.
- Vintage Trolley, Inc. agrees to raise additional funds for the Endowment with the goal achieving a fund of \$700,000 to assure the permanent preservation of the Vintage Trolleys in Portland.

Benefits:

- Leverages private money
- Saves a \$4 million Portland investment
- Preserves a Portland icon
- Ensures perpetual maintenance and operations of the vehicles
- Preserves the possibility of extending light rail or streetcar to Lake Oswego in the future

Further Context:

TriMet has agreed to operate vintage trolleys on the new transit mall, adding an exciting new dynamic to the mall. While vintage trolleys are currently not compatible with modern streetcar lines (only with on MAX LRT rails), we are seeking to make new Portland streetcar lines vintage-trolley compatible. This will provide new lines on which to run these vehicles.

Sacramento Regional Transit District has proposed to acquire two Vintage Trolley vehicles to operate on their light rail line. They have offered to pay \$35,000 per year for 10 years for the two vehicles. TriMet would retain the other two vehicles for continued use in Portland. Without the above commitments, it is recommended that two Vintage Trolley vehicles be sold to Sacramento per the standing agreement with TriMet.