# Innovation Fund City of Portland Innovation Review Panel Funding Recommendations Fiscal Year 2014-2015

Micro Grants (Totaling \$44,500):

- 1. Accurate Real Property Management, Portland Bureau of Transportation, \$7,500
- 2. Innovative eLearning through Emerging Mobile Technology, Office of Management & Finance, Bureau of Human Resources, \$10,000
- 3. PSU-BPS Coordination Program, Bureau of Planning & Sustainability, \$10,000
- 4. Water Quality Map Widget, Water Bureau, \$17,000<sup>1</sup>

Major Grants (Totaling \$625,000):

- 1. Data Sharing with Faith-Based Nonprofits to End Homelessness, Portland Housing Bureau, \$65,000
- 2. Field Treatment Pilot, Portland Fire & Rescue, \$150,000
- 3. Green Our Fleet Pilot, Portland Parks & Recreation, \$65,000
- 4. Honey Bee Bike Counters, Portland Bureau of Transportation, \$35,000
- 5. Implementation of Long Term Fiber Vision, Office of Management & Finance, Bureau of Technology Services, \$25,000
- 6. Interstate Firehouse Cultural Center, Portland Parks & Recreation, \$85,000
- 7. Rx Play, Portland Parks & Recreation, \$150,000
- 8. Sign Protection Proposal, Portland Bureau of Transportation, \$50,000

<sup>&</sup>lt;sup>1</sup> The Water Quality Map Widget was originally submitted under the Major Grant category as it was a request for more than \$10,000. It was determined during the Round 2 Innovation Review Panel meeting that the nature of the proposal aligned with the Micro Grant approach and the recommended funding for this proposal be included with the Micro Grant recommendations.

EXHIBIT B

# CITY OF PORTLAND INNOVATION FUND Fiscal Year 2014-15 Proposals Recommended to Council for Funding

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# CITY OF PORTLAND INNOVATION FUND Proposals Recommended to Council for Funding 2015

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**Micro Grant Proposals** 



# CITY OF PORTLAND INNOVATION PROJECT CALL FOR IDEAS

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Project Title:	Accurate Real Property Management		Request Amo	Request Amount: \$7,500.0		0
Primary Contac	: David E. McEldowney	Phone:	503-823-7166	Lead	Bureau:	PBOT

# **Describe the Problem/Opportunity:**

PROBLEM: PBOT owns approximately 600 parcels of land. There is a lost opportunity in that PBOT lacks any comprehensive electronic database with GIS and portfolio tracking capabilities. Recently, BTS Corporate GIS created a city-wide database in which all City-owned parcels could be identified. This innovation request keys off that database which is to allow for the newly created database to be populated with key information that will help manage property. In addition, PBOT leases segments of right-of-way from other entities such as ODOT and UPRR that will only be able to be tracked in this new application with this additional data as the BTS project only tracks County tax lots.

This is an opportunity to allow city staff instant access through a GIS application to such information as hazmat and seismic reports, appraisals, leases, acquisition information, photographs and maps, funding restrictions, etc. on PBOT parcels, and leased right of way. The ability to manage and update the data, as well as running reports and queries, will provide city staff with a new resource. Grant funds would not only pay for the data population, but it would also allow for the expansion of the application to create the ability to track improvements, leases, IGA terms, or any other relevant information within any jurisdiction's right-of-way. Users would be able to review data to determine if there were beneficial uses that could be realized for city property such as construction staging areas, housing opportunities and mitigation sites, while being able to note any limitations or restrictions on the parcel.

# **Describe the Proposed Solution/Strategy:**

Recently, BTS Corporate GIS has worked with property controlling bureaus within the City to create a city-wide database in which all City-owned parcels can be identified. If funding can be secured through a micro grant, PBOT staff would be able to go a step beyond and upload this innovative database with pertinent information associated with all of these parcels.

As a result of this process, there will also be serendipitous opportunities identified. The first is the identification of real property that could potentially be sold as surplus or identified as a lease opportunity, thus generating revenue for the bureau. Secondly, this process will potentially identify over 100 parcels that can be converted into public right-of-way and thusly removed from our inventory, creating a more realistic accounting of our holdings. And lastly, important institutional information can be added to this database for future generations to view.

The proposed work will largely be performed by PBOT's Right of Way Acquisition Section as it relates to the identification and input of the data; however, other entities within PBOT such as Maintenance Operations, SmartPark, Tram and Street Car would be able to populate the application with key information about their facilities and associated agreements. BTS Corporate GIS would perform the work needed to expand the current application they have created for the database to allow PBOT and other bureaus the ability to create polygons within the application for leases and facilities within City, State, TriMet, or railroad right-of-way.

Partners: (Other bureaus, governments, nonprofits, or private sector organizations)

BTS Corporate GIS, OMF and Multnomah County.

#### Additional Information Requested by the Innovation Review Panel prior to Round 2 Worksession:

*What will the \$7,500 do?* Funds granted to this request would be used for the following: 1) Take existing tax lots which are located within roadways and convert them into public right-of-way (approx. 180 parcels). This would cover staff time and recording fees. 2) Populate the new city-wide property management database with key information for all other parcels assigned to PBOT (approx. 400 parcels). This would cover staff time. 3) Expand the functionality of the city-wide property management database to allow for the ability to create distinct property records and better manage PBOT assets that are located in right-of-way (City, ODOT and Railroad). This would include such assets as the Tram, streetcar headquarters facilities, Stanton yard, and the Steel Bridge walkway, and would cover staff time for Corporate GIS.

*Can this interface with Portland Maps?* The city-wide property management database does not directly interface with Portland Maps; however, the assessment and taxation data represented in Portland Maps is taken from Multnomah County records. This means that the clean-up work identified above would ultimately be reflected in Portland Maps, thus creating a more accurate portrayal of the City's land holdings and a less confusing representation of the public right-of-way.

*How will this be shared with the rest of the City and greater community?* The property management database is a city-wide asset and all bureaus will be able to provide staff editing permissions or read-only capabilities. And given that all bureaus will have access to the database, the property information that is uploaded into the database by PBOT will be available to all viewers.

The benefit to the "greater community" would be that an electronic database allows city staff to quickly access key data, as well as historical information that could be used to answer questions from the public or other government agencies. This also provides the City with another method of preserving institutional knowledge associated with real property.



# CITY OF PORTLAND INNOVATION PROJECT CALL FOR IDEAS

Fill in the shaded areas. No more than 1 page please.

Project Litie.	Innovative eLearning through EmergingMobile Technology		Request A	Request Amount:		\$10,000		
Primary Contac	t: Lauren Nix	on	Phone:	503-823-6804	Lead	Bureau:	OMF BHR	

# **Describe the Problem/Opportunity:**

eLearning training offers a multitude of benefits. First, eLearning training improves efficiency. Employees do not have to wait for a scheduled course at a central location. Instead, the training comes to them, on their time. Additionally, eLearning provides the same level of training in one-third of the time allotted for traditional classroom-based training. Second, in a rapidly changing environment, training content is constantly changing. eLearning is easily editable, delivering timely and up-to-date information to employees. Finally, the City has the ability to create interactive eLearning that fully engages learners. Realistic scenarios instill applicable knowledge and skills. Mobile learning delivers high quality, up-to-date information, improving training delivery and efficiency. It is an all-inclusive package that will save the City of Portland valuable time and resources while delivering high quality training. In order to offer eLearning training, City employees must have access to a network computer. Currently, we estimate that one-third to one-half of the City's workforce cannot access eLearning due to lack of technology resources.

# Describe the Proposed Solution/Strategy:

# Bridging the Technology Gap

To meet current and future workforce training needs the City must invest in mobile technology hardware and eLearning training program development. With an investment of \$10,000 the City of Portland would be able to purchase and administer Training Tablets, specifically designed to bring eLearning programs to employees in the field. The Innovation Project would fund a pilot program to acquire and deploy mobile technology to meet the training and development needs of City employees without regular computer access.

A modest investment in tablet hardware and related ongoing wireless connection service, information technology maintenance, and eLearning development would give City of Portland employees access to valuable mobile training and development. Bureaus can opt-in to use Training Tablets giving all City employees the chance to participate in essential training and development. Ongoing administration costs will be recouped through a learner fee.

# **Capitalizing on Mobile Learning**

The Innovation Project is an opportunity to support our workforce today and prepare them for tomorrow. In 2013, the City of Portland launched its first citywide web-based training program. Over 3,300 employees successfully completed the online course. The Training and Workforce Development department in the Bureau of Human Resources is creating additional eLearning programs for the next fiscal year. If developed and administered on Training Tablets the new eLearning programs would save the City of Portland time and resources in delivery costs. By investing in the City's workforce, eLearning programs administered on Training Tablets positions the City of Portland to become a model employer of choice.

**Partners:** (Other bureaus, governments, nonprofits, or private sector organizations)



# CITY OF PORTLAND INNOVATION PROJECT CALL FOR IDEAS

Fill in the shaded areas. No more than 1 page please.

Project Title:	PSU-BPS Coordination Program	Request Amo	ount:	\$10,000		
Primary Contac	: Derek Dauphin	Phone:	503-823-5869	Lead	Bureau:	BPS

# **Describe the Problem/Opportunity:**

Collaborations between City bureaus and university faculty have resulted in projects that have won awards, resulted in new initiatives, and changed the public perception of how the City functions. These projects allow students to gain worthwhile hands-on experience working to improve the community, but they also allow the City to be more responsive and do more with limited resources. These projects represent a true win-win, but are currently rare because they can be hard to coordinate. One hurdle is the difficulty of synchronizing City projects with the academic calendar. Staff need to have project ideas at the right times during the academic year for there to be a chance at incorporating them into courses or being included in grant proposals. Without effective systems in place to share information and look ahead, opportunities to align research and practice are often missed. Projects that best capitalize on partnerships between universities and the City often succeed because of personal contacts and chance discussions. As such, they are typically one-offs and connections are lost. In order to realize the full potential of City bureau collaboration with universities, a coordinated approach is needed.

# Describe the Proposed Solution/Strategy:

The Bureau of Planning & Sustainability is in the process of establishing a pilot project with partners at PSU to overcome the above challenges. The Institute for Sustainable Solutions (ISS) at PSU has agreed to provide a paid graduate research assistant (GRA) to work with staff at BPS to organize a process and tools to address these issues. This proposal seeks a one-time \$10,000 micro-grant to cover the cost of acquiring or developing a searchable web-based system that staff would use to submit project proposals that faculty can use when they are designing courses or writing grant proposals. Updated contact details will allow them to engage directly with City staff. The database would be viewable by the public. Project management features would allow staff and faculty to update the project's status and provide lessons learned and products at the end of projects. Some projects will be recurring, particularly those where datasets are created and will need to be updated, and these can be tracked in the system and highlighted for staff when updates are needed. Such a system would dramatically reduce the time costs associated with collaborations both for staff and faculty and reduce missed opportunities for the City to conduct new low cost projects with partners at PSU such as the Toulan School of Urban Studies and Institute for Sustainable Solutions. This software is just one part of a larger coordinated program. The PSU GRA and a liaison from BPS will organize other activities to strengthen the program including a regular seminar series and high level meetings between PSU and BPS leadership. Already there has been discussion of integrating BPS's engagement with the PLACE program that provides planning experiences for high school students with the planning program at PSU to develop a planning career development pathway for Portland youth. Finally, we view BPS and PSU as first steps. If the pilot is successful, the system could be rolled out to other bureaus and other universities such as Lewis & Clark, University of Oregon, Portland Community College and Mt Hood Community College.

Partners: (Other bureaus, governments, nonprofits, or private sector organizations)

Portland State University and the Institute for Sustainable Solutions

# Additional Information Requested by the Innovation Review Panel prior to Round 2 Worksession:

#### How will this be implemented?

Our proposal asks for one-time funding of \$10,000 to purchase or develop software that will connect BPS staff with partners at PSU around specific projects. After using and testing within BPS, we hope to make the software available to other bureaus and to other academic and community partners. No funding is requested for the staff time required to establish and use the software. We are currently considering a customizable software system developed in the Portland area called For My Innovation (FMYI). This page explains our implementation approach including how we'd use FMYI and the support we'd provide staff and partners.

#### How We'd Use FMYI

BPS staff and partners at PSU would receive licenses to post and edit projects. Projects will be viewable to the public without a license. Once a project is established, collaborators would use the software's project management features to work together more effectively. These features allow for the tracking tasks and resources as well as team pages to share updates with the group, share documents, gather data using forms, and create a shared project calendar. This system has many benefits:

- (1) Projects can be proposed, updated and stored in the system for as long as they are needed or relevant. This reduces the need for staff to seek out academic partners at just the right moment.
- (2) Projects or datasets that need to be updated on a regular basis can be configured to send email reminders to staff and PSU partners when updates are needed.
- (3) Once a project starts, the software's project management functions will reduce the time needed to coordinate work with partners. Partners will not need to purchase additional and often costly project management software packages such as Microsoft Project.
- (4) The system stores completed projects, products and lessons learned. Staff can search the system to find this information. This reduces the chance that work is unnecessarily duplicated. Management can use the software to quickly summarize work by topic, partners, or across all collaborations.

### Supporting Staff and Project Partners

The software will only result in innovative projects if staff and faculty use it and get the support they need. We are not asking for funds for this part of the project, but feel it is an important part of implementation.

- At BPS, we'll work with managers across the bureau to inform staff and identify projects. We will hold training sessions to ensure staff know how to use the software and what kinds of details are needed for project proposals. We will also organize a monthly meeting of staff who have ongoing projects with PSU to work through any issues they may have and share lessons learned along the way.
- At PSU, the paid graduate research assistant (GRA) will work with academic partners to provide the same level of support. Where there are multiple departments or schools working on the same project, the ISS would support the project by helping to coordinate the team.

A liaison from BPS will work with the PSU GRA to continually improve the program and overcome issues as they arise. We will share results across the bureau and University through existing and new seminar events.

#### Additional Benefits of the Project

At the November panel meeting, members raised a number of issues important to them in deciding to recommend funding for projects.

- 1. Can this be expanded to the rest of the City's bureaus? Yes. Once the system is working, other bureaus and community partners would be able to join in.
- Will the proposed program sustain itself over time? Yes. The funds will allow us to establish the software tool and pay for licenses. Use of the software will greatly reduce the staff coordination and oversight work needed. Research projects will not require budget and may in fact result in grants and other funding opportunities.
- How does it serve equity goals? The program improves BPS's ability to work with academic institutions that serve diverse student bodies and will result in opportunities for these students to gain meaningful experience working on real world projects. This benefits communities in need and the students' own career development.
- 4. Does it promote a more sustainable City? Yes. The software allows us to expand our bureau's core planning and sustainability capacity.

#### Fill in the expandable shaded areas. No more than 3 pages please.

Project Title:	Water Quality Map Widget		Innovation Reques	\$17,000	
Primary Contact:	Scott Bradway	Phone:	503-823-1951	Bureau:	PWB

#### **Problem/Opportunity Statement:**

Describe the challenge your proposal seeks to address, or opportunity it seeks to capture.

According to the Pew Research Center, government entities should provide citizens a variety of both online and offline methods to access information<sup>1</sup>. For the past ten years, the Portland Water Bureau's Water Line, a customer service hotline dedicated to water quality questions and concerns, has provided information to citizens through only one method: the phone. While providing government access through the phone is still relevant, 87% of American adults believe it is important that government agencies provide general information to the public on government websites<sup>1</sup>. This proposed project will expand the Water Line's capabilities and align it to fit the changing needs of our society by developing an online and mobile-enhanced, map-based tool that citizens can use to access real-time information about water quality and water service disruptions around the City.

The Water Line staff are an important resource to the Portland Water Bureau (PWB) by responding to roughly 2,500 water quality calls per year. They field a wide range of questions, from helping customers troubleshoot the cause of an off taste or odor in their water, to coordinating and responding to lead-in-water testing requests. One type of customer concern, dirty or discolored drinking water, is a situation that presents a number of challenges to customers calling the Water Line. Since Portland has an unfiltered drinking water system, it is normal for sediment to accumulate at the bottom of water main pipes. Dirty water events can happen when this sediment is stirred up following planned or emergency situations such as construction, fire line testing, and water main breaks. These types of events can lead to two customer service challenges:

- 1) A large and sudden influx of customer calls can leave customers on hold for extended periods of time.
- 2) Customers report that they expected to find information on the PWB website, and were frustrated by the lack of online information.

This project, proposed through the 2014-15 City Innovation Program, is to develop an online and mobile-enhanced, map-based tool, called Portland Works, that allows the PWB, and other participating bureaus, to be more effective and responsive to Portland residents. Recognizing that other bureaus may have similar online communication needs, this project will be a platform that can be a shared resource between the bureaus for residents to find an up-to-date map of activities conducted by City bureaus in one place.

<sup>1</sup>Pew Research Center (2010) *Government Online: The internet gives citizens new paths to government services and information.* http://pewinternet.org/Reports/2010/Government-Online.aspx.

# Lead Bureau & Partners:

List the bureau taking lead and the other bureaus, governments, nonprofits, or private sector organizations involved. Confirm these partners are onboard.

**Lead bureau**: The Portland Water Bureau, will be the lead agency to coordinate with the Bureau of Technology Services to develop the Portland Works tool.

**Other participating bureaus**: Initial discussions have taken place with the Bureau of Technology Services to develop a cost estimate and schedule for the project. In addition the Portland Bureau of Transportation has expressed interest in participating in the development and use of the tool. We will continue to reach out to other agencies throughout the development and roll-out phases of the project, including the Bureau of Environmental Services, Bureau of Development Services, Parks and Recreation and the Bureau of Planning and Sustainability.

#### Describe the process undertaken to develop proposal:

Where did the idea originate? How has it evolved? Were other solutions considered? Who was involved?

PWB Water Line staff originally developed the idea of Portland Works, with the initial focus solely on providing information on water quality activities. However, after input from other staff, the proposal scope has expanded to include other bureaus.

Other solutions that were considered:

- Use of PWB Water Quality website: Regardless if this innovation grant project is funded, improving web content will occur to provide general information for the public. However, this web content will be static and not include event-specific information.
- Create a planned and emergency events webpage: This would be inefficient for both the City and residents as PWB staff would be burdened with regularly updating this list so that it does not grow stale; and residents may not be able to effectively find what is happening near them if projects are in list form.
- Post information on the Water Bureau's Water Blog: Even though dirty water events are infrequent and usually
  affect small numbers of residents at a time, there would be a large archive of dirty water postings that would
  negatively affect perceptions about drinking water quality.

Additional development of Portland Works included researching similar tools that are used by other utilities, including the tool developed by Severn Trent Water in the UK: <u>http://www.stwater.co.uk/my-supplies/live-updates/</u>.

# Detailed Project Description:

The Innovation Grant would provide funding for the Bureau of Technology Services (BTS) to develop the interactive map platform. This project will have two deliverables:

- Map-based user interface, similar to Google maps, that is accessed by Portland residents on computers and mobile devices.
- A user interface for City staff to input location and event information.

This map-based tool would provide Portland residents a comprehensive view of City projects happening near their homes, places of business, or schools. This would also allow the PWB, and other interested bureaus, to communicate to residents in real-time about either planned or emergency projects or issues. Examples of situations that could be included in the tool are water system issues, sewer work, road construction, development, or park projects. The grant would be used for BTS development of Portland Works that could then be placed on the website of any participating bureau.

Key functions:

- Unique symbols for each type of event and bureau
- Ability to search by address or intersection
- Filter to view only type of events customer is interested in
- Pop-up window for each event with standard information:
  - o Event type and title
  - Short event description including cause and duration
  - o Lead bureau and optional contact for more information
  - o Automatic expiration of each event so map doesn't need to be updated, or get outdated

# **Potential Outcomes:**

Address equity and opportunity. Who would benefit from the project outcome? Who might be burdened? How does this project make Portland, and/or the City organization, better? Does it create efficiencies? Be specific.

Benefits are two-fold:

1) Residents

- Provides additional sources of information; multiple ways to find the same information.
- On-the-go information: in the same amount of time it takes to find the phone number online, they can find and access the map, potentially resolving their question or issue.
- Can see what is happening around the City and the estimated length of the project. Information provided on the tool is useful beyond just a water quality application.
- Enables resident to independently locate information and potentially resolve questions on their own.
- 24/7 accessibility Most customer service numbers are only available during normal business hours.

2) City

• Improves customer service.

- Reduces burden on front line staff.
- One, central resource that all front line staff around the City can reference in real-time when on the phone with a customer and can direct to correct bureau.

Burdened: City staff who would be responsible to upload information to Portland Works.

Making Portland better and efficiencies:

- Provides better transparency of activities and the work that goes into maintaining City facilities.
- One resource used by multiple bureaus.
- The City is viewed as efficient and responsive and improves public perception

#### Metrics for Success:

How do you propose to track progress and project outcomes?

To monitor project progress and outcomes, the metrics that will be compared before and after deployment of Portland Works by Water Line staff will include number of calls to the Water Line and number of page views to the PWB webpage that Portland Works is posted to. To provide customers the opportunity to provide feedback online, a customer feedback link will be provided on the same page as the Portland Works widget, which will direct to an online survey/customer feedback form developed by PWB staff using TrackIT. Additionally, the project will be tracked qualitatively through polling of Water Line staff and front line staff in participating bureaus for general customer feedback they may have received.

#### Implementation Plan and Schedule:

Identify start and end dates, major milestones, and risks to proposed timeline.

Project start date: February 1, 2015

Project end date: September 1, 2015

Major milestones and dates: May 1, 2015: Go live date for PWB website. September 1, 2015: Go live date for all city bureaus.

Risks to timeline: As with all projects, there are other priorities that may take precedent and delay the work on the project, or technical complexities in the development that may also extend the project timeline.

# Innovation Funding Request: \$17,000

Using the table below, provide a line item breakdown of the funding request including: expected staff time and FTE requirements, contract costs, internal and external materials and services, ongoing operational and maintenance costs, and any other additional costs/resources related to the project that will be funded by your bureau outside of the actual Innovation fund request. Include cost savings or revenue, if applicable. Please add rows and descriptions to the table as needed.

	FY2014-15 Total Innovation Fund	FY2014- 15 Total	Ongoing* Total	In this column, give concise descriptions on what your estimated budget dollars represent (i.e. vendor, service,
Description	Budget	Budget	Budget	FTE etc.)
Personnel Services		0	0	
External Materials & Services	0	0	0	
Internal Materials & Services	\$17,000	0	0	Estimated 170 hours at \$100/hour of BTS development time.
Ongoing Operational	N/A	0	0	
				Funding to BTS to update and improve as needs arise. Funding would be from the PWB Water
Ongoing Maintenance	N/A	\$500	\$500	Quality Information annual budget
Other	0	0	0	
Total Cost Estimate	\$17,000	\$500	\$500	

\*Identify what funding sources you have confirmed for ongoing requirements in the right column.

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**Major Grant Proposals** 

#### Fill in the expandable shaded areas. No more than 3 pages please.

Project Title:	Data Sharing with Faith-Based Nonprofits to End Homelessness		Innovation Reques	\$ 65,000	
Primary Contact:	Leslie Goodlow	Phone:	503-823-4160	Bureau:	Portland Housing Bureau

#### **Problem/Opportunity Statement:**

Describe the challenge your proposal seeks to address, or opportunity it seeks to capture.

This innovation project aims to couple the specialized care and commitment provided by faith-based organizations serving the homeless with City services and housing resources.

Multnomah County has nearly 1,000 homeless assistance programs operating on an average winter day. Faith-based nonprofits run about a third of those programs, including the majority of food programs and one quarter of all shelters and drop-in centers. Yet, despite their long history of helping those in need, very little is known about the services these organizations provide, the diverse clients they serve and the role faith-based organizations play in the City's larger efforts to reduce and end homelessness.

The majority of faith-based programs in Multnomah County receive little or no funding from government sources. Wary of the restraints that government funding and reporting could potentially place on their organizations, Portland's faith-based organizations have traditionally declined participation in government efforts to collect and report data on the clients they are serving. As a result, the work of faith-based nonprofits is not well-captured in the City's efforts to measure and respond to homelessness. Relatedly, faith-based organizations often provide short-term help to households in crisis – funds for a rent payment or medicine – without being aware of how to access long-term government support that may be available to needy households.

The work of faith-based programs is a missing piece in understanding the City's efforts to end homelessness. As a whole, the City has succeeded in building up an emergency response system for homeless people and is now focused on prevention and longer-lasting housing and support services. But the more basic support services provided by faith-based agencies are likely to remain a key ingredient in helping prevent homelessness and ensuring that those who do become homeless do so only once and for a short period of time. As Mayor Hales said during the City's recent day of homeless awareness, "Finding answers for houseless citizens is a priority for the city, the county, the state and the nation, it takes the for-profit and nonprofit communities, the faith community, the education community, the service providers. In short, it takes all of us, together, to begin to address this crisis."

#### Lead Bureau & Partners:

List the bureau taking lead and the other bureaus, governments, nonprofits, or private sector organizations involved. Confirm these partners are onboard.

Portland Housing Bureau is the lead bureau on this project in partnership with NE Community Fellowship Church, Anawim Christian Community, Blessed Temple Community Church and Westminster Presbyterian.

#### Describe the process undertaken to develop proposal:

Where did the idea originate? How has it evolved? Were other solutions considered? Who was involved?

Through our public engagement efforts, the Portland Housing Bureau (PHB) has consistently heard that PHB and the City need to do a better job of connecting communities with City Services and housing resources. Too often people in need are unaware of City housing programs and resources that are available. Community leaders have suggested that a means of addressing this mutual lack of awareness is to develop formal partnerships with faith-based communities as a way to

reach residents that we are not reaching through our traditional outreach efforts. Faith-based nonprofits have the potential to be excellent partners for the City in that they are deeply committed to those they serve, trusted by the communities in which they are located and are efficient in their services. All of the partner agencies listed above provide homeless services and housing to the Portland community but are not part of the City's coordinated efforts to reduce and end homelessness.

Originally this project was focused on gathering data from faith-based organizations in order to better inform public policy and decision-making. Over time the project has evolved into a strong partnership with an emphasis on two-way information sharing. PHB is interested in better understanding the needs of the communities that faith-based organizations are serving; and the proposed faith-based partner organizations need to be better connected to housing resources to meet the needs of their communities. PHB recently hosted a summit of faith-based leaders serving communities in North and Northeast Portland. If funded this proposal will provide seed money to fund a staff liaison and some technical assistance with the summit participants to develop a data sharing program.

# **Detailed Project Description:**

PHB proposes appointing a staff member as a faith-based community liaison to serve as a bridge between government and faith-based groups providing homeless services in Portland. The staff liaison will work with the bureau's program managers, data team and faith-based agencies providing homeless services to develop a data and information sharing program. The project is focused on information sharing in both directions so that all of the partnering agencies benefit from participation. As part of its ongoing outreach efforts, PHB recently hosted a summit of faith-based leaders serving communities in North and Northeast Portland. This proposal builds on those efforts and if funded will provide seed money to fund a staff liaison and some technical assistance with the summit participants to develop a data sharing program.

The program will also build on the work completed in last year's innovation fund pilot program. Last year, PHB piloted an XML data sharing project with several of its secular partner organizations that routinely supply data. The pilot was extremely successful and permitted partners to easily upload data into PHB systems and eliminated hours of cumbersome data entry. This proposal – partnering with faith-based nonprofits to share data — was recommended by Portland State University's Center for Public Service as phase two of the initial data sharing pilot. Perhaps more challenging than the previous pilot, this proposal will build a completely new data sharing relationship and grant the City and the participating agencies access to new information.

The data sharing program will employ innovative technical tools such as XML data transfers in order to make data sharing as easy as possible. None of the faith-based agencies will be asked to manually enter data into City systems. Instead, the XML tool developed will permit the faith-based nonprofits to share data from their own internal information management systems — often volunteer created Microsoft Access databases and Excel spreadsheets— that will in turn be uploaded into the City's Homeless Management Information System. This will greatly reduce what would otherwise be a burdensome data entry process for the agencies.

#### **Potential Outcomes:**

Address equity and opportunity. Who would benefit from the project outcome? Who might be burdened? How does this project make Portland, and/or the City organization, better? Does it create efficiencies? Be specific.

This proposal ties in very closely with the City's efforts to further equity and opportunity for its residents. National research indicates that in general, faith-based providers serve a more diverse group of clients than secular non-profits providing homeless services. The proportion of programs serving each client group — single men, single women, females with children, other households with children and youth — is higher among faith-based programs than it is among secular non-profits. The faith-leaders that attended the PHB faith-based leader summit serve a diverse community of Portland residents that the city is not currently reaching through its outreach efforts. These organizations have deep and trusting relationships with the communities they serve and are willing to work with the City to help our community access programs and housing assistance.

#### **Metrics for Success:**

How do you propose to track progress and project outcomes?

Ultimately the success of the project will be measured by the number of people whose housing crisis is addressed through a connection made because of this project. Progress will be tracked through the establishment of successful data sharing relationships between the City and faith-based organizations, the number of households receiving assistance and the number of households retaining their housing after they have been assisted. Because this is a new relationship contributing new information to the City's efforts to reduce and end homelessness, a secondary outcome of the project will be a sense of how this information contributes to new knowledge about the needs of Portland residents and the strategies to best meet their needs.

#### **Implementation Plan and Schedule:**

Identify start and end dates, major milestones, and risks to proposed timeline.

Project start date: March, 2015

Project end date: March, 2016

Major milestones and dates: March – June: establish liaison and final project timeline; June – August: map out technical aspects of data and information sharing; September – December: Implementation of data sharing; January – March: evaluation of project and necessary program adjustments.

Risks to timeline: Many faith-based agencies operate with volunteers. Changes in staffing with partner organizations may cause delays.

#### Innovation Funding Request: \$ 65,000

Using the table below, provide a line item breakdown of the funding request including: expected staff time and FTE requirements, contract costs, internal and external materials and services, ongoing operational and maintenance costs, and any other additional costs/resources related to the project that will be funded by your bureau outside of the actual Innovation fund request. Include cost savings or revenue, if applicable. Please add rows and descriptions to the table as needed.

Description	FY2014-15 Total Innovation Fund Budget	FY2014- 15 Total Budget	Ongoing* Total Budget	In this column, give concise descriptions on what your estimated budget dollars represent (ie. vendor, service, FTE etc.)
Personnel Services	45,000	55,000	0	Staffing for faith-based liaison. Bureau will provide necessary matching funds
External Materials & Services	20,000	0	0	Technical assistance for XML programming
Internal Materials & Services	0	0	0	
Ongoing Operational	N/A	0	0	
Ongoing Maintenance	N/A	0	0	
Other	0	0	0	
Total Cost Estimate	\$65,000	\$55,000	0	

\*Identify what funding sources you have confirmed for ongoing requirements in the right column.

#### Fill in the expandable shaded areas. No more than 3 pages please.

Project Title:	Field Treatment Pilot		Innovation Reques	\$150,000	
Primary Contact:	Mark Whitaker	Phone:	823-3725	Bureau:	Fire & Rescue

#### **Problem/Opportunity Statement:**

Describe the challenge your proposal seeks to address, or opportunity it seeks to capture.

People use the 9-1-1 system for a variety of medical problems, including lower acuity issues. The emergency medical services (EMS) system, however, is currently configured to transport all patients needing medical care to a hospital emergency department (ED) regardless of severity. As a result, the EMS system transports too many patients to EDs, which is often the most expensive place for treatment in the healthcare system. This places a heavy financial burden on patients and insurers, and places strain on the region's EDs. Also, as the first responder on EMS calls, Portland Fire & Rescue (PF&R) emergency units' response reliability for critical calls becomes strained when occupied on lower acuity calls. Lastly, under healthcare reform, there is added pressure throughout the system to improve health outcomes and reduce costs. In response, PF&R has taken several steps in the last few years to address this problem including the bureau's Rapid Response Vehicles and pilot programs to send patients to destinations with the appropriate level of care, other than the ED. However, additional innovative options exist to provide better treatment to patients in the right setting at a lower cost.

#### Lead Bureau & Partners:

List the bureau taking lead and the other bureaus, governments, nonprofits, or private sector organizations involved. Confirm these partners are onboard.

Portland Fire & Rescue is the lead bureau for this project. As part of its usual operations, PF&R will work with Multnomah County's Medical Director/Supervising Physician and the Bureau of Emergency Communications to develop and implement any new EMS protocols required to implement the project.

As described below in the project description, PF&R will also seek out a nonprofit or private sector partner for staffing the midlevel healthcare practitioner. PF&R has successfully partnered with clinics and insurers recently, most notably for the bureau's Alternative Destination Alternative Transportation (ADAT) program.

#### Describe the process undertaken to develop proposal:

Where did the idea originate? How has it evolved? Were other solutions considered? Who was involved?

Over the last several years, PF&R has been evaluating new programs to address the challenges described in the first section. The bureau's leadership team and supervising physician have met regularly over this time period to explore opportunities in improving EMS care. The department has also engaged with outside stakeholders and regional partners. For example, PF&R participated in the Community Healthcare Summit in April. Those attending included local health providers, hospitals, state and county health and human services departments, mental health providers, primary care and home health representatives, and EMS providers. Lastly, PF&R has researched other innovations in EMS programs at other fire agencies across the country, including direct meetings with several to learn more.

Improving EMS service is a complex task and there is not a single solution that will address all of the existing issues. As a result, PF&R's efforts culminated into a menu of promising EMS programs that PF&R is considering. PF&R presented these options to the City Council at a work session on December 9, 2014. While each proposed EMS program on the list is innovative, PF&R viewed the Field Treatment Pilot as the best candidate for the city's innovation program because the innovation fund could provide the necessary seed money to engage partners in establishing the program.

# **Detailed Project Description:**

PF&R proposes a pilot program of at least 6 months to staff an emergency response vehicle with a PF&R firefighter paramedic and a midlevel medical provider (nurse practitioner or physician assistant). This would enhance PF&R's medical response capabilities because the team could provide a level of on-site treatment that is not currently provided. For example, the firefighter paramedic would receive training as a community paramedic, giving the firefighter additional skills such as suturing. The midlevel provider could provide antibiotics and other prescription drugs. Together, the team would have the patient assessment tools, clinical skills, and familiarity with other healthcare providers and social services available in the local community to provide a more integrated approach to healthcare delivery. For example, the midlevel provider and paramedic could provide follow-up care, either returning to visit 9-1-1 patients from the previous day or scheduling visits with recently discharged hospital patients. Similarly, the program could ensure that patients with chronic conditions (i.e. TB) take their necessary medications. The team could also provide in the field treatment for patients who might normally refuse treatment or transport, preventing their condition from escalating and requiring costly treatment at a later time. The team would work under physician direction and approved patient care protocols to ensure patient safety while providing the right level of care for each patient. Several fire agencies (Mesa, Arizona and Denver, Colorado are two examples) have implemented similar systems by partnering midlevel providers with firefighter paramedics.

The two-person unit would work out of a rescue apparatus, similar in size and configuration to a typical ambulance. This would allow the unit to carry the necessary equipment and also offer a private, comfortable protected setting to provide care. The unit would likely work 40 hours per week (4 or 5 days per week). It would be inefficient for a single unit to cover the entire city. As a result, the unit will likely focus on a specific geographic area in downtown or east Portland, the areas currently with the highest volume of EMS calls and largest concentration of low-income or uninsured residents. PF&R will analyze the department's EMS call volume to determine the best geographic area. The unit could, however, make visits outside of that geographic area if there is a particular frequent caller or facility that could clearly benefit from the program.

To implement the proposal, PF&R would partner with a local clinic or hospital to provide one of its nurse practitioners or physician assistants for the 6-month pilot. PF&R could cover all, or a portion of, the midlevel provider's base salary for the duration of the pilot to encourage the partner's participation. PF&R's preferred approach is that the partner would be willing to fund a portion of the midlevel provider's salary. Such a cost-sharing arrangement would free up innovation funds and allow PF&R to extend the pilot project for longer than 6 months. PF&R believes a partner would be willing to share these costs because the partnership offers a low-risk method to reach a larger segment of the community and build a relationship with PF&R. A partnership would be beneficial for PF&R because it would be difficult to recruit and hire a midlevel provider for such a limited term. PF&R could also rely on the clinic or hospital for certain supplies and technology, such as electronic health records. It also allows PF&R to demonstrate its capabilities and strengths to a local clinic or hospital and build relationships for future public-private partnerships in EMS.

# **Potential Outcomes:**

Address equity and opportunity. Who would benefit from the project outcome? Who might be burdened? How does this project make Portland, and/or the City organization, better? Does it create efficiencies? Be specific.

The main beneficiary of this program is the patient, particularly the homeless or uninsured who do not have regular access to care. On-site treatment would improve the care available to this population and prevent them from facing the high cost of ambulance transport and an ED visit. The focus on integrated healthcare delivery would better equip PF&R to connect patients with additional resources in the community.

The program is also important in continuing to advance PF&R's efforts to form relationships and partnerships with healthcare providers and insurers. These programs lay the groundwork for potential cost recovery for PF&R's EMS services in the future. The program would create efficiencies by freeing up other PF&R resources for emergency response, a benefit for city residents requiring fire, rescue, EMS, or other emergency response.

#### Metrics for Success:

How do you propose to track progress and project outcomes?

PF&R inputs data about every incident that it responds to. Therefore, throughout the pilot project, PF&R will be able to evaluate the unit's workload, the type of services it is providing, and patient outcomes. Some important metrics to track for the unit's interactions with each patient include: Was the patient treated on scene without

transport? Was a follow up scheduled or patient care plan created? Did the care plan and treatment provided prevent the patient from calling 9-1-1 in the period following the unit's care? Affirmative answers to each of these questions would indicate the program is achieving its desired outcomes.

Another metric is whether the private partner finds the program useful and worthy of continued financial investment. This will be the key to continuing the program beyond the pilot phase and innovation funding. The goal is that the partner views the program as beneficial and allows the midlevel practitioner to continue in the program without the innovation fund subsidy. A more ambitious goal is that a successful pilot attracts additional partners willing to subsidize a midlevel provider on PF&R apparatus resulting in an expanded program with multiple units, and capable of receiving additional reimbursements.

### Implementation Plan and Schedule:

Identify start and end dates, major milestones, and risks to proposed timeline.

Project start date: 7/1/2015

Project end date: 12/31/2015

Major milestones and dates: Identify and negotiate with partner (Jan-April); community paramedic training (Mar-May); development of protocols and scope of practice (Apr-May); program training (June); pilot project (July-December)

Risks to timeline: Finding appropriate private partner; availability of appropriate training opportunities

# Innovation Funding Request: \$150,000

Using the table below, provide a line item breakdown of the funding request including: expected staff time and FTE requirements, contract costs, internal and external materials and services, ongoing operational and maintenance costs, and any other additional costs/resources related to the project that will be funded by your bureau outside of the actual Innovation fund request. Include cost savings or revenue, if applicable. Please add rows and descriptions to the table as needed.

Description	FY2014-15 Total Innovation Fund Budget	FY2014- 15 Total Budget	Ongoing* Total Budget	In this column, give concise descriptions on what your <i>estimated budget</i> dollars represent (ie. vendor, service, FTE etc.)
Beschption	Buuget	Budget	Buuget	6 months salary and benefits for
Personnel Services	60,000	0	0	paramedic firefighter
				6 months salary for midlevel practitioner (for initial planning, assumes PF&R covers full salary), medical supplies and
External Materials & Services	75,000	0	0	equipment, training
Internal Materials & Services	15,000	0	0	vehicle outfitting and maintenance
				If pilot is successful, estimated <b>annual</b> cost of continuing program for single unit (firefighter/paramedic salary, vehicle, etc.) with partner covering full cost of midlevel
Ongoing Operational	N/A	0	155,000	practitioner
Ongoing Maintenance	N/A	0	0	
Other	0	0	0	
Total Cost Estimate	\$150,000	\$0	\$155,000	

\*Identify what funding sources you have confirmed for ongoing requirements in the right column.

Project Title:	Green Our Fleet Pilot		Innovation Request Amount:		\$ 65,000
Primary Contact:	Sally Noble	Phone:	823-1632	Bureau:	Parks

**Problem/Opportunity Statement:** Describe the challenge your proposal seeks to address, or opportunity it seeks to capture. Please print in color to view charts.

The Climate Action Plan goal calls for a 50% reduction in carbon emissions from 1990 levels by 2030. One of PP&R's Strategic Plan sustainability initiatives is to reduce fossil fuels in our system. Pickup trucks accounted for 64% of PP&R fuel in FY13-14 and 66% in FY12-13, so this is a substantial target for more efficient replacements. The current electric vehicle (EV) options are not adequate for truck hauling requirements in park maintenance. Propane auto gas burns cleaner than gasoline or diesel, with 20 percent less nitrogen oxide, 60 percent less carbon monoxide, up to 25 percent fewer greenhouse gas emissions, and fewer particulate emissions when compared to gasoline. Propane costs 30-40% less than gasoline with lower vehicle maintenance costs and longer vehicle life. After I had conversations with the King County Department of Transportation and the City of Chicago Parks Department, I feel confident in conversion to propane as a practical, successful and innovative step toward achieving our goals.

#### Lead Bureau & Partners:

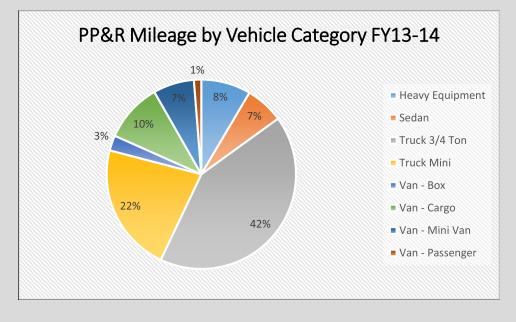
List the bureau taking lead and the other bureaus, governments, nonprofits, or private sector organizations involved. Confirm these partners are onboard.

Portland Parks & Recreation, Central Support Services management, City Fleet, Oregon Department of Energy, Bureau of Planning & Sustainability. All partners are on board with this decision.

#### Describe the process undertaken to develop proposal:

Where did the idea originate? How has it evolved? Were other solutions considered? Who was involved?

For the past year, I've been the leader on the Strategic Plan initiative to reduce fossil fuels at PP&R. This involved working with a team of supervisors in varying areas of the bureau to survey their vehicle needs and to research more efficient vehicle options. After analyzing the City Fleet data, we found 64% of all PP&R mileage was used to fuel pickup trucks in FY13-14 (see chart below) and 66% in FY12-13, due to the number of trucks we have in operations. Finding an alternative replacement for this vehicle type seemed imperative to lowering fossil fuel emissions.



By researching vehicle alternatives and having discussions with leaders in the electric vehicle (EV) community, we found an EV hybrid pickup truck & van produced by VIA Motors. It looked like an attractive option, but after more research we found the technology needs testing and each vehicle costs \$80,000-\$85,000. When the technology is further developed and the prices become more realistic, this may be a good option for smaller trucks. For some of these vehicle types, due to the weight of equipment and tools, there may not be an EV option even after technologies advance.

The Oregon Department of Energy (ODOE) hosted a workshop I attended on alternative fuels and I met some important contacts. More recently, ODOE has studied our fleet data and has recommended propane as a great option for our large fleet of trucks and larger vehicles. From the ODOE emissions analysis, they estimate we can achieve 20% emissions reduction by converting to propane with a 5 year ROI with their incentives. Along with the cost savings, this option is very feasible to implement and rose to the top of the list to green our fleet with currently available technologies. City Fleet agrees this is a good option and are excited about the project. They have funds to update the fuel station at Mt. Tabor Yard within the next two years. There may be an option to install a permanent tank purchased for propane during the upgrade, further lowering the cost per gallon of propane fuel.

After researching the 5 year vehicle replacement list, I saw a huge opportunity to replace trucks in 2015. The highest number of trucks will be replaced at Mt. Tabor Yard & Delta Park. (Please review both charts below).

Vehicle Type	2015	2016	2017	2018	2019	2020	Total
Heavy							
Equipment	1	1	2	8	4	4	20
Sedan	1		2				3
SUV					1		1
Truck 3/4 Ton	20	5	20	10	1	2	58
Truck Mini	23	3		5			31
Van - Box	1	1					2
Van - Cargo	3		2	3		1	9
Van - Mini Van	1		7	3	1	2	14
Van -							
Passenger	1	1					2
Grand Total	51	11	33	29	7	9	140

	Truck 3/4	Truck	Grand
Truck Replacement 2015	Ton	Mini	Total
Delta Park	2	8	10
East Service Zone HQ	2		2
Flavel Maintenance Yard	1	1	2
Golf Site		4	4
Mt. Tabor Yard	8	4	12
Northeast Service Zone HQ	3		3
Portland Building (Rangers)		4	4
Washington Park HQ	2	2	4
West SW Zone HQ	2		2
Grand Total	20	23	43

# **Detailed Project Description:**

Purchase a propane mower (Toro). Convert two replacement pickup trucks (F250 & F550) to propane; City Fleet will install conversion kits in house. Install concrete pad and electrical supply to operate the propane dispensing station; PP&R will install in house. Establish a contract with a fuel provider for free propane tank and dispenser; PP&R will arrange. After pilot is successful, roll out to other replacement vehicles at Mt. Tabor Yard and expand to other sites.

**Potential Outcomes:** Address equity and opportunity. Who would benefit from the project outcome? Who might be burdened? How does this project make Portland, and/or the City organization, better? Does it create efficiencies? Be specific.

According to the US Department of Energy "Propane is an inherently clean burning fuel due to its lower carbon content. When used as a vehicle fuel, propane can offer life cycle greenhouse (GHG) emissions benefits over conventional fuels, depending on vehicle type, and drive cycle. In addition, using propane in place of petroleum-based fuels may reduce some tailpipe emissions." Better air quality, lower emissions and lower costs are all benefits to conversion to propane fuels for vehicles without an electric or hybrid vehicle option for replacement. Oregon Department of Energy (ODOE) will offer 35% incentives for on road vehicles converting to alternative fuels starting in Jan. 2015 through 2018. These lower costs would be a better use of general fund dollars overall. Propane vehicles last longer than gasoline powered vehicles and there is evidence of lower maintenance costs.

With the huge fuel cost savings, we would hope to hire more staff in Central Support Services (CSS). After several years of budget cuts, staffing size is inadequate to meet the growing demands and large array of assets in the system. If the pilot is successful, we will roll this out to all appropriate vehicles due for replacement at Mt. Tabor Yard (we have CSS management approval) and then expand to other maintenance sites. At many maintenance sites, City fuel infrastructure is absent. Adding this infrastructure would reduce fuel use, drive time and improve efficiency for staff. If the pilot goes well, we will set up the fuel station to mirror existing City Fleet fueling stations (EJ Ward) in order to track fuel use by vehicle. We will be able to monitor propane use and quantify related emissions reductions.

Metrics for Success: How do you propose to track progress and project outcomes?

We will stay in communication with staff using the propane fueled trucks and mower to be sure they have the power needed to do their work effectively. Measure horsepower and torque before and after conversion.

**Implementation Plan and Schedule:** Identify start and end dates, major milestones, and risks to proposed timeline.

#### Project start date: March 1, 2015

Project end date: November 1, 2015

Major milestones and dates: Get fuel contract in place-3/2015, Train impacted staff about propane use and goals of pilot-4/2015, Add electricity & concrete pad-7/2015, Propane tank delivered-8/2015, Trucks, mower & conversion kits received by Fleet-9/2015, Vehicles delivered & start of pilot -10/2015, Analyze results of the pilot-12/2015, End of pilot report-1/2016

Risks to timeline: If vehicles take City Fleet longer to receive or we have issues with a fuel provider contract.

#### Innovation Funding Request: \$ 65,000

Using the table below, provide a line item breakdown of the funding request including: expected staff time and FTE requirements, contract costs, internal and external materials and services, ongoing operational and maintenance costs, and any other additional costs/resources related to the project that will be funded by your bureau outside of the actual Innovation fund request. Include cost savings or revenue, if applicable.

Description	FY2014-15 Total Innovation Fund	FY2014- 15 Total	Ongoing* Total Budget	In this column, give concise descriptions on what your <i>estimated budget</i> dollars represent (ie. vendor, service, FTE
	Budget	Budget	Buugei	etc.)
Personnel Services	U	U	U	
External Materials & Services		0	0	
				Propane conversion kits for trucks. New propane mower. Concrete pad installation and electrical supply for dispensing station. Arrange with fuel
Internal Materials & Services	\$78,000	0	0	provider for free fuel tank.
Ongoing Operational	0	0	0	
Ongoing Maintenance	0	0	0	
Revenue	-\$13,000	0		Incentive Oregon Dept. of Energy
Total Cost Estimate	\$65,000	\$0	\$0	

#### Fill in the expandable shaded areas. No more than 3 pages please.

Project Title:	Honey Bee Bike Counters		Innovation Reques	\$35,000	
Brimary Contact	Margi Producy	Phone:	503-823-5667	Burgau	Transportation
Primary Contact:	wargi brauway	Phone:	202-022-2007	Dureau:	Transportation

#### **Problem/Opportunity Statement:**

Describe the challenge your proposal seeks to address, or opportunity it seeks to capture.

Better collection and sharing of bicycle transportation data offers the opportunity to reduce program costs, increase the sustainability of Portland's transportation system, better engage its residents in stakeholders in the design and performance of the transportation system, and more equitably count and allocate resources based on income, race and modal choice. Portland is a national leader in bicycle planning. Portland is innovating in a number of bicycle programs and designs, including Sunday Parkways, bike boxes and bike corrals. While Portland's annual bicycle count report is one of the nation's most extensive, it still pales next to the volume and sophistication of the automobile traffic data collected by public agencies and private companies.

The Portland Bureau of Transportation's (PBOT) annual bicycle count relies on manual tallies at over 200 locations to supplement automated hose count locations. This undertaking requires approximately 560 staff hours to coordinate. While the envy of many bike planners nationwide, this static data doesn't allow an interactive mechanism for bikeway users to provide feedback on the safety and quality of their bicycling experience, nor provide PBOT information about trip type, route or demographic information beyond gender.

PBOT's Traffic Safety Hotline (503-823-SAFE) does a very good job of evaluating safety concerns, but that data – especially in aggregate – is not easily available to the general public and only captures negative experiences. The Honey Bee project has the potential to a) reduce staff costs for collecting bicycle data; b) inform traffic safety investments with a richer set of data crowd-sourced from a wider cross-section of users; c) represent underserved communities that may be undercounted in traditional bike counts occurring during peak travel times for "9 to 5" commuters; and d) provide an open, transparent forum for road users to share experiential data about Portland's transportation network.

#### Lead Bureau & Partners:

List the bureau taking lead and the other bureaus, governments, nonprofits, or private sector organizations involved. Confirm these partners are onboard.

PBOT is partnering with the Portland Development Commission's Early Adopter Program and Knock, a Portland-based software development company. The parties have confirmed their intent to participate.

### Describe the process undertaken to develop proposal:

Where did the idea originate? How has it evolved? Were other solutions considered? Who was involved?

In July, Margi Bradway joined PBOT as the Active Transportation Division Manager. As the former Sustainability Program Manager for the Oregon Department of Transportation, ODOT became the first state transportation agency to purchase a large aggregate of bicycle trip data from Strava, a market-leading app and online service used by people to track their bicycle trips. Simultaneously, the Portland Development Commission's (PDC) Early Adopter Program introduced William Henderson, CEO of Knock to PBOT Active Transportation Division staff. Since July 2014, PBOT and Knock have held multiple meetings to explore the use of Knock's portable bike counter prototype and smart phone app for collecting bike trip and user data while creating a forum for bicyclists and PBOT to comment and interact on bikeway issues. In September, PBOT convened a meeting with Metro, PBOT bike planning staff, Knock and researchers from the Transportation Education and Research Consortium and PSU to explore opportunities.

# **Detailed Project Description:**

"Honey Bee" is an innovative traffic counting device that also captures users' experiential data. Honey Bee utilizes mass produced, low-cost components to record and store count data on bicyclists that pass by its sensor using a magnetometer and infrared technologies. While everyone who bikes by the device is counted, those that have downloaded the smartphone app transmit the data via their smartphone to a central cloud server. Smaller than a smartphone, Honey Bee could be discretely attached to utility poles or embedded in the roadway. Road users with the free smartphone app or anyone with Internet access could also share positive and negative experience to help PBOT target traffic safety investments.

Honey Bee proposes a work plan with four main objectives: 1) to pilot and evaluate the use of a low cost, portable bike counter as a supplement and/or lower-cost option to existing bike counting methods and technologies; 2) to provide PBOT, the Bureau of Planning and Sustainability, Metro, researchers and other partners a larger and richer set of bicycle trip and user data to inform and evaluate bike and traffic safety planning, investment and evaluation; 3) to provide greater representation of lower income and neighborhoods of color through continuous bike counting via the Honey Bee counters 9outside of conventional peak travel hours); and 4) to create an open forum for communication among bicycle users and City staff that can inform the planning and maintenance of Portland's bikeways and traffic safety investments. The following comprise the main tasks of the scope of work:

**Convene and consult Technical Advisory Committee (TAC):** The TAC will provide ongoing guidance and feedback to project staff. Within one month of the grant award, project staff will convene a technical advisory committee (TAC) that will include PBOT representatives from the Maintenance group and Signals and Streetlighting and Traffic Operations division, and the Portland Bicycle Coordinator; the Bureau of Planning and Sustainability; the Bureau of Technology Services; PDC; Portland Parks and Recreation; Metro's Active Transportation Division; and Portland State's Transportation Research and Education Center (TREC).

**Refine Scope of Work:** Project staff will: a) engage the TAC in evaluating site selection criteria based on street types (Neighborhood Greenways, high volume streets, trails, etc.); b) vet with community partners and TAC on the minimum 30% of counter sites that will be placed in neighborhoods with higher representations of low income and communities of color; c) consider other inform technical considerations for counter placement, including street width and placement; d) develop a process for recording and responding to comments made via the Honey Bee smart phone app; and e) engaging Technology Services staff on integration via the API of the City Reporter app and PBOT staff via the existing and robust Traffic Safety Hotline.

**Promote Smart Phone App:** Project staff will utilize PBOT's Active Transportation division's vast network of contacts and outreach venues to promote the Honey Bee smart phone app. Project staff will kick off the outreach campaign with National Bike Month events in May 2015. Other PBOT promotional venues include: the Portland SmartTrips email list (13,000 subscribers), five Sunday Parkways events (average 25,000/event), 25 bicycle classes and guided rides, 25 community tabling events, Welcome SmartTrips mailings to 14,000 households that move to or within Portland during the spring and summer months, PBOT's News Feed, and social media outlets.

**Evaluation:** At the end of the fair weather riding season, project staff will begin work on a final report evaluating the successes and lessons learned from the pilot against the project metrics and objectives. The final report will be presented to the TAC for review in November 2015 and to the Innovation Fund staff in January 2016. Please see "Metrics for Success" for more information.

# Potential Outcomes:

Address equity and opportunity. Who would benefit from the project outcome? Who might be burdened? How does this project make Portland, and/or the City organization, better? Does it create efficiencies? Be specific.

If successful, *Honey Bee* may provide a lower cost alternate or supplement to PBOT's existing bike counts. By increasing the quality and amount of bike traffic data, a successful pilot will result in better informed planning and evaluation of bicycle and traffic safety projects by PBOT, Parks, Metro and academic researchers. Leveraging the Honey Bee counters' low cost offers the opportunity to capture 24 hour data that could result in a better representation of Portlanders in lower income neighborhoods that may be undercounted with PBOT's existing counts that occur within peak travel hours of conventional "9 to 5" workers. Lastly, the smart phone app

offers the opportunity for richer bike traffic data and greater public participation on evaluating and maintaining Portland's extensive bikeway and traffic safety network.

#### Metrics for Success:

How do you propose to track progress and project outcomes?

Low cost supplement or alternate to existing bike counting methods. Metrics will include the accuracy of counters within different site characteristics, functionality, and evaluation of maintenance cost.

**Larger and richer bicycle trip and user data.** Aside from the efficacy of the portable bike counters, the greater capture of data will rely on both the effectiveness of the smart phone app and the extent of adoption and use of the app by the general public. Metrics will include the number of trips and users recorded, along with the functional application of this data by PBOT and its agency and research partners.

**Greater representation of bicyclists in low income and historically underserved neighborhoods.** Metrics will include meeting the 30% threshold for placing Honey Bee counters in underserved neighborhoods and the evaluation of this data in comparison to existing bike data. Additionally the project team will measure its success against its sharing of these results with PBOT staff, agency, community and research partners.

**Increased public participation in the planning, maintenance and evaluation of City bikeway assets.** Along with the number of trips recorded by the counters and app, project staff the numeric and qualitative extent of interaction by the public, along with PBOT's ability and effectiveness in recording and responding to this expanded dialogue.

#### Implementation Plan and Schedule:

Identify start and end dates, major milestones, and risks to proposed timeline.

Project start date: Within two weeks of award. Project end date: January 2016

Major milestones and dates: Beta testing (spring 2015), project launch (May 15, 2015), draft final report (November 2015).

Risks to timeline: Unforeseen problems in production of counters.

Innovation Funding Request: \$ 35,000

	FY2014-15 Total Innovation Fund	FY2014- 15 Total	Ongoing* Total	In this column, give concise descriptions on what your <i>estimated budget</i> dollars represent (ie. vendor, service, FTE
Description	Budget	Budget	Budget	etc.)
Personnel Services	10,000	15,000	TBD	PBOT project staff
				Honey Bee Bike Counters (Knock
External Materials & Services	10,000	10,000	TBD	and/or informal RFP
Internal Materials & Services	12,000	12,000	TBD	Installation & removal of counters
Ongoing Operational	N/A	TBD	TBD	TBD based on success of pilot
Ongoing Maintenance	N/A	3,000	TBD	Maintenance of counters in FY
Other	3,000	3,000	TBD	Contingency (10%)
Total Cost Estimate	\$35,000	\$40,000	TBD	

#### Fill in the expandable shaded areas. No more than 3 pages please.

Project Title:	Implementation of long term fiber vision		Innovation Requ	est Amoun	<b>t:</b> \$75,000 <sup>i</sup> (See footnote)
Primary Contact:	Beth Fox	Phone:	503-823-5233	Bureau:	<b>BTS/Communications</b>

# **Problem/Opportunity Statement:**

Describe the challenge your proposal seeks to address, or opportunity it seeks to capture.

Currently the fiber plant in the Communications Division is installing and allocating fiber as needs arise. Many of the City's connections are provided by other's fiber units or Comcast based off of individual requests. Much of this work is done manually as well, including documentation, route determination and feasibility. The Fiber department needs to implement a practice that builds our fiber network strategically, taking into consideration the City's needs over a 10 or 20 year time period.

We need the ability to generate routes from online documentation and data that has been held and populated in a software program called OSP. This will allow us to generate accurate routes in minutes, not days or weeks. We will establish a business practice to lease unused and available fiber assets to 3<sup>rd</sup> parties, which will allow immediate revenue generation. This includes rates for the 3 different assets we have available, conduit, conduit and innerduct and dark fiber. (Fiber that has been installed and isn't currently being used.) Foresight into increasing the current footprint to connect underserved communities, as well as all City buildings, many buildings are currently accessing the network via a T-1 line. (a T-1 line delivers 1.544 megabits per second, and quickly becomes saturated with current City usage.)

The longer term direction of the City is to adopt a "dig once" plan that allows us to have the ability to install conduit whenever a street has been dug up for any reason. This is the most costly part of laying a fiber network, especially in the core of the city. This ties into the Broadband Strategic Plan that was developed by the Office of Community Technology several years ago. In 2009 when the plan was created, global internet traffic increased by 45%, it only increases more each year, and we must be prepared. Being prepared for new and emerging technologies requires the underlying infrastructure be present to support it.

#### Lead Bureau & Partners:

List the bureau taking lead and the other bureaus, governments, nonprofits, or private sector organizations involved. Confirm these partners are onboard.

BTS is the lead Bureau partnering with the Office of Community Technology. Contributing to the plan would be PBOT and BES. NetCity is the organization we will use to create the business and implementation plan.

# Describe the process undertaken to develop proposal:

Where did the idea originate? How has it evolved? Were other solutions considered? Who was involved?

When I was first appointed to my current positon as Communications Division Manager, the Office of Community Technology reached out to me to see if we could lease some available fiber to interested 3<sup>rd</sup> parties. It wasn't something that had been previously considered within BTS. Mary Beth Henry, Manager for the Office of Community Technology, introduced me to the Broadband Strategic Plan, and shortly thereafter we started an audit to see what we had that might be able to be used. These assets would not only be used for 3<sup>rd</sup> parties for revenue generation, but to develop economic growth to business, network growth in underserved communities and as I discovered in this current role, a more robust internal network for emerging and innovative public safety technologies. This audit eventually contributed to the Google plan that was announced about 60 days after we started. During this process I realized 3 things: 1) This process was painfully manual and time consuming, we couldn't respond quickly to any requests: 2) We had unused assets and many of them didn't have a specific municipality clause that would prohibit them from being leased to 3<sup>rd</sup> parties or non-

governmental business: 3) BTS Communications doesn't have a business model that allowed for implementation and support of assets for any entity outside of the City, we are internal service providers. I have since become more involved with the Fiber community increasing my knowledge about this amazingly important resource that we have control over. I began to realize the opportunity that we have within this department to build a truly amazing infrastructure that isn't available to all city's across the country. We have the resources, we have the technical knowledge and through the Office of Community Technology we have true long term vision. We are actually compromising our ability to reach our goals if we don't build this infrastructure.

# **Detailed Project Description:**

Implementation of a business model that allows for the creation of a 3<sup>rd</sup> party leasing and support branch for revenue generation. Buying OSP software that allows for all areas of fiber support and creation to be automated. Create a cost and billing model that supports both and contributes to financial support and growth for the infrastructure

# **Potential Outcomes:**

Address equity and opportunity. Who would benefit from the project outcome? Who might be burdened? How does this project make Portland, and/or the City organization, better? Does it create efficiencies? Be specific.

Creation of a robust fiber infrastructure. This will allow us to provide connectivity in underserved communities. For example, if any part of the RX Play program would require network access for participants, but they don't have that available, it would be less effective. If that connectivity was available because we have the infrastructure to support it, this one program alone would achieve more success.

Economic development within the City. More business is being conducted on the web than ever before. There must be a robust web presence for success, and not all businesses have access to the needed bandwidth for 2 reasons. It isn't available or it isn't affordable. We can help solve that problem and attract new business or support expansion of current business.

Public Safety Network. There are so many new and emerging technologies in Public Safety as many older technologies are moving off of analog to IP based equipment. This is truly a new frontier of change we will see in the next 5 years. We must provide all of our first responders with the latest technologies that will protect them and save lives, these technologies need a secure and dependable fiber network.

# **Metrics for Success:**

How do you propose to track progress and project outcomes?

- Creation of a business plan that will determine the exact amount of revenue that can be realized for current unused assets, how we would support that and the model by which we will bill customers and receive payment. This would include the generation of rate models and support SLA's.
- Implementation of the business plan to begin building, supporting and generating revenue for current assets.
- Plan includes how the fiber team in BTS/Communications will tie into the Broadband Strategic Plan and start executing against initiatives in that plan. Including: Work to pass "dig once" inclusion for conduit installation. Creation of a 10 – 20 year fiber footprint for the City and begin to build against that. Model for fiber rollout that creates a decision matrix for how much fiber is allocated for City use, for 3<sup>rd</sup> party use for private Public Safety use once it is installed.
- Existing fiber asset information uploaded into OSP.
- Creation of routes and inventories available on demand in OSP.

# Implementation Plan and Schedule:

Identify start and end dates, major milestones, and risks to proposed timeline.

Project start date: February1<sup>st</sup>, 2015

Project end date: December 2015

Major milestones and dates: Phase one: Completion of business plan April 2015. Phase two: Implementation of Plan December 2015

#### Risks to timeline: Resource schedules, funding for additional resources if needed.

#### Innovation Funding Request: \$75,000.00

Using the table below, provide a line item breakdown of the funding request including: expected staff time and FTE requirements, contract costs, internal and external materials and services, ongoing operational and maintenance costs, and any other additional costs/resources related to the project that will be funded by your bureau outside of the actual Innovation fund request. Include cost savings or revenue, if applicable. Please add rows and descriptions to the table as needed.

	FY2014-15 Total Innovation Fund	FY2014- 15 Total	Ongoing* Total	In this column, give concise descriptions on what your <i>estimated budget</i> dollars represent (ie. vendor, service, FTE
Description	Budget	Budget	Budget	etc.)
Personnel Services	50,000.00		N/A	NetCity Contractor to create plans
External Materials & Services	25,000.00		N/A	OSP software purchase
Internal Materials & Services	0	0	0	
Ongoing Operational	N/A	0	0	This will be maintained in BTS budget
Ongoing Maintenance	N/A	0	0	This will be maintained in BTS budget
Other	0	0	0	
Total Cost Estimate	\$75,000.00		\$0	

\*Identify what funding sources you have confirmed for ongoing requirements in the right column.

<sup>i</sup> Request revised to \$25,000 prior to the December 17, 2014 meeting with the Innovation Review Panel. Proposal recommended for \$25,000 of funding.

Project Title:	Interstate Firehouse Cultural Center – Incubator of inclusive recreation		Innovation Request Amount:		\$85,000
Primary Contact:	Todd Lofgren	Phone:	503.823.5229	Bureau:	Parks & Recreation

# **Problem/Opportunity Statement:**

Describe the challenge your proposal seeks to address, or opportunity it seeks to capture.

The recreation needs and desires of Portland's population is changing. As the demographics shift in our community, so must the services that we provide. Under PP&R's management, Interstate Firehouse Cultural Center is poised to be PP&R's incubator to test new multi-cultural art and recreation programs. Why at IFCC? It is located in the heart of Northeast and North Portland, one of the most diverse areas in Portland. Hispanics are most concentrated in North Portland at nearly 15% of the population and NE Portland has the highest concentration of African Americans at 30%. In Northeast Portland, 38 percent of the population is non-white, while in North Portland, 35 percent of the population is non-white.

# Lead Bureau & Partners:

List the bureau taking lead and the other bureaus, governments, nonprofits, or private sector organizations involved. Confirm these partners are onboard.

Portland Parks & Recreation will take the lead on this project. Within PP&R, there will be a cross section of departments that collaborate together to utilize this resource and leverage their individual partnerships and relationships. This includes Adaptive & Inclusive Recreation, Citywide Recreation, North Zone Recreation, North Zone Operations, Property & Business Development, Teen Services, and Equity & Access. In addition, PP&R has partnerships and will create new partnerships with multi-cultural non-profit art and recreation organizations, immigrant and refugee organizations, inclusive and adaptive recreation and community service organizations, community theater groups, community members. Some of these organizations include: Immigrant & Refugee Community Organization (IRCO), African Youth & Community Organization, Center for Intercultural Organizing, Native American Youth Association (NAYA), Bhutanese Immigrant leaders, Lutheran Family Services, New Portlanders Program and Disability Art and Culture Project.

# Describe the process undertaken to develop proposal:

Where did the idea originate? How has it evolved? Were other solutions considered? Who was involved?

While IFCC was founded in 1982 by Portland's first African-American elected official, Commissioner Charles Jordan, the idea to revitalize and reinvent recreation programs and outreach is a key component of Portland Parks & Recreation's Strategic Plan for 2012-2015. When the current tenant notified PP&R that it would be leaving IFCC on December 31, 2014, it presented an opportunity for the PP&R to reinvest in a very diverse part of the City and further transform programming at IFCC, and art, cultural, and recreation programming across the city. PP&R staff have taken the lead in creation of this proposal and will lead future programming at IFCC.

# **Detailed Project Description:**

PP&R has the opportunity to transform its own art and recreation programming, as well as train other non-profit multi-cultural and adaptive service organizations in Portland. The IFCC was founded in 1982 by Portland's first African-American elected official, Commissioner Charles Jordan. The IFCC is located in a 1910-built former fire station at 5340 North Interstate Avenue and now contains a 99-seat theater, an art gallery, and space for rehearsal or recreation classes. The center's mission statement states that the IFCC, "is committed to creating an environment in which people of every ethnic/cultural background come together as artists and audience to explore, preserve and celebrate their diversity." The facility has multiple spaces that are program ready. Portland Parks & Recreation's Citywide Recreation Team has hired a Recreation Coordinator II - Performing Arts to assist with arts based programming and align these programs across the system. Additionally, PP&R's Adaptive and Inclusive Recreation program offices will be based at IFCC starting January 2015. Utilizing the unique features of the IFCC as a centerpiece for performances and specialized programs would greatly enhance PP&R's visibility and honor the rich traditions of this multi-cultural community center while at the same time creating best practices for all of our community centers in multicultural outreach and programming.

There are four essential elements to this proposal to transform recreation programming at IFCC and promote change at PP&R and throughout our community. Each element will have robust monitoring and evaluation, documenting learnings and best practices:

- 1. Multi-cultural teen microbusiness: \$10,000 of seed funding will start a food and beverage microbusiness, led and operated by teens serving special events at IFCC. The Teen Services Department would take a lead role in identifying and recruiting North Portland teens to this program.
- 2. Culturally specific art and recreation programming: \$20,000 program funds targeted to refugee and immigrant communities (i.e. African dance, visual arts, and events).
- 3. Performing arts for kids with special needs: \$15,000 program funds targeted for adaptive recreation performing arts camp and programs for kids with autism. The Adaptive and Inclusive Recreation department within PP&R will lead this program with support from PP&R Recreation staff at IFCC and Peninsula Park Community Center.
- 4. Quarterly community forums at IFCC: \$40,000 program funds to conduct four community forums at IFCC, including, PP&R staff and community organizations to discuss learnings from each of the pilot programs in this proposal and how to better serve our increasingly diverse community.

# **Potential Outcomes:**

Address equity and opportunity. Who would benefit from the project outcome? Who might be burdened? How does this project make Portland, and/or the City organization, better? Does it create efficiencies? Be specific.

IFCC is located in one of the most diverse areas in Portland. Utilizing the unique features of the IFCC as a centerpiece for performances and specialized programs would greatly enhance PP&R's visibility and honor the rich traditions of this multi-cultural community center while at the same time creating best practices for all of our community centers in multicultural outreach and programming.

# Metrics for Success:

How do you propose to track progress and project outcomes?

There are four essential elements to this proposal to transform recreation programming at IFCC and promote change at PP&R and throughout our community. Each element will have robust monitoring and evaluation, documenting learnings and best practices:

1. Multi-cultural teen microbusiness: Within the first quarter of FY 2015, PP&R Teen Program will start a food and beverage microbusiness, led and operated by teens serving special events at IFCC through FY 2015-16. The objective of the program will to be revenue neutral after the first year of operation.

2. Culturally specific art and recreation programming: Fall of 2015 will be the first quarter where program funds will target refugee and immigrant communities (i.e. African dance, visual arts, and events) and scheduled during FY 2015-16. The number of classes, events and participants will be

tracked, including qualitative customer, event organizer and teacher feedback through community forums and surveys.

3. Performing arts for kids with special needs: Program funds targeted for adaptive recreation performing arts camp and programs for kids with autism will begin in Fall of 2015 and scheduled during FY 2015-16. The number of classes, events and participants will be tracked, including qualitative customer, event organizer and teacher feedback through community forums and surveys.
4. Quarterly community forums at IFCC: Program funds to conduct four community forums at IFCC will be completed each quarter for FY 2015-16. PP&R staff and community organizations will discuss learnings from each of the pilot programs in this proposal and how to better serve our increasingly diverse community. The number of participants will be tracked, including feedback through community forum surveys.

The activities described above will provide the foundation for PP&R to fully realize the potential of IFCC as an incubator for programming excellence and upon the end of the innovation funding will be managed by PP&R and funded by PP&R's General Fund resources.

# Implementation Plan and Schedule:

Identify start and end dates, major milestones, and risks to proposed timeline.

Project start date: July 1, 2015

Project end date: June 30, 2016

Major milestones and dates: Innovation funds will be expended during FY 2015-16. Planning and initial organizing for the innovation proposal will begin in January 2015. The innovation proposal will provide

Risks to timeline: PP&R Recreation programs are funded by program revenues and General Fund resources, so lack of resources to support the necessary coordination and resources will negatively impact the implementation of this proposal.

#### Innovation Funding Request: \$85,000

Using the table below, provide a line item breakdown of the funding request including: expected staff time and FTE requirements, contract costs, internal and external materials and services, ongoing operational and maintenance costs, and any other additional costs/resources related to the project that will be funded by your bureau outside of the actual Innovation fund request. Include cost savings or revenue, if applicable.

Teen Micro-business:

	FY2014-15 Total Innovation Fund	FY2014-15 Total	Ongoing* Total	In this column, give concise descriptions on what your <i>estimated budget</i> dollars represent (ie. vendor, service, FTE
Description	Budget	Budget	Budget	etc.)
Personnel Services	5,000	0	0	Seasonal Staffing & Benefits
External Materials & Services	4,500	0	0	Materials, Operating Supplies
Internal Materials & Services	500	0	0	Printing
Ongoing Operational	N/A	0	0	
Ongoing Maintenance	N/A	0	0	
Other	0	0	0	
Total Cost Estimate	\$10,000	\$0	\$0	

Culturally Specific Art & Recreation programming:

	FY2014-15			In this column, give concise
	Total			descriptions on what your
	Innovation	FY2014-15	Ongoing*	estimated budget dollars
	Fund	Total	Total	represent (ie. vendor, service, FTE
Description	Budget	Budget	Budget	etc.)
Personnel Services	18,500	0	0	Seasonal Staffing & Benefits
External Materials & Services	1,500	0	0	Materials, Operating Supplies

Internal Materials & Services	0	0	0	
Ongoing Operational	N/A	0	0	
Ongoing Maintenance	N/A	0	0	
Other	0	0	0	
Total Cost Estimate	\$20,000	\$0	\$0	

Performing Arts for Kids with special needs:

	FY2014-15 Total Innovation Fund	FY2014-15 Total	Ongoing* Total	In this column, give concise descriptions on what your estimated budget dollars represent (ie. vendor, service, FTE
Description	Budget	Budget	Budget	etc.)
Personnel Services	12,000	0	0	Seasonal Staffing & Benefits
External Materials & Services	2,500	0	0	Materials, Operating Supplies
Internal Materials & Services	500	0	0	Printing
Ongoing Operational	N/A	0	0	
Ongoing Maintenance	N/A	0	0	
Other	0	0	0	
Total Cost Estimate	\$15,000	\$0	\$0	

Quarterly Community Forums:

	FY2014-15 Total Innovation Fund	FY2014- 15 Total	Ongoing* Total	In this column, give concise descriptions on what your <i>estimated budget</i> dollars represent (ie. vendor, service, FTE
Description	Budget	Budget	Budget	etc.)
Personnel Services	28,000	0	0	
External Materials & Services	12,000	0	0	
Internal Materials & Services	1,000	0	0	
Ongoing Operational	N/A	0	0	
Ongoing Maintenance	N/A	0	0	
Other	0	0	0	
Total Cost Estimate	\$40,000	\$0	\$0	

#### Fill in the expandable shaded areas. No more than 3 pages please.

Project Title:	Rx Play		Innovation Request Amount:		\$150,000
Primary Contact:	Sue Glenn	Phone:	3-1605	Bureau:	PP&R

#### **Problem/Opportunity Statement:**

Describe the challenge your proposal seeks to address, or opportunity it seeks to capture.

In Multnomah county, 26% of eight grade students and 23% of 11<sup>th</sup> grade students are overweight or at risk of becoming overweight. The rates can be even higher among children of color and children who live in lower income neighborhoods. Through Rx Play Portland, local Pediatricians and PPR staff have teamed up to change these trends by connecting kids with local recreation resources to get them up and moving.

The Portland Rx Play Program addresses the wide spread problem of physical inactivity among youth and the resulting health consequences. With the assistance of the Innovation Project funding Rx Play Portland in 2015 will continue its important service to community youth. The 2015 program will:

- Improve upon an existing program (since 2009) that has shown increasing success in reaching at risk underrepresented children.
- Continue to focus on children ages 6 to 12. This age group is high risk for developing on-going health issues into adulthood that <u>can be</u> reversed if new healthy behaviors, including regular physical activity, are encouraged early and maintained into adulthood.
- Break down cultural and educational barriers to assure access to PPR's extensive class offerings at recreation facilities and through its city-wide recreation programs.
- Provide scholarships for 300 participants to enroll in close to home recreation programs of their choice. These are programs that the participant may not have known about or felt comfortable previously enrolling.
- Employ two multi-lingual staff to connect with families, provide patient mentoring and direct assistance with enrollment in recreation programs.
- Develop a critical evaluation tool to substantiate successful outcomes of the current program methodology and identify improvements that can expand Rx Play Portland outreach and sustain it financially for the long term.

# Lead Bureau & Partners:

List the bureau taking lead and the other bureaus, governments, nonprofits, or private sector organizations involved. Confirm these partners are onboard.

Portland Parks & Recreation (11 Community Centers, extensive city wide Youth Sports programs, 4 indoor and 5 outdoor/seasonal swimming pools, Indoor Tennis Center ). Current partners include Kaiser Permanente, Multnomah County School Based Health Clinics, and Oregon Health and Science University. Other providers are interested including the National College of Naturopathic Medicine, Legacy and Emmanual, as well as, the Intertwine. We have not been able to expand due to the NRPA grant ending and financial sustainability of the program has not been established. It should be recognized that the value of the conversations that have begun to occur with families regarding Active Lifestyles is not quantifiable but extremely valuable. Pediatricians and referring clinicians have solid credibility with parents and guardians with respect to health and the hand off to the recreation professional is a treasured investment outcome of this model. The Rx Play program fits perfectly with the purpose and goals of Oregon's new Coordinated Care Organizations (which includes Kaiser Permanente) for providing Medicaid services: stretching the understanding of health care to address underlying causes of poor health and promoting activities that will improve long term health outcomes.

#### Describe the process undertaken to develop proposal:

Where did the idea originate? How has it evolved? Were other solutions considered? Who was involved?

Rx Play Portland was designed to strengthen the connections between at risk youth (ages 6-12) and their local park and recreation resources via local health care organizations, encouraging youth to embrace fun physical activity as an integral part of everyday life. The program breaks down perceived or real barriers that participants may have due to language, cultural values or economic disadvantage and facilitates access to local, close to home recreation opportunities. The roll out component of the NRPA Grant Cycle clearly identified and addressed barriers to serving under represented youth by; hiring a Bi Lingual Specialist, dedicating trust funds to scholarship participants, Reducing the time between receiving the prescription and the outreach call through a dedicated specialist, providing real time feedback to referring clinicians about successes when participants are registered, and meeting families onsite, giving tours and introducing them to staff-a warm welcome to the community center.

Young people carrying extra weight are at risk for pre-diabetes, fatty liver disease, orthopedic problems, high blood pressure, sleep apnea and menstrual irregularities. If not addressed - all this translates to a pre-disposition to very serious, potentially debilitating and expensive long term adult health problems.

The widespread problem of physical inactivity and the notable increase in childhood obesity underscore the need for programs and policies to effectively promote regular exercise and reduce sedentary behavior in children and adolescents. Rx Play Portland began as a modest research feasibility pilot five years ago to address this very serious problem. Its purpose was to test a program that aimed for a new way to address childhood obesity and offer an alternative to the documented impacts of excessive screen time. The method chosen was to have area doctors write kids prescriptions for fun, low-stress active play time, provide the family's contact information to PPR (with permission), and invite the family's participation in existing programs. Feasibility was proven, but due to limitations of the pilot only 9 participants successful performed. The program was then rolled out system wide in 2010 but without dedicated resources or staff, which was successful but still quite limiting. Through a grant funded by NRPA in 2013, a dedicated bilingual Rx Play Specialist position was created. In addition, PPR was able to temporarily link existing funds from Nike to the Rx Play program, and found that the ability to offer initial enrollments at no cost to the participant made a big difference for those who are most at risk. The result of dedicated staff and the ability to defray enrollment expense led to solid success: by 2014 there were over 260 prescriptions. Unfortunately the NRPA and Nike funding were time-limited. If the program can continue with new funding, the goal for 2015 is 300 participants.

#### **Detailed Project Description:**

Exercise is a very basic and inexpensive preventative medicine. Scientific research is now recognizing the "medicinal" qualities of exercise. More and more studies confirm the feeling of renewed energy, increased self- esteem along with decreased tension, anger and depression that can result from regular exercise. Given the potential positive outcomes, medical providers are enthusiastic about being able to write children at risk for obesity a "prescription for play" and process for a "warm handoff" to PPR. PPR then uses its extensive recreation resources to connect the child's prescription with the opportunity to play, and to invite other family members to get involved as well. Over the last 5 years the Rx Play Portland model has grown and evolved in its outreach to medical providers and at risk youth. PPR now provides intense outreach and engagement to ensure participation of each child referred, regardless of their race, ethnicity, spoken language, physical ability or family income. As a result of removing the aforementioned barriers to registration, the enrollment rate (capture rate=successful registrations in PPR programs from prescriptions) has increased from 12% in January of 2013 to a12 month average capture rate of 44% in the calendar year of 2014.

While PP&R does not collect socioeconomic data on participants, the majority of enrollees are from low income neighborhoods and 62 listed themselves as Spanish speaking households with an additional 42 listing the household was bilingual or another language was spoken (other than English). To date forty six physicians at 12 separate clinics have referred children to PPR's Rx Play program. PPR staff provides feedback to physicians regarding the success of their prescriptions to encourage the pediatricians to continue writing prescriptions for their patients.

The Innovation Program funding will be used to reach and enroll 300 participants in Rx Play. These participants will each be eligible for up \$200 worth of scholarships over a 12 month enrollment period. This funding will insure that income inequity is not disqualifying. The funding will provide two part-time multi-lingual staff dedicated to assisting, tracking and encouraging participants, as well as language translation of enrollment and survey materials. Both staff and these materials help break down cultural, language, and education barriers to accessing PP&R services and participation.

The final component of the Innovation Project request is for outside expert evaluation of the program to help to determine its strengths and deficiencies. The longevity of Rx Play is not only dependent upon consistent funding but also on proving that the "prescription for play" has measurable results for children who actively participate. The program needs a permanent system to track and verify results and to provide feedback to medical staff. Using an outside evaluator will help establish a long term tracking protocol. Ultimately a Focus Group will use proven results to seek ongoing funding mechanisms.

#### **Potential Outcomes:**

Address equity and opportunity. Who would benefit from the project outcome? Who might be burdened? How does this project make Portland, and/or the City organization, better? Does it create efficiencies? Be specific.

- Increase patient prescription numbers.
- Successfully enroll 80% of prescription recipients in PPR activities and track them for 12 months to determine outcomes.
- Increase the number of medical prescribers and provide them feedback on success of their effort.
- Expand both medical and community partnerships in Portland including CCO's
- Provide greater outreach to underserved communities who may not currently use PPR facilities
- Expand resources to include active outdoor recreation opportunities and partnerships.

#### Metrics for Success:

How do you propose to track progress and project outcomes?

The underlying model for Rx Play works. "Green" and "Park" Prescription programs have achieved success in other US cities and abroad. But measuring results is critical to adapting a program to reach its desired potential.

The growth of Rx Play Portland over the last 5 years indicates that it is being assimilated into the community but the full program has not been critically evaluated by outside experts. Funding for solid metrics is critical to improving Rx Play methodology, outreach and staffing roles. It's not just growing the program that matters. What matters is that we can prove it works; that we can build upon its strengths and shore up its weaknesses to achieve financial sustainability.

The funder is seeking \$20,000 to conduct a rigorous monitoring and evaluation plan to measure the impact of the prescription program. Has it benefited these young people? Has it produced substantial changes in participants (physically or mentally); has it encouraged them to engage their families or others to use PPR and its resources? Have barriers to accessing recreation programs been navigated to a point where the participant is moving forward on their own?

Finally, the evaluation strategy includes efforts to convene experts who can recommend a continuous funding and reimbursement model that would support the program into the future. They can brainstorm how to make this prescription a mainstream therapy. Can this be included as preventative care in some health care coverage? Is this an ounce of prevention that can help a youngster avoid heart disease, stroke, Type 2 diabetes in adulthood? Is this a small cost today to avoid huge personal health and health care expenditures in the future?

In short, Rx Play has now proven itself as a mechanism for bringing children to Portland Parks for active play - children who otherwise would have been unlikely to do so. With support, we intend to continue the program, expand and build on that success, evaluate the longer term impacts and create a sustainable financing model.

#### Implementation Plan and Schedule:

Identify start and end dates, major milestones, and risks to proposed timeline.

Project start date: February 2015

Project end date: January 31, 2016 Major milestones and dates: Write RFP and Hire External Evaluator 3/31/2015

Produce Active Media key for national Recommendations in many languages 6/1/2015

Report from Evaluator September 2015

Convene Focus Group to review results and plan for sustainable funding October-November 2015 Risks to timeline: WE are committed to doing this.

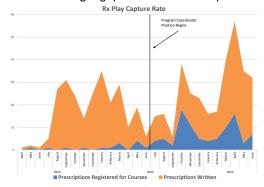
# Innovation Funding Request: \$ 150,000

Using the table below, provide a line item breakdown of the funding request including: expected staff time and FTE requirements, contract costs, internal and external materials and services, ongoing operational and maintenance costs, and any other additional costs/resources related to the project that will be funded by your bureau outside of the actual Innovation fund request. Include cost savings or revenue, if applicable. Please add rows and descriptions to the table as needed.

	FY2014-			
	15			
		FY2014-		
	Total		•	
	Innovation	15	Ongoing*	In this column, give concise descriptions
	Fund	Total	Total	on what your estimated budget dollars
Description	Budget	Budget	Budget	represent (ie. vendor, service, FTE etc.)
Personnel Services	60,000	60,000	0	Two Bi Lingual Outreach Workers
	15,000			Rigorous External Monitoring and
External Services		0	0	Evaluation
				Public Private Forum-Evaluation and
External Services	5,000	0	0	Sustainable Funding
				Multi Lingual Education materials for
				behavior change to identify physical
				activity opportunities within PP&R to meet
Internal Materials & Services	\$10,000	0	0	national standards
Ongoing Operational	N/A	0	0	
Ongoing Maintenance	N/A	0	0	
Other	60,000	0	0	300 scholarships \$200/year/participant
Total Cost Estimate	\$150,000	\$0	\$0	

\*Identify what funding sources you have confirmed for ongoing requirements in the right column.

Notable increases in the capture rate correlate with the addition of specialists; spiking once the first Rx Play Specialist gained momentum following the in June 2013 and then a slight gap until the second specialist was hired in January 2014.

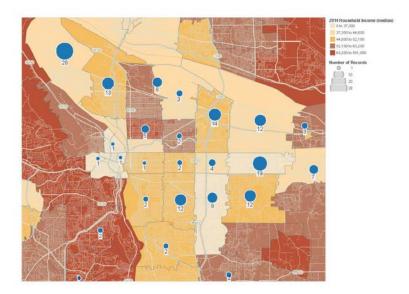


#### These are the totals since October of 2013 up to November of 2014

Spanish	62	19%
Bilingual	34	11%
English	208	65%
Other	8	2%
Undeclared	9	3%

**Rx Play Prescriptions Written by Client Zip Code** 

Blue dots with numbers represent number of prescriptions written within each zip code boundary. Lighter shade Zip Code areas indicate lower median household incomes (see legend)



#### Fill in the expandable shaded areas. No more than 3 pages please.

Project Title:	Sign Protection Proposal		Innovation Request Amount:		\$50,000.00
Primary Contact:	Kirstin Byer Peter Wojcicki	Phone:	3-1727 3-1751	Bureau:	PBOT/Maintenance Operations

# **Problem/Opportunity Statement:**

Describe the challenge your proposal seeks to address, or opportunity it seeks to capture.

This proposal is to create and optimize process to apply a protective surface on our traffic signs and other exposed or vulnerable infrastructure which would allow graffiti to be easily removed without damaging the underlying surface. The funding from this grant would cover the start-up cost to set up a work area to apply the protective coating, coat existing signs already in the Material Distribution Center and coat a substantial portion of signs produced by PBOT's sign shop.

It has been very difficult to find an effective graffiti cleaner and/or sign protection product that also does not interfere with the signs retroreflective properties. Many graffiti cleaning and protective products have been tested over the last few years. Nonve of the products tested have been able to both clean and protect while at the same time not interferring with the engineered retroreflective surface of traffic signs. However, one product has recently been found to meet our requirements. This will allow us to develop a process that would protect the sign from graffiti, cleaning and UV damage, and inhibit formation of moss, mildew and mold while retaining the sign's retroreflectivity.

Though this is a grafitti abatement proposal, preserving sign retroreflectivity is a key consideration and a legal obligation. The term "retroreflectivity" describes a sign's (or other surface) to be clearly seen at night by returning light to the observer. It is critical for night-time safety and serviceability of all of our signs in the public right-of-way. Federal regulations have certain requirements relative to sign retroreflectivity and apply to all public agencies "having jurisdiction" of signs in the public right-of-way. The Manual on Uniform Traffic Control Devices (MUTCD) is the Federal document that details all of the operational requirements for signs and markings placed in the publicly-traveled ways. This document clearly states that "Regulatory, warning and guide signs and object markers shall be retroreflective." (Section 2A.07-02).

Of the approximately 163,000 signs that are our responsibility to maintain, 103,000 (63%) are federally mandated to be retro-reflective. The remaining signs are parking and general information signs that do not have reflectivity standards.

The Portland Bureau of Transportation has a condition assessment process to identify sign condition, including retroreflectivity, using a combination of sampling and measured retroreflectivity. Therefore, great care needs to be taken in choosing a sign protection and/or cleaning product and methodology.

Condition assessments in 2011 and 2012 identified the presence of graffiti in 38% of the regulatory signs inspected and in about 20% of all sign types inspected. It is clear that signs that should have a service life of 12 – 15 years are being shortened by graffiti and graffiti cleaning efforts. <u>Over half</u> of all maintenance activity in the past 6 years has been in response to graffiti, affecting over 25% of the 163,000 signs in our inventory.

City of Portland has a clear obligation to maintain signs in good condition and to maintain at least minimum levels of retroreflectivity. We also have a strong commitment to minimizing the impact on other infrastructure such as bridges, retaining walls, signal control cabinets and other similarly impacted assets.

Sign reflectivity is damaged when graffiti occurs, but often the sign is further damaged when the graffiti is cleaned. The graffiti itself or the cleaning process disturbs the outside surface of the sign which prevents the

underlying engineered retroreflective surface from returning light to the observer, thus making the sign appear dark and drastically reducing its night-time visibility.

The following example shows how a sign can look fine during the day, but its message cannot be seen or is distorted in the evenings and at night. On the left is a picture of stop signs during the day, on the right are the same signs photographed at night.



#### Lead Bureau & Partners:

List the bureau taking lead and the other bureaus, governments, nonprofits, or private sector organizations involved. Confirm these partners are onboard.

Lead bureau is <u>PBOT with Maintenance Operations being the lead within PBOT</u> (PBOT-MO). Initially, the project will involve only PBOT-MO. After two to five years there will be a sufficient quantity of signs of a particular type that are consistently protected that we expect to communicate to neighborhood organizations which signs they could engate in sign cleaning without our concern relative to damaging sign retroreflectivity. This has been an ongoing problem with well-meaning citizens that unwittingly damage the signs while they attempt to clean them. Other organizations and partners that would have interest in this sign protection project would include Portland Police, Office of Neighborhood Involvement (ONI), Graffiti Abatement as well as road users and citizens in general.

#### Describe the process undertaken to develop proposal:

Where did the idea originate? How has it evolved? Were other solutions considered? Who was involved?

The problems described in this proposal relative to protecting signs from graffiti and graffiti removal have been on-going for many years. As long as there has been signs in the right-of-way, there has been graffiti as well as mold, moss and mildew on those signs. Usually the approach has been to find a graffiti removal process that meets the critical criteria for not damaging the sign's ability to function as designed in terms of retroreflectivity and overall readability. Time and time again, graffiti cleaning products have been tested that failed that critical requirement. For many years we have used a citrus-based cleaning compound that can clean some, but not all graffiti off of a sign. Even that clearner, however, damages the sign after just one cleaning, or at best up to three cleaning cycles.

Usually, vendors come to us with their solution to the problem, and as stated above, those solutions have failed. In this particular case a vendor was able to present a different approach which was to coat the sign with a durable material that allows for the removal of graffiti without concern for damaging the sign's performance.

This material was applied to several signs and tested for ease of application, ability to facilitate removal of graffiti (including stickers) and retain the sign's retroreflectivity. The process has been tested for several months and has met all expectations. We are now ready to incorporate the coating into our sign fabrication, distribution and field-tracking processes.

# **Detailed Project Description:**

The project will provide the start-up infrastructure to create a work space to apply the sign protection product as well as to facilitate the application of product to signs in the Materials Distribution Center (MDC) and up to one year's production of signs produced in PBOT's sign shop.

The start-up cost provides for the infrastructure that is needed to apply the protective coating. This space needs to be well venilated, have an area set up for drying racks for the signs, table space for sign layout and a protective and ventilated spray booth. This will result in a clean area to keep dust and dirt off of the signs until the product is dried and it will provide a safe area for staff to work on the signs.

The sign protection product is under a general name of "Conservation Coatings". Specifically it is called "MicroGuard® AD00 Anti-Graffiti Clear Surface Treatment". It provides a barrier for graffiti from attaching firmly to the surface, thus making graffiti (including stickers) easier to remove. Even if harsh commercial clearners are used, neither the clear-coat treatment nor the signs' retroreflective properties are damaged. The properties of this coating also provides ultra-violet protection which also extends the life of the underlying sign sheeting. Another bonus, due to its hydro-phobic properties, is that a water film is not persistent thus inhibiting the adhesion of dust and dirt as well as the growth of moss and algae which is prevelant in Portland, particularly in areas of consistent moisture and/or shade.

With the work area set up, then the sign coating can be applied to signs already in the MDC and the work process detials can be refined and incorporated into the sign fabrication process.

# **Potential Outcomes:**

Address equity and opportunity. Who would benefit from the project outcome? Who might be burdened? How does this project make Portland, and/or the City organization, better? Does it create efficiencies? Be specific.

Given that PBOT-MO staff would be able to clean signs more quickly and easily, graffiti removal would be more timely and comprehensive than presently. Since it is clear nobody likes graffiti, with its tag markings and vulgarities, general neighborhood liveability would be improved. This positively impacts residents and visitors alike.

Road user safety would be improved by making the signs more readable and functionale, especially at night. A sampling of 349 signs City-wide showed that 47% of those signs have graffiti-related damage or environmental wear (dirt, moss, algae). It is an obvious problem that we are obligated to continue to improve upon. A protective sign-coating would improve this situation significantly. As stated above, a full realization of the potential benefit will take at least five years to have targeted high-value signs coated. With the sign fabrication process including the addition of the protective coating, then all new signs used in maintenance replacement or for capital projects will gradually improve the entire field inventory.

Sign crews replace about 400 signs per year and clean another 900 per year in response to grafitti damage alone at a cost of \$90,000 per year. The actual savings would be applied only to the signs that are being coated, which would be at a rate of 5,000 per year. If the sign coating reduces the sign replacement rate by a conservative 50% (there will always be a need to replace some signs from vandalism and vehicle crashes) AND improves the cleaning efficiency of signs by at least 50%, then this would represent an immediate <u>annual</u> <u>savings of about \$7,000 per year</u>. Savings will increase as more signs get coated until the entire inventory has coated signs. At that point, we could expect about a 50% to 70% decrease in annual maintenance costs.

#### Metrics for Success:

How do you propose to track progress and project outcomes?

We propose to use our work management system (Maximo) and GIS inventory to track work done on signs that are coated vs those that are not. We can then compare the frequency, time and cost of graffiti-related maintenance activities to evaluate the overall effectiveness of the sign coating material and application process.

#### Implementation Plan and Schedule:

Identify start and end dates, major milestones, and risks to proposed timeline.

Project start date: January 6, 2015

evaluation period. Work process is on-going.) Major milestones and dates: Start-up on Jan. 6, 2015 – representing when coated signs will be showing up in the field. Monthly check-in on work process improvements in fabrication and tracking.

Project end date: December 31, 2015 (End of

Risks to timeline: None

#### Innovation Funding Request: \$ 50,000

Using the table below, provide a line item breakdown of the funding request including: expected staff time and FTE requirements, contract costs, internal and external materials and services, ongoing operational and maintenance costs, and any other additional costs/resources related to the project that will be funded by your bureau outside of the actual Innovation fund request. Include cost savings or revenue, if applicable. Please add rows and descriptions to the table as needed.

	FY2014-15 Total Innovation Fund	FY2014- 15 Total	Ongoing* Total	In this column, give concise descriptions on what your <i>estimated budget</i> dollars represent (ie. vendor, service, FTE
Description	Budget	Budget	Budget	etc.)
Personnel Services	31,400	0	0	Labor to coat signs
External Materials & Services	15,600	0	0	Coating product, prep area matl's
Internal Materials & Services	3,000	0	0	Finish prep area
Ongoing Operational	N/A	0	0	
Ongoing Maintenance	N/A	0	0	
Other	0	0	0	
Total Cost Estimate	\$50,000	\$0	\$0	

\*Identify what funding sources you have confirmed for ongoing requirements in the right column.

#### Prep Area

Portable paint & prep unit Two (2) drying racks Ventilation, work space <b>Prep Area Total</b>	\$9,000 \$2,000 \$3,000 <b>\$14,000</b>	Personnel Services: \$13,000 – coating signs in MDC \$18,400 – coating signs from sign shop External Mat'ls & Svcs
Coat signs in MDC Protective Coating Total signs in the MDC: Total hours to coat signs in Labor (painter job class @ S Total for MDC stock		\$2,000 – Coating product for MDC \$2,600 – Coating product for sign shop signs \$11,000 – Prep area (excl. ventilation & work space) Internal Mtl's & Svcs \$3,000 – Prep area venilation & work space impr.
Subtotal for Start-up:	\$29.000	

\$29,000
<b>\$21,000</b> (about 12,000 sq. ft. or about 50% of annual sign shop production)
\$18,400
\$ 2,600