

## IMPACT STATEMENT

**Legislation title:** \*Authorize an Intergovernmental Agreement with Portland State University for \$8,000 to provide funding for Low-Cost Urban Air Quality Sensor Testing (Ordinance)

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**Purpose of proposed legislation and background information:**

The City received a \$100,000 grant from the National Institute of Standards and Technology's Replicable Smart City Technologies Cooperative Agreement Program to evaluate low-cost air quality sensors and build a framework for using low-cost sensors for urban air quality measurements (Ordinance 187957). Portland State University was specified in the grant application as a provider of laboratory testing and analysis of the sensors compared to known pollutant concentrations.

The City also received a \$25,000 grant from Drive Oregon Foundation to support the Low Cost Air Quality Sensor Program (Ordinance No. 188326).

The ordinance would authorize an Intergovernmental Agreement with Portland State University to provide funding for Low-Cost Urban Air Quality Sensor Testing.

In accordance with the IGA as described in Exhibit 1, Attachment A, Portland State University will provide testing and evaluation of low-cost air quality sensors through exposing sensors to ranges of known concentrations of gases and particles while sometimes varying ambient conditions. Sensor devices will be provided by City of Portland Bureau of Planning and Sustainability.

The services and datasets to be provided by Portland State University are supportive of required deliverables for the National Institute of Standards and Technology's Replicable Smart City Technologies Cooperative Agreement Program grant, Ordinance No. 187957 and Drive Oregon Foundation's Low Cost Air Quality Sensor Work grant, Ordinance No. 188326.

**Financial and budgetary impacts:**

This ordinance will result in a new IGA with Portland State University for a total of \$8000.

\$6000 is budgeted from National Institute of Standards and Technology's Replicable Smart City Technologies Cooperative Agreement Program grant, Ordinance 187957, Cost Object PN00700001, for supplies and testing services such as use of the environmental chamber, sensing reference instrument, and gas supplies.

\$2000 is budgeted from Drive Oregon Foundation's Low Cost Air Quality Sensor Work grant, Ordinance 188326, for technician's time for sensor and instrument maintenance and diagnostic checks.

**Community impacts and community involvement:**

The work facilitated by this intergovernmental agreement will support the City's grant projects focused on improving our understanding of how traffic and meteorological conditions affect air quality and test technologies for monitoring and reporting that information in real-time. Because this technology is still emerging, the direct impacts to the community are limited in the near term, but successful demonstration of the technology could eventually lead to better community information about air quality along major transportation corridors. The testing services and datasets provided by Portland State University are first step towards improving understanding of this emerging technology.

**Budgetary Impact Worksheet****Does this action change appropriations?**

- YES: Please complete the information below.  
 NO: Skip this section

Fund	Fund Center	Commitment Item	Functional Area	Funded Program	Grant	Sponsored Program	Amount