IMPACT STATEMENT

Legislation title: *Amend contract with Eco Northwest for additional implementation work for the local transportation infrastructure charge project phase III not to exceed $50,000 (Ordinance; amend Contract No. 30004500)

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Purpose of proposed legislation and background information:
The Portland Bureau of Transportation (PBOT) is responsible for the maintenance and improvements to city streets. PBOT would like to gain a better understanding of the benefits associated with paving city streets that are currently unpaved. In this scope of work, ECONorthwest (ECONW) proposes a study that can contribute to this goal by estimating the price premium paid by Portland home buyers for a home on a paved street. A positive and statistically significant price premium signals a real benefit from the paving of streets. In economic terms, it would signal that the value of a paved street to housing consumers is capitalized into higher housing prices, and that (1) the estimated price premium is one measure of that value, and (2) the cost to a home owner of paving an unpaved street can be recaptured, at least in part, when the home is eventually sold.

ECONW proposes to estimate part of the benefits of paving streets by using a "hedonic regression model." These models use economic theory and statistical techniques to estimate the contributions of various "attributes" of a product to that product's price. In the context of this study, we will model the price of a housing unit as a function of the attributes of that housing unit to understanding the respective value of each attribute. The list of attributes will include structural characteristics, like the number of bedrooms and bathrooms, locational characteristics, like neighborhood and demographics, and (critical to this study) a measure of the quality of roads near the housing unit.

Specifying an appropriate list of attributes allows the statistical model to control for important confounding factors. In other words, the model estimates the contribution of paved streets to housing prices, *holding all else constant*. This allows ECONW to estimate how much value paved streets add to housing prices; that added value is a proxy measure of the benefit they provide to society. ECONW has access to several data sources that can be combined with data from PBOT on pavement quality to estimate the statistical model.

Financial and budgetary impacts

$50,000 budgeted GTR in Development, Permitting, and Transit group budget.

Community impacts and community involvement:
There was significant advocacy during the year-long charge establishment process from neighborhoods, district coalitions, and community members to ensure the next phase occurs and funding from the charge is applied equitably and fairly. Community involvement to date informed the direction of this scope necessary to estimate the price premium paid by Portland home buyers for a home on a paved street.

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

KK 7-19-17