

ORDINANCE No.

Authorize an Intergovernmental Agreement with METRO for participation in the Sidewalk Labs, Replica pilot test in an amount not to exceed \$152,433 (Ordinance)

The City of Portland ordains:

Section 1. The Council finds:

1. Sidewalk Labs is seeking metropolitan regions to pilot test Replica, a data tool developed by Sidewalk Labs, a subsidiary of Alphabet, Google's parent company, that provides a high-fidelity, synthetic representation of how people travel during a typical week. The City of Portland's Bureau of Transportation (PBOT), along with Metro and TriMet, are interested in participating in a 12-month pilot test of Replica built for the Portland Region. As designed, Replica is capable of providing the City of Portland with rich data pertaining to transportation supply (the configuration of the roadway network, transit service, bicycle routes, and footpaths), transportation demand (representations of all personal travel that takes place in the region), land use (estimates of how land is used, for example, estimates of spatially-specific employment and school enrollment estimates as well as spatially and temporally-specific estimates of other activities, e.g., shop, eat, recreate), and demographics (including income, race, and household size). This data is not currently available to PBOT at the volume, depth, or frequency that the Replica tool is able to provide; and, access to this data, once validated, has the potential to greatly enhance PBOT's ability to understand how people are moving through our transportation system as well as if and how investments in this system ultimately impact mobility and motivate transportation choices.
2. Under the pilot test, Metro, TriMet and PBOT will work with Sidewalk Labs to develop acceptance criteria detailing the desired accuracy of Replica data with respect to traffic counts, passenger counts, model outputs, and other data used by public agencies within the Portland region. Metro, TriMet and PBOT will then draft and sign a contract with Sidewalk Labs that details the terms of the pilot test, including these acceptance criteria. This will be followed by a trial period during which Sidewalk Labs will make Replica data available to Metro, TriMet and PBOT to review and validate at no cost. If the data does not meet the acceptance criteria, Metro, TriMet and PBOT will terminate the agreement without making any payments. If it does, Metro, TriMet and PBOT will pay for a year's access to Replica, with data updated quarterly.
3. Metro will manage the Replica validation process, coordinating access to the tool and collecting feedback from TriMet and PBOT. Each agency will be responsible for

validating the data with respect to the criteria developed by that agency, i.e., Metro will be responsible for validating vehicle volumes, TriMet for transit ridership, and PBOT for validating bicycle and pedestrian volumes and movement.

4. Once Metro, PBOT and TriMet agree to accept Replica data, Sidewalk Labs will provide access to the data, updated quarterly, for the following year. Payment will be due to Sidewalk Labs upon receipt of each quarterly update, according to a predetermined payment schedule, agreed to by all parties involved.
5. During this period, Metro, Portland, and TriMet, as well as other public agency partners in the Portland region, will have full access to Replica data and documentation, as outlined in the terms and conditions of the agreement with Sidewalk Labs. Metro will convene monthly meetings with representatives of Sidewalk Labs to discuss product updates, user questions and feedback, and other issues; PBOT and TriMet will communicate questions and feedback to Metro and participate in these meetings as needed.
6. Once the year-long pilot test period is over, Metro, TriMet and PBOT will decide whether to continue jointly funding regional access to Replica.
7. The Bureau's level of confidence in the cost estimates for this project is 100%. Sidewalk Labs offers one year of access to Replica data based on the total population of the region for which Replica is being developed, at a cost of 20 cents per person. Based on the most recent population data available from the American Community Survey, the population of the Portland metropolitan area (Multnomah, Washington, Clackamas, and Clark [WA] Counties) is 2,296,500, so the total cost of accessing data during the pilot test will be \$457,300. Metro, TriMet, and PBOT will each pay a total of \$152,433.33. The City's share will be paid from General Transportation Revenue that was requested in the Fall '18 BMP

NOW, THEREFORE, the Council directs:

- a. That the Commissioner-in-Charge is hereby authorized to enter into a contract with METRO in a form similar to the contract attached as Exhibit A.

Passed by the Council,

Commissioner Chloe Eudaly
Prepared by: Michael Kerr; CB
Date Prepared: October 9, 2018

MARY HULL CABALLERO
Auditor of the City of Portland
By

Deputy

Intergovernmental Agreement

Metro Contract No.XXXX

Project: Sidewalk Labs, participating in the Replica pilot test

This Intergovernmental Agreement ("IGA" or "Agreement") is between Metro, an Oregon metropolitan service district organized under the laws of the State of Oregon and the Metro Charter ("Metro"), City of Portland, an Oregon municipal corporation ("Portland"), and the Tri-County Metropolitan Transportation District of Oregon ("Tri-Met").

1. Background

Metro, Tri-Met, and Portland have authority under ORS Chapter 190 to enter into this Agreement.

Replica is a data tool developed by Sidewalk Labs (a subsidiary of Alphabet). Sidewalk Labs collects, develops, maintains, and distributes regional transportation, land use, and census data.

Sidewalk Labs is seeking metropolitan regions to pilot test Replica.

Metro, Tri-Met, and Portland desire to participate in the Replica pilot test.

Under the pilot test, Metro, Tri-Met and Portland will work with Sidewalk Labs to share and obtain data, and calibrate and validate the model over the course of time.

Metro will act as the lead agency contracting with Sidewalk Labs. The parties will share in product costs.

In consideration of the foregoing recitals and the mutual promises herein, the parties agree as follows:

2. Term

This Agreement is effective on XXXX and terminates XXXX, unless terminated or extended as provided by this Agreement.

3. Scope of Work

This Agreement establishes responsibilities of the parties concerning contracting and coordinating with Sidewalk Labs, participating in the Replica pilot test, and coordinating with local data partners to assemble, maintain, and provide access to certain datasets. Work will be performed pursuant to the Scope of Work, Exhibit A, which is incorporated into this Agreement...

4. Changes to Scope of Work

The City authorizes XXX; Metro authorizes Metro's Research Center Director, Planning and Development Director or Deputy Director; and Tri-Met authorizes XXXX, or other defined designees, to modify the Scope of Work, upon mutual agreement in writing.

5. Responsibilities

- A. Metro agrees to make payments and furnish the necessary personnel, equipment, materials, and services and otherwise do all things necessary for or incidental to performing the Scope of Work. Metro certifies that at the time this Agreement is executed sufficient funds are available and authorized for expenditure to finance costs of this Agreement.
- B. Portland agrees to make payments and furnish the necessary personnel, equipment, materials, and services and otherwise do all things necessary for or incidental to performing the Scope of Work. Portland certifies that at the

Intergovernmental Agreement

Metro Contract No. XXXX

time this Agreement is executed sufficient funds are available and authorized for expenditure to finance costs of this Agreement.

- C. Tri-Met agrees to make payments and furnish the necessary personnel, equipment, materials, and services and otherwise do all things necessary for or incidental to performing the Scope of Work. Tri-Met certifies that at the time this Agreement is executed sufficient funds are available and authorized for expenditure to finance costs of this Agreement.

6. Billing Invoices and Payment for Services

- A. Each party must share equally in the costs, with Metro advancing payment to Sidewalk Labs, and Tri-Met and Portland reimbursing Metro for their respective shares.
- B. Portland and Tri-Met must submit invoices to Metro quarterly. Metro's billing invoices must include the contract number, remittance address, invoice date, invoice amount, and statement of expenses and work performed during the billing period.
- C. Portland and Tri-Met must send invoices to:
MetroAccountsPayable@oregonmetro.gov

- D. Metro will issue payment within thirty (30) days of receipt of an invoice, provided that services and expenses described in the invoice are in accordance with the terms of this Agreement.

7. Records Maintenance and Access

The parties must maintain all fiscal records related to this Agreement in accordance with generally accepted accounting principles. The parties must maintain books, documents, and other records related to the subject Agreement. The parties must retain and keep accessible all such records for a period of six (6) years from the date of final completion of this Agreement. Each party must make records available to the other party and its authorized representatives, including but not limited to the staff of any department, at reasonable times and places regardless of whether litigation has been filed on any claims.

8. Public Records

Except to the extent disclosure is required by Oregon Public Records Law ORS Chapter 192, the parties must protect the confidentiality of all confidential and proprietary information of the other parties and to which the parties have access. Nothing in this section is intended to waive either party's right to assert that any record is exempt from disclosure under the Public Records Law.

9. Ownership of Work Product

The parties have unrestricted access to all work products relating to this Agreement. To the extent either party uses any of its own property created or developed, whether arising from copyright, patent, trademark, trade secret or other similar right, in the performance of this Agreement, such property remains the property of the party.

10. No Third-Party Beneficiary

Except as set forth herein, this Agreement is between the parties and creates no third-party beneficiaries. Nothing in this Agreement gives or will be construed to give or provide any benefit, direct, indirect, or otherwise to third parties unless third persons are expressly described as intended to be beneficiaries of its terms.

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Metro Contract No.XXXX

11. Indemnification

- A. Within the limits of the Oregon Tort Claims Act and the Oregon Constitution, Metro must indemnify, defend, and hold harmless Portland and Tri-Met, its officers, employees, and agents, including assigned personnel, from all claims, suits, actions, or expenses of any nature resulting from or arising out of the acts, errors, or omissions of Metro, its agents or assigned personnel acting within the scope of employment or pursuant to the terms of this Agreement.
- B. Within the limits of the Oregon Tort Claims Act and the Oregon Constitution, Tri-Met must indemnify, defend, and hold harmless Metro and Portland, its officers, employees, and agents, including assigned personnel, from all claims, suits, actions, or expenses of any nature resulting from or arising out of the acts, errors, or omissions of Tri-Met, its agents or assigned personnel acting within the scope of employment or pursuant to the terms of this Agreement.
- C. Within the limits of the Oregon Tort Claims Act and the Oregon Constitution, Portland must indemnify, defend, and hold harmless Metro and Tri-Met, its officers, employees, and agents, including assigned personnel, from all claims, suits, actions, or expenses of any nature resulting from or arising out of the acts, errors, or omissions of Portland, its agents or assigned personnel acting within the scope of employment or pursuant to the terms of this Agreement.

12. Termination

This Agreement may be terminated as follows:

- A. By mutual written consent of all parties.
- B. By any party if another party commits any breach or default of any covenant or obligation under this Agreement. To be effective, the party intending to terminate must give the other party written notice of default and its intent to terminate. If the breaching party does not entirely cure such breach, default, or failure within thirty (30) days after receipt of notice, or such longer period of cure as may be specified in the notice, then this Agreement may be terminated at any time thereafter by giving a written notice of termination.

Any termination of this Agreement does not prejudice any rights or obligations accrued to the parties prior to termination.

Upon termination, Metro is entitled to payment, and Portland and Tri-Met must pay in accordance with the terms of this Agreement for all work performed and all reasonable close out costs up to the effective date of termination. Metro must submit a prorated invoice for all un-reimbursed work and expenses within the Scope of Work.

13. Dispute Resolution and Forum

This Agreement is to be construed according to the laws of the State of Oregon. The parties must negotiate in good faith to resolve any dispute arising out of this Agreement. If the parties are unable to resolve any dispute within fourteen (14) calendar days, the parties shall attempt to settle any dispute through mediation. The parties shall attempt to agree on a single mediator. The cost of mediation will be shared equally. If the parties agree on a mediator, the mediation must be held within 60 days of selection of the mediator unless the parties otherwise agree. If the parties cannot agree on a mediator, or the matter is not settled during mediation, the parties will have all other remedies available at law or in equity. Any litigation between Metro and the City arising under this Agreement or out of work performed under this Agreement will occur, if in the state courts, in the Multnomah County Circuit Court, and if in the Federal courts, in the United States District Court for the District of Oregon located in Portland, Oregon.

Exhibit A



Intergovernmental Agreement

Metro Contract No.XXXX

14. Notices; Project Managers

All notices and other written communication between the parties under this Agreement must be given in writing to the address set forth below and is deemed received (a) upon personal service, (b) three (3) days after deposit in the United States Mail, postage prepaid, or (c) one (1) day after deposit with a nationally recognized overnight courier service. The parties appoint the following representatives for receiving notice and as project managers for this Agreement.

Metro: Chris Johnson
Metro
600 NE Grand Ave.
Portland, OR 97232
503-797-1765
Email: Chris.Johnson@oregonmetro.gov

Portland: Name: _____
Department: _____

Telephone: _____
Email: _____

Tri-Met: Name: _____
Department: _____

Telephone: _____
Email: _____

The foregoing addresses may be changed by giving written notice. Notice given in any manner other than the manners set forth above will be effective when received by the party for whom it is intended.

15. Assignment

A party may not subcontract, assign, or transfer any rights or obligations under this Agreement without the prior written consent of the other parties.

16. Survival

All obligations relating to indemnification, default or defect in performance, limitation of liability, publicity, proprietary rights, and obligations to make payments that become due under this Agreement prior to termination (except that payments for services not performed by the date of termination will be prorated) survive termination or expiration of this Agreement and, to the extent applicable, remain binding and in full force and effect.

Exhibit A



Metro

600 NE Grand Ave.
Portland, OR 97232-2736

Intergovernmental Agreement

Metro Contract No.XXXX

17. Interpretation of Agreement

This Agreement will not be construed for or against any party by reason of authorship or alleged authorship of any provision. The Section headings contained in this Agreement are for ease of reference only and may not be used in constructing or interpreting this Agreement.

18. Entire Agreement; Modification; Waiver

This Agreement constitutes the entire agreement among the parties on the subject matter hereof and supersedes all prior or contemporaneous written or oral understandings, representations, or communications of every kind. There are no understandings, agreements, or representations, oral or written, not specified herein regarding this Agreement. No waiver, consent, modification, or change of terms of this Agreement will bind either party unless in writing and signed by all parties. Such waiver, consent, modification, or change, if made, will be effective only in the specific instance and for the specific purpose given. The failure of a party to enforce any provision of this Agreement will not constitute a waiver by a party of that or any other provision.

19. Choice of Law

The situs of this Agreement is Portland, Oregon. Any litigation over this Agreement will be governed by the laws of the State of Oregon and will be conducted in the Circuit Court of the State of Oregon for Multnomah County, or, if jurisdiction is proper, in the U.S. District Court for the District of Oregon.

20. No Waiver of Claims

The failure to enforce any provision of this Agreement does not constitute a waiver of that or any other provision.

21. Counterparts

This Agreement may be executed in any number of counterparts, each of which will be an original, but all of which will constitute one and the same instrument.

22. Authority

The representatives signing on behalf of the parties certify that they are authorized to make this Agreement by the party for which they sign.

METRO

Authorized Signature

Printed Name

Title

Date

City of Portland

Authorized Signature

Printed Name

Title

Date

TriMet

Authorized Signature

Printed Name

Title

Date

Exhibit A – Scope of Work

This Scope of Work describes Metro, Portland, and Tri-Met roles and responsibilities during the Replica pilot test.

Replica is a data tool developed by Sidewalk Labs (which is a subsidiary of Alphabet, Google's parent company) that provides a high-fidelity, synthetic representation on how people travel during a typical week. Replica includes details on:

- Transportation supply: The configuration of the roadway network, transit service, bicycle routes, and footpaths.
- Transportation demand: Representations of all personal travel that takes place in the region.
- Land use: Estimates of how land is used, for example, estimates of spatially-specific employment and school enrollment estimates as well as spatially and temporally-specific estimates of other activities, e.g., shop, eat, recreate.
- Demographics: Including income, race, and household size.

In order to create Replica, Sidewalk Labs synthesizes data from a wide variety of sources, including credit bureaus, location data from Android phones and Google apps, the Census Bureau, and local and regional planning agencies. Sidewalk Labs uses these data to model the travel behavior of each individual in a synthetic population that matches the demographic profile of a metropolitan area. The result is a detailed, full-scale model of how people travel through a region that doesn't compromise individuals' privacy because of the use of a synthetic population. Replica is updated quarterly, making it possible to examine how transportation patterns change over time.

Sidewalk Labs is seeking metropolitan regions to pilot test Replica, and Metro, TriMet and the City of Portland are interested in participating in the pilot test. Under the pilot test, Metro, TriMet and Portland will work with Sidewalk Labs to develop acceptance criteria detailing the desired accuracy of Replica data with respect to traffic counts, passenger counts, model outputs, and other data used by public agencies within the Portland region. Metro, TriMet and Portland will then draft and sign a contract with Sidewalk Labs that details the terms of the pilot test, including these acceptance criteria. This will be followed by a trial period during which Sidewalk Labs will make Replica data available to Metro, TriMet and Portland to review and validate at no cost. If the data does not meet the acceptance criteria, Metro, TriMet and Portland will terminate the agreement without making any payments. If it does, Metro, TriMet and Portland will pay for a year's access to Replica, with data updated quarterly.

There are four tasks that are covered by this agreement:

1. Develop acceptance criteria
2. Procurement and contracting
3. Validate Replica data
4. Pilot test Replica

1. Develop acceptance criteria

Metro, TriMet and Portland will collaborate to develop acceptance criteria to use as a basis for determining whether Replica is a valid representation of travel patterns, land uses, and demographic characteristics for the greater Portland region. Acceptance criteria describe the performance measures that will be used to validate the data, associated data sources, and the criteria that will be used to determine whether to accept Replica data with respect to each measure. These criteria will be expressed quantitatively using standard statistical measures (e.g., root mean square error). See Exhibit B for example acceptance criteria provided by Sidewalk Labs.

Metro will develop the majority of acceptance criteria, including those related to regional land use, vehicle counts, and demographic characteristics. TriMet will develop acceptance criteria related to transit ridership, potentially including ridership counts as well as demographic characteristics of transit riders. Portland will develop acceptance criteria related to private for-hire vehicles and bicycle and pedestrian

Exhibit A – Scope of Work

movement within the City of Portland, and potentially other criteria that draw on detailed data collected by the City. Metro will compile all acceptance criteria into a single document for review and distribute to TriMet and Portland. TriMet and Portland will provide edits to this document within two weeks, after which Metro will compile edits and send a draft version to Sidewalk Labs.

Metro, TriMet, and Portland will then work with Sidewalk Labs to ensure that these acceptance criteria are mutually acceptable. With each round of revisions by Sidewalk Labs to the acceptance criteria, Metro will distribute revisions to TriMet and Portland, which will provide edits within two weeks, after which Metro will compile edits and send a revised draft to Sidewalk Labs.

2. Procurement and contracting

Metro will lead the procurement and contracting process, selecting the procurement vehicle and executing the contract regarding Replica data. The contract will include the acceptance criteria developed under Task 1 as well as terms and conditions governing usage of and access to the Replica data (see Exhibit C for example Replica terms and conditions provided by Sidewalk Labs). Metro provides data to public agency partners in the Portland region, and Metro's intent is for the contract to allow for:

- Staff at public agencies throughout the region to have access to Replica through an online interface
- Users to access the complete raw Replica dataset via API, including both current and previous quarterly updates, and to download and host data as needed
- Users to access a methodology document, data dictionary, and other information needed to interpret and analyze Replica data
- Users to combine Replica data with data from other sources, analyze data, and share results, without restrictions or conditions

This intent is reflected in the term sheet signed by Metro and Sidewalk Labs (Exhibit D), which indicates a good-faith agreement to develop an agreement to pilot test Replica.

Metro will share the draft terms and conditions with TriMet and Portland for feedback prior to executing the contract.

3. Validate Replica data

During the final quarter of calendar year 2018, Replica will make a test version of Replica available at no cost for Metro, TriMet and Portland to test and validate. Metro will manage the validation process, coordinating access to the tool and collecting feedback from TriMet and Portland. Each agency will be responsible for validating the data with respect to the criteria developed by that agency, i.e., Metro will be responsible for validating vehicle volumes, TriMet for transit ridership, and Portland for validating bicycle and pedestrian volumes and movement.

Validation will entail reviewing the test version of the Replica data against data from other sources as specified in the acceptance criteria, determining whether the data meet these criteria, and documenting the review process and determination. Validation tests will be scripted using a programming language such as SQL or Python so that they can be easily repeated in the event that the data require multiple rounds of evaluation. Metro, TriMet and Portland will have eight weeks from receipt of the initial test version of Replica to validate that version of the data. By the end of this period, Portland and TriMet will provide Metro with written documentation of the validation results and methodology, scripts and data used in validation testing, and associated metadata. Metro will review these materials and request clarification, edits, and additional information within one week of receipt, and TriMet and Portland will have two weeks to respond.

Metro, TriMet and Portland will review validation results internally and, in the event that data do not meet acceptance criteria, make a joint decision about what refinements to request from Replica. Metro will validate any revisions to the test version of Replica provided by Sidewalk Labs using the data, scripts,

Exhibit A – Scope of Work

and methodology provided by Portland and TriMet, and convene a meeting with TriMet and Portland to discuss results and whether further refinements to the data are necessary. Acceptance of Replica data will occur when project managers from Metro, TriMet and Portland all agree in writing that the data meet acceptance criteria. Metro will distribute documents for signature in PDF format to TriMet and Portland as shown in Table 2. Portland will sign documents in print or digital format and return to Metro within one week of receipt.

In the event that TriMet or Portland fail to complete validation tests; provide adequate documentation, data, and scripts; or return signed documents within the allotted time, the other partners in this agreement will be authorized to make the decision of whether to accept data on their behalf.

4. Pilot test Replica

Once Metro, Portland and TriMet agree to accept Replica data, Sidewalk Labs will provide access to the data, updated quarterly, for the following year. Replica data will be updated quarterly, with payment due to Sidewalk Labs upon receipt of each quarterly update, according to the payment schedule outlined below. During this period, Metro, Portland, and TriMet, as well as other public agency partners in the Portland region, will have full access to Replica data and documentation, as outlined in the terms and conditions of the agreement with Sidewalk Labs. Metro will convene monthly meetings with representatives of Sidewalk Labs to discuss product updates, user questions and feedback, and other issues; Portland and TriMet will communicate questions and feedback to Metro and participate in these meetings as needed.

Once the year-long pilot test period is over, Metro, TriMet and Portland will decide whether to continue jointly funding regional access to Replica.

Cost and payment schedule

Sidewalk Labs offers one year of access to Replica data based on the total population of the region for which Replica is being developed, at a cost of 20 cents per person. Based on the most recent population data available from the American Community Survey, the population of the Portland metropolitan area (Multnomah, Washington, Clackamas, and Clark [WA] Counties) is 2,296,500, so the total cost of accessing data during the pilot test will be \$457,300. Metro, TriMet, and Portland will each pay a total of \$152,433.33. Payment will be made in quarterly installments upon receipt of updated Replica data, according to Table 1 below.

Table 1: Payment Schedule

Payment date (approx.)	Payment amount	Responsibility
January 2019	\$152,433.33	Metro to pay in full
April 2019	\$101,622.22	Portland and TriMet each to reimburse Metro for \$50,811.11
July 2019	\$101,622.22	Portland and TriMet each to reimburse Metro for \$50,811.11
October 2019	\$101,622.22	Portland and TriMet each to reimburse Metro for \$50,811.11

Metro will invoice TriMet and Portland for reimbursement within 15 business days of processing payment to Sidewalk Labs. Reimbursements to Metro will be due within 15 business days of receiving invoices.

Project schedule and roles

Table 2 below details the schedule, key milestones and Metro, TriMet and Portland's roles for each of the tasks included in this scope of work. In order to sign a contract with Sidewalk Labs by early October and

Exhibit A – Scope of Work

meet the schedule established in the term sheet (Exhibit D), the schedule shows Task 1 and Task 2 as happening concurrently.

Table 2: Project Schedule and Roles

Timing	Milestone	Metro role	TriMet / Portland role
<i>Task 1: Develop acceptance criteria and Task 2: Procurement and contracting</i>			
9/7/18 (est.)	Metro, TriMet, and Portland sign IGA	<ul style="list-style-type: none"> Draft and sign IGA 	<ul style="list-style-type: none"> Sign IGA
Signed IGA + 2 weeks	First internal draft of acceptance criteria and contract language	<ul style="list-style-type: none"> Draft acceptance criteria related to land use, vehicle counts, and demographics Draft contract language Compile draft criteria and contract language and distribute 	<ul style="list-style-type: none"> Send Metro draft acceptance criteria related to transit ridership (TriMet) and bike / ped movement and TNCs (Portland)
Signed IGA + 3 weeks	Send first draft of acceptance criteria and contract language to Sidewalk Labs	<ul style="list-style-type: none"> Schedule meeting to review draft criteria and contract language Compile edits Send draft to Sidewalk Labs 	<ul style="list-style-type: none"> Participate in meeting Review draft and provide edits
Signed IGA + 4 weeks (est.)	Sidewalk Labs provides revisions to acceptance criteria and contract language	<ul style="list-style-type: none"> Distribute Sidewalk Labs revisions to group 	
Signed IGA + 6 weeks	Final draft of acceptance criteria and contract language	With each subsequent round of revisions provided by Sidewalk Labs: <ul style="list-style-type: none"> Review Sidewalk revisions and provide edits Schedule meeting to discuss revisions as needed Compile edits Send edited draft to Sidewalk Labs 	With each subsequent round of revisions provided by Sidewalk Labs: <ul style="list-style-type: none"> Participate in review meeting(s) Review Sidewalk revisions and provide edits
Final draft + 2 weeks	Execute contract	<ul style="list-style-type: none"> Sign contract 	
<i>Task 3: Validate Replica data</i>			
Signed contract + 4 weeks	Delivery of test version of Replica	<ul style="list-style-type: none"> Convene meeting with Sidewalk Labs to discuss model development Provide data to inform model development as needed 	<ul style="list-style-type: none"> Participate in meeting Provide data to inform model development as needed
Test version + 8 weeks	First round of validation	<ul style="list-style-type: none"> Validate acceptance criteria developed by Metro Document validation methodology and results 	<ul style="list-style-type: none"> Validate acceptance criteria developed by TriMet (TriMet) and Portland (Portland) Document validation methodology and results

Exhibit A – Scope of Work

Timing	Milestone	Metro role	TriMet / Portland role
		<ul style="list-style-type: none"> • Compile validation results and methodology • Communicate validation results to Replica 	<ul style="list-style-type: none"> • Provide Metro validation results, documentation, data, and scripts
Test version +12 weeks (est.)	Acceptance of test version of Replica	With each round of revised test version of Replica data provided by Sidewalk Labs: <ul style="list-style-type: none"> • Conduct validation tests using methodology, scripts, and data provided by Portland and TriMet where applicable • Convene meeting to discuss validation results and discuss next steps 	With each round of revised test version of Replica data provided by Sidewalk Labs: <ul style="list-style-type: none"> • Participate in meeting to discuss validation results and next steps • If the test version meets acceptance criteria, sign agreement accepting data
Task 4: Pilot test Replica			
Acceptance + 2 weeks	First quarterly Replica data update	<ul style="list-style-type: none"> • Distribute login information to access Replica • Process payment to Sidewalk Labs 	
First update + 13 weeks	Second quarterly Replica data update	<ul style="list-style-type: none"> • Process payment to Sidewalk Labs 	<ul style="list-style-type: none"> • Reimburse Metro according to Payment Schedule (Table 1)
Second update + 13 weeks	Third quarterly Replica data update	<ul style="list-style-type: none"> • Process payment to Sidewalk Labs 	<ul style="list-style-type: none"> • Reimburse Metro according to Payment Schedule (Table 1)
Third update + 13 weeks	Fourth quarterly Replica data update	<ul style="list-style-type: none"> • Process payment to Sidewalk Labs 	<ul style="list-style-type: none"> • Reimburse Metro according to Payment Schedule (Table 1)
Duration of Task 4	Feedback meetings	<ul style="list-style-type: none"> • Convene monthly feedback meetings 	<ul style="list-style-type: none"> • Participate in monthly feedback meetings
Fourth update + 13 weeks	Contract ends		

Communications and meetings

- Metro, TriMet and Portland project managers or a designated representative will attend all meetings listed in Table 2.
- Metro will schedule meetings at least two weeks in advance.
- Meetings will be held at Metro, with a dial-in or online meeting option available.
- Metro will distribute drafts of written materials in Word format to TriMet and Portland for edits as shown in Table 2. Except where noted otherwise in this scope of work, TriMet and Portland will provide edits in track changes within one week of receipt.

IMPACT STATEMENT

Legislation title: Authorize a contract with METRO for participation in the Sidewalk Labs, Replica pilot test in an amount not to exceed \$152,433.33 (Ordinance)

Contact name: Michael Kerr

Contact phone: 503-823-5808

Presenter name: Michael Kerr

Purpose of proposed legislation and background information:

- Authorize the Portland Bureau of Transportation to participate in the Sidewalk Labs, Replica pilot test, which will be led by METRO
- METRO led Replica is a detailed, full-scale model of how people travel through a region that doesn't compromise individuals' privacy because of the use of a synthetic population. Replica is updated quarterly, making it possible to examine how transportation patterns change over time.

Financial and budgetary impacts:

- The cost to participate in this pilot is \$152,433.33, paid in 3 quarterly installments of \$50,811.11 to be paid from General Transportation Revenue that was requested in the Fall '18 BMP.

Community impacts and community involvement:

- None

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 10-26-18