Exhibit A

PORTLAND STATE UNIVERSITY

INTERGOVERNMENTAL AGREEMENT

This Agreement is entered into between the City of Portland, Oregon, hereinafter referred to as SPONSOR and the State of Oregon acting by and through the State Board of Higher Education on behalf of Portland State University, hereinafter referred to as UNIVERSITY.

WITNESSETH:

WHEREAS SPONSOR desires UNIVERSITY'S services on "Portland Single Family Weight Study 2011-12," in accordance with the SCOPE OF WORK, Attachment A hereunder;

WHEREAS the performance of such services is consistent, compatible and beneficial to the academic role and mission of UNIVERSITY;

Therefore, in consideration of the mutual promises and covenants contained herein, the parties hereto agree as follows:

ARTICLE I -SCOPE OF WORK

UNIVERSITY agrees to perform for SPONSOR the services described in ATTACHMENT A hereto, which by this reference is incorporated herein and made a part hereof.

ARTICLE II -AGREEMENT PERIOD

This Agreement shall become effective on the date of last signature and shall be completed by January 31, 2013, unless subsequent time extension, supplement, addition, continuation, or renewal is mutually agreed upon in writing between the parties. Costs may be incurred for this Agreement from January 1, 2011.

ARTICLE III -SCIENTIFIC PERSONNEL

Shanna Eller is responsible for the conduct of research under this Agreement for the UNIVERSITY. The UNIVERSITY shall not replace Shanna Eller without prior written approval of the SPONSOR.

ARTICLE IV -CONSIDERATION

SPONSOR agrees to pay UNIVERSITY for services performed under this Agreement in the fixed price amount of One Hundred and Nineteen Thousand Five Hundred (\$119,500) DOLLARS.

Payment shall be made according to the following schedule:

\$29,250 June 30, 2011 \$29, 250 January 31, 2012 \$30,500 June 30, 2012 \$30,500 January 31, 2013

Invoices for work accomplished under this Agreement shall be submitted quarterly in an original and two copies to Arianne Sperry, City of Portland, Bureau of Planning and Sustainability, 1900 SW 4th Avenue, Suite 700, Portland, OR 97201-5380. SPONSOR certifies that sufficient funds are available and authorized to finance the costs of this Agreement. Payment shall be sent to Portland State University, Office of Business Affairs, Research Accounting, PO Box 751 (BO/RA), Portland, Oregon 97207-0751.

ARTICLE V -NOTICE

Any notice provided for under this Agreement shall be sufficient if in writing and delivered to the following addressee or to such other person as may be identified in writing to the other party:

If to SPONSOR: Arianne Sperry City of Portland Bureau of Planning and Sustainability 1900 SW 4th Avenue, Suite 700 Portland, OR 97201-5380 503 823-5664 If to UNIVERSITY: Christina E. Frost Contract Officer Office of Research and Sponsored Projects

Portland State University PO Box 751 (ORSP) Portland, OR 97207-0751

ARTICLE VI -PERFORMANCE / REPORTING REQUIREMENT

UNIVERSITY is responsible for the performance of work and will provide progress reports of 'findings, if any, as stated in ATTACHMENT A, SCOPE OF WORK. UNIVERSITY shall maintain fiscal records pertinent to this Agreement for at least three (3) years following completion of work under this Agreement. UNIVERSITY shall maintain all fiscal records relating to this Agreement in accordance with generally accepted accounting principles. In addition, UNIVERSITY shall maintain all other records pertinent to this Agreement in such a manner as to clearly document UNIVERSITY'S performance hereunder.

ARTICLE VII - CONFIDENTIALITY

Subject to the limitations and conditions of the Oregon Public Records law, UNIVERSITY agrees to keep confidential any SPONSOR proprietary information that SPONSOR designates as such and supplies to UNIVERSITY during the course of this Agreement. Such information will not be included in any published material without prior approval by SPONSOR.

ARTICLE VIII -INDEMNIFICATION

To the extent permitted by Oregon Law (ORS 30.260 through 30.300) and the Oregon Constitution, Article XI, Section 7, UNIVERSITY shall indemnify SPONSOR against any liability for damage to life or property arising from UNIVERSITY'S actions under this Agreement provided, however, UNIVERSITY shall not be required to indemnify SPONSOR for any such liability arising out of the wrongful or negligent acts of employees or agents of SPONSOR.

To the extent permitted by Oregon Law (ORS 30.260 through 30.300) and the Oregon Constitution, Article XI, Section 7, SPONSOR agrees to be responsible, assume liability and indemnify UNIVERSITY for SPONSOR'S own wrongful or negligent acts or omissions, or those of its officers, agents, employees or representatives.

ARTICLE IX -COMPLIANCE WITH LAWS

This Agreement shall be governed and construed in accordance with the laws of the State of Oregon. Any suit for enforcement shall occur, if in the state courts, in the Multhomah County Court having jurisdiction thereof, and if in the federal courts, in the United States District Court for the District of Oregon.

ARTICLE X - ASSIGNMENT

Neither party shall assign or transfer any interest in this Agreement, nor assign any claims for money due or to become due during this Agreement, without the prior written approval of the other party.

ARTICLE XI - COPYRIGHT

UNIVERSITY may assert copyright on materials that it produces in the performance of the work of this agreement. SPONSOR shall have a time-limited first right to negotiate a non-transferable, irrevocable, worldwide, royalty-free, non-exclusive license to use, reproduce, publish or re-publish, or otherwise disseminate such copyrighted materials.

ARTICLE XII -PATENTS AND INVENTIONS

All rights to inventions or discoveries arising from research conducted under this Agreement shall belong to the UNIVERSITY and shall be disposed of in accordance with UNIVERSITY'S policies.

To the extent that UNIVERSITY has the legal right to do so, UNIVERSITY shall offer to SPONSOR a time-limited first right to negotiate an exclusive or non-exclusive, royalty-bearing license. If Sponsor does not elect to secure such license, rights to inventions disclosed hereunder shall be disposed of in accordance with UNIVERSITY policies with no further obligation to SPONSOR. Nothing contained in this Agreement shall be deemed to grant either directly or by implication, estoppel or otherwise any license under any patents, patent applications or other proprietary interests of any other invention, discovery or improvement of either party.

ARTICLE XIII - TERMINATION

This Agreement may be terminated by either of the parties hereto upon written notice delivered to the other party at least thirty (30) days prior to intended date of termination. By such termination, neither party may nullify obligations already incurred for performance or failure to perform prior to the date of termination. Payment to UNIVERSITY shall be prorated to and include the day of termination.

THIS AGREEMENT CONSTITUTES THE ENTIRE AGREEMENT BETWEEN THE PARTIES. THERE ARE NO UNDERSTANDINGS, AGREEMENTS, OR REPRESENTATIONS, ORAL OR WRITTEN, NOT SPECIFIED HEREIN REGARDING THIS AGREEMENT. NO AMENDMENT, CONSENT, OR WAIVER OF TERMS OF THIS AGREEMENT SHALL BIND EITHER PARTY UNLESS IN WRITING AND SIGNED BY ALL PARTIES. ANY SUCH AMENDMENT, CONSENT, OR WAIVER SHALL BE EFFECTIVE ONLY IN THE SPECIFIC INSTANCE AND FOR THE SPECIFIC PURPOSE GIVEN. SPONSOR, BY THE SIGNATURE BELOW OF ITS AUTHORIZED REPRESENTATIVE, ACKNOWLEDGES HAVING READ AND UNDERSTOOD THE AGREEMENT AND SPONSOR AGREES TO BE BOUND BY ITS TERMS AND CONDITIONS.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date set forth herein by their duly authorized representatives.

STATE OF OREGON ACTING BY AND THROUGH THE STATE BOARD OF HIGHER EDUCATION ON BEHALF OF PORTLAND STATE UNIVERSITY

Name:

Title:

Date:

Employer Tax ID Number:

Name:

Title

Date:

Primary Contact Person:

Contact Phone Number

Fax Number:

ATTACHMENT A SCOPE OF WORK Portland Single Family Weight Study 2011-12

PSU RESPONSIBILITIES

TERM: JANUARY 1, 2011 THRU JANUARY 31, 2013

The UNIVERSITY shall provide services specifically to Solid Waste & Recycling, Bureau of Planning & Sustainability, to determine average amount, by weight, of garbage, recycling, and yard debris/food scraps, being collected at the curbside of single family residences. The UNIVERSITY shall provide the CITY those services set out below.

Beginning in January 2011 and continuing until such time as curbside food scrap collection is available citywide, the UNIVERSITY shall collect data in Portland's Food Scrap Curbside Collection Pilot areas in the same way it has been doing since June of 2010. Protocol for such data collection is detailed in the section below titled, "Data Collection in Pilot Areas."

Once curbside food scrap collection is available citywide, UNIVERSITY shall return to a protocol established for many years of collecting data from randomly selected, stratified neighborhoods, while continuing to collect data on container volumes and presence of food scraps in the yard debris / food scraps roll cart. Protocol for such data collection is specified below in the section titled, "Citywide Data Collection."

DATA COLLECTION IN PILOT AREAS

Food Scrap Curbside Collection Pilot area data shall be collected as follows.

- 1. The UNIVERSITY staff shall continue to collect data once a season on seven walking routes (one in each pilot sub-area) established in 2010. The seven pilot walking routes have approximately 100 houses each and can be visited through a series of ten field observations in order to record for each house:
 - a. if garbage is set out, and if set out the size, weight, and estimated fullness of garbage container;
 - b. if recycling is set out, and if set out the size, weight, and estimated fullness of recycling container;
 - c. if compost is set out, and if set out the size, weight, and estimated fullness of compost container. Also if there is any readily available indication of food scraps in the compost container when the container lid is lifted, if the container needs to be stickered as a compost container, and any other field conditions of note, such as signs of pests or excessive odors.
- 2. UNIVERSITY staff collecting field data shall also adhere a compost container sticker on any residential yard debris container belonging to a household with residential hauling service in the pilot area that has not yet been stickered as a compost container.

- 3. UNIVERSITY shall coordinate with haulers to coordinate data collection days and times. Haulers will be requested to stay out of the area for a two and one half hour period for each route (between 6:00am and 8:30am).
- 4. Set-out net weights will be determined by deducting average tare weights for each container from the field recorded gross weight for each container set out at the curb. Tare weight averages will be derived from SFW field data collected between 2001 and 2005 (over 34,000 data points) in addition to manufacturer's specifications and any tare weighs established by UNIVERSITY and CITY staff using field data.
- 5. **UNIVERSITY** will perform data entry of all observations into a Microsoft Excel spreadsheet.
- 6. **UNIVERSITY** will perform data analysis of current and past data to determine trends in recycling, compost, and garbage set-out behavior. Analysis will include recycling and compost participation rates by hauler and by geographic location.

CITYWIDE DATA COLLECTION

Once curbside food scrap collection is available citywide, the UNIVERSITY shall shift to collect the following data in the following manner.

- 1. A sample of 10 separate Portland single-family residential walking routes shall be identified that contain approximately 100 households each. The UNIVERSITY staff, in cooperation with CITY and Metro, shall select the 10 route areas using a list of randomly generated single family residential households within the City of Portland Urban Services Boundary. The random selection of households will be stratified by property value and location. The final route list shall be representative of the single family household population.
- 2. UNIVERSITY shall coordinate with haulers to coordinate data collection days and times. Haulers will be requested to stay out of the area for a two and a half hour period for each route (between 6:00am and 8:30am).
- 3. A total of four observations shall be made of each household in each walking route over the course of a full calendar year. One observation shall be made in each of the four seasons (Winter, Spring, Summer and Fall) for a total of approximately 4000 observations for each full calendar year during which the observations are made during this contract period. Once four observations have been made for the first sample of ten routes, a new set of ten sample routes shall be established using the same selection process.
- 4. Observations shall be made in order to record for each house:
 - a. if garbage is set out, and if set out the size, weight, and estimated fullness of garbage container;

- b. if recycling is set out, and if set out the size, weight, and estimated fullness of recycling container;
- c. if compost is set out, and if set out the size, weight, and estimated fullness of compost container. Also if there is any readily available indication of food scraps in the compost container when the container lid is lifted, if the container needs to be stickered as a compost container, and any other field conditions of note, such as signs of pests or excessive odors.
- 5. UNIVERSITY staff collecting field data shall also adhere a compost container sticker on any residential yard debris container belonging to a household with residential hauling service that has not yet been stickered as a compost container by the CITY or its agent as is planned for all containers as part of the rollout of the citywide residential food scrap collection program.
- 6. Set-out net weights will be determined by deducting average tare weights for each container from the field recorded gross weight for each container set out at the curb. Tare weight averages will be derived from SFW field data collected between 2001 and 2005 (over 34,000 data points) in addition to manufacturer's specifications and any tare weighs established by UNIVERSITY and CITY staff using field data.
- 7. UNIVERSITY will perform data entry of all observations into a Microsoft Excel spreadsheet.
- 8. UNIVERSITY will perform data analysis of current and past data to determine trends in recycling, compost, and garbage set-out behavior. Analysis will include recycling and compost participation rates by hauler and by geographic location.

CITYWIDE AND PILOT DATA COLLECTION

UNIVERSITY shall provide make four seasonal observations of residential routes in accordance with the schedule set out below.

Winter:	January 15 – March 15
Spring:	March 16 – June 15
Summer:	June 16 – September 15
Fall:	September 16 – December 15

Data for each season shall be provided to the **CITY** within three weeks of the end of each season. Any changes to the schedule for data collection shall be by mutual agreement of CITY and UNIVERSITY staff.

Route schedules will rotate each season so that each route is observed at least once in the first half of the month and once in the second half of the month (i.e., first week of month in spring and second week of the month in summer) where cooperation with hauler is established.

Any modification of the schedule must be agreed upon by the CITY and the UNIVERSITY.

DELIVERABLES:

- 1. UNIVERSITY shall provide CITY with an excel spreadsheet with all route data compiled within three weeks of completing each season's data collection.
- 2. UNIVERSITY shall provide CITY with analysis of data for each full calendar year that observations are made for routes. In the event that a full calendar year of data is not collected for the Food Scrap Curbside Collection Pilot areas before curbside food scrap collection is available citywide and new sample routes are established for the study, the UNIVERSITY shall produce an analysis of the Food Scrap Curbside Collection Pilot area data collected as well as analysis of a full calendar year of data on the new citywide sample routes without exceeding two sets of analysis for the contract period. Each analysis in narrative report format shall not exceed roughly 10 pages and shall compare historical data to new data collected.
- 3. UNIVERSITY shall provide CITY with each analysis report within 45 days of completion of all observations to be included in the report.

CITY RESPONSIBILITIES:

To assist the UNIVERSTIY in carrying out its obligations hereunder, the CITY shall perform the services set out below:

- 1. The **CITY** shall ensure that the haulers selected to participate in this study cooperate with **UNIVERSITY** personnel in completing this project. Hauler cooperation shall include providing **UNIVERSITY** with route related information to facilitate completion of the sample collection as well as coordinating scheduling of sampling activity to ensure that curbside set-outs are available for measurement. Failure to cooperate, including hauler interference in the collection of data, may result in the hauler being dropped and/or replaced and a reduction in total sample size.
- 2. The **CITY** shall ensure that sample property selection is provided by Metro or some other mutually acceptable source.
- 3. The **CITY** shall perform the services set out above throughout the lifetime of the agreement.
- 4. The **CITY** shall provide maps of and hauling schedules for all routes selected for observation.