# Environmental Sustainability Metadata at the University of Washington
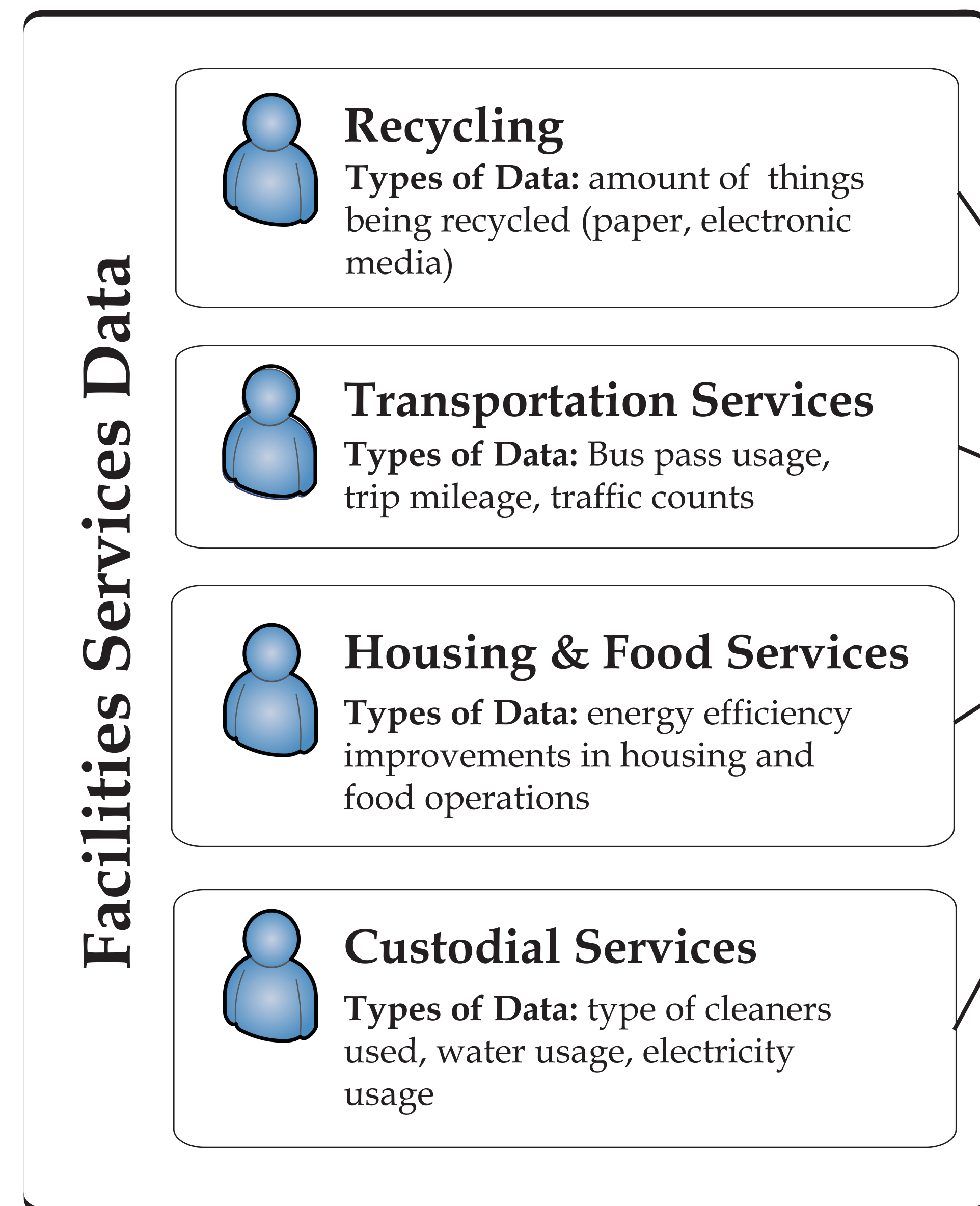## Peter Ellis, Day Master of Science in Information Management Candidate

## The Problem

Currently, no method of centrally assessing the University of Washington's environmental sustainability efforts exists. Data and information are fragmented, spread out across several departments and administrative units on campus. Additionally, few units actually track data - the data that exists is the result of a very small number of departments attempting to gather and maintain the data.

## The Goal

Provide the University of Washington's Office of Environmental Stewardship and Sustainability a metadata structure that allows them to centralize all of the University's environmental sustainability data in a single place that can then be accessed by researchers, staff, faculty, and other interested parties.

### Facilities Services Data

**Recycling**
Types of Data: amount of things being recycled (paper, electronic media)

**Transportation Services**
Types of Data: Bus pass usage, trip mileage, traffic counts

**Housing & Food Services**
Types of Data: energy efficiency improvements in housing and food operations

**Custodial Services**
Types of Data: type of cleaners used, water usage, electricity usage

**Office of Environmental Stewardship and Sustainability**

**Other Drivers:**
Climate Action Plan
Green Computing Special Interest Group
Office of Information Management
UW Technology
Facilities Services

**Potential Academic Collaborators:**
Information School
College of the Environment
Computer Science and Engineering
Human Centered Design and Engineering

## Further Recommendations

Since the University of Washington is an institution of higher learning, all effort should be made to keep students involved in the project on a cross-disciplinary basis, including, at minimum, students from the Information School to help address issues of data and knowledge management.
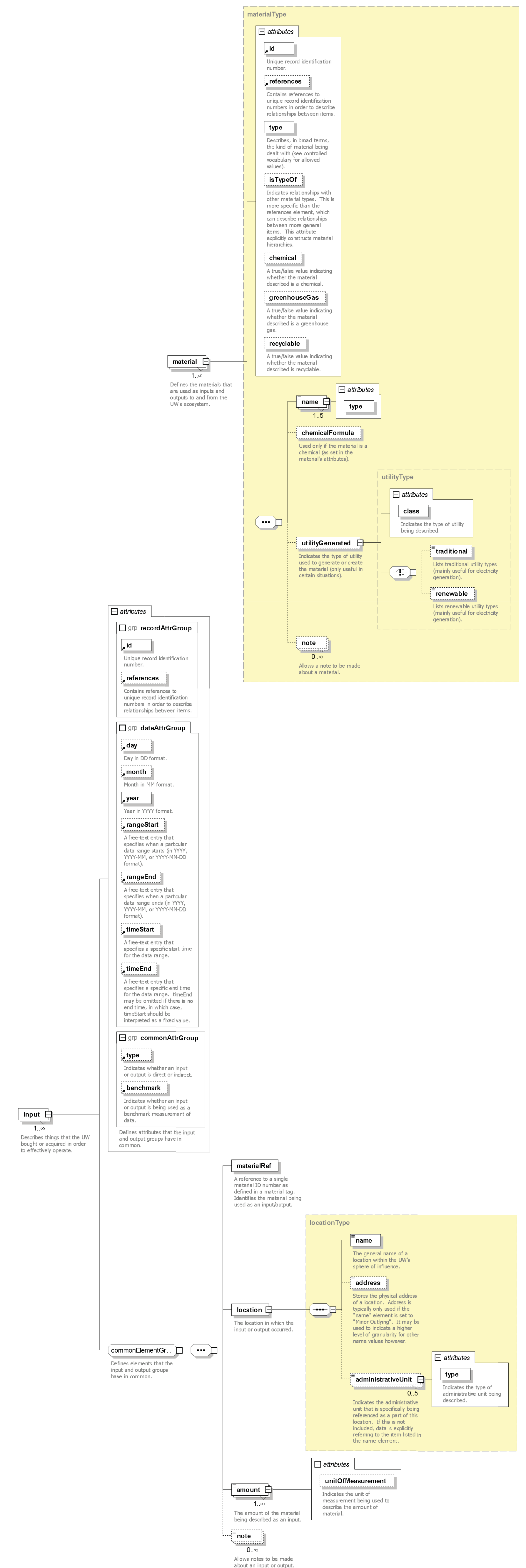
Consider creating a hire (likely at least 1FTE) to assist in data management and assimilation tasks.

Involve academic units in determining how this data can be translated into information that can then decrease costs and increase productivity.

Consider refinements in data collection across the UW based on findings from the data entry testing done on the schema and reviews of currently existing data.

## Many Thanks To...

The metadata structure has three components: materials, inputs, and outputs. Only inputs are shown here, since inputs and outputs have exactly the same structure.



### Information School
UNIVERSITY of WASHINGTON