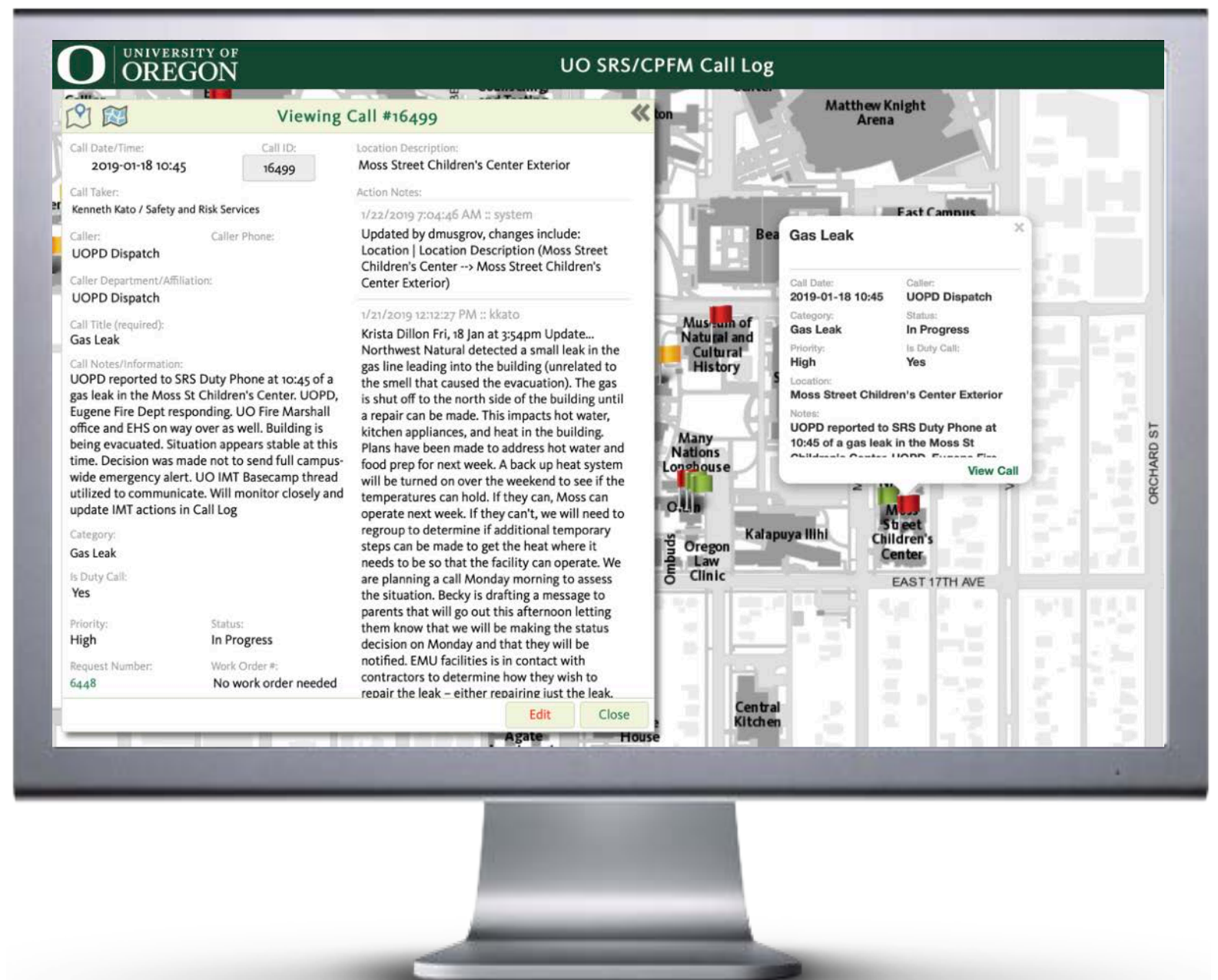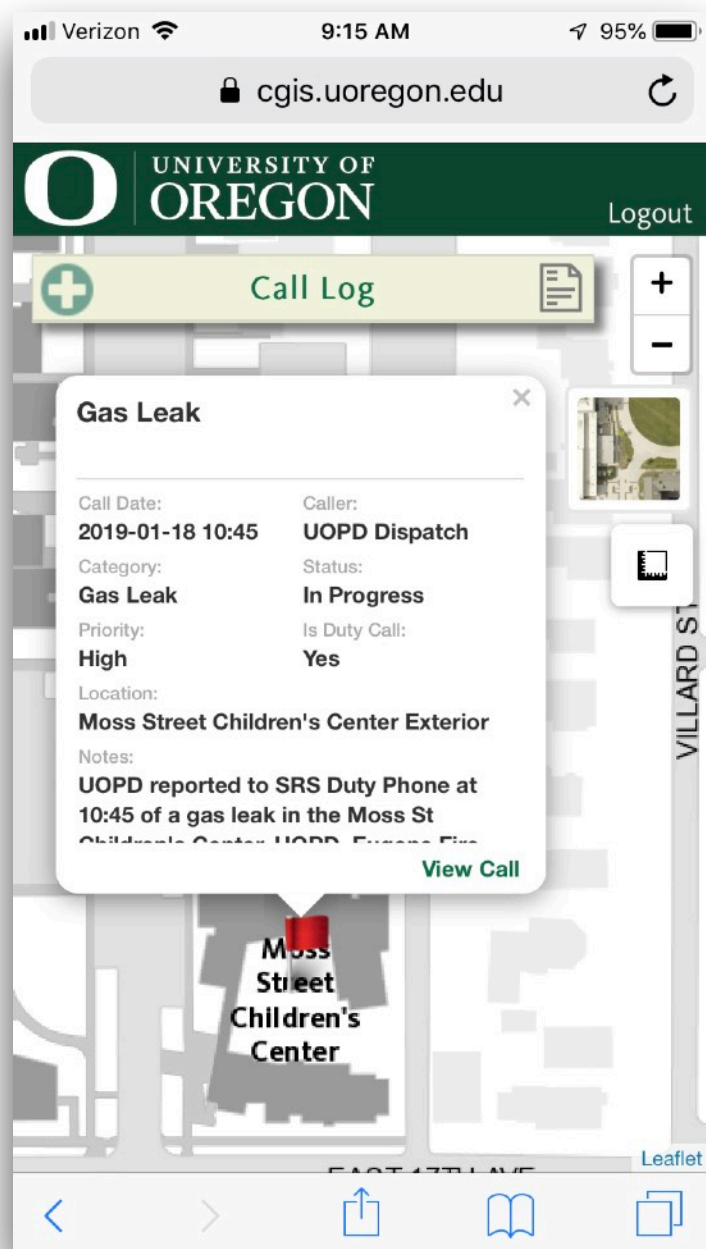# Innovations in Location/Mapping Technologies:
Enhancing Service Efficiency, Safety, and Resilience at UO

Through Innovations in Indoor Location Services and Mapping Technologies

Ken Kato - Director, GIS and Mapping Program - Location Lab
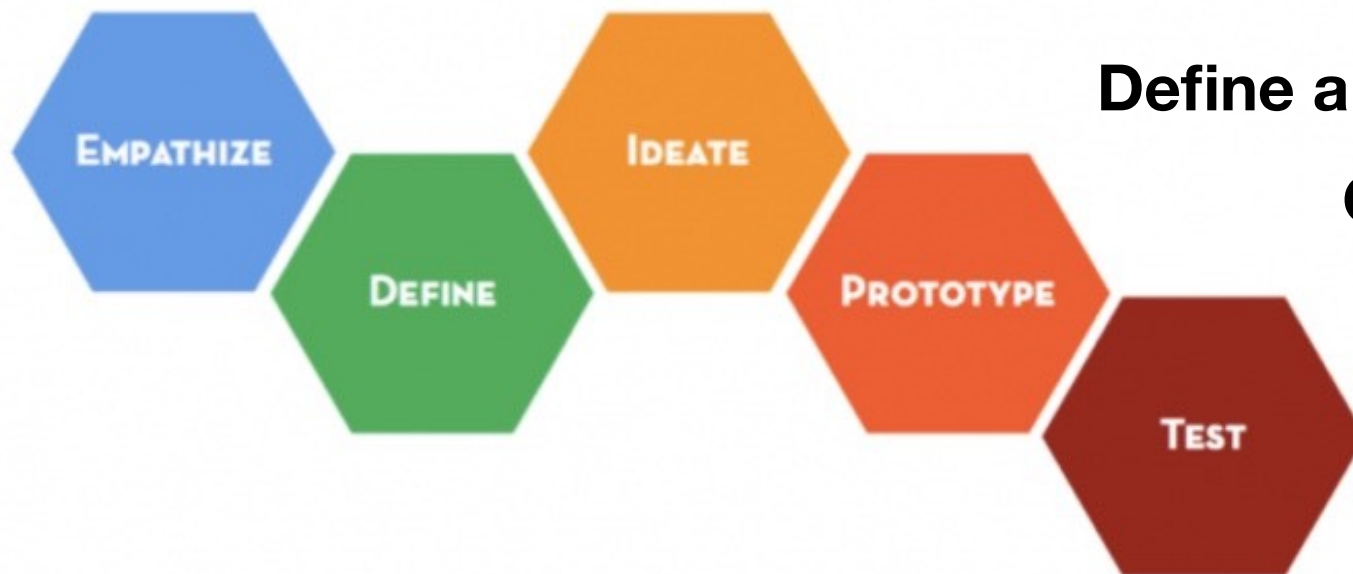
Our Mission

A <u>smarter</u>, <u>safer</u>, and more <u>efficient</u> campus through geospatial data, technology and systems.

Our Philosophy

Providing stable, reliable and accurate services and products - using <u>Design Thinking</u> and <u>Strategic Doing</u> approaches.

empathize - define - ideate - prototype - test

Design Thinking

Every thing we do first starts with people

Define a problem that can be collaboratively solved

Creatively produce ideas to solve problems

Rapidly make something

Test it out

Iterate

Strategic Doing

Playing a strong role in leading transformational organizational change

Innovation = Disruption
Disruption = Risk
Risk = Fear
Empathy = Trust

Provide solutions and tools that are world class

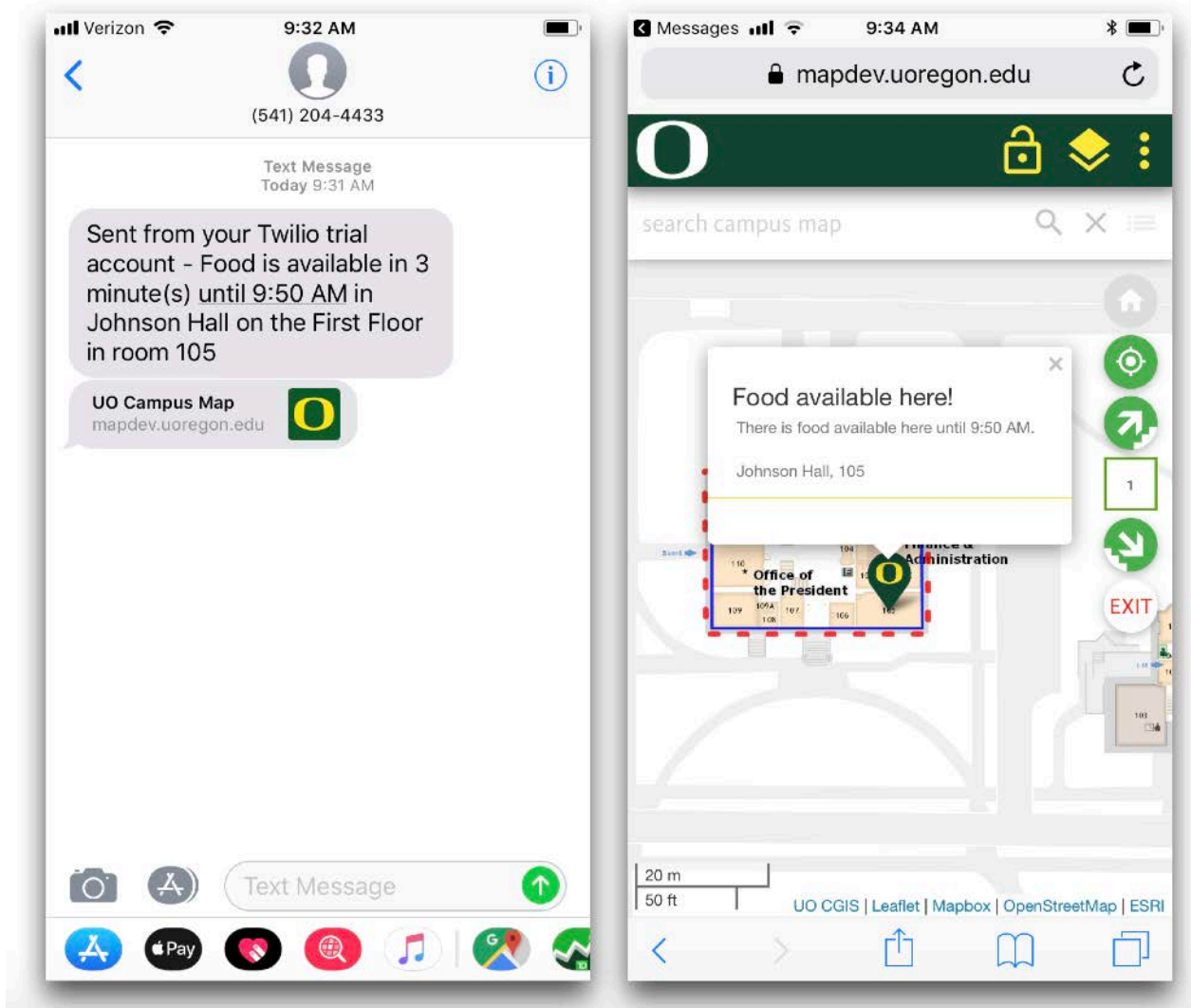Yes, and…

Enter new Ride

Caller Lookup:

950418[   ]   →   Valid 95#   Call   01

First Name: Last Name: Phone Number:

[First Name]   [Last Name]   [Phone Number]

Enter new Ride   🚌 🎧 ⊙ ⚙ ⊗ O

Caller Lookup: Call Time:

950418046   →   Valid 95#   01 : 15 : PM

First Name: Last Name: Phone Number: Rider Count:
[First Name]   [Last Name]   [Phone Number]   1

Pickup Location Search:

[Location Search Text]   →   G

Dropoff Location Search:

[Location Search Text]   →   G

Assigned Van: Wait Time: Earliest Pickup: Ride Estimate:
Unassigned   0   01 : 15 : PM   5
                 minutes   minutes

Ride Notes:

Log "Turn Away"   Save   Cancel

Schedule   **Map View**   🎧   01 : 11 : 25   [▼]

Unassigned   Assigned   En-Route   Call Rider   Picked Up   Complete

Unassigned Rides   📌
☐ Select All
Showing all rides

Whew, no unassigned rides! :)

🗑

+
🏠
−

Map of Eugene/University of Oregon area

Autzen Stadium

University of Oregon

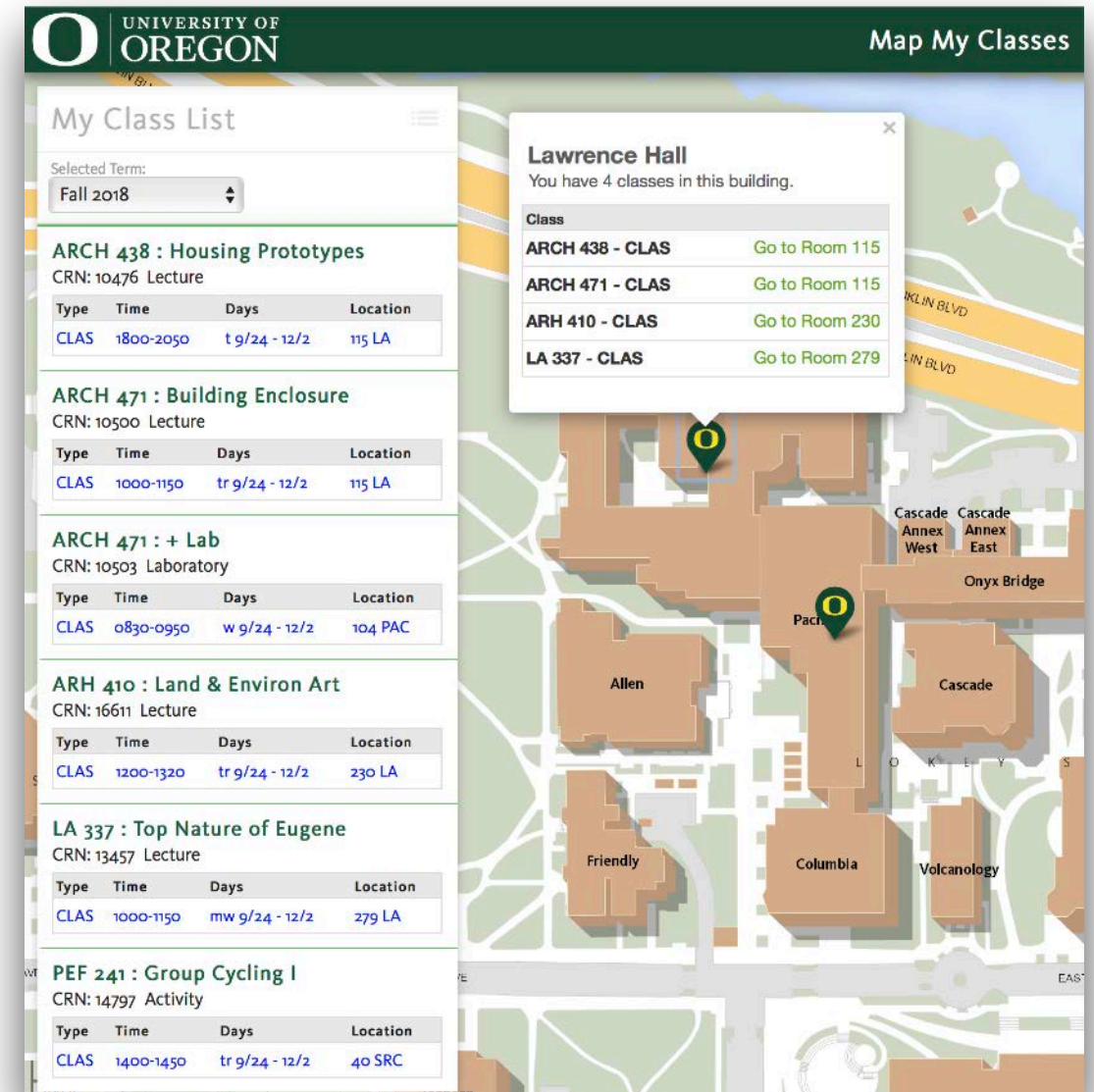# Projects contributing to the Academic, Research/Innovation and Student Success Missions

Whenever possible, leverage innovations to maximize benefit for students and researchers.

Leftover Textover
Student Food Insecurity

MyClassMap
Student Success / Retention

Partnership with Food Security Taskforce, Dean of Students, ASUO, VPFA

Partnership with Information Services and Enrollment Management, targeting student retention/success of freshmen class

UNIVERSITY OF OREGON

Office of the
Dean of Students

Student One Stop

Community   Leadership   Prevention   Sexual Assault Response   Off-Campus Living   Conduct   Need Help   About

Report a Concern   Student Care Team   About Bias   Faculty Staff Support   Helping a Friend   Basic Needs   Food Security

Food Security

We know that as a student, you have a lot things on your plate. But with the rising cost of education, housing, and other expenses, your plate might be lacking one vital item—food.

The University of Oregon recognizes the importance of proper nutrition, and that having enough food contributes to your academic success. That's why we're continuing to take steps to address food insecurity in the lives of our students. To help "feed the flock," our campus and community partners have created important new initiatives for the 2018–19 academic year, made available with joint funding from Associated Students of the University of Oregon and the Office of the President.

These new resources, as well as programs already in existence, are summarized below.

Produce Drop

In partnership with Food for Lane County and Trillium Produce Plus, the UO Student Sustainability Center's new monthly program in the EMU Amphitheater places fresh produce directly into the shopping bags of UO students who self-identify as living at or below 200 percent of the Federal poverty level.

Ducks Leftover Textover

The Ducks Leftover Textover program alerts current UO students via text message when there is leftover, free food available on campus. These leftover portions come from campus events where food was ordered from UO Catering, but not all of it was consumed.

Ducks Food Cache shares catering leftovers with students

Texts to announce available food will occur in real time—typically with about 15 minutes notice—and include a location link on the UO campus map.

Sign up for Ducks Leftover Textover

Want to donate your catering leftovers to Textovers?
Contact UO Catering directly.

foodsecurity.uoregon.edu

- **Produce Drop**
- **Ducks Feeding Ducks**
- **SNAP** *(Supplemental Nutrition Program)*
- **Student Food Pantry**
- **Ducks Leftover Textover**

United States Government Accountability Office
GAO   Report to Congressional Requesters

December 2018

FOOD INSECURITY

Better Information Could Help Eligible College Students Access Federal Food Assistance Benefits

GAO-19-95

Food Security - Basic Stakeholder Groups

Program Administration & Policy

The program requires oversight and administration to ensure participating students are receiving the desired outcomes

Sponsors Program

Organizes Stakeholders

Sets Policies
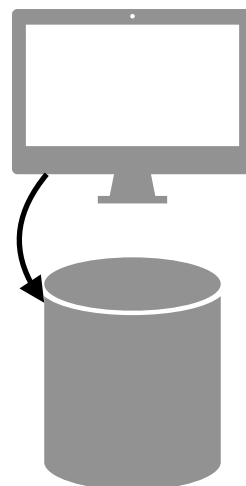
Funds the Program

Promotes the Program

Evaluates Feedback

Software System & Data

The software system will be built on top of the Campus GIS & Mapping software platform. It will leverage several existing technologies and integrate a new text notification feature

Enters Key Info:
location
date/time
contact cell #'s
Notification times

Participating Units

Arranges Event

Attends Event

The program will need participation from units that are using Catering's services to cater their events The participating unit requires at two roles, the <u>event arranger</u> and <u>event attendee</u> - that may or may not be the same person.

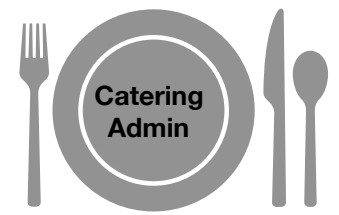## Catering

Catering Website

Routes user to sign-up form

The Program will need participation from Catering to identify events that can work for the project goals. Catering's website sign-up page can be utilized to capture units/events willing to join. Catering administrative staff will help coordinate participating events and clean-up staff will be informed

Catering Admin

Informs Catering of Participating Event

Participating Students

Students need a timely and discrete way to be notified of available food from a catered event. They can sign up and receive notifications from their cell phones. Users will need Duck ID to sign up to ensure UO students can participate. They will provide only one cell number for notifications and agree to terms of program. A goal will be to maximize anonymity and not store any personally identifiable information or data that would constitute a "student record".
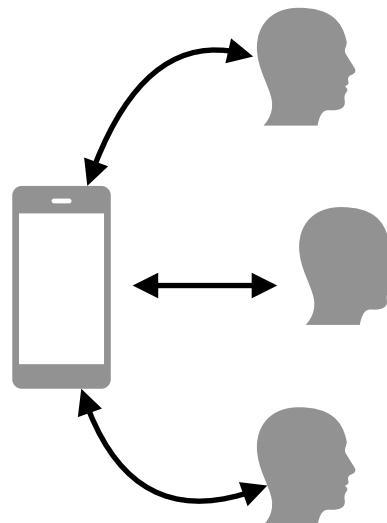
Food Security - Pre-Event Logistics

Program Administration & Policy

Sets Policies

Crafts the text message language. Establishes time window for food availability.

Data & Software System

Enters Key Info: location, date/time, contact cell #

3

Participating Unit

Arranges Event

Visits Catering Website & Agrees to participate

2

The participating unit requires at an <u>event arranger</u> that contacts Catering to set up a catered event. They identify an event attendee (and cell #) that will also participate (may or may not be the same person.

Catering

Catering Website

Routes user to sign-up form

4

Catering Admin

Informs Catering of Participating Event

Catering enables the website sign-up page to capture willing units, administrative staff to be informed and possibly clean-up staff to be informed

Participating Students

Log in w/ Duck ID to Sign Up

1

Provide Cell #

Agree to terms

Users will need Duck ID to sign up to ensure UO students can participate. They will provide only one cell number for notifications and agree to terms of program
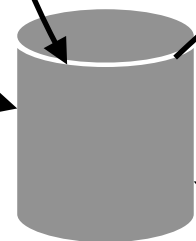
Food Security - Event and Post-Event Logistics

Program Administration & Policy

Data & Software System

Participating Unit

Attends Event

Receives text prior to event ending to verify if food is available

Responds YES or NO.

2

1

Inspect Analytics

5

Catering

Catering Admin

Informs clean-up staff

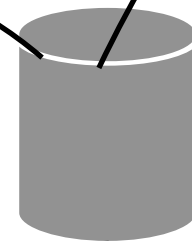Informs Catering of Confirmed Event

3

How many participating events submit YES to food availability?

How many students have signed up?

Are there popular places, times, days of week, weeks of the academic term?

Other Metrics?

4

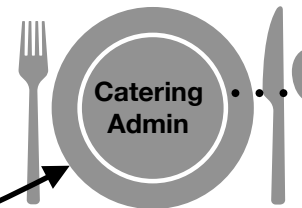**Participating Students**
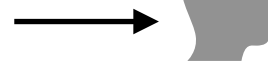
Receive text notification _15_ minutes prior to event ending, with precise location of available food (map) and time window to pick up food.
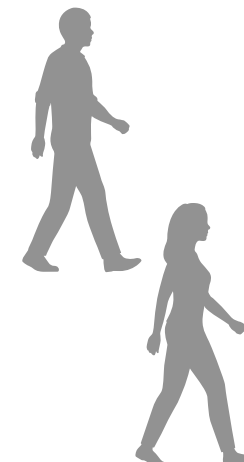
Ducks Leftover Textover Sign-Up

Sign Up here to be notified when free food is available!

The Ducks Leftover Textover program is ready to Go! This new program will alert current students via text message when there is leftover, free food available on campus. These leftover portions typically come from campus events where food was ordered from UO Catering, but not all of it was consumed.

Your Name (not required):

Your Email Address:

kkato@uoregon.edu

Mobile Phone (XXX-XXX-XXXX):

Do you identify as food insecure (lack reliable, affordable access to healthy food)?

○ Yes

● No

☐ I agree to the terms and conditions

Submit

Vacation Watch

Vacation Watch Signup

Will anyone be at the residence while you are gone (including roommates)?
No

Is the residence behind a locked gate or otherwise inaccessible to our staff?
No

Will there be an animal left unattended inside your residence?
No

First Name: Last Name:

Phone Number: Email Address:
XXX-XXX-XXXX

Search your street address
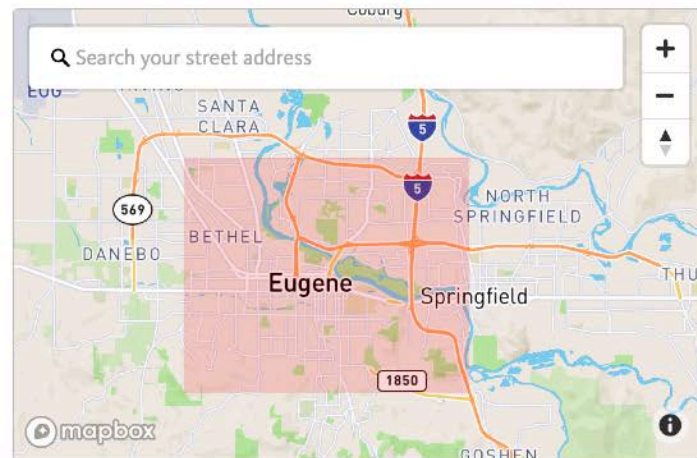
The area in red represents our service area. If your address doesn't appear in the search results list, you are outside of this area. Please contact James Stegall at james.stegall@uopd.org or 541-346-2651 for more information.

Date/Time Leaving:
1 : 00 : PM

Date/Time Returning:
1 : 00 : PM

Would you like us to check on a vehicle?
No

Secondary Contact (not required):   Phone Number:
                                    XXX-XXX-XXXX

If we can't reach you, we will try and contact this person next.

UNIVERSITY OF OREGON — Vacation Watch — Map Apps

Entry Details
Resident has returned.

VACATION WATCH
LEGEND:
- Resident has not yet left. Hide / Show
- Recently checked. Hide / Show
- Next check in < 24 hours. Hide / Show
- Next check in < 6 hours. Hide / Show
- Final check performed. Hide / Show
- Resident has returned.

12:36 PM Thu Apr 4

‹ Watch List   **Map View**

Address: Resident:

Last Checked On: Last Check Status: Next Check On:
03/30/2019 03:04 PM   All OK   04/01/2019 03:04 AM

Last Check Notes:
Residents called to cancel watch.

– CURRENT CHECK –

All OK | Item of Note | Issue Found

Next Check In:

36 Hrs.

−   +

Check Notes:

Save Close

Check   Details   History

UNIVERSITY OF OREGON

Call Log

Hide Filters | Show Layers

Tue, Apr 2nd to Thu, Apr 4th

Today | -1 | -7

Category:
Any

Is Duty Call:
No / Yes

Priority:
Any

Status:
Any

Category Home Org:
All selected

Building Filter:
All / Filter

Call Taker Home Org:
Any Home Org

Call ID:

Work Order Status:
Either

Free Text:

Export | Reset | Apply

None | None

Friendly Hall : 1161 E. 13th — 20309
Police Activity

Call Time: 05:06 pm
Caller: UOPD
Duty Call: No
Category: Police Activity (UOPD)
Request #: None
Work Order #: None

Agate Hall 208 — 20308
Broken Hot Water Faucet handle

Call Time: 04:19 pm
Caller: Liang, Jiaqi
Duty Call: No
Category: Plumbing (CPFM)
Request #: 9083
Work Order #: 19027330

PLC : 1415 Kincaid — 20307
Police Activity

Call Time: 03:59 pm
Caller: UOPD
Duty Call: No
Category: Police Activity (UOPD)
Request #: None
Work Order #: None

Police Activity

Call Date: 2019-04-02 17:06
Caller: UOPD
Category: Police Activity
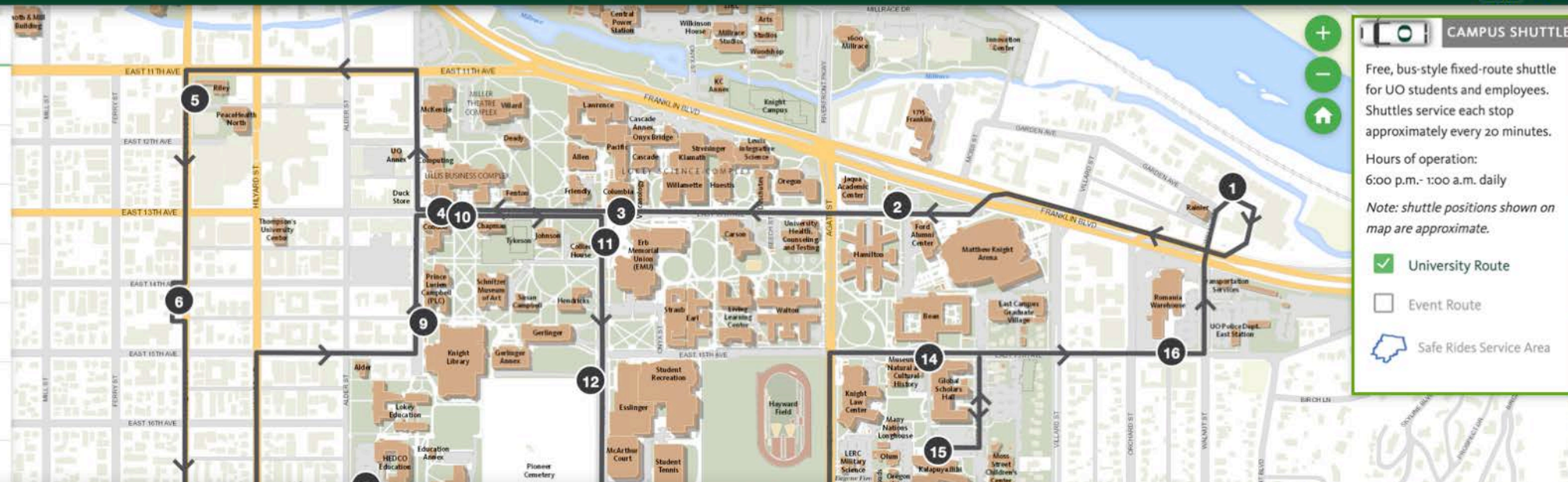Status: Open
Priority: Low
Is Duty Call: No
Location: Friendly Hall : 1161 E. 13th
Notes: Please contact UOPD for details.

View Call

Shuttle Stops

1. 2125 Franklin Apartments
2. Jaqua / Hamilton Residence Hall
3. EMU Near Columbia 150
4. Lillis Hall
5. Riley Hall
6. Central Presbyterian Church Parking Lot
7. Spencer View

CAMPUS SHUTTLE

Free, bus-style fixed-route shuttle for UO students and employees. Shuttles service each stop approximately every 20 minutes.

Hours of operation: 6:00 p.m.- 1:00 a.m. daily

Note: shuttle positions shown on map are approximate.

☑ University Route
☐ Event Route
◇ Safe Rides Service Area

UNIVERSITY OF OREGON

SafeRides/Campus Shuttle Reporting

Select a Report: Campus Shuttle

Campus Shuttle

Export to Excel | Thu, Mar 14th thru Wed, Mar 20th

Previous Week | Next Week

Pick Ups / Drop Offs

Stop:	Thu 03/14	Fri 03/15	Sat 03/16	Sun 03/17	Mon 03/18	Tue 03/19	Wed 03/20	Totals:
15th & Walnut, Arena District Apartments	1/2	5/11	2/2	7/3	3/4	0/0	2/1	20 / 23
Agate Hall	1/0	0/2	0/0	1/1	0/1	0/0	0/0	2/4
Central Presbyterian Church Parking Lot	1/1	0/3	0/1	0/1	0/2	1/2	0/0	2/10
Clinical Services	0/0	0/1	2/0	0/0	2/1	0/1	1/2	5/5
EMU Near Columbia 150	2/3	7/2	4/1	6/1	7/3	5/0	3/2	34/12
Jaqua Center Parking Lot	0/0	3/0	1/2	0/0	0/2	0/0	0/0	4/4
Kalapuya Ilihi	0/0	5/3	0/0	0/6	0/0	1/1	0/0	6/10
Knight Library	2/0	2/0	1/0	0/0	2/0	1/2	2/0	10/2
Lillis Hall	10/3	6/0	10/4	5/0	7/2	5/0	0/1	43/10
Museum of Natural and Cultural History	3/4	6/2	6/3	0/1	3/3	0/0	0/0	18/13
Rainier Building	0/1	1/7	3/3	0/1	2/2	1/2	2/1	9/17
Riley Hall	1/5	0/0	0/7	2/3	0/5	0/1	0/2	3/23
Spencer View	1/3	0/2	0/5	0/4	0/1	2/7	1/2	4/24
Student Rec Center	0/0	1/3	0/1	0/0	0/0	0/0	0/0	1/4
Off Route Stop	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Totals:	**22/22**	**36/36**	**29/29**	**21/21**	**26/26**	**16/16**	**11/11**	**161/161**

One week running average

Stop:	PICK-UPS	DROP-OFFS
15th & Walnut, Arena District Apartments	2.86	3.29
Agate Hall	0.29	0.57
Central Presbyterian Church Parking Lot	0.29	1.43
Clinical Services	0.71	0.71
EMU Near Columbia 150	4.86	1.71
Jaqua Center Parking Lot	0.57	0.57
Kalapuya Ilihi	0.86	1.43
Knight Library	1.43	0.29
Lillis Hall	6.14	1.43
Museum of Natural and Cultural History	2.57	1.86
Rainier Building	1.29	2.43
Riley Hall	0.43	3.29
Spencer View	0.57	3.43
Student Rec Center	0.14	0.57
Off Route Stop	0	0
Totals:	**23**	**23**

Totals (Pick Ups / Drop Offs)	Totals MTD	Totals YTD	Totals Last YTD	Totals Last Year
For the Month ending: Thursday, 04 April 2019	28 / 26	1989 / 1984	0 / 0	2337 / 2325

Pickups by Stop

Legend:
- 15th & W...
- Agate Hall
- Central P...
- Clinical S...
- EMU Nea...
- Jaqua Ce...

1/3

X-axis: Thu 03/14, Fri 03/15, Sat 03/16, Sun 03/17, Mon 03/18, Tue 03/19, Wed 03/20 — *Date*
Y-axis: 0.0, 2.5, 5.0, 7.5, 10.0
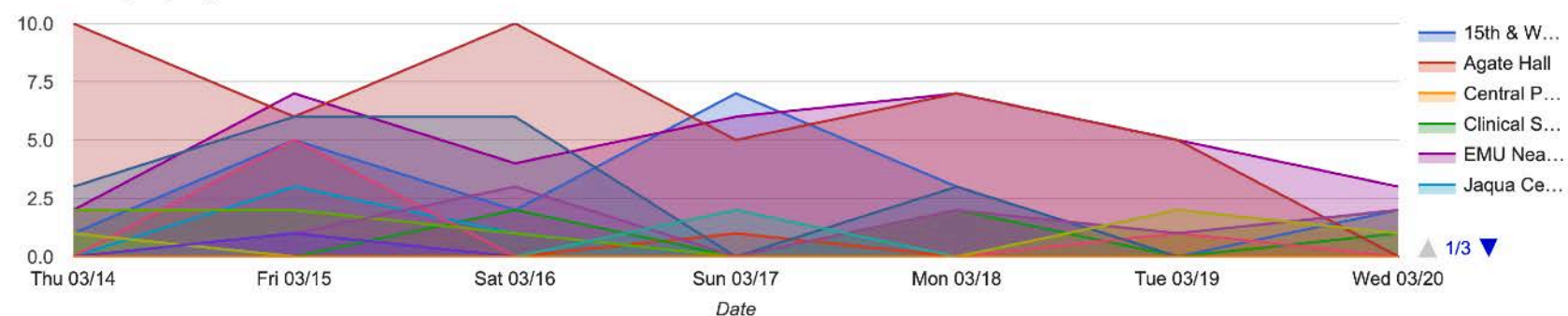
My Class List

Selected Term:

Spring 2019

ARH 211 : Survey Lat Amer Arts
CRN: 36674 Lecture

Type	Time	Days	Location
CLAS	1200-1320	mw 4/1 - 6/9	208 DEA

ARH 211 : + Dis
CRN: 36675 Discussion

Type	Time	Days	Location
CLAS	1100-1150	f 4/1 - 6/9	241 LA

ARH 359 : History of Photography
CRN: 36659 Lecture

Type	Time	Days	Location
CLAS	1000-1120	tr 4/1 - 6/9	182 LIL

Lillis Hall 182
First Floor

Class Details

ARH 359: History of Photography
CLAS 1000-1120 tr 4/1 - 6/9

Exit Building

CEO Network
Duck Guides

Career Services