OREGON LAND USE/LAND COVER FRAMEWORK IMPLEMENTATION TEAM

Overview

The Land Use/Land Cover Framework Implementation Team (LU/LC FIT) is one of the 15 established Framework Implementation Teams. Through the work of the LU/LC FIT, an Oregon Land Cover Data Standard based largely on vegetation cover was endorsed in 2006 and is focused on remote sensing derived classification. Land use cannot be reliably determined from remotely sensed data, so the Standard may not meet the needs of land use data users throughout the state, particularly within urban and developed areas. It remains to be determined whether or not a standard land use data classification is needed to complement or expand on the existing Land Cover Standard. Individuals and agencies with possible interest are being invited to look at statewide needs for land use data and standards as well as explore next steps for gauging interest, assessing data development opportunities, and possibly convening a new land use work group within the LU/LC FIT.

Objectives

1. Determine statewide interest in land use data.
2. Identify agency needs for land use data and examples of its usage.
3. Explore possible role for new land use work group within LU/LC FIT.
    a. Identify possible participants and potential roles.
    b. Outline work group tasks and timeframe.
    c. Establish how work group will make decisions and accomplish tasks.

Definitions

Framework Implementation Teams FITs are organized thematically around like groupings of spatial data. The 15 FITs are Administrative Boundaries, Bioscience, Cadastral, Climate, Elevation, Geoscience, Geodetic Control, Preparedness, Hazards, Land Use / Land Cover, Hydrography, Imagery, Reference, Transportation, and Utilities.

Framework data are fundamental geospatial data elements, typically statewide in extent, considered to be authoritative, and intended to serve the purposes of a broad range of users. Framework datasets are organized into fifteen themes, developed to agreed-upon standards, shared openly, and maintained through a voluntary collaborative community based effort under stewardship agreements participated in by local, regional, and state level agencies within Oregon.

Land Use Data Work Group Meeting Agenda

1)	Introductions	*Theresa Burcsu*	(10 min)
2)	Meeting Purpose and Objectives	*Eric Brandt*	(10 min)
3)	Statewide Land Use Data Prototype (2015)	*Eric Brandt/Nick Seigal/Steve Lucker*	(20 min)
4)	Land Use Data Requirements and Use Examples	*Group Discussion*	(50 min)
5)	Next Steps	*Group Discussion*	(30 min)

Oregon Land Use/Land Cover FIT
Land Use Data Work Group
First Meeting | February 29, 2016 | DLCD Basement Meeting Room (Salem)

Participants

Theresa Burcsu (DAS GEO), Eric Brandt (LCOG), Nick Seigal (LCOG), Steve Lucker (DLCD), Robert Mansolillo (DLCD), Gordon Howard (DLCD), Marian Lahav (DLCD), Angela Lazarean (DLCD), Jacob Cruser (ODA), Steve Erickson (Portland Metro), Jed Roberts (DOGAMI)

Phone: Malavika Bishop (DEQ), Bob DenOuden (City of Bend), Holly Kerns (Baker City/County), Jimmy Kagan (INR-Portland)

Notes compiled from Jed Roberts, Eric Brandt

Meeting Purpose and Objectives

Eric provided introduction and reviewed objectives on agenda handout; a key goal of the Work Group is to identify needs and use examples for land use information throughout the state.

Eric clarified terminology:

- *Land Use* is the current use of a site or property (typically at parcel or sub-parcel level). The data are usually vector format; can't reliably be determined from imagery; require supplemental information about human activities; and generally offer less detail in rural areas and more in urban areas.

- *Zoning* means allowed use which is not always the same as the current use and may reflect historical or near-term future use. Land is not always being used the way it has been zoned

- *Plan Designation* is the long-term ideal or desired future land use expressed in a comprehensive plan and intended to guide development according to adopted policy.

Ideally would like a land use scheme that could transition from land cover (small scale) across rural portions of the state to land use (large scale) in urban and urbanizing areas. The two should mesh in some complementary way to maximize utility and ease maintenance.

Scale and resolution were mentioned as factors in the land use-land cover continuum and examples of land use associated with taxlots, address points, and building footprints were shown. The need for representations of "mixed use" was noted and examples were shown of multiple address points representing multiple land use types interpreted as mixed use categories when generalized to corresponding building footprints or parcels.

The ongoing work of DAS GEO and others at the State to develop a statewide address point dataset--Oregon Multidisciplinary Address Repository (OMAR)—was noted as a valuable statewide resource. At some point in the future, OMAR could have the potential to include land use information or relate to structures or other building features to share information.

Statewide Land Use Data Prototype (2015)

Nick Seigal provided an overview of the land use pilot project LCOG and DLCD worked on (*Assessment of Stat Class Applicability for Building a Statewide Land Use Data Layer,* June 2015). The project entailed an assessment of the consistency of county Assessors' stat/building class data for a useful and sustainable statewide land use layer.

The assessment was done in three stages: acquisition, comparison, and mapping. Of the 27 counties currently confirmed to have stat class data, LCOG staff acquired and compared the stat class codes for 15 counties. They assembled improvement tables and GIS tax lot data to be able to map five representative counties from different regions of the state. The counties included: Deschutes, Harney, Josephine, Multnomah, and Lane. In addition a stand-in standard list of stat/building classes focused on typical categories like industrial, commercial, residential, and mixed use was created for mapping and data comparison purposes (based on the *Trip Generation Manual* by the Institute of Transportation Engineers).

Nick clarified terminology:

- *Stat/Building Class* represents what is on the ground but the codes are not standardized across counties.

- *Property Class* is a state standard that is applied in all counties; this is the "highest and best" use, not what is on the ground

Jimmy asked where he can find information about what the counties are required to do with regard to these data. Nick stated he has the ORS for Property Class (attached to notes).

Jimmy noted that they have two people working for INR under USFS and ODF to determine where the forest ends and exurban starts for timber; pointing to the possible need for three different things: land cover, land use, and large parcel uses.

A member of the group asked if they could obtain a copy of LCOG's June 2015 report and was referred to Steve Lucker (DLCD).

Land Use Data Requirements and Use Examples

Jacob Cruser at Agriculture (ODA) has been digitizing fields and attributing crop types from statewide imagery. Buildings/structures are not being mapped.

Angela Lazarean (DLCD) noted the availability of farm/forest land cover data and that having land use at the parcel level is good enough for her purposes.

Marian Lahav (DLCD) talked about the need to define change in development (i.e., change and trends over time) for FEMA Natural Hazard Mitigation Planning. A baseline of land use is needed to help identify where structures are being developed relative to hazard areas. Longitudinal data are needed and a baseline for the next State Plan in 2020.

Jed Roberts (DOGAMI) gave an overview of risk assessments DOGAMI is completing, funded by FEMA. He is doing loss estimations at the individual building level and needs fairly detailed information about each building in addition to Assessor and other classes (military, public owned, religious, etc.), such as occupancy type (i.e., land use), specific occupancy (i.e., more specific information, such as

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multi-family, mobile home, etc.), year built, building material, foundation type, square footage, value and replacement cost. Land use data are used with FEMA's Hazus risk assessment software. Projects will cover all coastal counties, with more coming. Work in Tillamook County to digitize building footprints and develop a countywide database of buildings was mentioned. The idea of integrating building footprints, address points, and Assessor data (among other sources) was noted.

The concept of hierarchical coding schemes was raised for scaling land use data across varying levels of user requirements for specificity. For example, the distinction between two forms of residential uses—mobile homes versus stick-built homes—was pointed out for its use in Hazus for clarifying distinct loss impacts deriving from construction characteristics.

Robert Mansolillo (DLCD) shared that the statewide zoning layer is hierarchical.

Nick Siegal (LCOG) asked the group if the land use classification needs to be hierarchical, and received several affirmative responses.

Steve Erickson (Metro) shared that his agency uses the Assessor property class to derive land use for applications including: buildable land inventory, land consumption monitoring, sub-building level change tracking (changes among multiple uses within a building). Metro is looking at budgeting for land use modeling needs for work such as determining densification (land consumption/land density), which is the conversion of industrial to commercial uses.

Gordon Howard (DLCD) expressed a primary interest in finding out land use changes in urban areas that go beyond Assessor classifications—he noted the need for land use data collection standards.

Steve Erickson mentioned Metro's annual vacant land inventories dating back to the 1990's. Metro has very good single family data, industrial lands, and multi-family data at the sub-taxlot level (drawn from Assessor's data, imagery interpretation and field work). He noted that maintaining reliable data on commercial uses is more problematic.

Next Steps

Theresa asked the group the question: Do we want to have a work group? To which participants answered in the affirmative. Participants were asked to submit to Theresa names and contact information for others with possible interest in Land use data and the Work Group.

The following suggestions were offered by group members:

- Review the hierarchical standards and classification schemes
- Continue discussion of the specific business needs each agency has and build a matrix
- Document who is doing what with land use data
- Look further at the issues around deriving land use from Assessor data and any DOR sharing issues
- Explore work happening with address points
- Explore possible funding sources for additional study

Eric noted that volunteers will be needed to help advance future efforts of the Land Use Data Work Group.

OREGON LAND COVER/LAND USE FIT
Possible Land Use Work Group Contacts

Name	Title	Agency	email
Eric Brandt	GIS Program Manager	LCOG	ebrandt@lcog.org
Nick Seigal	Senior GIS Analyst	LCOG	nseigal@lcog.org
Theresa Burcsu	Oregon Framework Coordinator	Oregon DAS GEO	theresa.burcsu@oregon.gov
Jimmy Kagan	Director	INR-Portland	Jimmy.Kagan@pdx.edu
Stephen Lucker	Oregon Risk MAP Coordinator	DLCD	stephen.lucker@state.or.us
Robert Mansolillo	Urban Planner	DLCD	robert.mansolillo@state.or.us
Angela Lazarean	Mid-Willamette Valley Regional Rep	DLCD	angela.lazarean@state.or.us
Marian Lahav	Natural Hazards Planner	DLCD	marian.lahav@state.or.us
Gordon Howard	Urban Planning Specialist	DLCD	gordon.howard@state.or.us
Tom Hogue	Economic Development Specialist	DLCD	Thomas.Hogue@state.or.us
Katherine Daniels	Farm/Forest Specialist	DLCD	Katherine.Daniels@state.or.us
Sarah Marvin	Measure 49	DLCD	smarvin@dlcd.state.or.us
Malavika Bishop		Oregon DEQ	Malavika.BISHOP@state.or.us
David Pray	Water Quality Program GIS Coord.	Oregon DEQ	Pray.David@deq.state.or.us
Jed Roberts	Flood Mapping Coordinator	DOGAMI	jed.roberts@dogami.state.or.us
Diana Walker	GIS Coordinator	Oregon Department of Agriculture	dlwalker@oda.state.or.us
Jacob Cruser		Oregon Department of Agriculture	Jacob.a.cruser@state.or.os
Steve Erickson		Portland Metro	Steve.Erickson@oregonmetro.gov
Bob DenOuden	GIS Performance Analyst	City of Bend	bdenouden@bendoregon.gov
Holly Kerns	Planning Director	Baker City & County	hkerns@bakercounty.org
Scott Hartell	Planning Director	Union County Planning Dept.	shartell@union-county.org

Name	Title	Agency	email
Brandon McMullen	Planning Director	Harney County	planning@co.harney.or.us
Darwin Johnson	Planning Director	Lake County Planning Dept.	djohnson@co.lake.or.us
Peter Gutowsky	Planning Director	Deschutes County Planning Dept.	Peter.Gutowsky@deschutes.org
Martin Lafrenz	Assoc. Professor of Geography	Portland State University (PSU)	lafrenz@pdx.edu
Vivek Shandas, PhD	Assoc. Professor of Urban Studies and Planning	Portland State University (PSU)	vshandas@pdx.edu
Alan Yeakley	Director, School of Environment	Portland State University (PSU)	yeakley@pdx.edu