



Oregon

Theodore R. Kulongoski, Governor

Department of Human Services

Budget Planning and Analysis

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Technical Appendix I

- A. Oregon Public School Locations (point)
- B. Oregon School District Boundaries (polygon)
- C. Oregon Public School Attendance Boundaries (polygon)
- D. Oregon Educational Service District Boundaries (polygon)

A. Oregon Public School Locations (point)

Definition: A point location representing the physical location of a public school site location.

Technical and Software Requirements: 1 GIS Analyst and 1 ArcGIS ArcView 9.3 license

Relational Data Requirements:

1. ESRI Street Map 'Street_Addresses_US' Address locator
2. Excel file of current school locations from the Oregon Department of Education (ODE)
(<http://www.ode.state.or.us/news/announcements/announcement.aspx?=4035>)

Data Development Procedures and Standards:

1. Convert ODE excel file to File Geodatabase table with a table of All_Institutions.
2. Query those records, which have a value of 'School' in the 'FUNCTION' field and a value of 'Public' in the 'SECTOR' field.
3. Export the selected records to a table called, All_Public_Schools.
4. Using the ESRI 'Street_Addresses_US' locator geocode the addresses the All_Public_School table to a File Geodatabase feature class called, Oregon_Public_School_Locations.
5. Add in any required fields and delete any ODE fields, which are not required.
6. Records which do not geocode will be individual reviewed for errors. Once a valid address is identified, then record with edited and geocoded a second time and appended the Oregon_Public_School_Locations feature class.
7. Any schools which remain uncoded will be researched by contacting the school or associated school district for clarification. In some cases this will involve collaborating with an individual familiar with the school's location through Google Maps or Google Earth to accurately identify the correct location. In most cases this involves locating rural school or a new school located on a road not yet available in any road center line dataset.



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8. Attributing each school record with additional information, which has been researched by OFRA staff. This includes school image, URL, Information email, DHS district, etc.

Table A – 1, Oregon public school locations, attributes

ATTRIBUTE	DEFINITION
NAME	school name
SCHOOL_ID	four digit numerical id value provided by the Department of Education to individual identify each school
SITE_STREET	street number and street name to the physical street location of the school or school complex
SITE_CITY	full city name to the physical street location of the school or school complex
SITE_STATE	two letter state abbreviation to the physical street location of the school or school complex
SITE_ZIP	five digit zip code to the physical street location of the school or school complex
SITE_ZIP4	plus four digit zip code to the physical street location of the school or school complex
MAIL_STREET1	street number and street name for U.S. mail delivery services
MAIL_STREET2	additional address directions for U.S. mail delivery services (ie. Suite Number)
MAIL_CITY	full city name for U.S. mail delivery services
MAIL_STATE	two letter state abbreviation for U.S. mail delivery services
MAIL_ZIP	five digit zip code for U.S. mail delivery services
MAIL_ZIP4	plus four digit zip code for U.S. mail delivery services
INFO_PHONE	10 digit phone number to the school information line (if available)
INFO_EMAIL	school email address to which inquiries may be directed (if available)
URL	URL to the school's official home page (if available)
DISTRICT_NMBR	alpha numeric Id to the administrative school district
ESD_ID	four digit numerical to the administrative educational service district
ESD_NAME	name to the administrative educational service district
YEAR_BUILT	4 digit year the school building was originally completed
STATUS	current status of the school (active, inactive, transition to active, transition to inactive)
POP1990	total student enrollment for the 1989-1990 school year
POP1995	total student enrollment for the 1994-1995 school year
POP2000	total student enrollment for the 1999-2000 school year
POP2005	total student enrollment for the 2004-2005 school year
POP2008	total student enrollment for the 2007-2008 school year
YEAR_CLOSED	4 digit year the school was closed
DHS_DISTRICT_NMBR	numerical value representing the Department of Human Services (DHS) within which the school is located
DHS_HEALTH_CLINIC	true or false as to the presence of a DHS community based health clinic on site at the school
COUNTY	name of the county within which the school is located
SCHOOL_PHOTO	name of the image file containing the image of the school's exterior

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LATITUDE	numerical value representing the latitude coordinate to the site address of the school
LONGITUDE	numerical value representing the longitude coordinate to the site address of the school

Table A – 2, Oregon public school locations, attributes (continued)

ATTRIBUTE	FIELD_TYPE	FIELD_WIDTH	FIELD_PRECISION
NAME	CHARACTER	250	0
SCHOOL_ID	INTEGER	5	0
SITE_STREET	CHARACTER	250	0
SITE_CITY	CHARACTER	250	0
SITE_STATE	CHARACTER	2	0
SITE_ZIP	INTEGER	5	0
SITE_ZIP4	INTEGER	4	0
MAIL_STREET1	CHARACTER	250	0
MAIL_STREET2	CHARACTER	250	0
MAIL_CITY	CHARACTER	250	0
MAIL_STATE	CHARACTER	2	0
MAIL_ZIP	INTEGER	5	0
MAIL_ZIP4	INTEGER	4	0
INFO_PHONE	CHARACTER	250	0
INFO_EMAIL	CHARACTER	250	0
URL	CHARACTER	250	0
DISTRICT_NMBR	CHARACTER	25	0
ESD_ID	INTEGER	4	0
ESD_NAME	CHARACTER	100	0
YEAR_BUILT	INTEGER	4	0
STATUS	CHARACTER	25	0
POP1990	INTEGER	6	0
POP1995	INTEGER	6	0
POP2000	INTEGER	6	0
POP2005	INTEGER	6	0
POP2008	INTEGER	6	0
YEAR_CLOSED	INTEGER	4	0
DHS_DISTRICT_NMBR	INTEGER	2	0
DHS_HEALTH_CLINIC	BOOLEAN		0
COUNTY	CHARACTER	25	0
SCHOOL_PHOTO	CHARACTER	50	0
LATITUDE	DOUBLE	16	6
LONGITUDE	DOUBLE	16	6

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B. Oregon School District Boundaries (polygon)

Definition: A public and quasi-municipal corporation, organized by legislative authority comprising a defined territory, for the erection, maintenance, government and support of the public schools within its territory.

Technical and Software Requirements: 1 GIS Analyst and 1 ArcGIS ArcView 9.3 license.

Relational Data Requirements:

1. Most accurate School District boundaries data layer
2. Most accurate roads centerline dataset available or ESRI StreetMap detailed roads dataset
3. National Hydrological Dataset (water features)
4. County Tax Lots
5. County Boundaries

Data Preparation Requirements:

1. Contact School District for any legal documents that may define the district's boundary.
2. Contact the county tax assessor's offices, which the school district covers. See if the tax lot polygon layer can be obtained with the school district information attached. In cases where DAS has a data sharing agreement for the tax lots, it may be only a reference table with the tax lot and associated school districts listed.

Data Development Procedures and Standards:

1. In cases where tax lots are available and are used to defined the boundary, select those tax lots representing the school district and dissolve the polygons based on the school district attribute value.
2. In cases where tax lots are not available, define the boundary based upon the other relational data layers.
 - Create a new Feature Class and Start Editing
 - Set the snapping tolerances the edges and vertexes of the relational data layers
 - Select the 'Create New Feature' task
 - Start tracing a new school district boundary following the more current relational data layers
3. Add required attribute information.

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Table B – 1, Oregon school district boundaries, attributes

ATTRIBUTE	DEFINITION
NAME	school district name
DISTRICT_NMBR	school district alpha numeric id
MAIL_STREET1	street number and street name for U.S. mail delivery services
MAIL_STREET2	additional address directions for U.S. mail delivery services (ie. Suite Number)
MAIL_CITY	full city name for U.S. mail delivery services
MAIL_STATE	two letter state abbreviation for U.S. mail delivery services
MAIL_ZIP	five digit zip code for U.S. mail delivery services
MAIL_ZIP4	plus four digit zip code for U.S. mail delivery services
INFO_PHONE	10 digit phone number to the school information line (if available)
INFO_EMAIL	school email address to which inquiries may be directed (if available)
URL	URL to the school districts official home page (if available)
ESD_ID	four digit numerical to the administrative educational service district
ESD_NAME	name to the administrative educational service district
POP1990	total student enrollment in the district for the 1989-1990 school year
POP1995	total student enrollment in the district for the 1994-1995 school year
POP2000	total student enrollment in the district for the 1999-2000 school year
POP2005	total student enrollment in the district for the 2004-2005 school year
POP2008	total student enrollment in the district for the 2007-2008 school year
LAST_UPDATE	date on which the district boundary was last updated
ACRES	numerical value representing the total number of acres with the school district

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Table B – 2, Oregon school district boundaries, attributes (continued)

ATTRIBUTE	FIELD_TYPE	FIELD_WIDTH	FIELD_PRECISION
NAME	CHARACTER	100	0
DISTRICT_NMBR	CHARACTER	25	0
MAIL_STREET1	CHARACTER	250	0
MAIL_STREET2	CHARACTER	250	0
MAIL_CITY	CHARACTER	250	0
MAIL_STATE	CHARACTER	2	0
MAIL_ZIP	INTEGER	5	0
MAIL_ZIP4	INTEGER	4	0
INFO_PHONE	CHARACTER	250	0
INFO_EMAIL	CHARACTER	250	0
URL	CHARACTER	250	0
ESD_ID	INTEGER	4	0
ESD_NAME	CHARACTER	100	0
POP1990	INTEGER	6	0
POP1995	INTEGER	6	0
POP2000	INTEGER	6	0
POP2005	INTEGER	6	0
POP2008	INTEGER	6	0
LAST_UPDATE	DATE	0	6
ACRES	DOUBLE	16	6



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C. Oregon Public School Attendance Boundaries (polygon)

Definition: A geographic area representing the catchment basin from which a school primarily derives its student enrollment.

Technical and Software Requirements: 1 GIS Analyst and 1 ArcGIS ArcView 9.3 license

Relational Data Requirements:

1. Most accurate School District boundaries data layer
2. Most accurate roads centerline dataset available or ESRI StreetMap detailed roads dataset
3. National Hydrological Dataset (water features)
4. County Tax Lots
5. County Boundaries

Data Preparation Requirements:

1. Make sure the School District Boundary data layer has been updated or corrected prior to updating or creation of any school attendance boundaries.
2. Contact the School District personnel responsible for maintaining the attendance boundaries and obtain any hardcopy and/or digital reference materials. Most districts have at least hard copy maps available.
3. Work with district staff to establish standards to which the boundaries are to conform too. This could be school district boundaries, tax lot boundaries, county lines, road center lines, and/or water features.

Data Development Procedures and Standards:

1. From the School District select the school district within which the school boundary will be defined.
2. Save the selected school district to a new feature class. The new feature class name should follow the following naming convention:
 - Elementary School Boundaries - "Elementary_Attendance_Boundaries_" & School District Number
 - Middle School Boundaries - "Middle_Attendance_Boundaries_" & School District Number
 - High School Boundaries - "High_Attendance_Boundaries_" & School District Number
3. Start editing the dataset containing the containing the fore mentioned feature classes.
4. Set the snapping tolerances to the edges and vertexes of the each of the relational data layers.

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5. Use the 'Cut Polygon Features' task to cut up the school district boundary be those lines define the school's attendance boundaries.
6. Add required attribute information and review the Oregon_Public_School_Locations feature class to make sure there is only one school for each attendance boundary. In the cases where a there two elementary schools share the same attendance boundary, but do not cover the same grade level. Add a duplicate attendance boundary polygon to the additional school.

Table C – 1, Oregon public schools attendance boundaries, attributes

ATTRIBUTE	DEFINITION
NAME	school name
SCHOOL_ID	four digit numerical id value provided by the Department of Education to individual identify each school
TYPE	true or false students are not restricted to this attendance boundary as their primary school
DISTRICT_NMBR	alpha numeric Id to the administrative school district
ESD_ID	four digit numerical to the administrative educational service district
ESD_NAME	name to the administrative educational service district
YEAR_BUILT	4 digit year the school building was originally completed
STATUS	current status of the school (active, inactive, transition to active, transition to inactive)
POP1990	total student enrollment for the 1989-1990 school year
POP1995	total student enrollment for the 1994-1995 school year
POP2000	total student enrollment for the 1999-2000 school year
POP2005	total student enrollment for the 2004-2005 school year
POP2008	total student enrollment for the 2007-2008 school year
YEAR_CLOSED	4 digit year the school was closed
DHS_DISTRICT_NMBR	numerical value representing the Department of Human Services (DHS) within which the school is located
DHS_HEALTH_CLINIC	true or false as to the presence of a DHS community based health clinic on site at the school
COUNTY	name of the county within which the school is located
SCHOOL_PHOTO	name of the image file containing the image of the school's exterior
LAST_UPDATE	date on which the attendance boundary was last updated
LATITUDE	numerical value representing the latitude coordinate to the site address of the school
LONGITUDE	numerical value representing the longitude coordinate to the site address of the school
ACRES	numerical value representing the total number of acres with the attendance boundary



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Table C – 2, Oregon public schools attendance boundaries, attributes (continued)

ATTRIBUTE	FIELD_TYPE	FIELD_WIDTH	FIELD_PRECISION
NAME	CHARACTER	250	0
SCHOOL_ID	INTEGER	5	0
TYPE	BOOLEAN		
DISTRICT_NMBR	CHARACTER	25	0
ESD_ID	INTEGER	4	0
ESD_NAME	CHARACTER	100	0
YEAR_BUILT	INTEGER	4	0
STATUS	CHARACTER	25	0
POP1990	INTEGER	6	0
POP1995	INTEGER	6	0
POP2000	INTEGER	6	0
POP2005	INTEGER	6	0
POP2008	INTEGER	6	0
YEAR_CLOSED	INTEGER	4	0
DHS_DISTRICT_NMBR	INTEGER	2	0
DHS_HEALTH_CLINIC	BOOLEAN		0
COUNTY	CHARACTER	25	0
SCHOOL_PHOTO	CHARACTER	50	0
LAST_UPDATE	DATE	0	6
LATITUDE	DOUBLE	16	6
LONGITUDE	DOUBLE	16	6
ACRES	DOUBLE	16	6



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D. Oregon Educational Service District Boundaries (polygon)

Definition: A public and quasi-municipal corporation, organized by legislative authority comprising a defined territory, for the erection, maintenance, government and support of the public schools within its territory.

Technical and Software Requirements: 1 GIS Analyst and 1 ArcGIS ArcView 9.3 license

Relational Data Requirements:

1. Most current School District Boundaries
2. Most accurate roads centerline dataset available or ESRI StreetMap detailed roads dataset
3. National Hydrological Dataset (water features)
4. County Tax Lots
5. County Boundaries

Data Preparation Requirements:

1. Contact the Educational Service District to see if there are any documents defining the boundary.
2. Check to district personnel to see if there are any changes in the review or have been accepted in addition to any other definition documentation.

Data Development Procedures and Standards:

1. In cases the Educational Service Districts are summations of School District boundaries.
 - Select those school districts that define the education service district, and dissolve based on the ESD attribute.
2. In cases where ESDs are not defined by school district boundaries, then follow the same development procedure as school district.



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Table D – 1, Oregon educational service districts, attributes

ATTRIBUTE	DEFINITION
NAME	name to the administrative educational service district
ESD_ID	four digit numerical to the administrative educational service district
MAIL_STREET1	street number and street name for U.S. mail delivery services
MAIL_STREET2	additional address directions for U.S. mail delivery services (ie. Suite Number)
MAIL_CITY	full city name for U.S. mail delivery services
MAIL_STATE	two letter state abbreviation for U.S. mail delivery services
MAIL_ZIP	five digit zip code for U.S. mail delivery services
MAIL_ZIP4	plus four digit zip code for U.S. mail delivery services
INFO_PHONE	10 digit phone number to the school information line (if available)
INFO_EMAIL	school email address to which inquiries may be directed (if available)
URL	URL to the educational service district's official home page (if available)
POP1990	total student enrollment in the educational service district for the 1989-1990 school year
POP1995	total student enrollment in the educational service district for the 1994-1995 school year
POP2000	total student enrollment in the educational service district for the 1999-2000 school year
POP2005	total student enrollment in the educational service district for the 2004-2005 school year
POP2008	total student enrollment in the educational service district for the 2007-2008 school year
LAST_UPDATE	date on which the educational service district's boundary was last updated
ACRES	numerical value representing the total number of acres with the educational service district

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Table D – 2, Oregon educational service districts, attributes (continued)

ATTRIBUTE	FIELD_TYPE	FIELD_WIDTH	FIELD_PRECISION
NAME	CHARACTER	100	0
ESD_ID	INTEGER	4	0
MAIL_STREET1	CHARACTER	250	0
MAIL_STREET2	CHARACTER	250	0
MAIL_CITY	CHARACTER	250	0
MAIL_STATE	CHARACTER	2	0
MAIL_ZIP	INTEGER	5	0
MAIL_ZIP4	INTEGER	4	0
INFO_PHONE	CHARACTER	250	0
INFO_EMAIL	CHARACTER	250	0
URL	CHARACTER	250	0
POP1990	INTEGER	6	0
POP1995	INTEGER	6	0
POP2000	INTEGER	6	0
POP2005	INTEGER	6	0
POP2008	INTEGER	6	0
LAST_UPDATE	DATE	0	6
ACRES	DOUBLE	16	6