

City of Surrey Bulk Data Transfer - Data Inventory

Last Updated: January, 2018

The following datasets are available via bulk data transfer as described at: <http://www.surrey.ca/city-services/13893.aspx>

Data Name	Type	Date Data Acquired/ Produced	Format	Description	Supplier/Processor	Approx. Size (Gb)	Location on Hard Drive
City of Surrey (CoS) Reference Data							
Bulk Data Transfer Inventory	Metadata	Oct. 2017	PDF	The list of all data included in the bulk data transfer.	City of Surrey		\\COS_Reference\BulkDataTransfer_DataInventoryListing.pdf
Bulk Data Request Form	Metadata	Sept. 2017	PDF	Copy of the Data Licence and application form.	City of Surrey		\\COS_Reference\BulkGIS_DataRequestFormSecured.pdf
Data source and version	Metadata	Oct. 2017	Text File	Information on City of Surrey's originating external HD, and version of data resident on that device.	City of Surrey		\\COS_Reference\DataSourceAndVersion.txt
As Constructed Drawings	Scanned Images	Submissions received prior to October 2017	TIF format	All as-built drawings received as of October 23, 2014 by the City for projects done in the City. For any drawings received by the City since that date, please access them via the Document Search feature in COSMOS, (www.cosmos.surrey.ca). As constructed drawings can also be searched for by project number at: http://www.surrey.ca/city-services/664.aspx	Various	16.5	\\COS_Reference\AsConstructedDrawings
As Constructed Drawings Submission Guidelines	Metadata	2001	PDF	This document details the as-built drawing submission requirements consultants must follow when submitting as-built drawings to the City. Refer to the link "Drawing and Digital Standards Specification" found at http://www.surrey.ca/city-services/802.aspx for latest version of this document, if a newer version is available.	City of Surrey		\\COS_Reference\DrawingStandards1.1.pdf
Map Tile Index	Metadata	1990	ESRI Shapefile	City of Surrey Tiling Convention based on a 1 mile grid.	City of Surrey		\\COS_Reference\COS_MapTileIndex
HyperSpectral Imagery (HSI)							
2017 Infrared Imagery	Native Data Product	Acquired April 2017	TIF format	10cm resolution imagery captured April 2017	Dudley Thompson Mapping and Associates	9	\\HSI\2017IR
2013 Radiance HyperSpectral Imagery (HSI)	Native Data Product	Acquired May 4, 2013	ERDAS Imagine .img format	72 band: 365 and 1050 nanometre wave length (Visible and Near Infrared Spectrum) as Band Sequential (BSQ) 16-bit Unsigned Integer.	ITRES Research Ltd under contract to Clean Harbors Exploration and Survey COB as Airborne Imaging Ltd.	47	\\HSI\2013HSI\NativeRadianceImagery
2013 ITRES Final Report	Metadata	Received August 15, 2013	PDF	Final report dated July 3, 2013 documenting HSI acquisition and processing completed.	ITRES Research Ltd under contract to Clean Harbors Exploration and Survey COB as Airborne Imaging Ltd.		\\HSI\2013HSI\Metadata\CityOfSurrey_HSI_FinalReport.pdf
2013 Reflectance HSI	Derived Data Product	Acquired May 4, 2013	ERDAS Imagine .img format	72 band: Between 365 and 1050 nanometre wave length (Visible and Near Infrared Spectrum) as PCI 16 bit unsigned integer "pix"	ITRES Research Ltd under contract to Clean Harbors Exploration and Survey COB as Airborne Imaging Ltd.	47	\\HSI\2013HSI\DerivedDataProducts\ReflectanceImagery
Road Allowance Impervious Classification Polygons	Derived Data Product	Received May 2014	Shapefile	Road pavement polygons of contiguous areas greater than 100 metres square within City Road Dedications. Built using HSI Imagery.	4DM Inc under contract to Clean Harbors Exploration and Survey COB as Airborne Imaging Ltd.	0.62	\\HSI\2013HSI\DerivedDataProducts\RoadAllowanceImperviousClassificationPolygons
Road Allowance Impervious Classification Rasters	Derived Data Product	Received May 2014	ERDAS Imagine .img format	20 cm raster image depicting impervious classification (Impervious, Pervious, or Water Bodies).	4DM Inc under contract to Clean Harbors Exploration and Survey COB as Airborne Imaging Ltd.	2.8	\\HSI\2013HSI\DerivedDataProducts\RoadAllowanceImperviousClassification_Rasters
Road Impervious Classification Documentation	Metadata	Received May 2014	PDF	Reports on hyperspectral analysis processing and results including ISPRS_HyperspectralLiDARPaper.pdf.	4DM Inc under contract to Clean Harbors Exploration and Survey COB as Airborne Imaging Ltd.		H:\HSI\2013HSI\Metadata\RoadImperviousClassificationDocumentation
LiDAR							
- 2013 LiDAR							
2013 LiDAR Point Cloud (LAS)	Native Data Product	Some portions of City acquired on April 3, others on April 11, 2013	LAS Format V1.2 (ASPRS)	Airborne LiDAR (Light Detection And Ranging). 25 - 30 LiDAR data points per square meter. Each point classified into 1 of 8 categories: (2) Ground; (3) Low Vegetation (less than 0.7m); (4) Medium Vegetation (0.7 to 2m); (5) High Vegetation (above 2m); (6) Building; (7) Low Points; (9) Water; (11) Withheld. See metadata for more information. Files in 0.5km square tiles named using UTM northing and easting coordinates.	Clean Harbors Exploration and Survey COB as Airborne Imaging Ltd.	242	\\LiDAR\2013Lidar\Native_LAS_Files
- 2013 LiDAR Derived Data Products							
Bare Earth DEM	Derived Data Product	June 2013	ESRI GRID Format	Bare Earth DEM raster data set in ESRI GRID format tiled according to Airborne Imaging tile index. 1m resolution. This DEM is missing wetland areas (excludes all water points).	Clean Harbors Exploration and Survey COB as Airborne Imaging Ltd.	4.56	\\LiDAR\2013Lidar\DerivedDataProducts\2013BareEarthDEM-AI\Tiled
Bare Earth DEM	Derived Data Product	June 2013	ESRI File GDB (Mosaic dataset)	Bare Earth DEM raster data set in ESRI GRID format. All tiles merged into an ESRI file geodatabase. 1m resolution. This DEM is missing wetland areas (excludes all water points).	Clean Harbors Exploration and Survey COB as Airborne Imaging Ltd.	2.41	\\LiDAR\2013Lidar\DerivedDataProducts\2013BareEarthDEM-AI\Merged

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Bare Earth DEM	Derived Data Product	June 2013	TIF Format	32 bit Bare Earth DEM raster data set. 25cm resolution. This DEM includes bathymetry for Nicomekl and Serpentine rivers.	City of Surrey	20	\\LIDAR\2013Lidar\DerivedDataProducts\2013BareEarthDEM-COS\TIF_Format
Full Feature DEM	Derived Data Product	June 2013	ESRI GRID Format	Upper most surface 32 bit DEM that includes buildings, trees, cars, etc. 1m resolution.	Clean Harbors Exploration and Survey COB as Airborne Imaging Ltd.	2.1	\\LIDAR\2013Lidar\DerivedDataProducts\2013FullFeatureDEM-AI
Full Feature DEM	Derived Data Product	June 2013	ESRI GRID Format	Upper most surface DEM that includes buildings, trees, cars, etc. and infill for wetland areas. .5m resolution.	City of Surrey	0.86	\\LIDAR\2013Lidar\DerivedDataProducts\2013FullFeatureDEM-COS\ESRI_GridFormat
Full Feature DEM	Derived Data Product	June 2013	TIF Format	DEM that includes buildings, trees, cars, etc. and infill for wetland areas. .5m resolution. This is also a derived data set processed from 2013 LiDAR by City of Surrey	City of Surrey	0.67	\\LIDAR\2013Lidar\DerivedDataProducts\2013FullFeatureDEM-COS\TIF_Format
Bare Earth Model Keypoints DEM	Derived Data Product	June 2013	ASCII GRID	Bare Earth Model Key Points thinned to redundant, data points with similar elevation. Files in 0.5km square tiles named using UTM northing and easting coordinates.	Clean Harbors Exploration and Survey COB as Airborne Imaging Ltd.	1.3	\\LIDAR\2013Lidar\DerivedDataProducts\2013BareEarthModelKeypointsDEM
Bare Earth Hillshade (1m)	Derived Data Product	June 2013	TIF Format	1m resolution. Bare earth hillshade split into 3 TIF files, (north, central, and south Surrey). Missing wetlands (excludes all water points).	Clean Harbors Exploration and Survey COB as Airborne Imaging Ltd.	0.5	\\LIDAR\2013Lidar\DerivedDataProducts\2013Hillshade-AI
Bare Earth Hillshade (0.1m)	Derived Data Product	June 2013	TIF Format	10cm bare earth hillshade which includes bathymetry for Nicomekl and Serpentine rivers.	City of Surrey	32	\\LIDAR\2013Lidar\DerivedDataProducts\2013Hillshade-COS_10cm
Full Featured Hillshade (1m)	Derived Data Product	June 2013	ESRI GRID Format	1m resolution. Full featured hillshade which includes wetlands, trees, buildings, etc.	City of Surrey	1.58	\\LIDAR\2013Lidar\DerivedDataProducts\2013FullFeaturedHillshade-COS\ESRI_GridFormat
Full Featured Hillshade (1m)	Derived Data Product	June 2013	TIF Format	1m resolution. Full featured hillshade which includes wetlands, trees, buildings, etc.	City of Surrey	1.5	\\LIDAR\2013Lidar\DerivedDataProducts\2013FullFeaturedHillshade-COS\TIF_Format
Contours (0.5 m)	Derived Data Product	September 2013	ESRI Shapefile Format	.5m contour shapefile generated from 2013 LiDAR points (includes points classified as water) tiled to City of Surrey tile index	Clean Harbors Exploration and Survey COB as Airborne Imaging Ltd. modified by City of Surrey	6.62	\\LIDAR\2013Lidar\DerivedDataProducts\2013Contours_50cm
Intensity Raster (1m)	Derived Data Product	June 2013	TIF Format	8 bit raster, 1m resolution of the intensity values of 2013 LiDAR	Clean Harbors Exploration and Survey COB as Airborne Imaging Ltd.	0.42	\\LIDAR\2013Lidar\DerivedDataProducts\2013IntensityRaster
Pavement Marking Centrelines	Derived Data Product	August 2013	ACAD format (3D)	3d Polyline of pavement marking centrelines of collector and arterial roads within the City. ACAD FILE "13014_All-Roads"	Dudley Thompson Mapping under contract to Clean Harbors Exploration and Survey COB as Airborne Imaging Ltd.		\\LIDAR\2013Lidar\DerivedDataProducts\2013PavementMarkingCentrelines
Pavement Marking Centrelines	Derived Data Product	August 2013	ESRI shapefile (2D)	Shapefiles with line type attribute. NO_PAINT_CENTRE, Concrete_MEDIAN_2-WAY_TURN_LANE, ROAD_PAINT_DASH, ROAD_PAINT_SOLID, ROAD_PAINT_DBL_SOLID, ROAD_PAINT_SOLID_DASH, ROAD_PAINT_VIRTUAL	Dudley Thompson Mapping under contract to Clean Harbors Exploration and Survey COB as Airborne Imaging Ltd.		\\LIDAR\2013Lidar\DerivedDataProducts\2013PavementMarkingCentrelines
- 2013 LiDAR Metadata							
FGDC Compliant LAS file metadata	Metadata	April 2013	XML	Each LAS file has an associated XML file which details the contents of the LAS file.	Clean Harbors Exploration and Survey COB as Airborne Imaging Ltd.	0.036	\\LIDAR\2013Lidar\Metadata\LAS_FileMetadata
Airborne Imaging Report	Metadata	April 2013	PDF	Airborne Imaging Final Report detailing 2013 LiDAR project.	Clean Harbors Exploration and Survey COB as Airborne Imaging Ltd.		\\LIDAR\2013Lidar\Metadata\CityOfSurrey_LidarFinalReport.pdf
LAS File Tile Index	Metadata	April 2013	ESRI Shapefile		Clean Harbors Exploration and Survey COB as Airborne Imaging Ltd.		\\LIDAR\2013Lidar\Metadata\2013LidarTileIndex
40 Ave Residual Plot of checkpoint survey	Metadata	April 2013	Microsoft Excel File	Excel File with plot of difference between RTK GPS survey along 40 Ave and LiDAR DEM.	Clean Harbors Exploration and Survey COB as Airborne Imaging Ltd. and 40 Ave residual plot by City of Surrey		\\2013 LiDAR\Metadata\40AveResidualPlot.xls
Pavement Marking Centrelines Readme	Metadata	Sept 2013	Text File	Summary of pavement marking classification.	Information provided by DTM Mapping and summarized by City of Surrey		\\LIDAR\2013Lidar\DerivedDataProducts\2013PavementMarkingCentrelines\PavementMarkingReadme.txt
Void Area Map	Metadata	August 2013	ESRI Shapefile	Polygons of contiguous concrete areas greater than 256 metres square that do not have ground or water classified LiDAR returns.	Clean Harbors Exploration and Survey COB as Airborne Imaging Ltd.	0.1	\\LIDAR\2013Lidar\Metadata\VoidAreaMap

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Wetland Areas and main Water Courses	Metadata	Feb 2013	ESRI Shapefile	These datasets were developed by City of Surrey to identify the wetland areas within the City. This layer was provided to Airborne to aid in classifying LiDAR points within these areas as water.	City of Surrey		\\LIDAR\2013Lidar\Metadata\WetlandAreas
Orthophoto Imagery							
2013 Ortho Photo Imagery	Derived Data Product	March 30, 2013	ECW format	10cm resolution imagery that has been compressed with minimal degradation in quality	4DM Inc.	13	\\Ortho\2013Ortho\ECW_Format
Oblique Imagery	Viewing only	Multi Year Available	IMG format	Oblique imagery is not available for download due to Pictometry licensing restrictions. Imagery is available for viewing at the City's online mapping website, COSMOS (www.cosmos.ca). We wanted to note this here for information purposes only.	Pictometry Canada		n/a
2017 Ortho Photo Imagery	Derived Data Product	April 2017	TIF format	10cm resolution ortho imagery captured between April and May 2017. Tiles and city wide image	Dudley Thompson Mapping and Associates	423	\\Ortho\2017Ortho\TIF_Format
Sonar Bathymetry							
2008 Nicomekl Sonar Point Cloud	Native Data Product	July 14 2008	ASCII xyz	Nicomekl River: 150 m downstream of BNSF Railway to Elgin Road. Multi-beam Sonar used when depth >2m, single beam used along shoreline	CRA Canada-Survey Inc.		\\Sonar\Native\Nicomekl
2008 Nicomekl Sonar Final Report	Metadata	July 14 2008	PDF	Report documenting data acquisition and processing.	CRA Canada-Survey Inc.	13.5	\\Sonar\MetaData\Nicomekl
2008 Nicomekl Sonar Personal geodatabase	Derived Data Product	July 2008	ESRI PGDB	A series of 32 bit raster files interpolated from bathymetric survey completed by CRA Canada.	City of Surrey	13.5	\\Sonar\DerivedProducts\Nicomekl\JA-NicomeklRiver.mdb
2012 Serpentine Sonar Point Cloud	Native Data Product	Acquired Feb 4-16 and April 19, 2012	ASCII xyz	Serpentine River: Broken into 4 segments. Water Level data added to interpolated 1 m grid. Single Beam (SB) around Bose Island, between Hwy 10 and 168 St. Multi-Beam (MB) KGB to Hwy 99, SB BNSF Bridge to Hwy 99. SB transect across Mud Bay	Terra Remote Sensing Inc		\\Sonar\Native\Serpentine
2012 Serpentine Sonar Point Cloud	Derived Data Product	March 28 2012	LAS File	Conversion of TRS job# 38, 45, and 46 to LAS format for viewing with LiDAR data.	City of Surrey	8.1	\\Sonar\DerivedProduct\Serpentine
2012 Serpentine Sonar Point Cloud	Metadata	March 28 2012	MS Word, PDF	PDFs of coverage, field acquisition summary, equipment and specifications metadata for each job.	Terra Remote Sensing Inc.	8.1	\\Sonar\Metadata\Serpentine
2015 Composite Nicomekl and Serpentine	Native Data Product	June 2015	KMZ	Track line of SONAR acquisition	Terra Remote Sensing Inc.		\\SONAR\Native\Nicomekl and Serpentine
2015 Composite Nicomekl and Serpentine	Derived Data Product	June 2015	ASCII xyz	Interpolated 1m DEM composite file based on 2015 and 2008 SONAR with 2013 LiDAR	Terra Remote Sensing Inc.	2	\\SONAR\DerivedProducts\Nicomekl and Serpentine
2015 Composite Nicomekl and Serpentine	Metadata	June 2015	DOC, PDF	Two documents, one outlining ASCII composite processing, one outlining 2015 SONAR acquisition process	Terra Remote Sensing Inc.		\\SONAR\MetaData\Nicomekl and Serpentine

Notes:

Please refer to the City's spatial data download page for the most up-to-date data download at <http://www.surrey.ca/opendata/>
Please refer to the City's online mapping system www.surrey.ca/cosmos for viewing data

Total Data Size ~ 930 Gb = 1 TB at least External Hard Drive Required
Total number of individual files ~ 910,000