Summary
This dataset uses the Anderson Level 2 Classification System to display land use/land cover for each Maryland County and Baltimore City. Initially developed using high altitude aerial photography and satellite imagery. For 2010 publication date product, land cover types were updated using 2007 National Agriculture Imagery Program (NAIP) aerial imagery and parcel information from the 2008 Edition of MDProperty View. The primary purpose of the data set is to display generalized land use / land cover to support planning, economic development, transportation and environmental mapping efforts in Maryland.

Description
The purpose of the 2010 land use/land cover data set is to provide a generalized view of how developed land has changed throughout the state, primarily capturing the conversion of resource land to development and characterizing the type of development (e.g. very low density, low density, medium density or high density residential development, commercial, industrial, institutional).

Urban Land Uses

11 Low-density residential - Detached single-family/duplex dwelling units, yards and associated areas. Areas of more than 90 percent single-family/duplex dwelling units, with lot sizes of less than five acres but at least one-half acre (.2 dwelling units/acre to 2 dwelling units/acre).

12 Medium-density residential - Detached single-family/duplex, attached single-unit row housing, yards, and associated areas. Areas of more than 90 percent single-family/duplex units and attached single-unit row housing, with lot sizes of less than one-half acre but at least one-eighth acre (2 dwelling units/acre to 8 dwelling units/acre).

13 High-density residential - Attached single-unit row housing, garden apartments, high-rise apartments/condominiums, mobile home and trailer parks; areas of more than 90 percent high-density residential units, with more than 8 dwelling units per acre.

14 Commercial - Retail and wholesale services. Areas used primarily for the sale of products and services, including associated yards and parking areas.

15 Industrial - Manufacturing and industrial parks, including associated warehouses, storage yards, research laboratories, and parking areas.

16 Institutional - Elementary and secondary schools, middle schools, junior and senior high schools, public and private colleges and universities, military installations (built-up areas only, including buildings and storage, training, and similar areas), churches, medical and health facilities, correctional facilities, and
government offices and facilities that are clearly separable from the surrounding land cover.

17 Extractive - Surface mining operations, including sand and gravel pits, quarries, coal surface mines, and deep coal mines. Status of activity (active vs. abandoned) is not distinguished.

18 Open urban land - Urban areas whose use does not require structures, or urban areas where non-conforming uses characterized by open land have become isolated. Included are golf courses, parks, recreation areas (except areas associated with schools or other institutions), cemeteries, and entrapped agricultural and undeveloped land within urban areas.

191 Large lot subdivision (agriculture) - Residential subdivisions with lot sizes of less than 20 acres but at least 5 acres, with a dominant land cover of open fields or pasture.

192 Large lot subdivision (forest) - Residential subdivisions with lot sizes of less than 20 acres but at least 5 acres, with a dominant land cover of deciduous, evergreen or mixed forest.

Agriculture

21 Cropland - Field crops and forage crops.

22 Pasture - Land used for pasture, both permanent and rotated; grass.

23 Orchards/vineyards/horticulture - Areas of intensively managed commercial bush and tree crops, including areas used for fruit production, vineyards, sod and seed farms, nurseries, and green houses.

24 Feeding operations - Cattle feed lots, holding lots for animals, hog feeding lots, poultry houses, and commercial fishing areas (including oyster beds).

241 Feeding operations - Cattle feed lots, holding lots for animals, hog feeding lots, poultry houses.

242 Agricultural building breeding and training facilities, storage facilities, built-up areas associated with a farmstead, small farm ponds, commercial fishing areas.

25 Row and garden crops - Intensively managed truck and vegetable farms and associated areas.

Forest

41 Deciduous forest - Forested areas in which the trees characteristically lose their leaves at the end of the growing season. Included are such species as oak, hickory, aspen, sycamore, birch, yellow poplar, elm, maple, and cypress.

42 Evergreen forest - Forested areas in which the trees are characterized by persistent foliage throughout the year. Included are such species as white pine, pond pine, hemlock, southern white cedar, and red pine.

43 Mixed forest - Forested areas in which neither deciduous nor evergreen species dominate, but in which there is a combination of both types.
44 Brush - Areas which do not produce timber or other wood products but may have cut-over timber stands, abandoned agriculture fields, or pasture. These areas are characterized by vegetation types such as sumac, vines, rose, brambles, and tree seedlings.

Water

50 Water - Rivers, waterways, reservoirs, ponds, bays, estuaries, and ocean.

Wetlands

60 Wetlands - Forested or non-forested wetlands, including tidal flats, tidal and non-tidal marshes, and upland swamps and wet areas.

Barren Land

70 Barren land

71 Beaches - Extensive shoreline areas of sand and gravel accumulation, with no vegetative cover or other land use.

72 Bare exposed rock - Areas of bedrock exposure, scarps, and other natural accumulations of rock without vegetative cover.

73 Bare ground - Areas of exposed ground caused naturally, by construction, or by other cultural processes.

Transportation

80 Transportation - Miscellaneous Transportation features not elsewhere classified.

Credits
There are no credits for this item.

Access and use limitations
Contact the Maryland Department of Planning

ArcGIS Metadata ➤

Resource Identification ➤

CITATION
TITLE Land Use/ Land Cover for Maryland
ALTERNATE TITLES Land Use/Land Cover

EDITION 2010

RESPONSIBLE PARTY
ORGANIZATION’S NAME Maryland Department of Planning
CONTACT’S ROLE owner

CONTACT INFORMATION
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Row and garden crops - Intensively managed truck and vegetable farms and associated areas.

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Mixed forest - Forested areas in which neither deciduous nor evergreen species dominate, but in which there is a combination of both types.

Brush - Areas which do not produce timber or other wood products but may have cut-over timber stands, abandoned agriculture fields, or pasture. These areas are characterized by vegetation types such as sumac, vines, rose, brambles, and tree seedlings.

Water

Rivers, waterways, reservoirs, ponds, bays, estuaries, and ocean.

Wetlands

Forested or non-forested wetlands, including tidal flats, tidal and non-tidal marshes, and upland swamps and wet areas.

Barren Land

Beaches - Extensive shoreline areas of sand and gravel accumulation, with no vegetative cover or other land use.

Bare exposed rock - Areas of bedrock exposure, scarps, and other natural accumulations of rock without vegetative cover.

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**PURPOSE (SUMMARY)**

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**DATASET CHARACTER SET**

utf8 - 8 bit UCS Transfer Format

**RESOURCE MAINTENANCE**

**UPDATE FREQUENCY**

daily

**TIME PERIOD BETWEEN UPDATES**

Every 5 Years

**TIME DURATION**

**RESOURCE CONSTRAINTS**

**CONSTRAINTS**

**LIMITATIONS OF USE**

Contact the Maryland Department of Planning

**SPATIAL REPRESENTATION TYPE**

vector

**SPATIAL RESOLUTION**

**GROUND SAMPLE DISTANCE**
PRECISION OF SPATIAL DATA  m (meter)

OTHER EXTENT INFORMATION

GEOGRAPHIC EXTENT

BOUNDING RECTANGLE

WEST LONGITUDE  -79.4938
EAST LONGITUDE  -75.0450
NORTH LATITUDE  39.7425
SOUTH LATITUDE  37.8713

POINT OF CONTACT

ORGANIZATION'S NAME  Maryland Department of Planning
CONTACT'S ROLE  owner

Spatial Representation ►

Grid

CELL GEOMETRY  area

TRANSFORMATION PARAMETERS ARE AVAILABLE  No

Reference System ►

REFERENCE SYSTEM IDENTIFIER
VALUE  NAD83 Meter Maryland State Plane

Data Quality ►

SCOPE OF QUALITY INFORMATION
 RESOURCE LEVEL  feature
 scope description

ATTRIBUTES  County Boundary- data aggregated by county boundary
LINEAGE
LINEAGE STATEMENT
This data represents an update to the 2002 Land Use/Land Cover dataset. The 2010 release date product contains enhancements containing two additional land use classifications (Very Low Density Residential and Transportation), enhanced imagery, and parcel information from the 2008 Edition of Maryland Property View.

Distribution Information ►

DISTRIBUTION FORMAT
 FORMAT NAME  ESRI
 FORMAT VERSION  Shapefile

Metadata Details ►

METADATA LANGUAGE  English
METADATA CHARACTER SET  utf8 - 8 bit UCS Transfer Format

METADATA CONTACT
ORGANIZATION'S NAME  Maryland Department of Planning
**Contact's Role**
owner

**Maintenance**
- **Update Frequency**: unknown
- **Time Period Between Updates**: Every 5 years
- **Time Duration**: Every 5 years

**Scope of the Updates**: dataset

**Metadata Constraints**
- **Constraints**
- **Limitations of Use**

The 2010 Land Use/Land Cover data set are based on superior imagery and a refined classification system. The 2002 Land Use/Land Cover dataset are not reconciled with these improvements; therefore direct comparisons may not be applicable. The 2010 data set include two new categories Very Low Density Residential (191,192) and Transportation (80).

**ESRI Metadata and Item Properties**

**Metadata Properties**
- **ArcGIS**: ArcGIS 1.0
- **Metadata Style**: FGDC CSDGM Metadata
- **Metadata Standard or Profile**: FGDC
- **Created in ArcGIS**: 2010-12-21T09:50:26

**Automatic Updates**
- **Have Been Performed**: No

**Item Properties**
- **Item Location History**
- **Item Copied or Moved**: 2010-12-21T09:50:26
  - From: J:\GIS_WORK\CMP_WORK_Area\PROJECTS\Land_Use_Land_Cover_Update_Proj\Completed Counties\Final_to SDE\Final Products\2010_LULC\metadata
  - To: \mdir\gis_data\GIS_WORK\CMP_WORK_Area\PROJECTS\Land_Use_Land_Cover_Update_Proj\Completed Counties\Final_to SDE\Final Products\2010_LULC\metadata

**ESRI Fields and Subtypes**

**LU_CODE**: Text

**Definition**
Anderson Level I classification schema, a classification scheme (2 or 3 digit integer numbers) to identify the predominant usage of land interpreted from the imagery and parcel information.