

CENSUS CITIES EXPERIMENT IN
URBAN CHANGE DETECTION

James R. Wray, Principal Investigator

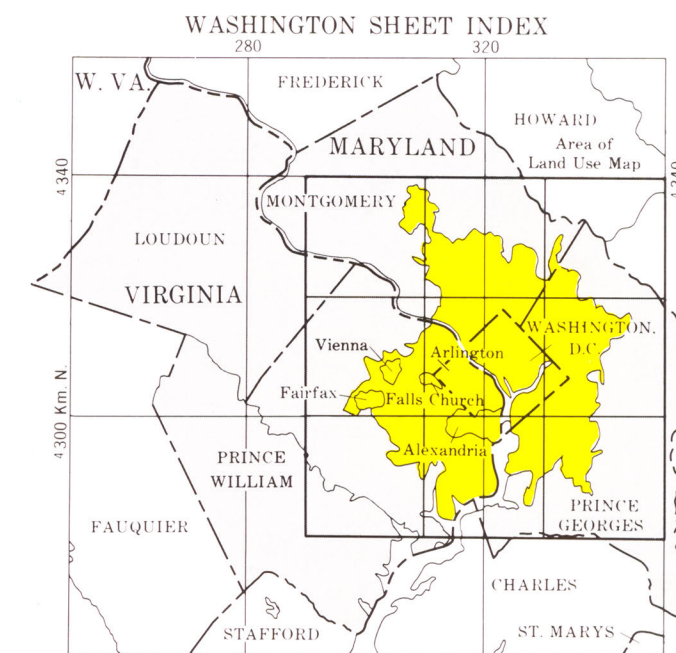
This map is one prototype product of experiments in land use change detection using remote sensors aboard aircraft and Earth-orbiting satellites. Contemporary sensor data and census data are being compared for a sample of urban test sites. Work in Washington is also related to multi-discipline inter-agency experiments in the Central Atlantic Regional Ecological Test Site (CARTS). All of these efforts are parts of the Department of the Interior's Earth Resources Observations Systems (EROS) Program and the National Aeronautics and Space Administration's Earth Observations Program. This map, and other experimental products, are test demonstrations of a system of new tools to assess and monitor urban and regional environments, especially those undergoing rapid change.

The photo mosaic base is made from the same photography used in the land use analysis. The geographic coordinate system is shown by cross ticks at a five-minute interval and is based on a conformal projection. The Universal Transverse Mercator (UTM) coordinate system is shown with grid intervals of 1.5 and 10 kilometers. Positioning of the UTM grid meets the following standard: ninety percent of randomly selected control points are correctly positioned to within one millimeter at map scale. The UTM grid forms the basis for sheetlines, sheet-numbering, and location control for computer mapping. The open legend space is for other superimposed data (such as census statistical area boundaries, etc.) plus any other distributions generated by the user.

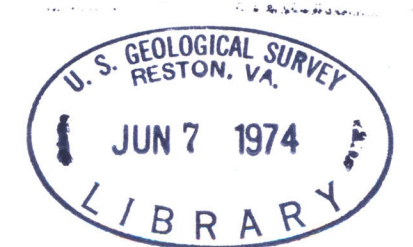
The location, kind, and intensity of subsequent land use change will be related to information on this map. This legend space is reserved for a listing of the symbols and an area-wide interpretation of change trends. The letter codes shown below are for one prototype classification scheme being tested for urban land use mapping at this scale using high altitude photography acquired at or near this scale. The numerical codes are corresponding designations proposed for possible nation-wide applications. (Anderson, J. R., Hardy, E. E., and Roach, J. T., 1972. A land-use classification system for use with remote sensor data: U.S. Geol. Survey Circ. 671, 16 p.) Portions of this work are reviewed in progress by planning agencies in Washington and elsewhere. Inquiries and suggestions may be addressed to The Director, U.S. Geological Survey, Reston, Virginia, 20192.

LAND USE, 1970

Livelihood	Primarily industry	13 LD
	Extractive industry	14 LD
	Transportation	15 LT
	Commercial and services	16 LC
Residential	Strip and cluster development	17 LR
	Multi-family residence	18 RW
Other, mostly Open	Single-family residence	19 RS
	Improved open space	20 OP
	Unimproved open space	21 OU
	Unimproved, wetland	22 OW
	Agriculture, with residence	23 LA
Land use in transition	Water	24 OW
		*



STANDARD METROPOLITAN STATISTICAL
AREA, 1970 CENSUS AND URBANIZED AREA,
1970.



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M(200)
1-858-A

LAND USE MAP, 1970, WASHINGTON URBAN AREA, D. C., MD., AND VA.

By
U.S. GEOLOGICAL SURVEY
1974

Copies of this map are available at cost in transparent scale-stable material from the U.S. Geological Survey, Reston, Va. 20192.

For sale by U.S. Geological Survey, price 75 cents.
District of Columbia, Land use, 1:100,000, 1974.
sheet A
cop. 1