

Asset Management Background

Understanding the Adjusted Census Urban Boundaries

The Adjusted Census Urban Boundary (ACUB) is an area that determines the official urban designation for a road. The ACUB is subject to Federal Highway Administration (FHWA) approval. Once approved, it is used to declare a road urban for federal Highway Performance Monitoring System (HPMS) and state Act 51 urban county road designation. Any road within or on the ACUB border is urban. For roads on the ACUB border, both sides of the road are considered urban. The federal FAST Act Transportation Performance Measures reference urbanized area roads; this means the urbanized ACUB roads. The ACUB roads are reported in the annual HPMS report to FHWA. Any road outside an ACUB is considered a rural road for state and federal transportation purposes.

The process for creating the ACUB area starts every 10 years using the U.S. decennial census urban areas (UA) as a base. The UAs are formed using U.S. census blocks and a U.S. census process that does not recognize any legal boundaries. While the U.S. census UA boundaries are defined by populations greater than 2,500, FHWA only recognizes UA boundaries that are 5,000 or greater in population. The 2010 U.S. census UA boundaries were released in May 2012 by the U.S. Census Bureau. A U.S. census UA is defined as urbanized if the population is 50,000 or greater. Any “urbanized” UA must be represented by a metropolitan planning organization (MPO). An MPO may represent more than one urbanized area. The state has the option to adjust the U.S. census UAs since the boundary can be very irregular. Irregular boundaries may cause roads to switch between rural and urban status many times along their length. To prevent the urban designation from frequently switching designation, FHWA allows states to adjust or smooth the boundaries outward in a cooperative process. Agencies cannot remove area from the U.S. census UA, but area may be added. The adjustments are done in cooperation with MDOT by the appropriate county, city, village, transit agency, and sovereign tribal governments invited to the process.

By adjusting the boundaries outward, the UAs are smoothed and create more consistent urban/rural road segment classifications. The adjusted UA boundaries are then sent to FHWA for approval. Once the adjusted UA boundaries are approved by FHWA, MDOT calls them the Adjusted Census Urban Boundaries (ACUB). The U.S. census decennial population for the UA is used to differentiate ACUBs into three types: small urban, small urbanized, and Traffic Management Area (TMA). The population is considered static and is not changed by the adjustment process. Urban designation for transportation use is not the same as urban land use. Many areas within the U.S. census UA and the resulting ACUB have rural characteristics due to the U.S. census creation method and the states adjustment process.

Michigan's 77 ACUBs are divided into three types based upon the 2010 census UA population:

- 56 Small Urban Areas (5,000 – 49,999)
- 13 Small Urbanized, MPO (50,000 – 199,999)
- Eight Large Urbanized, MPO, TMA (200,000 +)