Adopted November 2025

Transportation Environmental Impact Area Analysis Guide

Kentuckiana Regional Planning & Development Agency

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Introduction

What is a Transportation Environmental Impact Analysis?

Transportation Impacts are the guiding metrics by which we evaluate our investments to ensure that every member of the community is impacted in an equitable manner.

Fair treatment means that all people and communities are given the same opportunities to benefit from projects and policy. This includes equitable access to benefits, meaningful involvement, and mitigation of harmful outcomes.

Meaningful involvement means:

- People have an opportunity to participate in decisions about activities that may affect their environment and/or health.
- The public's contribution can influence the regulatory agency's decision.
- Community concerns will be considered in the decision-making process; and
- Decision makers will seek out and facilitate the involvement of those potentially affected.

Harmful outcomes are considered to be:

- Environmental degradation, which includes air, water, or noise pollution.
- Safety risks
- Reduced accessibility
- Economic displacement

Background

On February 11, 1994 President Clinton signed Executive Order 12898; This order mandated that environmental justice considerations be taken into account, such as adding it to the Metropolitan Transportation Plan (MTP).

This order was further expanded by the Biden administration On April 21, 2023 with Executive Order 14096. Both orders have since been revoked by the Trump administration through Executive Order 14173*, effectively eliminating the designation of Environmental Justice (EJ) as a required element within KIPDA's MTP

KIPDA has since replaced EJ as a metric with the Transportation Environmental Impact Areas.

** (2025, February 24). Trump Administration environmental-justice-related Executive Orders: Potential implications for EPA programs (CRS Product No. IF12922). Congressional Research Service. https://www.congress.gov/crs-product/IF12922*

Purpose

The Transportation Environmental Impact Areas Analysis is used in the MTP development process to ensure that both benefits and burdens of proposed projects are taken into account across the entire population of the urban area. This includes vulnerable or underserved communities.

Though transportation environmental impacts are no longer a federally mandated planning metric, KIPDA and the Transportation Policy Committee (TPC) feel that regional and social needs will remain persistent. As such, it will continue to be used in our long-range plan as a tool for accountability, transparency, and resilience.

Transportation Environmental Impacts at KIPDA

The Kentuckiana Regional Planning and Development Agency (KIPDA) is the MPO for the bi-state, five-county Louisville Metro Area, including Clark and Floyd counties in Indiana and Bullitt, Jefferson, and Oldham counties in Kentucky. As part of the transportation planning process for the region, KIPDA is responsible for incorporating a Transportation Environmental Impact Areas Analysis.

Transportation Environmental Impacts are measured by KIPDA to be used in identifying and engaging with populations experiencing social and financial hardships, with the primary goal of avoiding disproportionate impacts on any individual community, especially vulnerable communities.

This is achieved through three primary efforts. The first is to continue to extend outreach and engagement to persons who live and work in Transportation Environmental Impact Areas, thereby ensuring their concerns and ideas are incorporated into the decision-making process. The second focuses on project development through project evaluation and ultimately the programming of federal transportation funds. The third part of this effort is ensuring that Transportation Environmental Impacts remains a key consideration in all long-range planning activities undertaken at the KIPDA MPO.

Transportation Environmental Impact Areas

One method used to help ensure consideration of Transportation Environmental Impact Areas (TEIA) in the planning process is to identify geographic concentrations of low-income, no car, over 65, and people with disabilities populations. These areas help to focus our analysis efforts and outreach activities.

KIPDA analyzes transportation projects and programs relative to Transportation Environmental Impact Areas. The analysis focuses on identifying opportunities to enhance a proposed project so it may better serve people living in a TEIA. The analysis also reviews proposed projects and programs that may introduce a disproportionate impact that would result in a denial of project related benefits or other burdens.

The TEIAs are also displayed on the Online Resource Center, an interactive map that allows the public to explore KIPDA's data used in the transportation planning process. TEIAs can be viewed in comparison with planned and programmed transportation projects; including roadway improvements, bike and pedestrian infrastructure changes, transit facilities, and other data associated with transportation planning.

Metropolitan Transportation Plan (MTP)

The Metropolitan Transportation Plan (MTP) is updated every four years and is the blueprint for transportation project investments over the coming 20 years. Public outreach in the early development of the MTP includes an emphasis on reaching out to people living and working in Transportation Environmental Impact Areas to facilitate their inclusion in the process. Projects are also evaluated relative to their location in Transportation Environmental Impact Areas.

Participation Plan

KIPDA is committed to including all community members in outreach efforts. Additional attention is given to persons who live or work in Transportation Environmental Impact areas. The Participation Plan outlines KIPDA's public outreach process and opportunities for the public to be involved. KIPDA staff uses targeted social media ads, email campaigns to directed areas and organizations, attends events in TEIAs , and other means of outreach to reach these populations.

Transportation Environmental Impact Areas Analysis

Methodology

KIPDA develops Transportation Environmental Impact Areas to help identify locations with higher-than-average low income, no car, over 65, or people with disabilities populations. The demographic data used in the analysis comes from the American Community Survey (ACS), a product provided by the Census Bureau and IPUMS, a dataset provided by the Institute for Social Research and Data Innovation at the University of Minnesota. *Table S1701: Poverty Status in The Past 12 Months* is used to identify low-income population. IPUMS table *B25044 Tenure by Vehicles Available* is used to identify no car households. IPUMS table *B10001 Sex by Age* is used to identify the population aged 65 and older. IPUMS table *B18101 Sex by Age by Disability Status* is used to identify the population that reported having a disability*.

Low-income populations include persons whose household/median income is at or below the U.S. Department of Health and Human Services poverty guidelines. Poverty status is determined for all individuals except those who are institutionalized, in military group quarters, in college dormitories, and unrelated individuals under 15 years old. The Census Bureau uses the federal government's official poverty definition to determine the poverty status of families and households of unrelated individuals; the status of the family or household is applied to each individual member. The applicable poverty threshold is determined by several factors, including household or family size, the presence and number of family members under 18 years old, and age of householder.

No car households refers to occupied households that responded to the ACS survey that they have no vehicles (automobiles, vans, and trucks of one-ton capacity or less) that are kept at home for use by members of that household. Though vehicle ownership, or lack thereof, could be a result of personal preference, we feel that it is an economic indicator and is a valuable metric in the TIEA process.

People aged 65 and over include estimates of most of the population, and are the sum of all population groupings of males and females aged 65 and older.

People with disabilities population is determined by asking series of 3 questions (including 3 sub questions) on the ACS and determining if someone is disabled based on how they respond.

**For more information on how people with disabilities are determined, you can see a sample of the ACS at this link.*
The American Community Survey - Informational Copy (2025)

These questions cover topics such as deafness/serious difficulty hearing, blindness/serious difficulty seeing even when wearing glasses, memory and decision making issues related to physical, mental, or emotional conditions, difficulty walking or climbing stairs, difficulty dressing or bathing, or difficulty running errands due to physical, mental, or emotional conditions.

Demographic data was compiled at the Census tract level. Tracts allow for larger areas to be assessed, which is more applicable to transportation planning that often considers population along corridors. Tract-level data also allows for continuity to compare different vintages of this data because tracts are more consistent across Census versions.

Demographic data for low-income, no car, people over 65, and people with disabilities is compiled for each MPO county (Clark, Floyd in Indiana and Bullitt, Oldham, and Jefferson in Kentucky). The most recent iteration of the Transportation Environmental Impact Areas analysis uses ACS 2023 5-year estimates for Tables S1701, and 2023 IPUMS data for tables *B25044, B10001, and B18101* (this data also comes from ACS 2023 5-year estimates.* Low-income population was calculated from the percentage listed in the ACS table. No car households were calculated by aggregating the total owner occupied and renter occupied housing units and total households with no vehicle of both of those categories. People 65 and over were calculated by adding all of the groups 65 and older together to get the total number in each census tract. People with disabilities were calculated by adding together all of the populations with disabilities. To identify areas with significant concentrations of TEIA populations, KIPDA set a threshold of 200% of the regional average percentage for a population group, rounded down to the nearest whole percent. Census tracts that exceed the threshold for low-income, no car, 65 or older, or people with disabilities population are designated as a Transportation Environmental Impact Area.

12.48% of the population in the KIPDA MPO region is low-income. Any Census tracts with a low-income population greater than 200% of the regional average rounded down to the nearest whole percent (24%) was designated as a Transportation Environmental Impact Area. 7.55% of the households in the KIPDA MPO region have no vehicle. Any Census tracts with the percentage of households greater than 15% was designated a TEIA. 16.69% of the population in the KIPDA MPO region are 65 or older. Any Census tracts with a 65+ population greater than 33% was designated a TEIA. 14.15% of the population in the KIPDA MPO region had a disability. Any Census tracts with a persons with disabilities population greater than 28% was designated a TEIA. The following tables are examples of the analysis.

* *The reason for use of the IPUMS data was due to the government shutdown, also it performs well in GIS applications. The underlying demographic data is the exact same as the ACS data.*

Table 1: Example of defining Low-Income Transportation Environmental Impact Areas

Geography	Estimate; Total Population	Estimate; Population w/ Income Below Poverty Level	Percent Low-Income Population (24%+)
Census Tract 502, Clark County, Indiana	3,246	1,172	36.11% above threshold
Census Tract 59.01, Jefferson County, Kentucky	1,178	1077	59.90% above threshold

Table 2: Example of defining Elderly Transportation Environmental Impact Areas

Geography	Estimate; Total Population	Estimate; Elderly Population	Percent Elderly Population (33%+)
Census Tract 502, Clark County, Indiana	4,041	656	16.22% below threshold
Census Tract 59.01, Jefferson County, Kentucky	2,542	571	22.46% below threshold

Results

The KIPDA MPO region now contains 300 census tracts after the 2020 Census. Of those 300 Census Tracts, 79 of them are considered TEIAs, 26.33% of the tracts. In Table 3, the total population in TEIAs is shown, and is derived from the population living in each tract from IPUMS table *B18101 Sex by Age by Disability Status*.

Table 3: Total Transportation Environmental Impact Areas (TEIA) Population in Tracts by County

County	Total Population	Population in TEIA Tracts	Percent	# of TEIA Tracts
Clark	122,800	8,318	6.77%	3
Floyd	80,512	7,835	9.73%	3
Bullitt	83,209	8,127	9.77%	2
Oldham	68,600	0	0.00%	0
Jefferson	Breckenridge Ln 777,392	191,813	24.67	71
Region Total	1,132,513	216,093	19.08%	79

The tables below provide a breakdown of population per each county and the region. The tables show the total population, the low-income population, no car, 65+, and people with disabilities, and the corresponding percentages.

Table 4: Low-Income Population by County*

County	Total Households	No Vehicle Households	Percent
Clark	120,664	10,990	9.11%
Floyd	78,775	7,810	9.91%
Bullitt	82,721	7,882	9.53%
Oldham	64,581	2,511	3.89%
Jefferson	760,504	108,976	14.33%
Region Total	1,107,245	138,169	12.48%

**U.S. Census Bureau. (2020). 2015-2019 American Community Survey 5-year Estimates [Table S1701: Poverty Status in The Past 12 Months]. Retrieved from data.census.gov.*

Table 5: No Car Population by County*

County	Total Households	No Vehicle Households	Percent
Clark	49,184	2,311	4.70%
Floyd	31,173	1,930	6.19%
Bullitt	31,425	1,403	4.47%
Oldham	22,457	343	1.53%
Jefferson	329,392	28,995	8.80%
Region Total	463,631	34,982	7.55%

**Total Population is the Population in households for whom poverty status is determined, so it wont match perfectly with the total population of the county.*

Table 5: 65+ Population by County

County	Total Population	65+ Population	Percent
Clark	122,800	20,241	16.48%
Floyd	80,512	13,796	17.14%
Bullitt	83,209	14,042	16.88%
Oldham	68,600	9,643	14.06%
Jefferson	777,392	131,237	16.88%
Region Total	1,132,513	188,959	16.69%

Jonathan Schroeder, David Van Riper, Steven Manson, Katherine Knowles, Tracy Kugler, Finn Roberts, and Steven Ruggles. IPUMS National Historical Geographic Information System: Version 20.0 [dataset]. Minneapolis, MN: IPUMS. 2025. http://doi.org/10.18128/D050.V20.0

Table 6: Population with a Disability by County

County	Total Population	65+ Population	Percent
Clark	121,442	18,240	15.02%
Floyd	79,249	11,455	14.45%
Bullitt	82,810	12,818	16.17%
Oldham	64,777	5,736	8.86%
Jefferson	769,116	109,842	14.28%
Region Total	1,117,394	158,091	14.15%

Figure 1: Transportation Environmental Impact Areas, Combined Low-Income, No Car, 65+, People with Disabilities

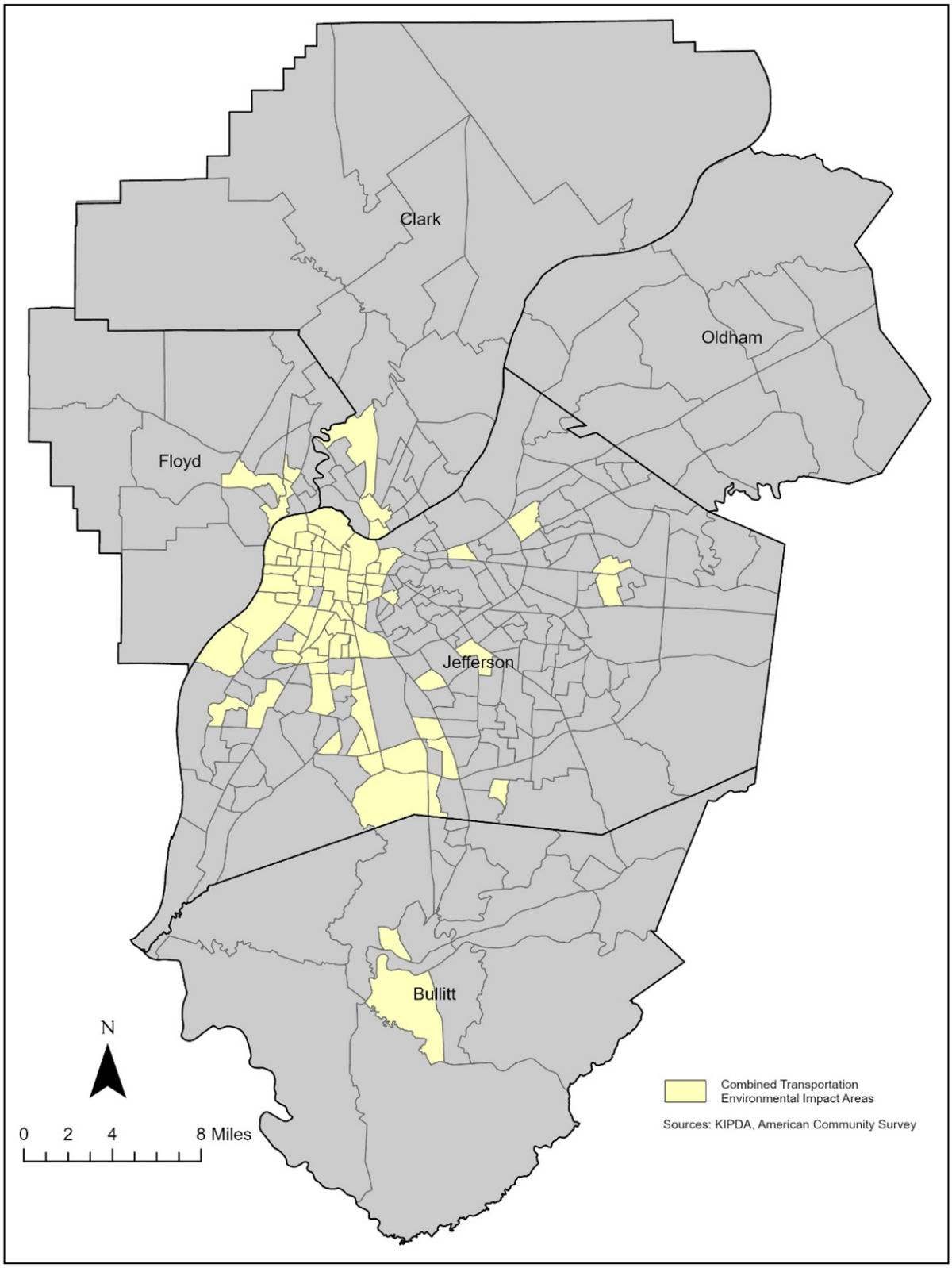


Figure 2: Transportation Environmental Impact Areas, Low-Income

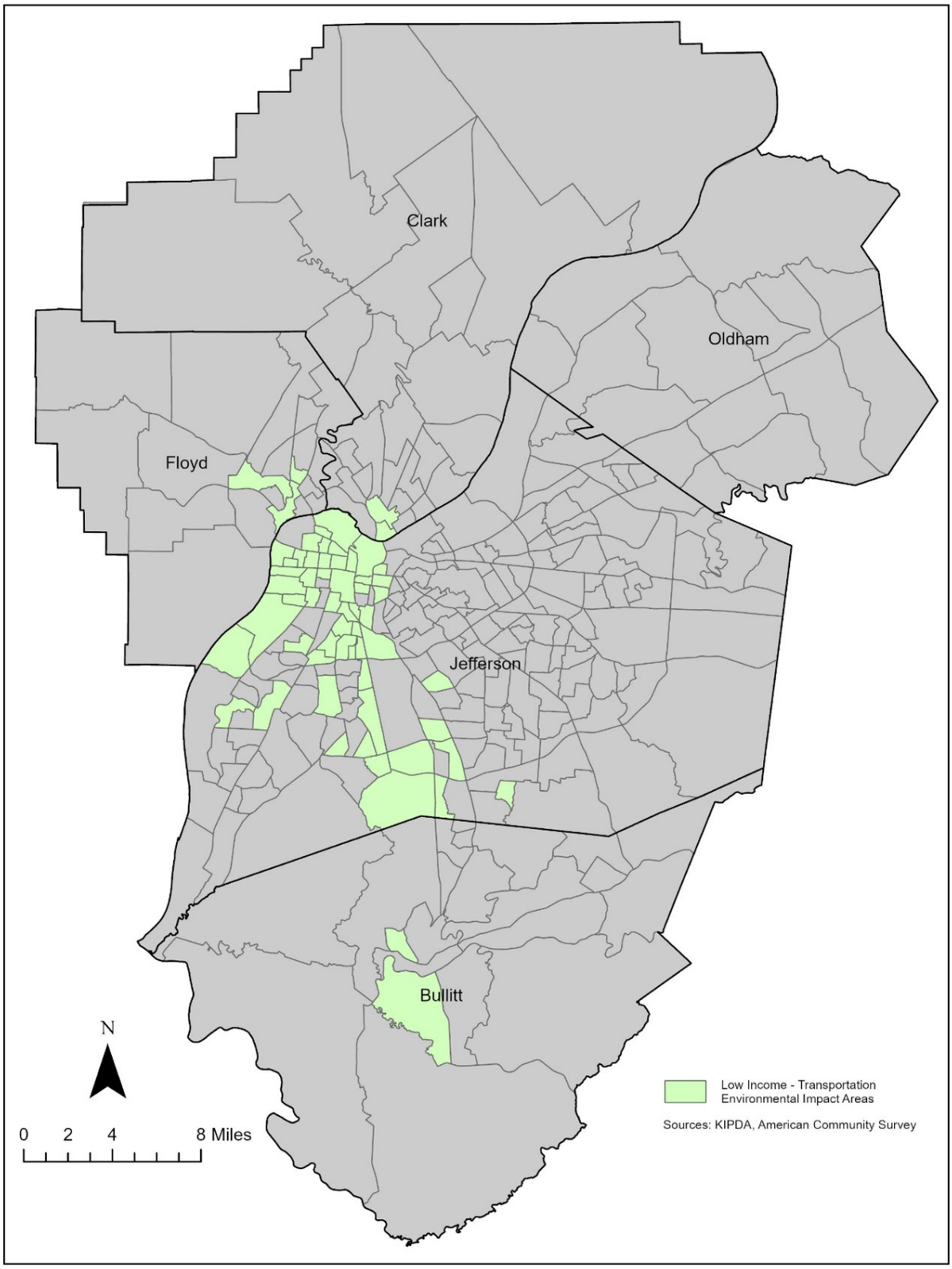


Figure 3: Transportation Environmental Impact Areas, No Car

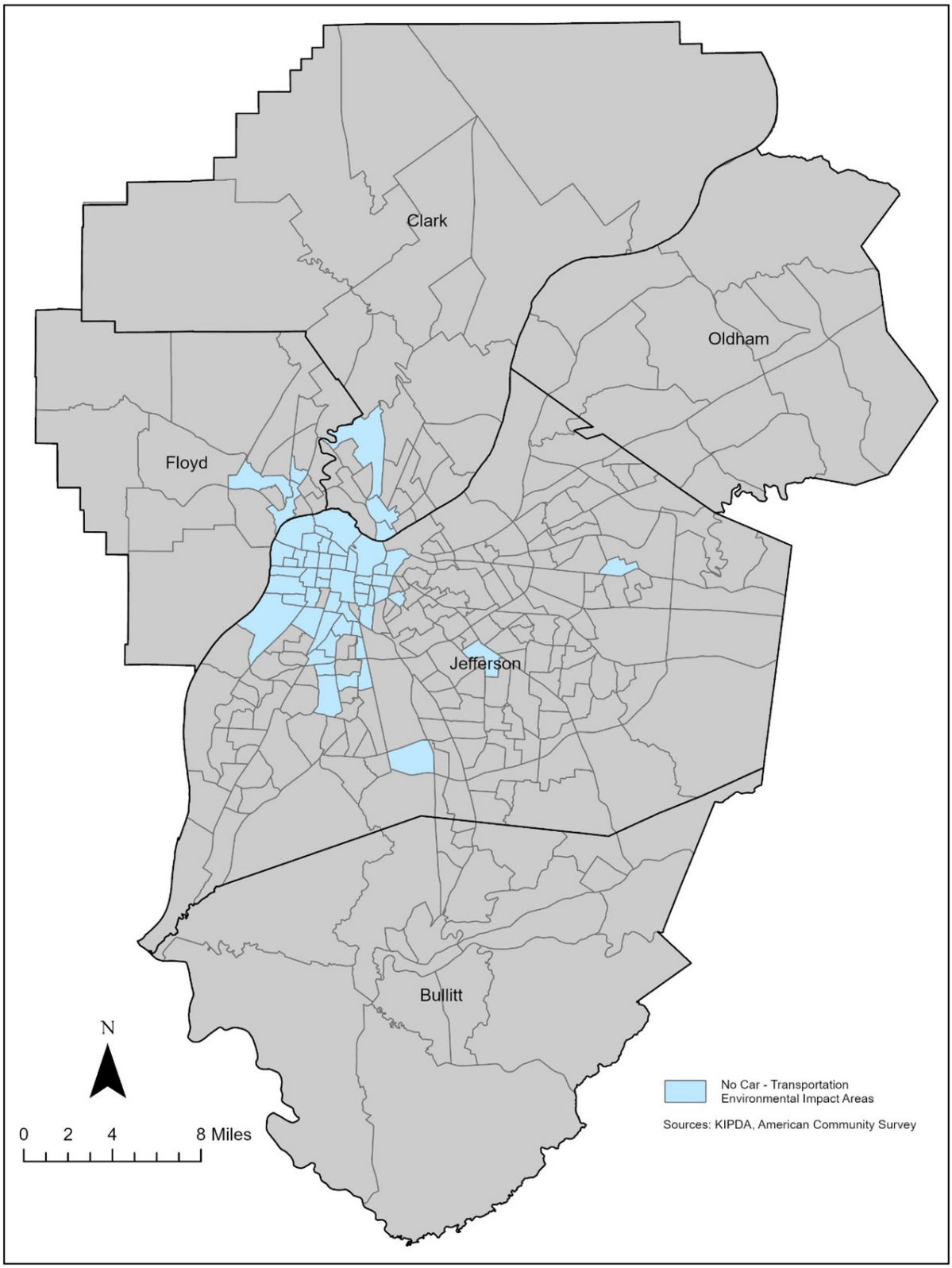


Figure 4: Transportation Environmental Impact Areas, No Car

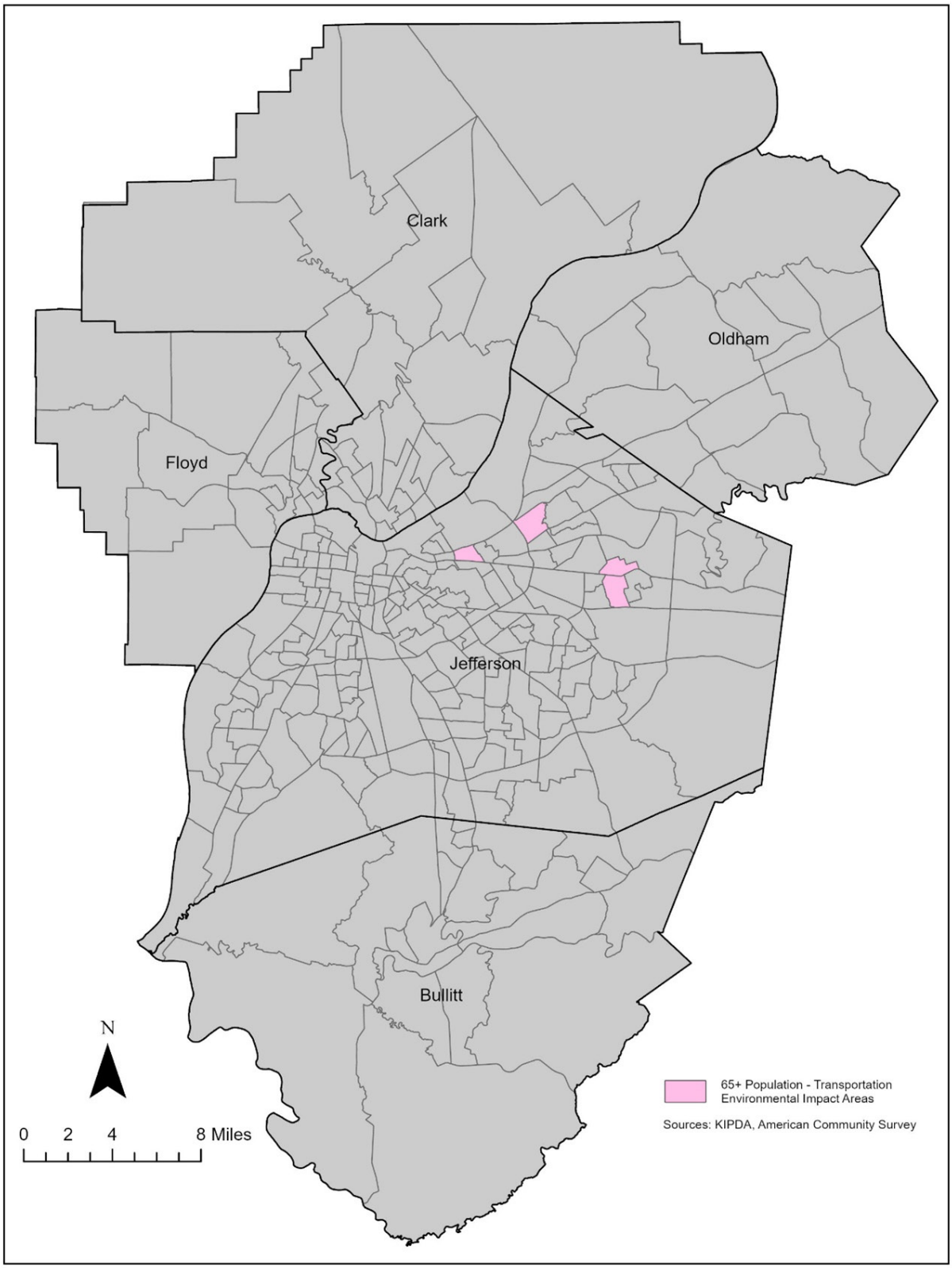
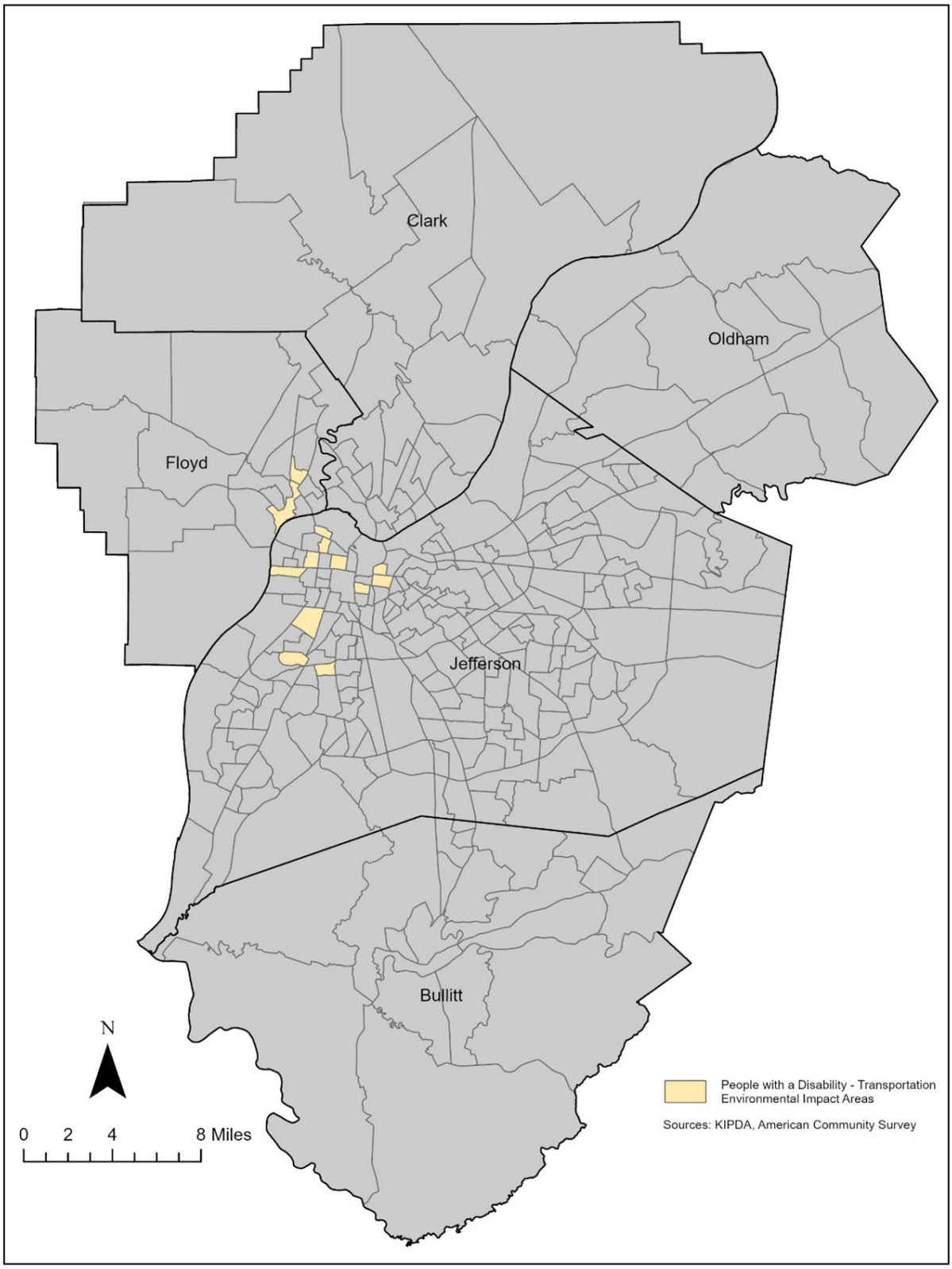


Figure 5: Transportation Environmental Impact Areas, People with Disabilities



Disproportionate Impacts and Burdens

Transportation Environmental Impact in long range planning aims to ensure people are not denied benefits or are not recipients of disproportionate burdens from any project or planning activities. From public feedback and data, persons who live or work in Transportation Environmental Impact Areas are more likely to walk, bike, and take transit, or only have access to one vehicle in the household. Therefore, when considering impacts project sponsors should mitigate project impacts from becoming barriers to non-automotive transportation options and continue to propose new, expanded non-automotive mobility options and improvements.

Other Resources

To view this on our website, you can go to this page to see the guide and other Transportation Environmental Impact Areas information. You can also see an interactive GIS map on the KIPDA Online Resource Center at Online Resource Center.

Another neat tool to use is this free screening tool from Public Environmental Data Partners. You can use it to see tons of useful information in census tracts around the USA. Find it here.

Review of Transportation Environmental Impact Areas and Resource Document

KIPDA will reevaluate the Transportation Environmental Impact Analysis Guide every four years, and update it if needed, depending on planning practices and methodology. This guide will be updated as needed if methodology or changes in planning practices are necessary.

IPUMS Citation

Jonathan Schroeder, David Van Riper, Steven Manson, Katherine Knowles, Tracy Kugler, Finn Roberts, and Steven Ruggles.

IPUMS National Historical Geographic Information System: Version 20.0

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