YOUR *Safety*

YOUR *Mobility*

YOUR *Economic Opportunity*

IDAHO **PUBLIC TRANSPORTATION** PLAN

Appendix C

Demographic and Economic Analysis

Final April 2018

Idaho Public Transportation Plan

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Idaho **Public Transportation Plan**

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Demographic and Economic Analysis

Introduction

This appendix expands on the summary included in Chapter 4 to provide a more detailed description of the characteristics of Idaho that affect the need for public transportation services: current and estimated future density of population, jobs, and key public transportation user groups.

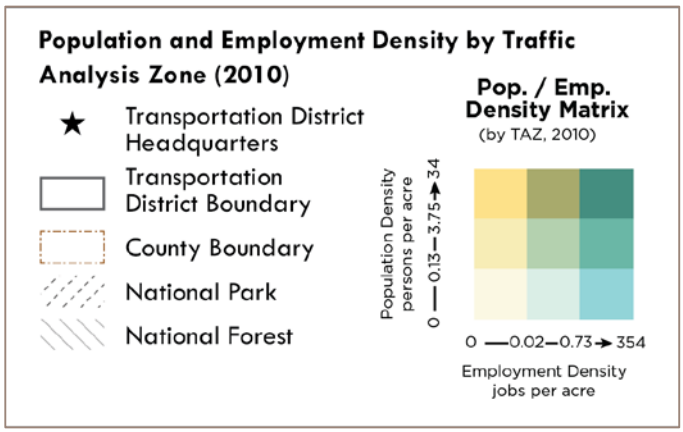
Population and Employment

Idaho is bordered by Montana and Wyoming to the east, Utah and Nevada to the south, and Washington and Oregon to the west. Idaho shares its northern border with the Canadian province of British Columbia. National Forests and National Parks make up much of the state's land area, especially in the central, northern, and eastern parts of the state. According to 2014 5-year American Community Survey (ACS) estimates from the U.S. Census, 1.6 million people call Idaho home.

Population and employment densities are important factors because the clustering of people and jobs helps determine where transit routes can operate most cost-effectively. Typically, an area with a density of four people or six jobs per acre can supply the ridership necessary to justify a basic level of fixed route bus service.

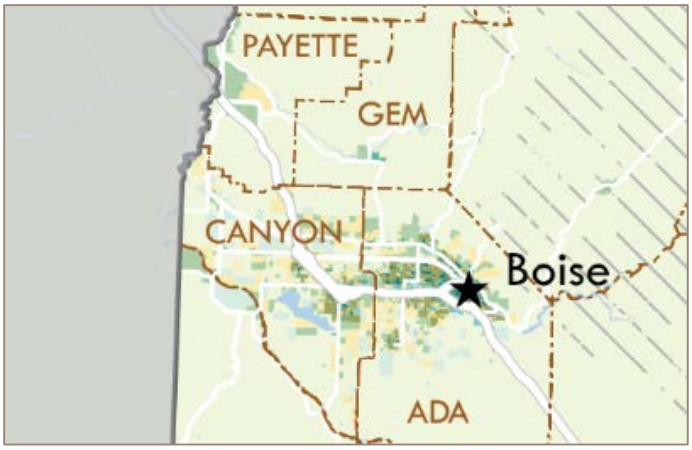
Figure 1 displays areas of the highest population and employment densities in Idaho, based on data from the 2010 Census. For most of the state, the population density is below 0.13 people per acre, and the employment density is less than 0.02 jobs per acre. The highest densities of both population and employment are primarily concentrated along the interstate corridors - I-15, I-86, I-84, and I-90. The most significant outlier is the area in and around Lewiston, along the state's western border with Washington. The Boise metropolitan area,

Figure 1 **Idaho Population and Employment Density (2010)**



District 1

District 4



District 3

District 6

located in the I-84 corridor of southwestern Idaho, has the highest population and employment densities.

Employment by Income Level

Figure 2 displays densities of jobs with monthly wages less than $3,333. These jobs are classified as low- and medium-income jobs in the Longitudinal Employer-Household Dynamics (LEHD) Origin-Destination Employment Statistics (LODES) datasets produced by the Census Bureau. Figure 3 displays densities of jobs with monthly wages of $3,333 or more; these jobs are considered high-income positions in LEHD LODES datasets.[1]

The densest areas of jobs at both income levels are primarily concentrated along the I-15, I-86, I-84, and I-90 corridors. The Boise metropolitan area, located in the I-84 corridor in northern Ada County and western Canyon County, has the densest clusters of low- and medium- income jobs. Other areas with concentrations of low- and medium-income jobs include western Madison County, western Bonneville County, northern Bannock County, northern Twin Falls County, western Nez Perce County, and central Kootenai County.

Specific Population Groups

Certain demographic and socioeconomic groups—older adults, people with disabilities, people in low-income households, and people in households without access to a private vehicles—are strong indicators of potential public transportation use. These populations require transportation to meet their everyday needs, but may not have the means or the ability to drive an automobile. A summary of how Idaho compares to the United States as a whole in terms of these demographic groups is shown in Figure 4.

[1] U.S. Census Bureau. *LEHD Origin-Destination Employment Statistics (LODES) Dataset Structure Format Version 7.2*. 2016. https://lehd.ces.census.gov/data/lodes/LODES7/LODESTechDoc7.2.pdf

Figure 2 **Idaho Employment Density with Monthly Earnings Less than $3,333 (2014)**

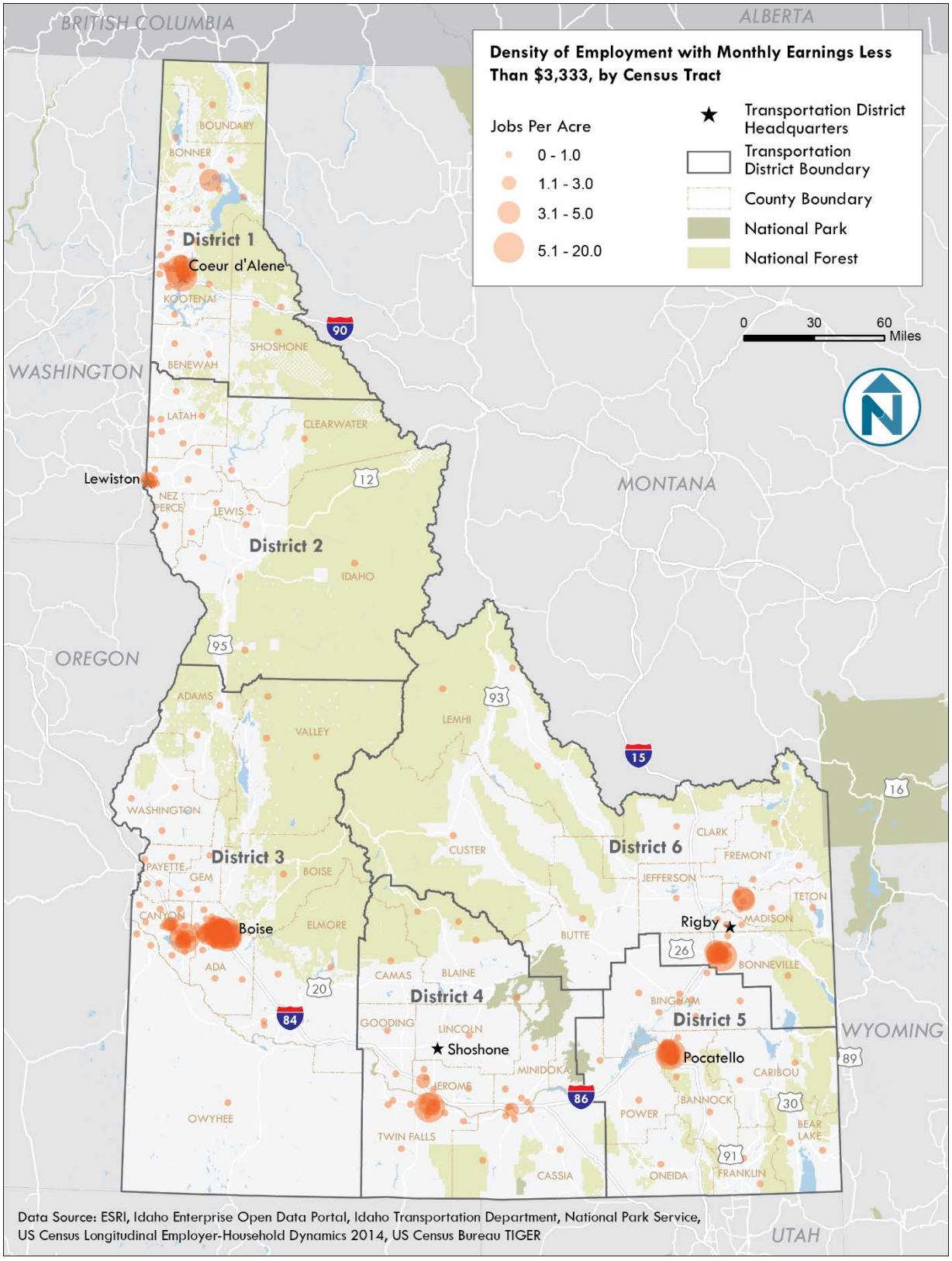


Figure 3 **Idaho Employment Density with Monthly Earnings of $3,333 or More (2014)**

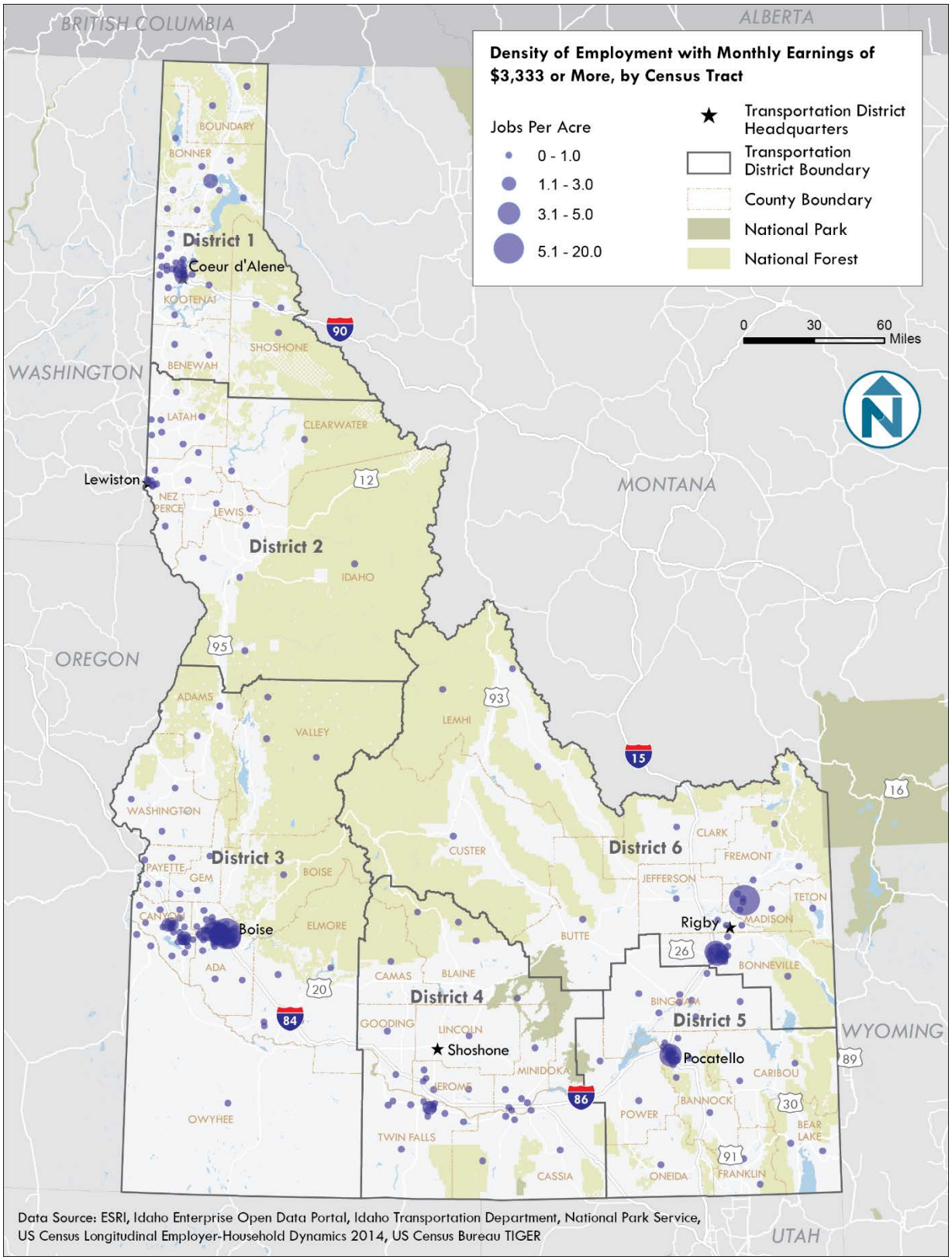


Figure 4 **Demographic Summary for Idaho**

County	Total Population	Adults Age 65 or Older		People with Disabilities		People Living in Households with Income 150% of Federal Poverty Line or Less		Total Households	Zero Vehicle Households	
		Number	%	Number	%	Number	%		Number	%
Idaho	1,579,140	209,293	13%	199,958	13%	431,198	27%	585,259	26,743	5%
USA	309,082,258	43,177,961	14%	37,874,571	12%	77,227,348	25%	116,211,092	10,594,153	9%

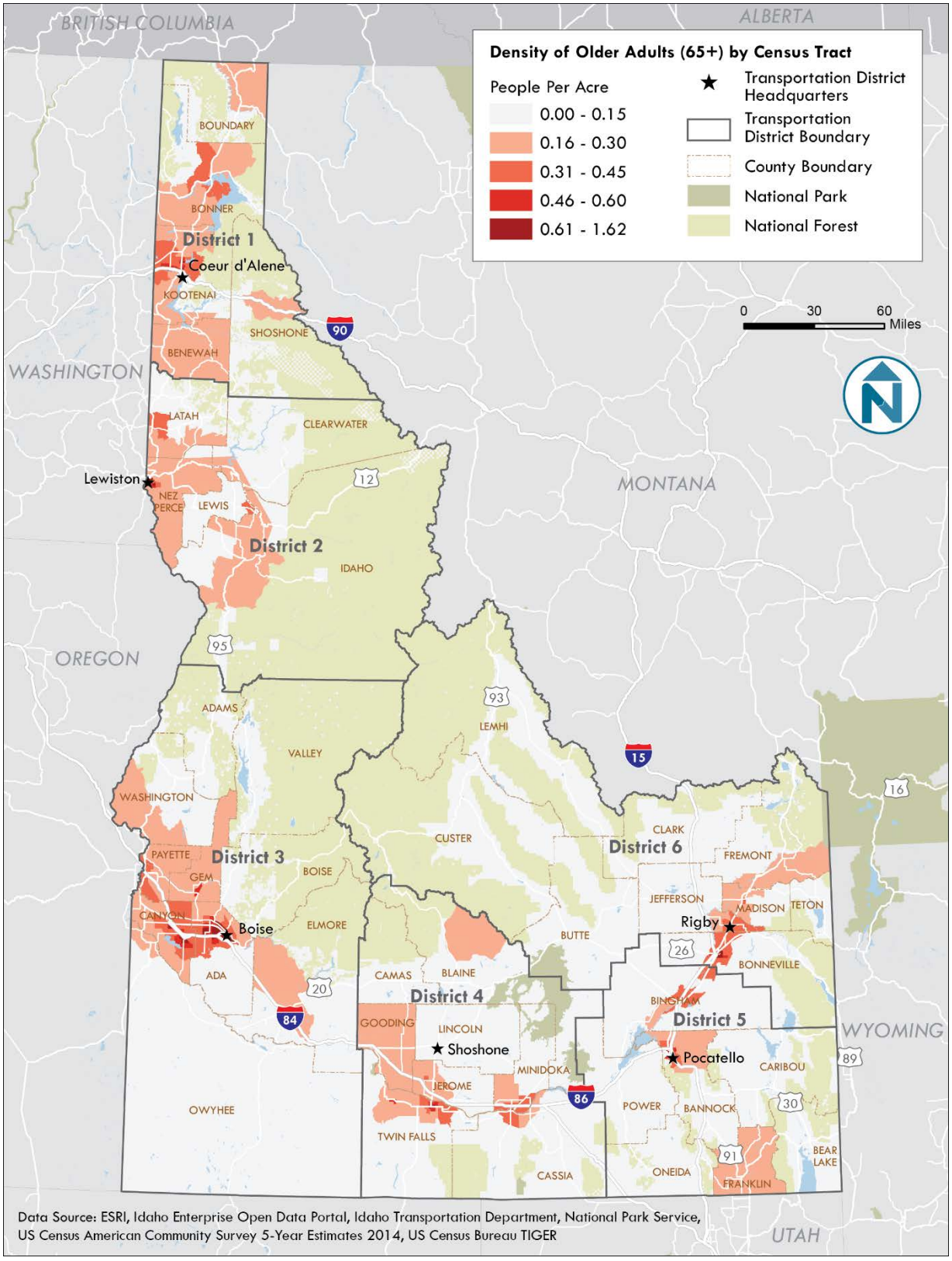
Source: 2014 ACS 5-year estimates

Older Adults

Older adults (age 65 and older) typically use public transportation more frequently than the general population. Older adults often exhibit higher demand for transit as they become less able or willing to drive themselves, or can no longer afford to own a car.

Figure 5 displays densities of older adults by Census tract in Idaho. The highest densities of older adults are primarily concentrated along the I-15, I-86, I-84, and I-90 corridors. The Boise metropolitan area has the most Census tracts with the highest concentrations found statewide of older adults - 0.61–1.62 per acre.

Figure 5 Idaho Density of Older Adults (65+) (2014)

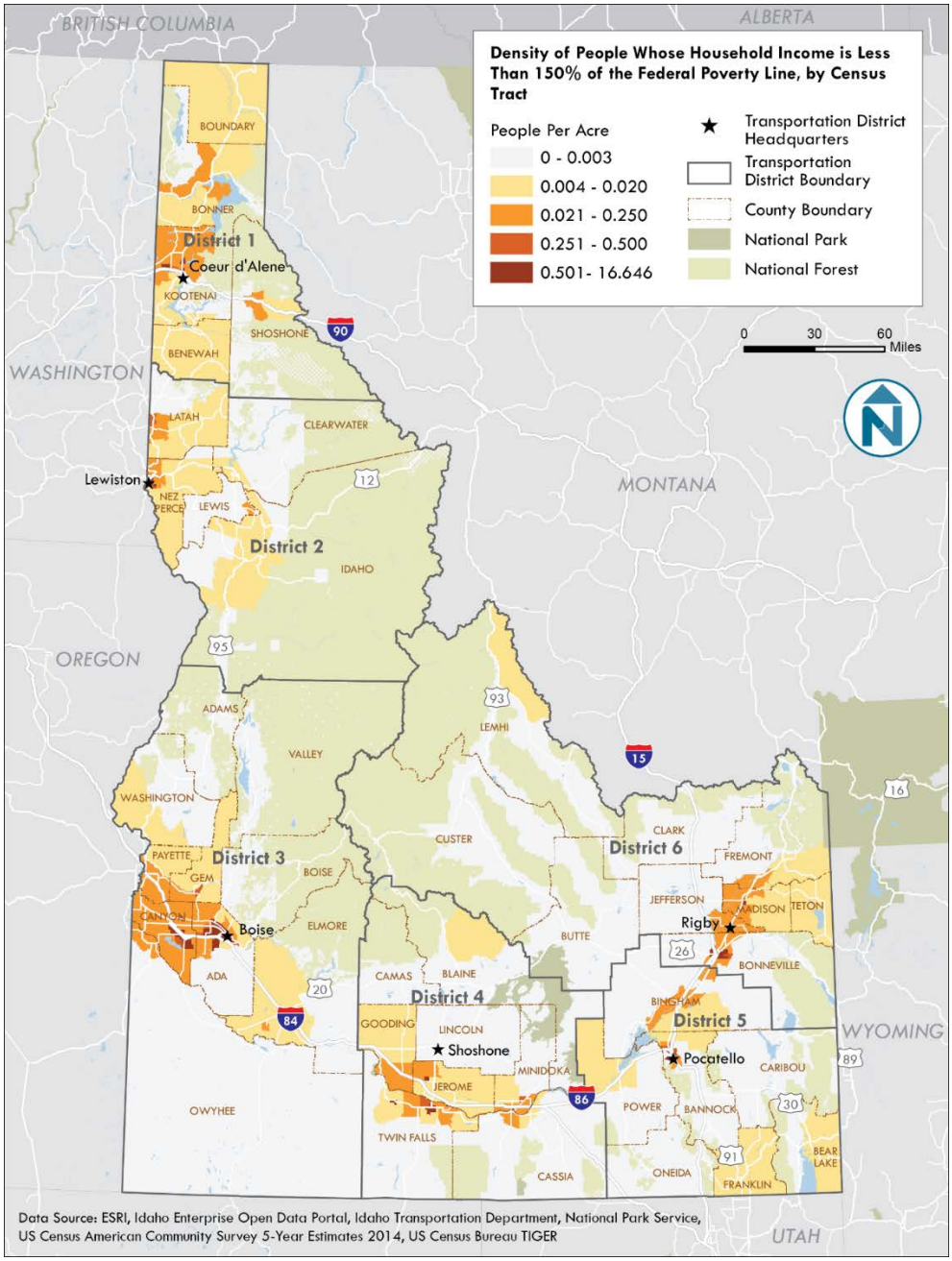


People in Low-Income Households

For the purposes of this analysis, households are classified as “low-income” if they earn less than 150% of the federal poverty threshold, adjusted for household size (as calculated by the U.S. Census Bureau).

Figure 6 displays densities of people in low-income households by Census tract. The highest densities of people living in low-income households are primarily concentrated along the I-15, I-86, I-84, and I-90 corridors. The Boise metropolitan area has the most Census tracts with the highest concentrations found statewide of low-income households - 0.501–16.646 people per acre. Canyon County stands out as the only county where all Census tracts have at least 0.021 people in low-income households per acre.

Figure 6 Idaho Density of People in Low-Income Households (2014)

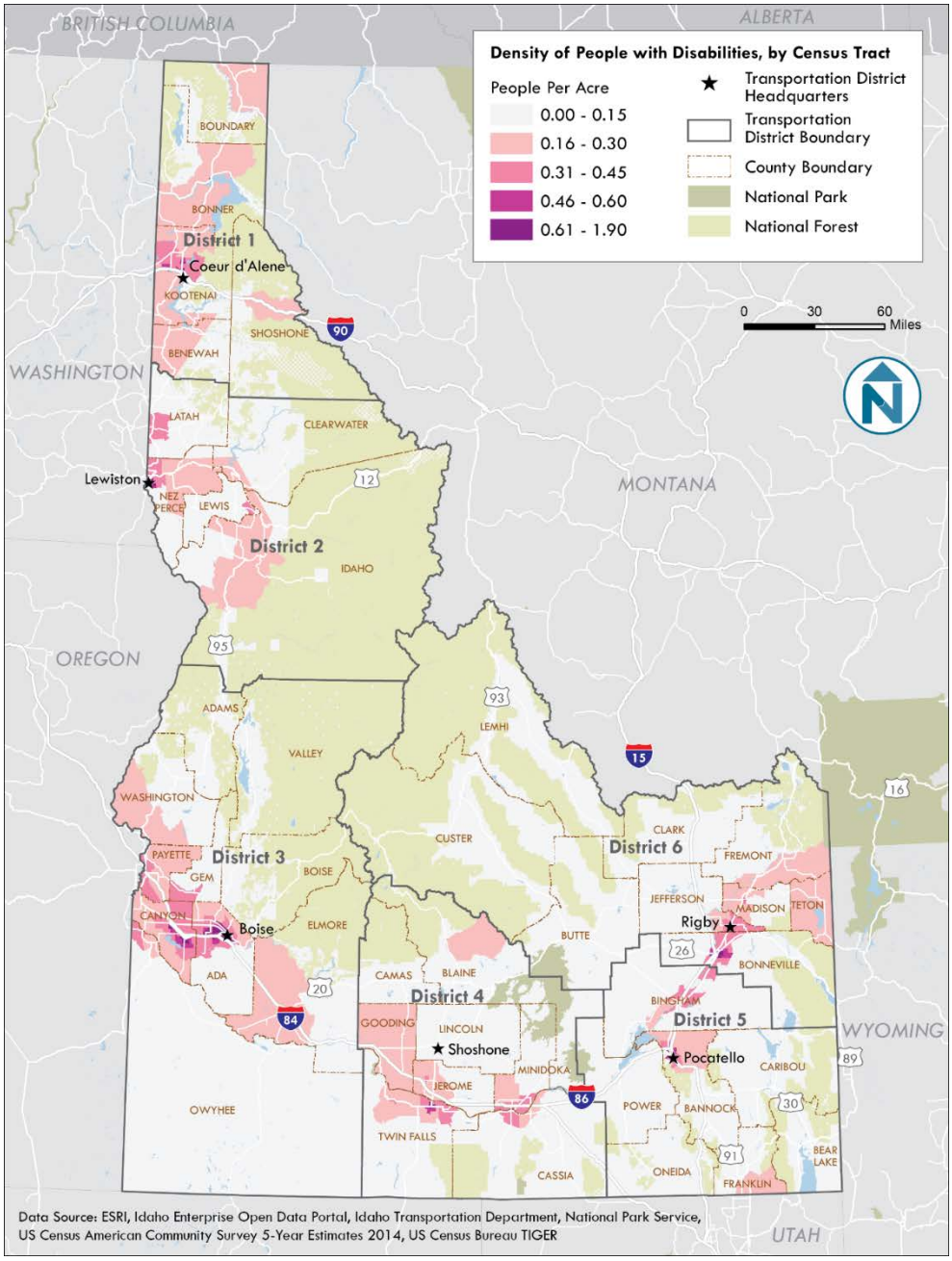


People with Disabilities

People with disabilities are often dependent on public transit service, as some types of disabilities may prevent people from driving. Access to transportation is an important factor in independent living and employment for people with disabilities.

Figure 7 displays densities of people with disabilities by Census tract. The highest densities of people with disabilities are primarily concentrated along the I-15, I-86, I-84, and I-90 corridors. The Boise metropolitan area has the most Census tracts with the highest concentrations found statewide of people with disabilities.

Figure 7 Idaho Density of People with Disabilities (2014)

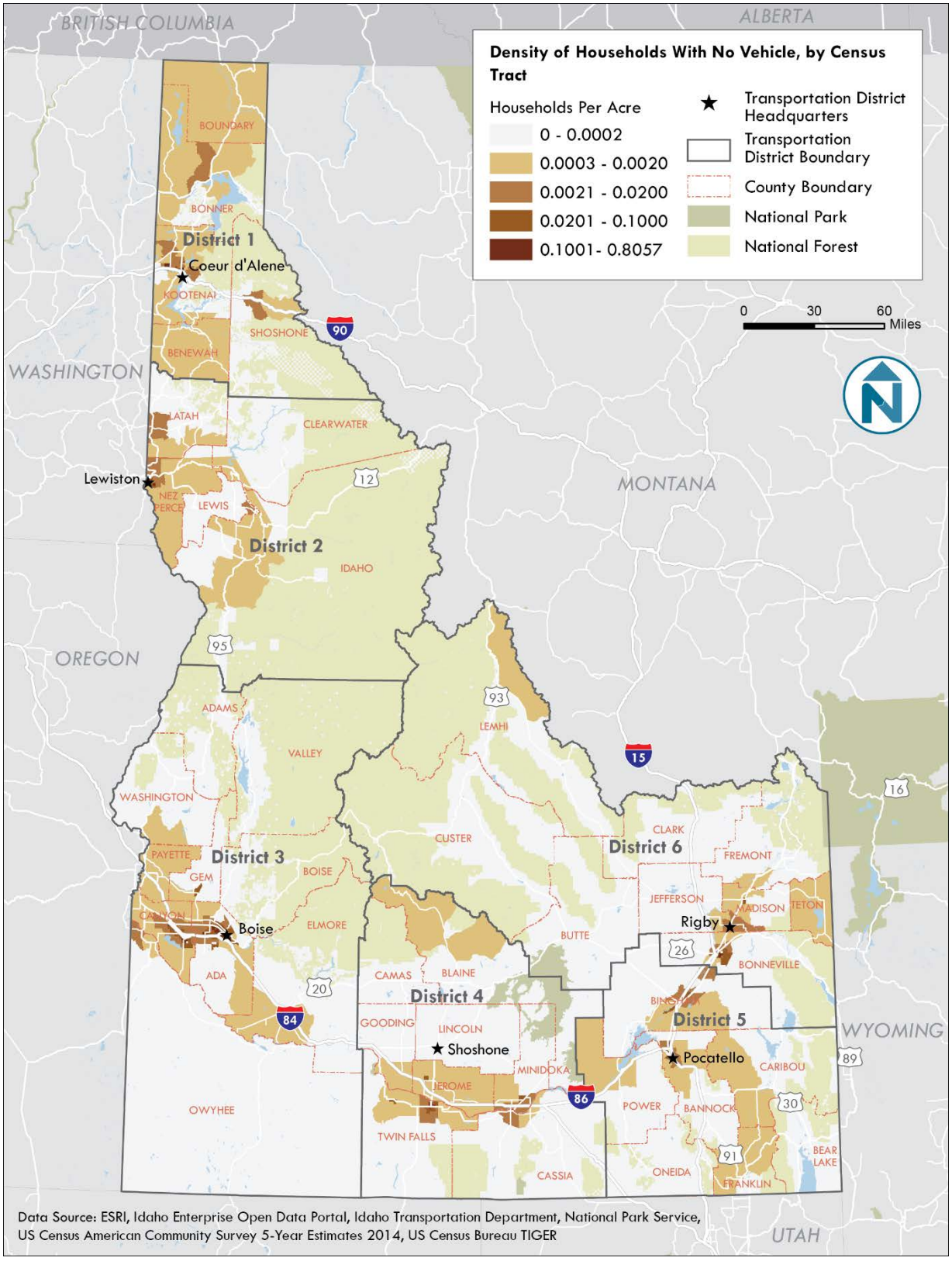


Households without a Vehicle

One of the most influential indicators of transit need is whether the members of a household have access to a car. This may represent households without the economic means of owning a vehicle, households that choose not to own a car, or individuals who are unable to drive.

Figure 8 displays densities of households without a vehicle by Census tract. The highest densities of households without a vehicle are primarily concentrated along the I-15, I-86, I-84, and I-90 corridors. As shown in the map, the densities in this category are by far the lowest of the four population characteristics examined, pointing to overall high vehicle ownership throughout the state.

Figure 8 Idaho Density of Households with No Vehicle (2014)



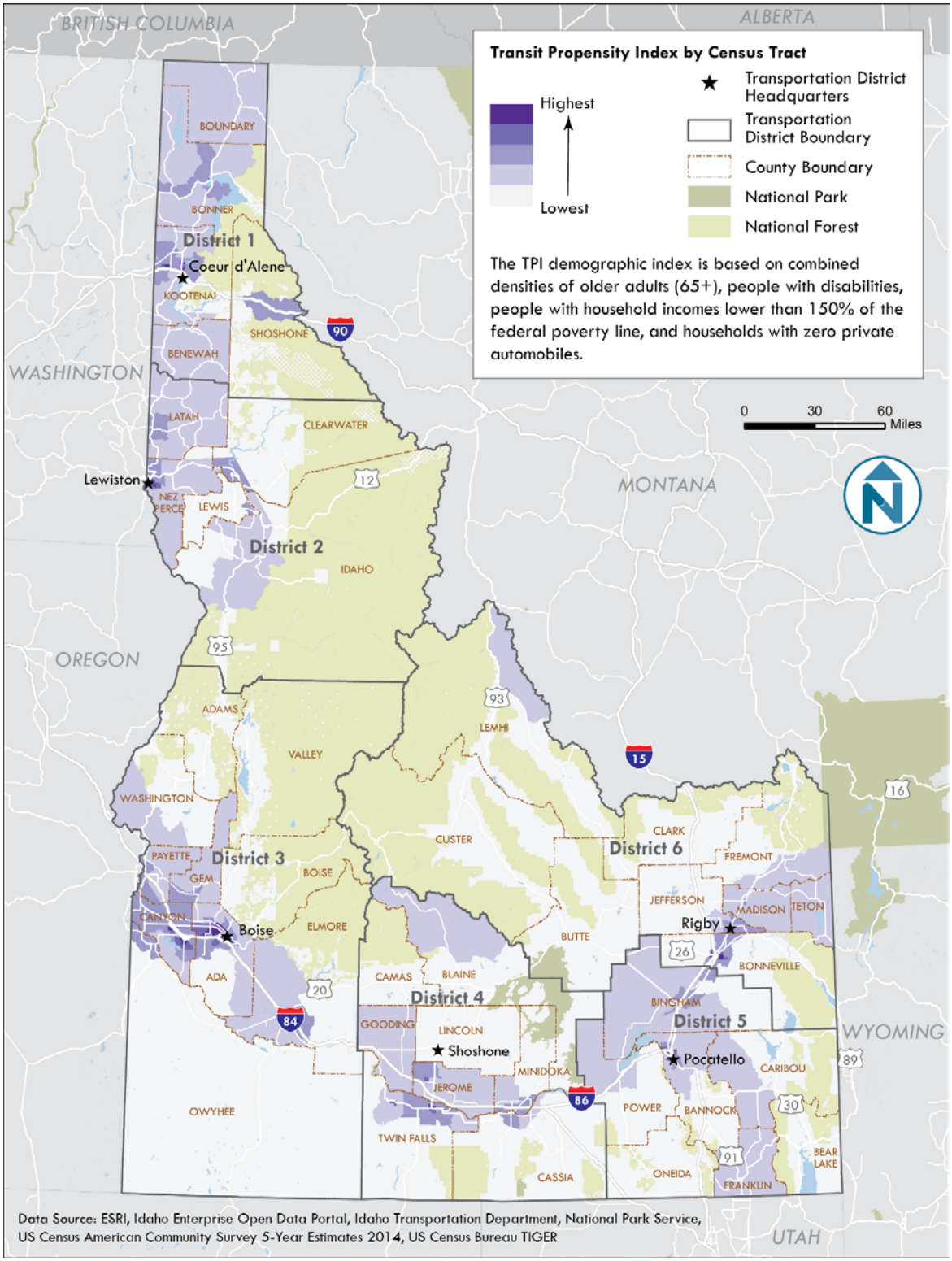
Transit Propensity Index

The Transit Propensity Index (TPI) is a composite indicator adding the densities of the four target populations—older adults, people with disabilities, people in low-income households, and people in households without access to a private vehicle—and assigning a score. The TPI is a useful tool to understand the aggregate need for transportation. This analysis paints a picture of how many people might need transportation, but further analysis such as surveys and stakeholder outreach is needed to get at a more refined number of potential public transportation riders.

Figure 9 displays the transit propensity index for Idaho. The greatest concentrations of medium or greater transit propensity are primarily concentrated along the I-15, I-86, I-84, and I-90 corridors. The Boise metropolitan area has the greatest concentration of Census tracts exhibiting high transit propensity. Other areas with relative concentrations of transit need include:

- District 1: Coeur d'Alene, Post Falls, and Hayden (Kootenai County); Sandpoint/US 2 area (Bonner County)
- District 2: Moscow (Latah County); Lewiston (Nez Perce County); Kamiah (Lewis County)
- District 3: Boise, Meridian (Ada County); Nampa, Caldwell (Canyon County); Emmett (Gem County); Fruitland, Payette (Payette County)
- District 4: Twin Falls, Buhl (Twin Falls County); Jerome (Jerome County); Heyburn (Minidoka County); Burley (Cassia and Minidoka counties)
- District 5: Blackfoot (Bingham County) and Pocatello (Bannock and Power counties)
- District 6: Idaho Falls (Bonneville County); Rigby (Jefferson County); Rexburg (Madison County)

Figure 9 Idaho Transit Propensity Index (2014)



Data Source: ESRI, Idaho Enterprise Open Data Portal, Idaho Transportation Department, National Park Service, US Census American Community Survey 5-Year Estimates 2014, US Census Bureau TIGER

Future Population and Employment Growth

Consideration of anticipated future changes in population and employment densities can inform where future public transportation infrastructure may be needed. Idaho's five metropolitan planning organizations (MPOs)[2] forecast future population and employment densities for their service regions out to 2040. Woods & Poole Economics has produced supplementary forecasts for Idaho's less populous communities outside of MPO regions.[3] Figure 10 summarizes these forecasts with statewide change from 2010 to 2040.

Figure 10 Idaho Population and Employment Future Forecast

Year		Population	Change			Employment	Change		
		Amount	Amount	%	Avg. Amount Per Year	Amount	Amount	%	Avg. Amount Per Year
2010	Base	1,548,989				620,316			
2040	Forecast	2,425,652	876,663	56.6%	29,222	1,080,334	460,018	74.2%	15,334

Source: KMPO, LCVMPO, COMPASS, BTPO, BMPO, and Woods & Poole Economics, all via ITD[4]

Figure 11 displays population and employment densities forecast for 2040. For most of the land area in the state, the population density remains the same as today—below 0.13 people per acre—and the employment density will remain less than 0.02 jobs per acre. The highest densities of both population and employment are projected to continue to be concentrated in the I-15, I-86, I-84, I-90, and US 20 corridors. The Boise metropolitan area, including northern Ada County and eastern Canyon County, is forecasted to have the highest population and employment density growth through 2040.

Across the state, jobs are forecast to grow by more than 460,000, or 74%, and population is projected to grown by more than 876,000, or 56% (Figure 10). The areas of high forecasted growth in population and employment density are:

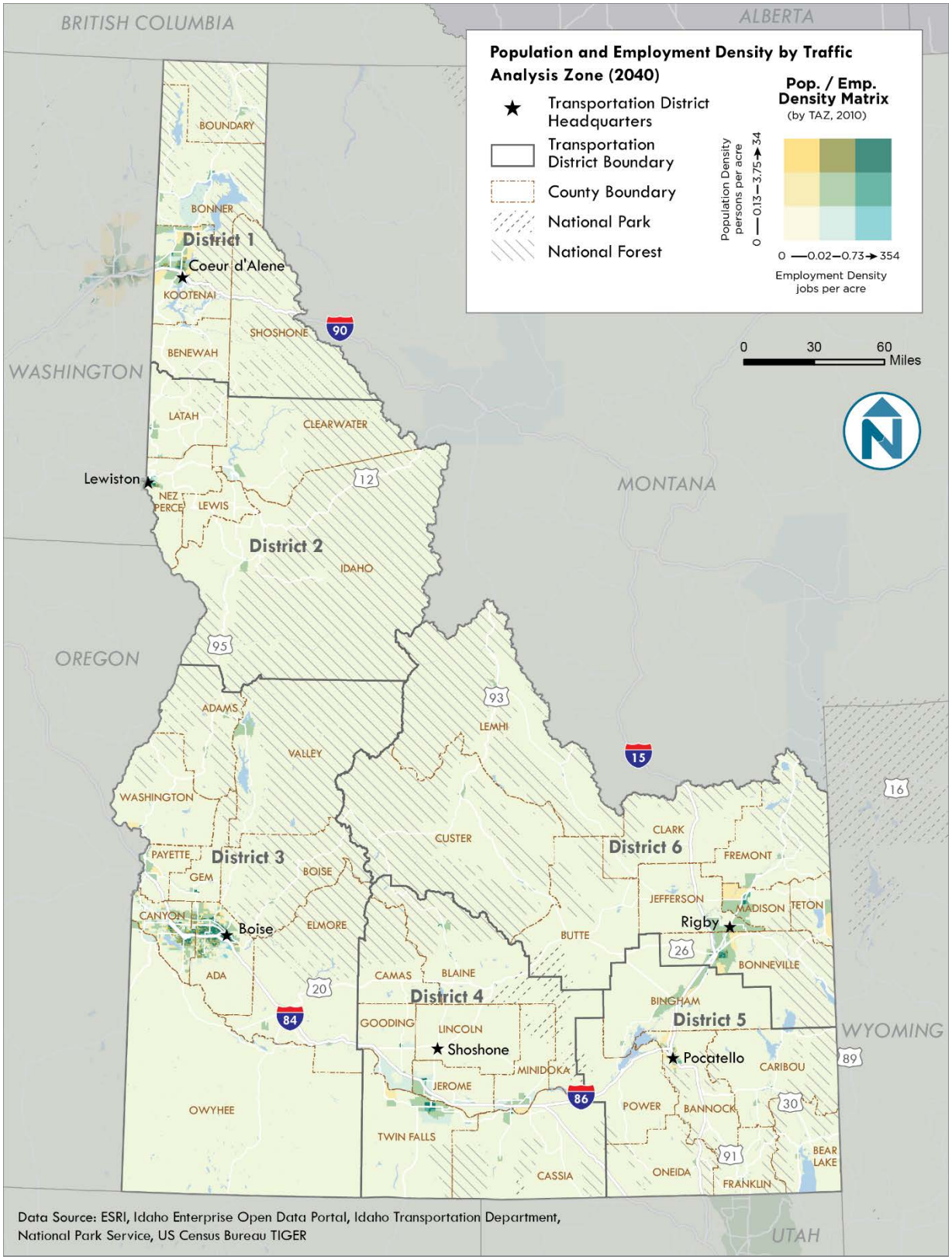
- District 1: northwestern Kootenai County, especially around Coeur d'Alene, Post Falls, Hayden, Rathdrum, Bayview, and Spirit Lake
- District 2: Lewiston (Nez Perce County)
- District 3: northern Ada County, and eastern Canyon County
- District 4: northern Twin Falls County, especially around the City of Twin Falls
- District 5: Pocatello and Chubbuck (Bannock County), and Blackfoot (Bingham County)
- District 6: Idaho Falls (Bonneville County), Rigby (Jefferson County), and Rexburg (Madison County)

[2] Kootenai Metropolitan Planning Organization (KMPO), Lewis Clark Valley Metropolitan Planning Organization (LCVMPO), Community Planning Association of Southwest Idaho (COMPASS), Bannock Transportation Planning Organization (BTPO), and Bonneville Metropolitan Planning Organization (BMPO)

[3] Provided by David Coladner, ITD, November 16, 2016.

[4] Ibid.

Figure 11 Idaho Projected Population and Employment Density (2040)



Data Source: ESRI, Idaho Enterprise Open Data Portal, Idaho Transportation Department, National Park Service, US Census Bureau TIGER

Current Idaho Employment

The Idaho Department of Commerce identifies the following regions as the primary economic corridors in the state.[5]

- Lewiston – Coeur d'Alene – Spokane (Washington)
- Twin Falls – Boise – Ontario (Oregon)
- Butte (Montana) – Idaho Falls – Pocatello – Salt Lake City (Utah)

Each of the six Idaho cities named as focal points within these corridors represents one of ITD's six districts. Five of these six Idaho cities have active fixed-route and demand-response public transportation services; Twin Falls has only demand-response service.

All three corridors are linked to communities in neighboring states. This reflects the ties Idaho goods and services have with those of neighboring states, and the inherent transportation connectivity required to support these connections. Ontario – served by Treasure Valley Transit – is the only out-of-state city named within these corridors that is served by local fixed-route or demand-response service operated by a public transportation provider based in Idaho. The other out-of-state cities anchoring these corridors are accessible from Idaho by intercity bus services.

Future Idaho Employment

Forecasting future employment densities can inform future transit infrastructure needs, as employment destinations draw individuals' most frequent trips. As highlighted in the Future Growth section earlier in this chapter, the Idaho communities with the highest forecasted employment growth are concentrated in the I-15, I-86, I-84, I-90, and US 20 corridors. These communities include:

- District 1: northwestern Kootenai County, especially around Coeur d'Alene, Post Falls, Hayden, Rathdrum, Bayview, and Spirit Lake
- District 2: Lewiston (Nez Perce County)
- District 3: northern Ada County, and eastern Canyon County
- District 4: northern Twin Falls County, especially around the City of Twin Falls
- District 5: Pocatello and Chubbuck (Bannock County), and Blackfoot (Bingham County)
- District 6: Idaho Falls (Bonneville County), Rigby (Jefferson County), and Rexburg (Madison County)

The highest forecasted employment growth in the state is projected to be in northern Ada County and eastern Canyon County.

The Idaho Department of Commerce cites its Tax Reimbursement Incentive (TRI) program as a significant contributor to new employment growth in Idaho. The TRI program is a performance-based incentive for companies expanding in or relocating to Idaho add new, qualifying jobs. Information about the requirements for TRI projects and other aspects of the program can be found at http://commerce.idaho.gov/incentives-and-financing/incentives/idaho-tax-reimbursement-incentive/.

[5] Described by Eric Forsch, Idaho Department of Commerce, May 19, 2017.

Each TRI project represents a new significant source of new commute trips. Direct engagement between companies awarded TRI incentives and local public transportation providers can help connect new employees to available public transportation services, and to connect residents to the new job opportunities. If this engagement is established early in a project's development, public transportation can be integrated into the transportation demand management of a new employment campus.

Figure 30 shows the number of jobs created in each district by TRI projects between 2014 and 2017.

Figure 12 New Jobs Created by Tax Reimbursement Incentive (TRI) Projects by District, 2014-2017