Capital Area Metropolitan Planning Organization FFY 2020-2021 Title VI Action Plan & Accomplishment Report

October 23, 2019

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The Capital Area Metropolitan Planning Organization (CAMPO), as a recipient of Federal financial assistance and under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person shall on the grounds of race, religion (where the primary objective of the financial assistance is to provide employment per 42 U.S.C. § 2000d-3), color, national origin, sex, age or disability be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any Department programs or activities.

This report updates the Texas Department of Transportation (TxDOT) Civil Rights Division on an annual basis regarding how CAMPO is monitoring the implementation of the Title VI/Nondiscrimination Plan. In accordance with Title 23 Code of Federal Regulations (CFR) 200.9 and FHWA's Title VI/Nondiscrimination Program, this report documents CAMPO's Title VI Program accomplishments for federal fiscal year (FFY) 2016 and goals for FFY 2017.

CAMPO Environmental Justice and Civil Rights

Title VI Assurances

In 2017, the Standard DOT Assurances were signed by the new Executive Director and are located in CAMPO's FFY 2017 *Title VI/Nondiscrimination Plan*.

Dissemination of Title VI Information

Title VI information is posted to the Environmental Justice and Civil Rights section of the CAMPO website. Title VI information available on CAMPO's website includes:

- CAMPO Environmental Justice Map
- CAMPO Limited English Proficiency Plan
- CAMPO Title VI Discrimination Documentation (English)
- CAMPO Title VI Discrimination Documentation (Spanish)
- CAMPO Title VI Complaint Form (English)
- CAMPO Title VI Complaint Form (Spanish)
- FHWA's Environmental Justice Page
- FHWA's Title VI of Civil Rights Act of 1964

Title VI/Nondiscrimination Training Summary

CAMPO conducted training on Effective Public Involvement in FFY 17 and will continue to provide this information to new employees and updates to this information to all employees. This course is modeled after TxDOT's Effective Public Involvement training designed to teach CAMPO staff new and innovative ways to involve and engage citizens, including the environmental justice (EJ) and LEP population, in early, continuous, transparent and effective access to CAMPO's transportation planning process. This course demonstrates to participants:

1. Why public involvement isimportant.
2. The elements of successful public involvement.
3. How to plan, coordinate, and conduct effective public involvementefforts.
4. Innovative techniques for including under-represented interest groups in the transportation planning process.
5. How to work with individuals and citizen groups to mediate/resolve conflict and develop planning studies for the overall public good.

FFY 2020 Goals

The following describes CAMPO's activities for the coming year:

- Continue to take part in training opportunities for CAMPO staff to ensure compliance with Title VI.
- Continue conducting community outreach with Title VI, Environmental Justice, and LEP groups within the six-county CAMPO region.

Limited English Proficiency

CAMPO adheres to its LEP plan and ensures that appropriate materials from planning documents and outreach campaigns, both printed and digital, are available in English and Spanish or other languages when needed. CAMPO employs bilingual (English and Spanish) staff that prepares materials in Spanish and attends public meetings to translate to and from Spanish. CAMPO staff also endeavors to conduct public outreach in identified Environmental Justice areas within the CAMPO region.

Title VI Action Plan

CAMPO staff will comply with the Action Plan items in this document to ensure that all Title VI requirements are adhered to, CAMPO staff receives adequate environmental justice / nondiscrimination training, and implements appropriate measures to meet all federal regulations.

Action Plan

Action Step	Timeline	Participants
Conduct Public Involvement/Title VI Training for new CAMPO staff	Ongoing as needed	CAMPO Staff
Review and Update Limited English Proficiency Plan	10/2020 – 1/2021	CAMPO Staff
Review/Update Title VI Work Plan	6/2021 – 9/2021	CAMPO Staff

Accomplishment Report

The following is a list of outreach that was conducted in CAMPO's Environmental Justice areas in FFYs 2018 and 2019, as well as planned outreach for FFY 2020:

- CAMPO staff conducted outreach on the 2019-2022 TIP by hosting public open house meetings in all six counties.
- CAMPO staff translated all material for TIP / RTP amendments cycle and RTP plans and studies into Spanish and made it available at the open house meetings and on the CAMPO website
- Social Media notifications are pushed out in both English and Spanish
- Both English and Spanish traditional media outlets are contacted with press releases in their broadcasting language
- CAMPO staff completed intercept surveys and targeted outreach in zip codes with low-engagement across the region that include EJ areas for multiple 2045 plans and studies
- Public meetings for various 2045 plans and studies were held in various EJ areas within the CAMPO region:
    - Texas School for the Blind and Visually Impaired
    - Luling Housing Authority
    - Huston-Tillotson University
- CAMPO staff distributed Spanish surveys at local Spanish-speaking religious organizations during Outreach for the Luling Transportation Study
- CAMPO staff presented on engaging the visually impaired community in regional planning at the 2019 Transportation Research Board annual meeting
- CAMPO staff tabled at Community Health Centers in Caldwell and Travis counties during outreach for the Regional Transit Study

Attachment 1 – Regional Tolling Analysis Report

Regional Tolling Analysis
for the
Capital Area Metropolitan Planning Organization Region
based on
CAMPO's 2040 Regional Transportation Plan

Prepared by:

Capital Area Metropolitan Planning Organization

June 2016

What is CAMPO?

The **Transportation Policy Board** is supported by policy development, technical advisory, and study committees, as well as a professional staff of 10.

CAMPO's offices are located in The City of Austin's One Texas Center Building at 505 Barton Springs Rd., Suite 700, Austin TX.

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The Capital Area Metropolitan Planning Organization (CAMPO) is the Metropolitan Planning Organization (MPO) for Bastrop, Burnet, Caldwell, Hays, Travis, and Williamson Counties. MPOs are designated for areas having a population greater than 50,000 as identified by the U.S. Bureau of the Census. CAMPO was established in 1973 and is governed by the Transportation Policy Board (CAMPO Board), which comprises regional and local officials.

CAMPO approves the use of federal transportation funds within the region, and produces both the long-range Regional Transportation Plan (RTP) and the short-range Transportation Improvement Program (TIP). Project sponsors are responsible for design and implementation of projects.

CAMPO coordinates regional transportation planning with cities and counties; the Capital Metropolitan Transportation Authority (Capital Metro); the Capital Area Rural Transportation System (CARTS); the Central Texas Regional Mobility Authority (CTRMA); the Federal Highway Administration (FHWA); the Federal Transit Administration (FTA); the Texas Department of Transportation (TxDOT); and other transportation providers in the region.

This report was prepared in cooperation with the Texas Department of Transportation and the US Department of Transportation, Federal Highway Administration, and Federal Transit Administration.

CAMPO Transportation Policy Board (As of May 11, 2015)

Commissioner Will Conley, Chair, Hays County
Commissioner Clara Beckett, Vice-Chair, Bastrop County
Mayor Steve Adler, City of Austin
Council Member Joe Bain, Travis County representative
Mayor Jeff Coleman, City of Pflugerville
Commissioner Gerald Daugherty, Travis County
Judge Sarah Eckhardt, Travis County
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CAMPO Staff and Consultants

Staff: Ashby Johnson (Executive Director), Phillip Tindall (Assistant Director), Daniel Yang, Michael Dutton, Art Zamorano, Alex Kone, Theresa Hernandez, Lei Xu, Kelly Porter, and Doise Miers. Consultants: CDM Smith.

DISCLAIMER

The preparation of this report has been financed in part through grants from the Federal Highway Administration and Federal Transit Administration, US Department of Transportation, under the Metropolitan Planning Program [Section 104 (f) of Title 23, US Code]. The contents of this report do not necessarily reflect the official views or policy of the US Department of Transportation.

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Appendix A – Figures

1.0 Introduction

The purpose of this document is to evaluate the effects of proposed expansion of the regional priced facility system in the CAMPO region based on the improvements included in *the CAMPO 2040 Regional Transportation Plan (RTP)*. The implementation of the regional priced facility system has the potential to affect land-use, air quality, and environmental justice (EJ) populations.

Potential effects from large, regional transportation projects are considered throughout the planning and development process from the long-range plan to construction. Assessing the impacts at the long-range, system-, and project-level planning provides a greater understanding of how a project may impact a community on a macro and micro level (see **Table 1**).

Table 1 Levels of Analysis

Analysis	Metropolitan Transportation Plan (*CAMPO 2040 Regional Transportation Plan*)	Regional Priced Facilities	National Environmental Policy Act (NEPA)
Scope	All projects proposed in CAMPO's 2040 Regional Transportation Plan on a regional level	All new priced facilities proposed in CAMPO's 2040 Regional Transportation Plan on a regional level	Project/corridor specific analysis
Results	Impacts on regional mobility and accessibility of proposed projects	Regional impacts on communities with the addition of all priced facilities	Localized impacts on a community due to the construction and operation of a project

The following sections provide the context of the existing and planned transportation system, and assess the potential effects. The study area for this analysis is CAMPO's 6-county region which includes the counties of Bastrop, Burnet, Caldwell, Hays, Travis, and Williamson.

2.0 Context of the Transportation System

This section discusses the process for developing the regional transportation system in the CAMPO area as a function of demographics, funding, and performance.

2.1 *Regional Transportation Plan Development*

The Capital Area Metropolitan Planning Organization (CAMPO) serves as the metropolitan planning organization (MPO) for transportation for the Central Texas Region, which include Metropolitan Austin. The Transportation Policy Board (TPB) is the policy body of the MPO and is comprised of elected officials and appointed staff representing the counties, municipalities, and transportation providers to include; the Capital Area Metropolitan Transit Authority (CMTA), and the Texas Department of Transportation (TxDOT). MPOs have the responsibility of developing and maintaining an RTP. The RTP is a federally mandated plan. CAMPO's RTP must be updated every five years and has a 25-year planning horizon. It identifies transportation

needs; guides federal, state, and local transportation expenditures; and is the basis for project specific studies. The RTP is developed in coordination with the public, local governments, transit authorities, TxDOT, CTRMA, Federal Highway Administration (FHWA), and Federal Transit Administration (FTA).

Federal transportation regulations require the RTP to be fiscally constrained; only projects that can be constructed under reasonable funding assumptions are contained in the multi-year plan. The CAMPO region is classified as a transportation management area (TMA) (population over 200,000) so the RTP must include a congestion management process (CMP) to address congestion.

The development of CAMPO's current 2040 Regional Transportation Plan was guided by the twelve goals listed in **Table 2**. The goals, adopted by the TPB as part of the RTP, represent CAMPO's regional commitment to a comprehensive, cooperative, and continuous transportation planning process for a balanced transportation system by recognizing the evolving transportation and air quality needs of the region. CAMPO's 2040 Regional Transportation Plan can be viewed at http://www.campotexas.org/plans-programs/campo-plan-2040.

Table 2 CAMPO's 2040 RTP Planning Goals

Mobility	Quality of Life	System Sustainability	Implementation
Improve connectivity within and between the various transportation modes for goods and for people of all ages and abilities. Improve the efficiency and performance of the transportation system. Maintain and enhance mobility and access of goods and people within the region.	Ensure that the benefits and impacts of the transportation system are equitably distributed regardless of income, age, race, or ethnicity. Maximize the economic competitiveness of the region. Minimize negative impacts to environmental resources, reduce adverse noise impacts, and preserve neighborhood character. Minimize air pollution and energy consumption related to the transportation system.	Ensure that the transportation system can be maintained and operated over time. Increase the safety and security of the transportation system.	Maximize the affordability of the transportation system in both the near and long term. Reduce project delays through the project development and delivery process and in the allocation of funds. Support coordinated planning of land use and transportation, where applicable.

Source: *CAMPO's 2040 Regional Transportation Plan*, May 2015

The *CAMPO 2040 Regional Transportation Plan* preferred scenario includes road and transit projects for which the region expects to receive funding between 2015 and 2040. The preferred

scenario invests $4.85 billion in state and federal funds, including matching funds, to improve IH 35 and its supporting roads. CAMPO developed the preferred scenario based on data gathering and analysis, as well as on input from residents, local government agencies, regional partners and policy makers. The *2040 Plan* represents the region's shared goal of producing the most effective transportation system possible. Selection of road projects for state and federal funds followed an iterative process. First, the CAMPO Board selected IH 35 projects in Hays, Travis, and Williamson counties (at a cost of $4.25 billion). CAMPO then allocated the remaining $605 million of state and federal road funds based, in part, on a project's ability to relieve IH 35 traffic by improving other north-south routes and IH 35 connections, by improving safety or by relieving congestion on other roads. See the CAMPO 2040 Regional Transportation Plan for the complete list of road projects funded with state and federal dollars.

The preferred scenario includes projects from the following project lists:

- All Existing + Committed Projects;
- All Grouped Projects;
- All Rural Transit Projects; and,
- All 100 percent Locally Funded Projects.

Funding was not sufficient to include all the urban transit, regional, and sub-regional projects that jurisdictions submitted. The CAMPO Board approved a revised urban transit list, adjusted to meet fiscal constraints, for inclusion in the *2040 Plan*. The board also approved roads for state and federal funding. The *2040 Plan* shows the transportation supply the CAMPO region can expect to have by 2040. Managing the transportation system efficiently and reducing demand for the system are the remaining options for improved mobility.

Table 3 CAMPO 2040 Plan Scenario Development

Project Lists	Description of Project Lists	Preferred Scenario
E+C (Existing + Committed)	Funding for projects expected to be built in the next five years has already been identified and it is very likely these projects will be built.	All E+C projects are included in the preferred scenario.
Grouped	Some types of projects do not need to be listed individually in the plan and these projects are funded from sources dedicated to these purposes. The different groupings are: safety, bridges, rehabilitation, and maintenance.	All Grouped projects are included in the preferred scenario.
Regional	These are road projects on limited-access highways (those without traffic signals) and other principal arterials.	Selected Regional projects are included in the preferred scenario – see text for description.

Project Lists	Description of Project Lists	Preferred Scenario
Sub-Regional	These are road projects on other regionally significant roads.	Selected Sub-Regional projects are included in the preferred scenario – see text for description.
Urban Transit	These are transit projects eligible for federal urban transit funding.	Some Urban Transit projects were included in the preferred scenario
Rural Transit	These are transit projects eligible for federal rural transit funding.	All Rural Transit projects are included in the preferred scenario.
Locally Funded (100%)	These are projects that a sponsor plans on building solely with their local funds.	All 100 percent Locally Funded projects are included in the preferred scenario.
Illustrative	These are projects for which there is no funding and in some cases no sponsor. These projects have the potential to be amended into the fiscally constrained project list at a later date.	The Illustrative list is not included in the preferred scenario. Some Regional and Sub-Regional projects were moved to the Illustrative List after project selection for the preferred scenario.

2.2 *Population Forecast*

The CAMPO region's population tripled between 1980 and 2010, growing from 585,000 residents in 1980 to 1,716,300 residents in 2010. All six counties experienced growth, with Travis and Williamson counties experiencing the largest increases in total population (see **Table 4** and **Figure 1**). Forecasts suggest the population will more than double by 2040. This growth reflects the region's reputation as a desirable place to live, and its history of fostering a robust economy. Rapid growth, and an unwillingness to expand the system during prolonged population growth, negatively affects the region's transportation system.

Table 4 CAMPO 6 County Population Forecast

County	2010	2020	2040
Bastrop	**71,827**	**99,565**	**198,263**
Burnet	**41,680**	**52,058**	**72,618**
Caldwell	**34,644**	**46,110**	**74,582**
Hays	**149,950**	**250,630**	**621,291**
Travis	**1,001,490**	**1,250,211**	**1,709,791**
Williamson	**417,508**	**635,602**	**1,401,915**
Total	**1,717,099**	**2,334,176**	**4,078,460**

Sources: 1. Texas State Data Center and Office of the State Demographer
2. US Census Bureau Population Projections

2.3 *Financial Forecast*

Financial analysis is vital to plan development. Fiscal constraint is a federally required element of every long-range regional transportation plan. Plans may only include projects for which funding can reasonably be expected during the life of that plan. The financial analysis for the *CAMPO 2040 Plan* contains the most accurate and timely information available. It uses the TRENDS model, developed by the Texas A&M Transportation Institute (TTI), to determine estimated amounts of federal/state funding sources. All 25 Texas Metropolitan Planning Organizations (MPOs) are able to use this model. It allows each MPO the flexibility to analyze effects of future income scenarios. A subcommittee of the CAMPO Technical Advisory Committee used this model to produce the financial forecast for this plan. State and federal funding comes to CAMPO through TxDOT. Rule 16.53 of Title 43, Texas Administrative Code describes the state highway program's various funding categories. The TRENDS model provides analysis for four of those categories. CAMPO used TxDOT's 2014 Unified Transportation Plan for future funding estimates in the other categories.

In November 2014, Texas voters approved Proposition 1, an amendment to the Texas constitution that authorizes increased allocations for highway improvements. The amendment allows for the diversion of some general revenue from the economic stabilization fund (informally known as the Rainy Day Fund) into the state highway fund. The *2040 Plan's* budget includes estimates of the CAMPO region's share of those funds. Voters in several of CAMPO's member jurisdictions approved transportation funding bonds in 2014. Revenues that will become available because of those elections are included in the local funding portion of the *2040 Plan*. CAMPO used local entities' revenue estimates (when available) to develop local revenue projections. CAMPO estimated revenues for local entities when needed. According to these revenue estimates, available local resources appear sufficient to meet the requisite match for all anticipated federal funding sources requiring a local match. Projections from the TRENDS analysis and local revenue projections allow CAMPO to develop a financial forecast for regional transportation

funding through 2040. The estimated revenue from all sources to implement the plan is $35 billion.

2.4 *2040 Plan Project Costs*

Project sponsors usually provide project cost estimates. If sponsors did not submit costs, CAMPO calculated the costs for their road projects (except for limited-access highways) using a cost calculator developed by the City of Austin and Travis County. Staff assumed that costs were in 2015 dollars and estimated costs for the year of expenditure using a 4 percent annual rate of inflation. TxDOT and other member jurisdictions use the same rate (note that highways do not follow this process, as the sponsoring jurisdiction is required to provide all costs for highways). Estimated costs for the plan include: added capacity projects (all transportation modes); and, operations and maintenance. The forecast summary for the *2040 Plan* is in **Figure 2.**

2.5 *Public Transportation*

Public transportation includes all shared passenger services available to the public. It may be fixed-route via bus or train or demand response, which provides service via vans. Public transportation is funded through a variety of sources, including federal funds dedicated to urban and rural areas, and to types of riders, such as the elderly or people with disabilities. Additionally, state and local funds contribute to the public transportation system. In the CAMPO area, municipalities, counties, and portions of counties can dedicate a one-percent sales tax to Capital Metro for public transportation services. Public transportation is also funded by fares. Service providers charge fares based on the type of service provided. For example, express bus service, which tends to cover longer distances with fewer stops, typically has a higher fare than local bus service. Transit is largely funded by the local sales taxes that are collected within the given service area of the transit authority. **Table 5** provides a current funding sources summary for transit providers in the region and the cities within the service area. In addition to funding through a one cent dedicated sales tax.

Table 5 Dedicated Transit Funding Sources

Agency	Type of Funding Source	Amount	Service Area Cities
Capital Metro	Sales tax	1%	Austin, Jonestown, Lago Vista, Leander, Manor, Point Venture, San Leanna, Volente, and portions of Travis County and Williamson County, including the Anderson Mill area.

2.5.1 **Transit Providers in the Region**

Public agencies, universities, and non-profit organizations provide public transportation service in the capital area.

2.5.1.1 ***Urban Transit***

The Capital Metropolitan Transportation Authority (Capital Metro) provides urban public

transportation services and complementary paratransit services within its service area. The Capital Metro service area comprises the following jurisdictions: Austin, Jonestown, Lago Vista, Leander, Manor, Point Venture, San Leanna, Volente, and portions of Travis and Williamson counties. These member jurisdictions voted to join Capital Metro, which operates the MetroBus, MetroExpress, MetroRapid, MetroRail, Night Owls, E-Bus, University of Texas Shuttles (for more information, see University Transit section), MetroAccess, MetroRideshare, and freight rail services. The City of Round Rock Demand Response Bus Service provides reservation-based services within the city limits and the extraterritorial jurisdiction of Round Rock.

2.5.1.2 *Rural Transit*

The Capital Area Rural Transportation System (CARTS) provides fixed-route transit service to Bastrop and San Marcos on a contract basis. San Marcos Transit serves San Marcos and Martindale via twelve routes that operate from the central hub of San Marcos Station. CARTS also provides rural transit and paratransit services to rural areas within the CAMPO region. This rural/urban transit district operates the Interurban Coach, Country Bus, Metro Connector, Municipal Bus (Bastrop and San Marcos), Medical Transportation, and Commuter Route services. It provides additional connections to Blanco, Fayette, and Lee counties, as well as intercity services.

2.5.1.3 *University Transit*

The University of Texas (UT) at Austin Shuttle System includes 10 routes providing circulator services around the central campus and express services to UT students, faculty, and staff from multiple locations in the city of Austin. The UT Shuttle system is jointly funded through a partnership between Capital Metro and the University of Texas. The Bobcat Shuttle System at Texas State University includes ten circulator routes from off-campus housing and remote parking locations in the City of San Marcos.

2.5.1.4 *Client-Based Transportation Providers*

The region has 38 client-focused transportation providers. These organizations provide transportation services to various specific populations, such as clients of human service organizations, residents of particular communities, or specific demographic groups (such as the elderly or people with disabilities).

2.5.2 **Other Modes Active Transportation: Bicycle and Pedestrian Network**

Bicycling and walking are vital elements of a well-balanced transportation system. Non-motorized transportation modes can enrich the livability of a community, reduce congestion, improve mobility, improve physical health, and enhance the overall quality of life for residents.

Whether for an entire trip, or just a segment of it, “human-powered” modes are essential transportation, particularly for non-drivers. The 2009 National Household Travel Survey indicates nearly one in 20 households in the CAMPO region does not have a vehicle. The U.S. Census shows that the six-county CAMPO region had an increase of approximately 3,500 work trips by bicycle and 2,500 pedestrian work trips between 2000 and 2010. The active transportation system is made up of many elements provided by a variety of sources. Local regulations may require developers to construct sidewalks. Bicycle

infrastructure in the road right-of-way is provided by cities, counties, or the state. Off-road paths may be provided by cities, counties, or the state, and sometimes these paths are built by the developer of a large tract of land. In 2012, CAMPO staff inventoried bicycle and pedestrian transportation network facilities on the CAMPO modeled road network. This inventory, along with Census data and the American Community Survey, provides data regarding the CAMPO region's use of its bicycle and pedestrian infrastructure. The Central Texas Regional Mobility Authority is constructing bicycle- and pedestrian-friendly facilities as part of every project, whenever feasible. This includes the design and implementation of Shared Use Paths (SUP), sidewalks and cross-street connections.

3.0 Evaluating Alternative Future Scenarios

What will traffic conditions in 2040 be like? How can we best use our limited resources to improve conditions? These questions can be answered, to the extent possible, by comparing different "what if" scenarios. Scenario planning provides the opportunity to compare the outcomes and potential benefits of different investments in the future transportation system. CAMPO used its data-driven travel demand model to produce several potential scenarios for the CAMPO 2040 Regional Transportation Plan. We considered scenarios that included both road and public transportation projects, since some federal and state funds are allocated to specific transportation modes. CAMPO solicited projects from local governments and agencies (or "sponsors") to develop several scenarios for the future transportation system. Sponsors provided project information such as description, limits, cost, expected funding source, and estimated funding and opening date. Using this information, CAMPO staff and the CAMPO Technical Advisory Committee developed project lists for the scenarios. CAMPO assigned each project to at least one of the project lists.

3.1 *Comparing Scenarios*

CAMPO used the travel demand model to assess benchmark scenarios, alternative scenarios, and the preferred scenario. The alternative scenarios and the preferred scenario were compared to the benchmark scenarios to evaluate performance. There are two benchmark scenarios consisting of the existing transportation network plus committed projects (projects with committed funding that will be implemented by 2020). These benchmarks were run with either 2020 demographics (existing plus committed scenario) or 2040 demographics (no-build scenario). The benchmark scenarios indicate transportation system performance in 2020 and 2040 if no additional investment is made in the transportation system. CAMPO tested two alternative scenarios that were not fiscally constrained. The regional and sub-regional scenarios evaluate the effectiveness of different types of road and transit projects in addressing the region's overall mobility needs in 2040. Since these scenarios are not fiscally constrained, they are theoretical scenarios for evaluation purposes only. CAMPO included all of the submitted regional projects plus those transit projects that met the definition of regional projects, the committed projects, and 100 percent locally-funded projects in the regional scenario. All of the submitted sub-regional projects were included in the sub-regional scenario plus those transit projects that met the definition of sub-regional projects, the committed projects, and 100 percent locally-funded projects. Sponsors submitted more sub-regional projects than regional projects.

CAMPO ran both scenarios with 2040 demographics. Results indicate that both arterial street and highway improvements are needed, as well as regional and local transit service. Arterial street improvements may offer significant mobility improvement opportunities.

4.0 Transportation System Performance

Over the past 20 years, vehicle miles of travel (VMT) has continued to increase in the CAMPO region. Increased VMT is the result of several factors:

- Population and employment growth
- Increased automobile ownership
- Increased single-occupant vehicle travel
- Increased number and length of trips due to continued suburbanization

4.1 *Roads*

Roads are essential to the region's transportation system, providing for the movement of people and freight within and through the region. Different types of roads function differently. The primary function of highways and other limited access roads is mobility; these roads provide for the movement of people and freight for longer distances, while providing limited local access. The primary focus of arterials and other non-limited access roads is local accessibility. It is more difficult to move efficiently across the region on the non-limited access roads; it is more difficult to access local destinations on the limited access roads. An effective transportation system will have sufficient supply of all road types so that the system provides efficient mobility and accessibility. **Table 18** compares the 2010 road network to the proposed 2040 road network by road type, and details the daily vehicle miles traveled (VMT) for each road type.

4.2 *Forecasting Future Travel*

The existing transportation system described previously is used to assess current traffic congestion. CAMPO then forecasts future travel demand. Travel demand is the result of thousands of individual travelers making decisions on when, where, and how to travel every day. These decisions place varying levels of demand on the transportation system.

Table 6 summarizes the roadway system performance for the existing 2010 system and proposed 2040 system. The numbers reflect a 57.9 percent increase in population and a 66.7 percent increase in employment. The projects listed in *CAMPO 2040 Regional Transportation Plan* result in a 55.0 percent increase in 2040 congestion levels when compared to 2010 levels.

Figure 3 and **Figure 4** show congestion levels in 2010 and 2040 with *CAMPO 2040 Regional Transportation Plan* improvements.

Table 6 Regional Performance Summary`

Performance Measure	2010	2040	2040 FPNB
Population	1,717,099	4,078,460	4,078,460
Employment	774,786	2,324,736	2,324,736
Vehicle Miles of Travel per weekday	44,224,994	98,298,080	97,888,087
Daily Capacity (Miles)	179,870,966	244,544,927	234,199,167
Vehicle Hours Spent in Delay (Daily)	146,339	1,095,135	1,254,744
Percent Increase in Travel Time Due to Congestion	16.90%	55.90%	63.90%
Annual Cost of Congestion (Millions)	$537.80	$4,024.62	$4,611.18

Source: *CAMPO 2040 Regional Transportation Plan, May 2015*

5.0 Planned Transportation Actions

The *CAMPO 2040 Regional Transportation Plan* is a blueprint for transportation improvements in the CAMPO region through 2040. **Figure 5** and **Figure 6** show the planned roadway (including priced facilities) and passenger rail systems for the region in 2040. Priced facilities are defined as roadway facilities that charge a toll for some or all vehicles to use the facility, and include toll roads, and tolled managed lanes. **Table 7** shows a summary of the roadway and passenger rail system. Approximately 524 lane-miles of priced lanes would be added to the transportation system by 2040. In comparison, about 2,113 lane-miles of non-priced capacity would be added to the system with almost 10 percent of this new capacity being freeway mainlanes. The transit system (excluding bus service) would be expanded by almost 182 miles; a 286 percent increase.

Table 7 CAMPO Roadway Facility Types

Roadway/Transit Facility Type	2010	2040	2040 No Price Build	2040 - 2010 Difference	2040-2010 Percent Change	Percentage of Total Lane-Miles (2040)
Interstate	514	534	534	20	4%	4%
Freeways	341	521	507	180	53%	3%
Major Arterials	4,558	6,450	6,464	1,892	42%	43%
Minor Arterials	3,846	3,599	3,599	(247)	-6%	24%
Collectors	1,252	1,229	1,229	(24)	-2%	8%
Locals	512	517	517	5	1%	3%
Direct Connectors	26	34	31	7	28%	0%
Ramps	116	128	128	12	10%	1%
Frontage Roads	852	1,119	1,105	267	31%	7%

Roadway/Transit Facility Type	2010	2040	2040 No Price Build	2040 - 2010 Difference	2040-2010 Percent Change	Percentage of Total Lane-Miles (2040)
Total Non-Priced Lanes	**12,016**	**14,129**	**14,113**	**2,113**	**18%**	**94%**
Toll Lanes	346	596	576	250	72%	4%
Toll Direct Connectors	31	52	51	21	69%	0%
Toll Ramps	60	84	83	24	40%	1%
Managed Lanes	-	218	22	218	0%	1%
Managed Lane Ramps	-	11	2	11	0%	0%
Total Priced Lanes	**436**	**961**	**734**	**524**	**120%**	**6%**
Total All Lanes	**12,452**	**15,090**	**14,847**	**2,637**	**21%**	**100%**
Commuter Rail	64	245	245	182	286%	5.9%
PM 1	-	-	-	-	0%	0.0%
PM 2	-	-	-	-	0%	0.0%
Express Bus	816	2,426	2,426	1,609	197%	58.1%
Local Bus	1,325	1,391	1,371	66	5%	33.3%
UT Shuttle	112	112	112	-	0%	2.7%
Transit Total	**2,317**	4,174	**4,154**	**1,857**	**80%**	**100%**

In a rapidly growing region that has limited resources available to improve the existing transportation system, planning efforts have shifted from expansion to maintaining and operationally enhancing the existing system. The total cost of implementing the transportation improvements in CAMPO 2040 Regional Transportation Plan is estimated at $35.1 million in year of expenditure (YOE) dollars. **Table 8** through **Table 13** show the costs by component and funding source included in the RTP.

Table 8 CAMPO 2040 Regional Transportation Plan Cost Summary

Source	Amount
Local Funding	$11,770,000
Federal / State	$8,663,000
Local Transit Funding	$9,662,000
Regional Funding	$5,010,000
Total	**$35,105,000**

Table 9 FHWA / TxDOT / Proposition 1 Funding

FHWA/TxDOT/Proposition 1	2015-2024	2025-2030	2031-2040	Total
Category 2-Metropolitan Area Corridor Projects	$325.40	$83.50	$275.70	$684.60
Category 7-Surface Transportation Program Metropolitan Mobility	$333.60	$318.70	$835.30	$1,487.60
Category 9 - Transportation Alternatives	$75.90	$74.10	$191.50	$341.50
Category 11 - District Discretionary	$42.30	$40.10	$105.20	$187.60
Other TxDOT Mobility Funding	$82.25	-	-	$82.25
TxDOT Preservation Funding	$678.13	$420.28	$700.46	$1,798.87
Proposition 1	$1,000.00	$600.00	$1,000.00	$2,600.00
Totals	**$2,537.58**	**$1,536.68**	**$3,108.16**	**$7,182.42**

Table 10 Regional Funding Sources

Regional Funding Sources	2015-2024	2025-2030	2031-2040	Total
Central Texas Regional Mobility Authority	$1,631.15	-	-	$1,631.15
Lone Star Rail District	$1,467.06	$636.63	$1,061.06	$3,164.75
Regional Infrastructure Fund	$37.00	$62.00	$115.00	$214.00
Totals	**$3,135.21**	**$698.63**	**$1,176.06**	**$5,009.90**

Table 11 Federal Transit Funding

Federal Transit Funding	2015-2024	2025-2030	2031-2040	Total
Urban Transit (FTA 5307 & 5340)	$288.59	$174.69	$293.00	$756.28
Rural Transit (FTA 5311)	$41.69	$34.40	$87.70	$163.79
Elderly and Disabled Transit	$9.28	$7.98	$20.80	$38.06
Bus and Bus Facilities (FTA 5339)	$21.51	$12.91	$21.51	$55.93
New Starts (FTA 5309)	$389.25	$27.18	$49.89	$466.32
Totals	**$750.32**	**$257.16**	**$472.90**	**$1,480.38**

Table 12 Local Transit Funding

Local Transit Funding	2015-2024	2025-2030	2031-2040	Total
MTA Sales Tax	$2,339.14	$1,985.63	$4,005.62	$8,330.39
CMTA Fares and Other Income	$349.59	$239.23	$428.56	$1,017.39
CARTS Fares and Other Income	$104.55	$75.00	$135.00	$314.55
Totals	**$2,793.28**	**$2,299.86**	**$4,569.18**	**$9,662.33**

Table 13 Local Funding

Local Funding	2015-2024	2025-2030	2031-2040	Total
City of Austin	$905.00	$726.00	$1,210.00	$2,841.00
City of Round Rock	$164.00	$98.40	$164.00	$426.40
Bastrop County	$73.46	$44.08	$73.46	$191.00
Burnet County	$42.40	$25.50	$42.40	$110.30
Caldwell County	$61.30	$50.10	$89.10	$200.50
Hays County	$364.57	$338.44	$589.07	$1,292.08
Travis County	$589.14	$442.26	$963.09	$1,994.49
Williamson County	$1,050.00	$650.00	$1,050.00	$2,750.00
Other local funding	$787.60	$453.94	$722.79	$1,964.33
Totals	**$4,037.47**	**$2,828.71**	**$4,903.91**	**$11,770.09**

Source: *CAMPO 2040 Regional Transportation Plan*, May 2015

5.1 *Roadway System*

For the roadway system, the 2010 transportation network for the CAMPO region (calculated in lane-miles) consists of 12,452 lane-miles of roadways with freeway and tollway lanes comprising 10.0 percent of the system (see **Table 7**). Of the total 2010 system, the freeway lanes account for 855 of the lane-miles (7.1 percent) and 346 of the lane-miles are tolled (approximately 2.8 percent). The anticipated 2040 transportation network for CAMPO would consist of approximately 15,090 lane-miles of roadways with freeway, tollway, and tolled managed lanes comprising 0.06 percent of the system. Of the total system in 2040, the freeway lanes account for 1,054 of the lane-miles (7.5 percent) and priced facilities (toll roads, express, and tolled managed lanes) account for approximately 961 additional lane-miles or 6.4 percent (see **Figure 7**).

Priced facilities are divided into three categories in *CAMPO 2040 RTP*: tollways, express lanes, (see section 6.1.1) and tolled managed lanes. Traditional tollways, such as SH 130, operate on a fixed schedule and fixed rate toll rate. Any roadway user will pay a set fixed rate that does not change by time of day or occupancy. Tolled managed lanes, such as the MoPac Improvement Project, are separate lanes within a highway where the toll rate changes throughout the day based on congestion. **Table 14** details the comparison of the different priced facilities that would be in use during the region to 2040.

Table 14 Priced Facility Variations

Priced Facility Variation	Schedule	Price	Speed Targets	Examples
Tollway	Fixed	Fixed	None	US 183A, Loop 1, SH 130, SH 45 N, and SH 45 SE
Express	Dynamic	Fixed		Future US 290 (Manor Expressway), SH 71 Express Project
Tolled Managed	Dynamic	Volume Based	None	MoPac Improvement Project

Table 15 and **Figure 5** and **Figure** 7 show the major planned roadway projects included in the CAMPO 2040 Regional Transportation Plan. For priced facilities, the type of tolling (fixed versus dynamic) is also noted.

Table 15 Planned Projects on Major Roadways

#	Location	County	Limits	Type of Improvement	Type of Tolling
1	IH-35 - Hays County	Hays	SH 45 SE -Posey Rd	IH-35 Improvement Projects	None
2	IH-35 - Travis County	Travis	SH 45 N - SH 45 SE	IH-35 Improvement Projects	None
3	IH-35 - Williamson County	Williamson	SH 45 N - SH 195 N	IH-35 Improvement Projects	None
4	US 183 N	Travis	Loop 1 N - RM 620	2 Express Lanes in each direction	None

#	Location	County	Limits	Type of Improvement	Type of Tolling
5	US 183 S	Travis	Boggy Creek - SH 71	Completion of environmental document, traffic and revenue studies, final engineering, ROW acquisition, utility relocation and construction for 6 tolled mainlanes and 4 to 6 continuous, non-tolled access road lanes and operational improvements on SH 71.	Fixed
6	US 183 S	Travis	US 290 - Boggy Creek	Completion of environmental document, traffic and revenue studies, final engineering, ROW acquisition, utility relocation and construction for 6 tolled mainlanes and 4 to 6 continuous, non-tolled access road lanes, project may be phased.	Fixed
7	US 290 E Hurricane Evacuation Route	Bastrop	1 mile east of FM 696 - Lee County Line	Reconstruct existing 4-lane undivided rural principal arterial to a 4 lane divided rural principal arterial.	None
8	US 290 W	Travis	RM 1826 - Nutty Brown Rd	Widen to MAD-6	None
9	US 290 W	Travis	West of RM 1826 - Loop 1	Construct 6-lane tolled facility with frontage roads	Fixed
10	US 79	Williamson	IH-35 - A. W. Grimes Boulevard	Reconstruct to a 6 lane divided roadway with sidewalks	None
11	SH 45 SW	Hays / Travis	Loop 1 S - FM 1626	Construction of a 4-lane tolled freeway (Project may be phased; shared use path where feasible	Fixed
12	SH 71	Bastrop	west of Colorado River - east of Loop 150 E	Construct 4-lane freeway with 3-lane frontage roads	None
13	SH 71 W	Travis	Silvermine Dr. to US 290	Construct tolled lanes and frontage road	Fixed

#	Location	County	Limits	Type of Improvement	Type of Tolling
14	SH 80	Caldwell	County Line Road - FM 1979	Widen to 6 lanes with raised median	None
15	SH 80 at Old Bastrop Hwy (CR 266)	Hays	east of Old Bastrop Hwy (CR 266) - east of Old Bastrop Hwy (CR 266)	Construct center left-turn lanes	None
16	SH 95	Bastrop	Loop 230 - Smithville High School	Add continuous turn lane and sidewalks (both sides)	None
17	SH 95	Bastrop	Smithville High School - Loop 230 at Fawcett Street	Construct recommendations from the in-progress SH 95 study. Improvements could include sidewalks, shoulders, turn lanes and drainage improvements	None
18	FM 1100	Bastrop	Travis County Line - SH 95	Construct MAD-4	None
19	FM 1626	Hays	0.2 miles south of Brodie Ln to FM 967	Widen to 4-lane divided	None
20	FM 1626	Hays	FM 967 - FM 2770	MAD-4	None
21	FM 1626	Travis	IH-35 - Manchaca Road	Widen to MAD-4	None
22	FM 1626	Travis	Manchaca Rd - 0.2 miles south of Brodie Ln	Improve to MAD-4	None
23	FM 1660 Realignment	Williamson	800' south of CR 101 - US 79	Construct new location 2-lane roadway	None
24	FM 2304 (Manchaca Rd)	Travis	FM 1626 - Ravenscroft Drive	Improve to MAD-4	None
25	FM 969	Travis	FM 3177 - Hunters Bend	Improve to MAD-4	None
26	FM 973	Travis	FM 812 - US 183	Widen to MAD-4	None
27	FM 973	Travis	FM 973 Relocation - SH 71 E	Widen to MAD-4	None
28	FM 973	Travis	SH 71 E - FM 812	Widen to MAD-4	None
29	Loop 1	Travis	Cesar Chavez - Slaughter	2 Express Lanes in each direction - MoPac South	Dynamic
30	RM 12 and FM 3237 Intersection Improvement	Hays	RM 12 - north and south of FM 3237 - FM 3237 - east of RM 12	Engineering, design and right-of-way purchase to add turn lanes and pedestrian crossings	None
31	RM 1431	Williamson	Sam Bass - IH-35	Reconstruct and widen to 6 lane divided	None

#	Location	County	Limits	Type of Improvement	Type of Tolling
32	RM 1431 / Whitestone Blvd Reconstruction and Widening	Williamson	Cottonwood Creek Trail - Market Street	Reconstruct and widen to a six lane arterial roadway with a raised center median, turn lanes, wide outer lanes and shared use path. The project will also reconstruct and elevate the Spanish Oak Creek bridge	None
33	RM 1826*	Hays	SH 45 SW - Nutty Brown Rd	Improve to MAD-4	None
34	RM 1826*	Travis	Slaughter Lane - SH 45 SW	Improve to MAD-4	None
35	RM 620	Travis	Anderson Mill Rd. - SH 71 W	Widen to MAD-6	None
36	RM 620	Williamson	Pecan Park Blvd - Anderson Mill Road	Improve to MAD-6	None

Source: CAMPO 2040 Regional Transportation Plan May 2015

Tolled managed lanes are proposed as part of the expansion or rehabilitation of 36 existing non-priced roadway projects. Drivers will have the choice of paying a toll to use the tolled managed lanes or traveling on non-priced general purpose lanes or frontage roads. The tolls collected from the tolled managed lanes will help finance the expansion/rehabilitation and operation of existing roadways (including priced facilities).

In addition to the major roadway improvements, *CAMPO 2040 Regional Transportation Plan* identifies smaller, regionally significant roadway that include major improvements (additions of lanes or new roadways) throughout the plan years. These improvements do not include any priced facilities and do not include any type of tolling element. **Table 16** lists these improvements.

Table 16 Planned Projects on Regional Arterials

#	Location	County	Limits	Type of Improvement
1	A.W. Grimes Blvd	Williamson	Westinghouse Road - University Boulevard	Reconstruct to a MAD-4 with sidewalks
2	Anderson Mill Rd	Travis / Williamson	RM 1431 - Lime Creek Rd	Improve roadway to MAD-4
3	Anderson Mill Rd	Travis / Williamson	Zeppelin Drive - Cypress Creek Rd	Widen to MAD-4
4	Arterial A	Travis	US 290 - Samsung Blvd	New MAD-4, new alignment

#	Location	County	Limits	Type of Improvement
5	Arterial A (Kenny Fort Blvd)	Williamson	Joe DiMaggio Blvd - 1000' S of US 79	Widen from 2 lanes with median to 6 lanes with median
6	Center St	Hays	Old Stagecoach - FM 150	Widen to 4 lanes
7	Congress Ave	Travis	North Bluff Dr - South Boggy Creek	Improve to MAD-4
8	Frate Barker Rd	Travis	Brodie Ln - Manchaca Rd	Widen to MAD-4
9	McCarty Ln / CR 233	Hays	FM 2439/Hunter Rd - IH 35	Improve to MAD-4
10	McNeil Dr	Travis	US 183 - Howard Ln	Widen to 6 lanes
11	McNeil Rd	Travis	700' north of SH 45 - McNeil Dr/Howard Ln	Improve to MAD-6
12	Old FM 2001	Hays	FM 2001 - Old Goforth Rd.	Reconstruct with TWLTL and sidewalks
13	Old Settlers Boulevard	Williamson	Sam Bass Road - Chisholm Trail Road	Widen to a MAD-4 with sidewalks
14	Pleasant Valley Rd	Travis	Existing Pleasant Valley Rd - SH 71	New MAD-4
15	Post Rd / CR 140	Hays	IH-35 - Aquarena Springs Rd	Improve to MAU-4
16	Robert Light Blvd	Hays	FM 1626 - FM 2770	New 4-lane divided
17	Robert Light Blvd	Hays	FM 2770 - Main St/FM 967	New 4-lane divided with railroad overpass
18	Ronald Reagan Blvd	Williamson	at IH-35	Construct new 6-lane Overpass
19	Rundberg Ln	Travis	FM 1325 - Metric Blvd	New MAD-2
20	Wild Horse Connector	Travis	FM 973 - Parmer LN	New MAD-4

Source: CAMPO 2040 Regional Transportation Plan, May 2015,

6.0 Dynamic Tolling

The Central Texas Regional Mobility Authority (CTRMA) is constructing the CAMPO region's first managed lanes that will use dynamic toll pricing as part of the MoPac North Improvement Project. Tolls will vary to ensure at least a free flow. Toll rates rise if the lane becomes overcrowded and drop when it is clear. Researchers at the University of Texas at Austin Center for Transportation Research (CTR) propose Credit-Based Congestion Pricing. Vehicles would have windshield stickers (TX Tags or a compatible device) loaded with a monthly travel allowance. Tolls would be variable, congestion-based, and deducted from the allowance amount. If a vehicle's travel along congested toll roads exceeds its allowance amount, the account receives a bill for the overage. Tolled managed lanes are separate lanes within a highway that charge a toll but the cost varies based on time-of-day, vehicle occupancy, or other operational strategies. This type of pricing is also called value, congestion, or dynamic pricing. This pricing strategy establishes higher rates during the peak periods and lower rates during off-peak travel times. Peak toll rates would be set to maintain a free flow of traffic, thus offering motorists a reliable and congestion-free trip in exchange for the higher peak toll. This can encourage the use of toll facilities more during off-peak periods. These effects are anticipated to help manage congestion and improve regional air quality. Transit vehicles and certain other exempt vehicles (e.g., emergency response vehicles) would not be charged a toll, which would allow riders and users to take advantage of the reliability and predictability of tolled managed lanes. This can be an incentive to facilitate increased transit usage. Commuters who travel on the tolled managed lanes will be able to benefit from faster and more reliable travel times through the use of value pricing.

6.1 *What Are Express Lanes?*

Express Lanes are special lanes that will be separated from the three existing non-tolled lanes by special striping and white plastic sticks. Express Lanes provide public transit buses, registered van pools, and emergency vehicles with a reliable, uncongested, non-stop, toll free route to their destination. Because public transit buses, registered vanpools and emergency vehicles will not use up all of the space in the Express Lanes, individual drivers will be permitted to use the lane if they choose to. To keep the Express Lanes from becoming congested, individual drivers are charged a variable toll that increases when traffic is heavy and goes down when traffic is light. The primary goal is not to generate revenue, but to keep the Express Lane free flowing as much as possible. The MoPac Express Lanes will encourage people to carpool because they have the option to split the cost of the trip among each occupant in the vehicle. The Express Lanes are not intended for everyday use. There will not be enough capacity to accommodate everyone who might want to use them. Individual drivers will have to decide whether any particular trip is worth the toll being charged at the time they wish to use the Express Lanes. Please see the Access Points page found on the MoPac Improvement Project website (http://www.mopacexpress.com/express-lanes/access-points.php) to see how and where you can access the Express Lanes after they are constructed.

6.1.1 Focus on Public Transit

Right now, Express Buses and vanpools sit in traffic with all other vehicles on MoPac, but with the construction of the Express Lanes, these transit vehicles will be able to bypass congestion and get to their destination reliably on time.

6.1.2 Moving More People, Not Just Vehicles

- Opportunity for expanded Capital Metro Premium Express Bus service
- Incentive for greater participation in Capital Metro's Ride Share vanpool program

- See more at: http://www.mopacexpress.com/express-lanes/index.php

7.0 Public Transportation

Public transportation, and especially high-capacity public transportation, can move more people in a traffic-lane sized area than can individual cars. High-capacity transit is designed to move more people than a typical bus. This is generally accomplished by fewer stops, higher speeds, and more frequent service. Capital Metro, the City of Austin, and Lone Star Rail District, are exploring options for high-capacity transit in the capital area.

7.1 *Expanded Transit Service*

Service Plan 2020 is a comprehensive analysis of the entire Capital Metro bus system and provides a roadmap for growth between 2010 and 2020. *Service Plan 2020* guides the agency's actions to meet the current and projected transit needs through new and revised local bus routes, new MetroExpress bus routes and park-and-ride facilities, and a new frequent route network including MetroRapid. *Service Plan 2020* recommendations also seek to improve the transit system in the following ways: design bus services to better meet the needs of the region; increase transit ridership to mitigate traffic congestion and improve air quality; and increase cost effectiveness of bus operations. Capital Metro has a policy to update its Service Plan every five years to respond to growth, changing demographics, and transit market demands. A new Service Plan will be developed in 2015 to address these changes, including the recent additions of MetroRail and MetroRapid. The new Service Plan will also incorporate elements of the P*roject Connect Long Range Transit Plan* that fall within the agency's designated service area.

Capital Metro is working to extend transit services to cities in the capital area that do not dedicate sales tax money to support the system. Through their Service Expansion Policy, adopted in 2014, Capital Metro defines five approaches for service to jurisdictions within the Austin urbanized area that are not currently members of Capital Metro. These options are:

1. Join Capital Metro: A municipality, county, or portion of a county may hold a vote to join Capital Metro and support it with a 1 percent sales tax;
2. Contract for Service: A jurisdiction may enter into a contract with Capital Metro to receive transit services;
3. Form a Local Government Corporation (LGC): A jurisdiction or group of jurisdictions, and Capital Metro may form an LGC for the purpose of overseeing transit initiatives;
4. Become an FTA Sub-Recipient: A jurisdiction can contract directly with a service provider and funnel Federal Transit Administration (FTA) funding reimbursement requests through Capital Metro; or,

5. Become a Direct Recipient: A qualifying jurisdiction may receive federal funds directly.

Transit improvements included in this plan, such as the implementation of express bus service to Jarrell, Liberty Hill, and Wimberley, will provide new public transportation connections to Centers throughout the CAMPO area. Upgrades to existing service in the densest part of the area will increase capacity for travel via public transportation. Planned Bus Rapid Transit (BRT) projects will improve reliability and travel time for patrons. A complete list of planned projects can be found in Chapter Five.

7.1.1 Project Connect

Project Connect is the proposed high-capacity transit system plan for central areas of the CAMPO region. The Transit Working Group, a committee of the CAMPO Transportation Policy Board, worked with regional partners both inside and beyond the Capital Metro service area to develop a long-range vision for Regional Rail, Commuter Rail, Urban Rail, Bus Rapid Transit, and Bus on Express Lanes. It will take a variety of jurisdictions and service providers to implement Project Connect. Several projects developed through Project Connect are included in the *2040 Plan* and outlined in Chapter Five. Additional information can be found online at ProjectConnect.com.

7.1.2 Lone Star Rail District

The Lone Star Rail District (LSRD) is an independent special district authorized by the Texas Legislature. It was established in 2002 to plan, develop, operate, and maintain passenger rail facilities between Georgetown and San Antonio along the existing Union Pacific freight rail corridor. LSRD is working with Union Pacific to relocate its through-freight rail traffic to a new corridor east of IH 35 from Taylor to Seguin. In 2014, LSRD began conducting environmental studies on the proposed freight bypass as part of the federal environmental approval process on the Lone Star Regional Rail Project. LSRD anticipates initial passenger service to begin by 2020. More information can be found at lonestarrail.com

8.0 Management and Operations

CAMPO's prioritization process looks at improving operations and removing trips from the system without significant capital investment. The regional CMP incorporates several strategies to help address congestion:

1. **Active Transportation** – Also known as bicycle and pedestrian, these modes offer additional transportation options to improve our existing transportation system efficiency and cost effectiveness through a variety of systematic enhancements, while providing benefits to all road and transit users. *CAMPO 2040 Regional Transportation Plan* has identified approximately $1.5 billion of potential funding for bicycle and pedestrian improvements. Some examples of this are, the regional veloweb system would be expanded from the existing 237 miles to 1,728 miles by 2040. Also the Central Texas Regional Mobility Authority is constructing bicycle- and pedestrian-friendly facilities as part of every project, whenever feasible. This includes the design and implementation of Shared Use Paths (SUP), sidewalks and cross-street connections. To date, on projects currently open to traffic (183A and US 290 - Manor Expressway), the Mobility Authority investment in bicycle and pedestrian accommodations totals $11 million. $31 million

more is invested in projects under construction (MoPac and 183S). Additional investments are planned for projects currently under environmental study (MoPac South, Oak Hill Parkway, and 183 North).

2. **Travel Demand Management (TDM)** – TDM promotes strategies that reduce the demand for drive-alone travel on roadways thus allowing traffic to move more efficiently. Examples of strategies include rail and bus transit, ridesharing options like carpools and vanpools, and bicycling, which reduce the demand on the roadway capacity. *CAMPO 2040 Regional Transportation Plan* includes $507 million for TDM strategies.
3. **Transportation System Management (TSM)** – Some examples of system management and operation improvements include traffic signal enhancements, removal of freeway and arterial bottlenecks, and ITS deployment. *CAMPO 2040 Regional Transportation Plan* includes $1.7 billion for non-ITS TSM strategies.
4. **ITS** – ITS, a subset of TSM, integrates advanced communications technologies into transportation infrastructure and in vehicles to improve travel conditions on the transportation system. *CAMPO 2040 Regional Transportation Plan* estimates the capital costs for regional ITS implementation at $383 million with an annual operating cost of $39 million at full system implementation.
5. **Transportation safety and security** – *CAMPO 2040 Regional Transportation Plan* includes various regional safety programs to help improve reliability, efficiency, and maintenance of the transportation system. *CAMPO 2040 Regional Transportation Plan* includes $405.7 million for safety and security strategies.

8.1 *Regional toll system effects*

The implementation of the regional toll system has the potential to affect land-use, air quality, and EJ populations. These topics are discussed in the following sections.

8.2 *Land-use*

Where people live and need to go influences travel patterns and traffic congestion. Altering land use can affect travel demand and the need for improvements to different elements of the transportation system. For example, when different uses are closer together, people are more likely to walk or bicycle, thereby increasing demand for sidewalks, safe street crossings, and shade.

8.3 *Centers definition*

CAMPO first used the concept of Centers as a transportation strategy in the 2035 Plan, building on the outcome of the Envision Central Texas process. Centers are now a central theme in the comprehensive plans of many jurisdictions in the CAMPO area. In the 2035 Plan, Centers were identified conceptually with a dot on a map and categorized as small, medium, and large. During development of the 2040 Plan, CAMPO worked with jurisdictional partners to define boundaries for Centers consistent with local plans. Centers, designated by the Transportation Policy Board, are locally-approved planning districts, either nodal- or linear-based, supported by their jurisdictions and other implementing agencies that are:

- A framework for regional multi-modal transportation corridor and network planning;

- Built and planned mixed-use environments that possess the density, diversity, and design attributes that produce lower vehicle-miles traveled and support transit, bicycling, and walking; and
- Incorporating, at the discretion of the local government, the following CAMPO Centers Guidelines and Notes:
    - Activity Density – Total population and employment per acre based upon the maximum development potential of selected areas in approved local land use or development plans that meet the recommended target ratio of jobs to population.
    - Transit – 'High Capacity Transit' modes include existing or planned Regional Rail, Commuter Rail, Urban Rail, Bus-Rapid Transit, or Managed Lanes. 'Local' transit is existing or planned local bus service provided by Capital Metro, CARTS, or another provider.
    - Village Centers – Incorporated cities outside of the 2010 Austin and San Marcos Census Urbanized Areas that would otherwise not have a Community or other Center may designate a single Center that meets this Activity Density threshold.
    - Centers Clusters – Multiple Centers that are adjacent or connected along a major transportation corridor can be designated as a Centers Cluster.

Each Center will develop based upon the existing built environment and locally approved plans. In this way each Center will ultimately develop in a way that is tailored to the desires and characteristics of the local community, and many of the Centers shown on the map will evolve differently over time. There are expected to be some common features among Centers, once they reach maturity. They would be:

- More intensely developed than the surrounding areas;
- Pedestrian-oriented (many destinations within walking distance, safe and convenient pedestrian facilities);
- A mix of employment, housing, and retail; and,
- Connected to surrounding neighborhoods and the region by a range of transportation options, including public transportation, highways, arterials, and bicycle and pedestrian connections (the mix of modes would be deter-mined by the overall context of the location).

8.3.1 **Centers benefits**

Strategic planning of major transportation investments. Defining areas of focused growth supports the identification of priority transportation corridors, and helps in planning major additions to the regional network including highway improvements, rail, and fixed guideway public transit.

8.3.1.1 ***Demand management***

Encouraging a mixed-use, higher-density land use pattern supports the ability of residents to live, work, and play in the same area and can reduce demand on the regional roadway network by allowing more trips to be made via alternatives to single occupant vehicles, and encouraging trips that don't use the transportation network.

8.3.1.2 *System efficiency*

Encouraging higher density development in specific locations can allow the region to better meet future needs within available transportation resources, by developing a transportation system that costs less per capita.

8.3.1.3 *Improved accessibility and equity*

Encouraging a land use pattern that can be adequately served by alternatives to the private automobile including transit, biking, and walking improves the accessibility and equity of the transportation system by providing everyone with the ability to access the region's opportunities.

8.3.1.4 *Improved connectivity and transportation choice*

Encouraging development to cluster in activity centers can increase the overall connectivity of the transportation system, particularly within Centers, and can increase choices among transportation modes and routes.

8.3.1.5 *Improved Safety*

Encouraging a mixed use, higher density land use pattern can improve the overall safety of the system by improving the safety of pedestrian and bicycle facilities and by helping to reduce the amount of time that individuals spend in private vehicles, reducing their exposure to vehicle crashes.

8.3.1.6 *Economic Benefits*

Supporting local and regional economic vitality and competitiveness strengthens fiscally sustainable communities.

8.3.1.7 *Supporting Local Plans*

Providing a regional plan that encompasses and integrates local visions for future land use helps local jurisdictions.

In 2009 CAMPO commissioned a study by researchers at the University of Texas at Austin to quantify the potential changes to travel in the CAMPO region (then five counties) in mixed use areas. The researchers worked with local planners to identify mixed use areas throughout the five county region. They then used data from the 2005 Austin Activity Travel Survey to calculate the influence of mixed-use areas on travel. They found that mixed-use areas reduce demand on the transportation system because:

There is a 40 percent higher internal capture rate in mixed use areas (a trip begins and ends in the same traffic analysis zone);

- There are more zero or one-car households in mixed-use areas;
- Households in mixed-use areas travel on average a shorter distance per day; and,
- Network connectivity and the presence of sidewalks also influence mode choice in mixed-use areas.

While we cannot quantify the changes that may happen, this study indicates that in the CAMPO

region, mixed-use areas are already producing the desired benefits of shorter trips and more trips by non-automobile modes.

8.4 *Centers implementation*

CAMPO will develop a formal designation process for Centers and include them in our annual Growth Monitoring Report to track changes in those areas. Also, examples of Centers implementation can be found in local plans. The Travis County Commissioners Court approved its Land Water and Transportation Plan (LWTP) in December 2014. The LWTP, which was completed by the County's Transportation and Natural Resources Department, provides a framework for protecting land and water resources, building a comprehensive transportation system and efficiently delivering related services to the unincorporated area of Travis County. The plan looks to balance development with conservation while expanding options people have when choosing where to live, work, and play and how they travel. Part of those options include encouraging growth that follows CAMPO's Centers supported by transportation corridor development that accommodates multiple modes. The plan and more information on the LWTP can be found at https://www.traviscountytx.gov/tnr/lwtp.

9.0 Environmental Justice and Title VI

The CAMPO 2040 Regional Transportation Plan supports a transportation system that meets the needs of all users. Through its EJ analysis CAMPO works to ensure that traditionally under-represented groups such as racial and ethnic minorities and low-income residents are involved in decision-making about the future development of the transportation system and that negative impacts of transportation projects do not disproportionately affect these residents.
The 1994 Presidential Executive Order 12898 directed every federal agency to "make achieving EJ part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." As a recipient of federal funds, CAMPO is required to comply with this mandate and with Title VI of the Civil Rights Act of 1964. Title VI prohibits discrimination on the basis of race, color, or national origin by requiring that no person in the U.S. shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.

9.1 *Environmental Justice Areas*

CAMPO uses demographic data compiled by traffic analysis zones (TAZs) to identify EJ areas. EJ TAZs must meet one or more of the following thresholds:

- "Low-income" TAZs
    - Have at least 50 percent of the population earning less than 80 percent of the county median family income and/or,
    - Have at least 25 percent of the population earning an income below the national poverty thresholds for a family of three ($17,373 in 2010, U.S. Census Bureau).

- "Minority" TAZs
    - Have less than 50 percent of the population identifying themselves as "White, non-Hispanic".

CAMPO used the following data from the U.S. Census Bureau to identify EJ TAZs:

- 2010 median family income levels;
- 2010 poverty data; and,
- 2010 ethnicity data.

9.2 *CAMPO 2040 Plan Environmental Justice Analysis*

CAMPO analyzed the 2040 transportation system to determine whether the system as envisioned would cause disproportionate negative impacts for the EJ population. Some of the road improvements include a tolling component, which may disproportionately burden low-income individuals. The plan also includes several Centers in EJ areas, focusing growth and economic opportunity. **Figure 8** shows the EJ areas and the planned 2040 transportation system.

9.3 *Travel Time Analysis*

Travel time is one measure of equity in transportation. The distance traveled in a specified amount of time should be roughly the same whether the trip originated in an EJ area or not. If EJ areas have a significant time or distance disadvantage compared to non-EJ areas, then there are likely transportation system inequities.

CAMPO analyzed travel times using output from the travel demand model. CAMPO selected representative sample EJ and non-EJ zone pairs in Bastrop, Burnet, Caldwell, Hays, Travis, and Williamson counties. CAMPO selected EJ zones with high populations and non-EJ zones based on comparable distance from major roads and similar population as the EJ zones. CAMPO calculated five-minute travel time intervals from five to 30 minutes for both the EJ and non-EJ zones for each zone pair, resulting in the area (in square miles) covered for each five-minute travel interval. CAMPO compared the area covered by each of the time intervals for each zone pair to determine whether there were any significant differences between the two. Since most people tend to think of their trips in five minute intervals, the area covered by a five-minute interval for the EJ zone of the zone pair is used to determine significant differences. If the area covered by an EJ zone five-minute interval is one half or less of the area covered by a non-EJ zone five-minute interval, then the EJ zone is initially determined to have a significant travel time disadvantage.

Results of the travel time analysis for 2010, 2040, and 2040 Priced Facility No Build (all recommended transportation (roadway and transit) facilities in *CAMPO 2040 Transportation Plan* except proposed roadway facilities with any priced elements (built after 2010) with year 2040 demographics), did not identify any significant differences in travel times between EJ and non-EJ zones. This finding indicates that implementation of the 2040 transportation system would not cause the EJ population any disproportionate negative impacts in terms of travel time.

9.4 *Mobility and Accessibility*

Mobility is the potential for movement or the ability to travel from one place to another. Accessibility measures how well the transportation system provides access to locations and opportunities. Factors that impact accessibility include the cost in both time and dollars and the number of choices available to reach a location. Accessibility has a direct impact on quality of life. For this reason the performance characteristics focus on measuring accessibility versus mobility. As part of the regional commitment to providing a transportation system that is equally accessible and beneficial to all populations of the region, CAMPO performed a system-level analysis during the development of *CAMPO 2040 Regional Transportation Plan* on the proposed transportation improvements included in the:

- 2040 network (all *CAMPO 2040 Regional Transportation Plan* recommended roadway and transit facilities with year 2040 demographics from the *2040 Demographic Forecast*)
- 2040 no build network (2010 roadway and transit facilities with year 2040 demographics from the *2040 Demographic Forecast*)

Please see Chapter 4 of *CAMPO 2040 Regional Transportation Plan* for more discussion of the methodology and results for the EJ analysis.

Table 17 shows the results of the analysis included in *CAMPO 2040 Regional Transportation Plan*. This analysis shows the 2040 network would provide protected populations access to 200 percent more jobs accessible within 30 minutes by car and 187 percent more jobs accessible within 30 minutes by transit in the future when compared to the 2010 network. Non-EJ populations would also experience a 200 percent increase in the number of jobs accessible within 30 minutes by auto and a 191 percent increase in the number of jobs within 30 minutes by transit compared to the 2010 network. In comparison to non-EJ populations, these results show a less than one percent decrease in access to jobs for protected classes by vehicles. For jobs accessible by transit, non-protected classes show an increase of less than one percent than EJ classes.

Table 17 CAMPO 2040 RTP Accessibility and Mobility Performance Measures

Measure	Protected			Non-Protected		
	2010 Network	2040 Network	2040 Priced Facility No Build	2010 Network	2040 Network	2040 Priced Facility No Build
Number of jobs accessible within 20 minutes by automobile*	759,084	2,289,521	2,284,916	774,786	2,324,736	2,324,736
Percent change from 2010 network		202%	201%		200%	200%
Number of jobs accessible within 30 minutes by automobile*	773,860	2,319,728	2,319,342	774,786	2,324,736	2,324,736
Percent change from 2010 network		200%	200%		200%	200%
Number of jobs accessible within 20 minutes by transit*	539,887	1,551,010	1,551,010	534,436	1,553,189	1,553,189
Percent change from 2010 network		187%	187%		191%	191%
Number of jobs accessible within 30 minutes by transit*	539,887	1,551,010	1,551,010	534,436	1,553,189	1,553,189
Percent change from 2010 network		187%	187%		191%	191%
Percent of lane-miles congested	6.8%	27.1%	25.9%	7.1%	37.3%	36.3%
Percent change from 2010 network		298%	280%		423%	409%

9.5 *Congestion Characteristics*

Road congestion results when supply is not sufficient to meet travel demand. Congestion typically occurs on weekdays during the morning and evening peak periods when most people are going to work and returning home. CAMPO monitors congestion during the morning and evening peak periods through the congestion management process (CMP). In 2012, CAMPO collected and analyzed cell-phone and global positioning system (GPS) data on 2,400 centerline miles of roads in the region to evaluate the region's peak-period congestion levels.

The CMP data showed that, region-wide, 21 percent of the roads monitored are moderately to severely congested in the morning peak and 26 percent of the roads monitored are moderately to severely congested in the evening peak. Roads in the more urbanized counties are more congested; in Hays, Travis and Williamson counties combined, 26 percent of the roads monitored are moderately to severely congested in the morning peak and 33 percent are moderately to severely congested in the evening peak. In Travis County, 37 percent of the roads monitored are congested in the morning peak and 44 percent are moderately to severely congested in the evening peak. An analysis of Travis County freeways indicates that 44 percent of the freeways

monitored are moderately to severely congested in the morning peak and 61 percent are moderately to severely congested in the evening peak. More information on the CAMPO CMP and data analysis is found in CAMPO's *2012 Roadway Congestion Analysis: Performance Report and Information System.*

9.6 *Interstate Highway 35—One of the Most Congested Roads in Texas*

Interstate Highway (IH) 35 bisects the CAMPO region, passing through Williamson, Travis, and Hays counties and connecting several municipalities. More than 200,000 vehicles travel on segments of IH 35 in Travis County every day. IH 35 in Travis County consistently ranks near the top of the Texas Department of Transportation's (TxDOT) list of the 100 most congested road segments in the state. Segments of IH 35 in Williamson County also rank in the top 100 most congested segments. In 2013, IH 35 from US 183 to SH 71/US 290W was the most congested road segment in Texas. In 2014, the same segment was the second most congested road segment overall and the most congested road segment for freight. Congestion is not the only concern; the accident rate on IH 35 in the CAMPO region is higher than the state average. State and local officials, the business community, and the general public all identify IH 35 as the region's biggest transportation problem and agree that it must be improved now. Other highly congested roads in the capital area include US 183, MoPac (Loop 1), US 290E, and Loop 360.

9.7 *Performance Measures*

CAMPO evaluates potential future transportation scenarios by measuring how they "perform" against current conditions and a no-build or "do nothing" scenario. Twenty-two performance measures assess how well a modeled network meets *CAMPO 2040 Plan* goals. Appendix G contains a matrix of performance measures and results for the 2010 baseline, no-build, and preferred scenarios.

9.8 *Modeling Results*

The results of all the modeling runs, or forecasts, indicate that traffic congestion will become an increasingly challenging issue by 2040 due to rapid population growth and a reasonable assumption of limited funding for transportation improvements. The model is only capable of assessing the impact of projects that alter the capacity of the system. It cannot predict behavioral changes to travel patterns. Regional mobility will be improved both by building or improving our transportation infrastructure and by reducing demand on the transportation system. To specifically analyze the transportation effects of the priced facilities on EJ populations, regional traffic was modeled under the three transportation network conditions:

- 2010 network (2010 roadway and transit facilities with 2010 demographics)
- 2040 network (all *CAMPO 2040 Transportation Plan* recommended roadway and transit facilities with year 2040 demographics)
- 2040 Priced Facility No Build network - *PFNB* [all recommended transportation - roadway and transit - facilities in *CAMPO 2040 Transportation Plan* except proposed roadway facilities with any priced elements (built after 2010) with year 2040 demographics)]

The daily VMT on each roadway classification under the three conditions is shown in **Table 18**. In the 2010 network there are approximately 5.1 million trips per day on the roadway system. Freeway facilities, (**Table 7**), which comprise 2.8 percent of the total roadway lane-miles, carry 11.4 percent of the daily VMT. Priced (toll road) facilities carry 3.3 percent of all VMT.

Table 18 Daily Vehicle Miles Traveled

Facility Type	2010 Network		2040 Network		2040 Priced Facility No Build Network	
	Daily VMT	Percent	Daily VMT	Percent	Daily VMT	Percent
Interstate	9,365,825	21.2%	13,337,360	13.5%	13,514,770	13.8%
Freeways	5,021,372	11.4%	8,991,952	9.1%	8,975,888	9.2%
Major Arterials	18,093,458	40.9%	40,286,224	40.7%	41,315,675	42.2%
Minor Arterials	4,791,788	10.8%	10,855,656	11.0%	11,041,700	11.3%
Collectors	873,262	2.0%	2,689,996	2.7%	2,761,214	2.8%
Locals	530,366	1.2%	1,019,283	1.0%	1,046,034	1.1%
Direct Connectors	260,019	0.6%	494,833	0.5%	463,599	0.5%
Ramps	708,750	1.6%	1,169,664	1.2%	1,118,362	1.1%
Frontage Roads	3,142,328	7.1%	7,156,301	7.2%	7,317,974	7.5%
Toll Lanes	1,215,286	2.7%	8,632,398	8.7%	8,785,543	9.0%
Toll Direct Connectors	118,373	0.3%	531,721	0.5%	539,598	0.6%
Toll Ramps	104,167	0.2%	498,470	0.5%	500,764	0.5%
Managed Lanes	-	0.0%	3,228,730	3.3%	494,987	0.5%
Managed Lane Ramps	-	0.0%	109,878	0.1%	11,981	0.0%
Daily VMT - Total	**44,224,994**	**100.0%**	**99,002,466**	**100.0%**	**97,888,087**	**100.0%**
Daily Vehicle Trips - Total	**5,114,757**		**11,667,739**		**11,660,964**	

Source: CDM Smith

Under the 2040 PFNB network, the total number of daily trips increases to approximately 11.7 million because of projected population increases. Capacity constraints increased the proportion of VMT on priced facilities slightly (both toll roads, express, and tolled managed lanes) by 7.3 percent and decreased on freeways by 9.6 percent in comparison to the existing 2010 network. All roadway classifications have a higher VMT under this condition than under the 2010 network.

The 2040 network has over 11.6 million trips per day, only 6,775 more than under the 2040 PFNB network. The combined proportion of VMT on freeways and priced facilities is 75.3 percent compared to 45.9 percent under the 2040 PFNB network. The greater VMT on freeways and priced facilities under the 2040 network would reduce the amount of VMT on major arterials, frontage roads, and collectors compared to the 2040 PFNB network.

A comparison of the average loaded speed per roadway classification is shown in **Table 19**. The average loaded speed is the average speed a vehicle travels (including congestion delays) along a specific roadway classification and is calculated by dividing the total VMT by the total vehicle hours traveled. The results show that the 2040 network would result in a slight increase in daily roadway speed for most roadway classifications compared to the 2040 PFNB network. The average loaded speeds for the 2040 network would be lower than the 2010 network because of the expected population increase of over 42 percent (see **Table 6**).

Table 19 Average Loaded Speed (mph)

Roadway Classification	2010 Network			2040 Network			2040 Priced Facility Network		
	AM	PM	Daily	AM	PM	Daily	AM	PM	Daily
Interstate	51.8	46.6	53.6	35.7	31.0	40.3	32.1	26.8	36.5
Freeways	45.5	39.2	47.6	35.9	30.0	39.5	31.8	26.7	36.1
Major Arterials	39.5	36.9	40.8	22.7	21.5	27.7	22.1	19.5	26.6
Minor Arterials	39.1	36.5	38.7	23.3	22.3	27.2	22.8	21.5	26.7
Collectors	38.5	37.6	38.7	28.2	26.1	30.2	27.2	24.8	29.5
Locals	29.9	27.5	28.8	21.8	17.9	21.7	21.4	17.6	21.3
Direct Connectors	47.5	43.8	47.5	43.8	42.5	44.9	42.4	41.3	44.0
Ramps	34.7	33.6	34.4	30.9	28.5	30.5	30.7	28.8	30.6
Frontage Roads	41.4	37.8	41.4	30.0	25.2	31.2	27.9	23.5	29.9
Toll Lanes	76.9	76.1	76.9	52.7	44.5	57.3	49.4	41.0	54.6
Toll Direct Connectors	53.6	52.0	53.4	45.4	45.0	47.3	47.3	45.3	48.2
Toll Ramps	38.4	38.4	38.4	32.7	31.6	32.7	32.7	31.6	32.7
Managed Lanes	0.0	0.0	0.0	46.5	40.0	48.7	53.8	50.6	55.7
Managed Lane Ramps	0.0	0.0	0.0	57.2	56.6	57.8	62.6	62.8	63.5

Source: CDM Smith

Table 20 shows a comparison of the congestion levels during the morning peak period for the three analysis conditions. The morning peak period was used because it best represents travel to work; the evening peak period includes more discretionary travel. When comparing the 2040 and the 2040 PFNB network to the 2010 network there is an overall average increase in congested lane miles of 9.2% and 10.8% respectively and an overall average increase in severe congested lane miles of 4.0% and 4.6% respectively. Non-Congested lane miles show an overall average increase of 1.1% for 2040 network and decrease by the same percentage for the 2040 PFNB network. Implementing all of the transportation system improvements in the *CAMPO 2040 Regional Transportation Plan*, including the additional priced facilities, is not expected to accommodate the increased travel demand created by an increasing regional population without increasing congestion throughout the roadway network compared to the 2010 network.

Table 20 Morning Peak Period Congestion Levels

Roadway Classification	Congestion Level	2010 Network		2040 Network		2040 PFNB Network	
		Lane-Miles	% by Class	Lane-Miles	% by Class	Lane-Miles	% by Class
Interstate	Non-Congested	514	86.1%	534	56.7%	534	51.7%
	Congested		13.9%		35.0%		39.3%
	Severe Congestion		0.0%		8.3%		9.0%
Freeways	Non-Congested	341	77.6%	521	64.7%	507	62.6%
	Congested		22.0%		30.8%		30.8%
	Severe Congestion		0.4%		4.5%		6.6%
Major Arterials	Non-Congested	4,558	96.8%	6,450	83.5%	6,464	81.7%
	Congested		2.8%		10.9%		12.2%
	Severe Congestion		0.4%		5.5%		6.2%
Minor Arterials	Non-Congested	3,846	99.5%	3,599	91.7%	3,599	91.0%
	Congested		0.5%		5.5%		6.0%
	Severe Congestion		0.1%		2.8%		3.0%
Collectors	Non-Congested	1,252	99.4%	1,229	90.5%	1,229	89.6%
	Congested		0.6%		5.4%		5.8%
	Severe Congestion		0.0%		4.1%		4.6%
Locals	Non-Congested	512	97.8%	517	87.2%	517	86.1%
	Congested		2.1%		8.8%		9.3%
	Severe Congestion		0.1%		3.9%		4.6%
Direct Connectors	Non-Congested	26	95.2%	34	86.9%	31	77.6%
	Congested		2.3%		3.8%		9.9%
	Severe Congestion		2.5%		9.4%		12.4%
Ramps	Non-Congested	116	97.6%	1,28	91.3%	128	91.5%
	Congested		2.0%		6.0%		6.4%
	Severe Congestion		0.4%		2.6%		2.1%

Roadway Classification	Congestion Level	2010 Network		2040 Network		2040 PFNB Network	
		Lane-Miles	% by Class	Lane-Miles	% by Class	Lane-Miles	% by Class
Frontage Roads	Non-Congested	852	94.3%	1,119	78.6%	1,105	74.9%
	Congested		4.7%		13.9%		15.1%
	Severe Congestion		1.0%		7.5%		10.0%
Toll Lanes	Non-Congested	346	100.0%	596	83.1%	576	80.5%
	Congested		0.0%		15.1%		15.6%
	Severe Congestion		0.0%		1.8%		3.9%
Toll Direct Connectors	Non-Congested	31	94.6%	52	91.9%	51	91.8%
	Congested		5.4%		1.4%		1.4%
	Severe Congestion		0.0%		6.7%		6.8%
Toll Ramps	Non-Congested	60	100.0%	84	94.8%	83	94.6%
	Congested		0.0%		4.3%		4.9%
	Severe Congestion		0.0%		0.9%		0.5%
Managed Lanes	Non-Congested	-	0.0%	218	75.8%	22	55.8%
	Congested		0.0%		24.0%		44.2%
	Severe Congestion		0.0%		0.2%		0.0%
Managed Lane Ramps	Non-Congested	-	0.0%	11	77.9%	2	93.8%
	Congested		0.0%		19.3%		6.2%
	Severe Congestion		0.0%		2.9%		0.0%

Source: CDM Smith

9.8.1 Travel Time

A travel time comparison for EJ and Non-EJ traffic analysis zones (TAZ) was performed based on the 2010, 2040, and 2040 PFNB networks previously described. The average 2040 network trip times for Non-EJ and EJ TAZs was 30.22 and 18.58 minutes respectively and the 2040 PFNB network was 32.28 and 19.42 percent, respectively). The reduced congestion and improved travel efficiency under the 2040 network allows longer average trip lengths for residents of all TAZs when compared to the 2040 PFNB network. Based on the increase in trip times in both 2040 networks, the average speed during the morning peak period is projected to decrease. The increase in average travel speed for trips from all TAZs was between 4.1 and 4.4percent greater in the 2040 network than in the 2040 PFNB network. The results indicate that trips from both EJ and Non-EJ TAZs receive travel benefits under the 2040 network. **Table 21** shows the changes in average travel time, trip length, and trip speed between morning peak period trips under the 2040 PFNB and 2040 networks as compared to 2010 network.

Table 21 Morning Peak Period Trip Characteristics (Roadway Users)

Roadway Trip Characteristics	All MPO TAZs	EJ Status		EJ TAZ Type		
		Non-EJ TAZs	EJ TAZs	Low-Income	Minority	Low-Income and Minority
Average Vehicle Trip Time (Minutes)						
2010 Network	14.06	18.11	14.17	13.61	0.00	14.35
2040 PFNB Network	19.26	32.28	19.42	25.71	0.00	17.60
Percent Change from 2010	37.0%	78.3%	37.0%	88.9%	0.0%	22.7%
2040 Network	18.44	30.22	18.58	24.57	0.00	16.86
Percent Change from 2010	31.2%	66.9%	0.31	80.5%	0.0%	0.17
Average Vehicle Trip Length (Miles)						
2010 Network	9.90	12.52	9.98	9.76	0.00	10.07
2040 PFNB Network	10.57	14.02	10.64	11.97	0.00	10.29
Percent Change from 2010	6.7%	12.0%	6.6%	22.6%	0.0%	2.1%
2040 Network	10.56	13.67	10.64	11.97	0.00	10.28
Percent Change from 2010	0.07	9.2%	0.07	22.7%	0.0%	0.02
Average Vehicle Trip Speed (mph)						
2010 Network	42.25	41.48	42.25	43.05	0.00	42.11
2040 Network	34.37	27.14	34.34	29.25	0.00	36.58
Percent Change from 2010	-0.19	-34.6%	-0.19	-32.1%	0.0%	-0.13
2040 PFNB Network	32.92	26.06	32.89	27.93	0.00	35.06
Percent Change from 2010	-22.1%	-37.2%	-22.2%	-35.1%	0.0%	-16.7%

Transit users from both EJ and Non-EJ TAZs receive travel benefits from transit improvements included in *CAMPO 2040 Regional Transportation Plan*. **Table 22** shows the total trips, average travel time, trip length, and travel speed for morning peak period transit trips under the 2010 network, 2040 PFNB network, and 2040 network. In all three conditions, trips from EJ TAZs are a majority of transit trips. The 2040 network shows an average transit trip length of 4.5 miles and an average speed of 13.18 mph for all TAZs, so the number of jobs accessible by transit would probably be under this condition. The shorter trip distances and lower speeds for transit trips from EJ TAZs may reflect greater access to and use of transit bus service. Transit users from Non-EJ TAZs may be more likely to use park and ride facilities or rail transit, resulting in longer (in both time and distance) transit trips at higher speeds.

Table 22 Morning Peak Period Transit Trip Characteristics

Transit Trip Characteristics	All MPO TAZs	EJ Status		EJ TAZ Type		
		Non-EJ TAZs	EJ TAZs	Low-Income	Minority	Low-Income and Minority
Total Transit Trips						
2010 Network	85,839	27,019	58,820	19,298	0.00	39,522
2040 Network	155,366	54,668	100,697	32,161	0.00	68,536
Percent Change from 2010	81.0%	102.3%	71.2%	66.7%	0.0%	73.4%
2040 PFNB	155,848	54,733	101,114	32,328	0.00	68,786
Percent Change from 2010	81.6%	102.6%	71.9%	67.5%	0.0%	74.0%
Average Trip Time (Minutes)(in vehicle travel time)						
2010 Network	19.31	21.12	18.53	15.19	0.00	20.18
2040 Network	20.64	22.73	19.58	16.18	0.00	21.21
Percent Change from 2010	6.9%	7.6%	5.7%	6.5%	0.0%	5.1%
2040 PFNB	20.81	22.97	19.72	16.18	0.00	21.42
Percent Change from 2010	7.8%	8.7%	6.4%	6.5%	0.0%	6.1%
Average Trip Length (miles)(in vehicle travel time)						
2010 Network	4.60	5.04	4.41	3.61	0.00	4.81
2040 Network	4.53	5.13	4.23	3.46	0.00	4.60
Percent Change from 2010	-1.4%	1.8%	-4.1%	-4.2%	0.0%	-4.4%
2040 PFNB	4.44	5.01	4.15	3.37	0.00	4.53
Percent Change from 2010	-3.5%	-0.5%	-6.0%	-6.5%	0.0%	-6.0%
Average Travel Speed (mph)						
2010 Network	14.30	14.31	14.29	14.24	0.00	14.31
2040 Network	13.18	13.54	12.97	12.82	0.00	13.02
Percent Change from 2010	-7.8%	-5.4%	-9.3%	-10.0%	0.0%	-9.0%
2040 PFNB	12.80	13.09	12.63	12.50	0.00	12.68
Percent Change from 2010	-10.4%	-8.5%	-11.6%	-12.2%	0.0%	-11.4%

The number of transit trips from low-income TAZs may under-represent the actual usage by low-income populations. On-board surveys conducted by Capital Metro in 2010 showed that 67 percent of transit users had an annual household income below $30,000 and 50 percent of transit users have no car.

Three counties (Caldwell, Hays, and Travis) have a higher proportion of EJ to Non-EJ TAZs. The CAMPO region as a whole has a slightly higher number of Non-EJ zones compared to EJ zones, (1151 to 951 respectively). Examining the counties individually shows the percentage of Non-EJ zones ranging from 96 percent in Burnet to 37 percent in Caldwell. At the regional level the ratio of Non-EJ to EJ zones is 55% to 45% respectively. The majority of the EJ TAZ's consist of both low-income and minority populations while no EJ zones contain minority only

populations.

Table 23 EJ Status by TAZ by Area Type

County	All MPO TAZs	EJ Status		EJ TAZ Type		
		Non-EJ TAZs	EJ TAZs	Low-Income	Minority	Low-Income and Minority
Bastrop	139	84	55	12	0	43
	6.6%	7.3%	5.8%	5.0%	0.0%	6.0%
Burnet	102	98	4	4	0	0
	4.9%	8.5%	0.4%	1.7%	0.0%	0.0%
Caldwell	101	37	64	0	0	64
	4.8%	3.2%	6.7%	0.0%	0.0%	9.0%
Hays	296	131	165	50	0	115
	14.1%	11.4%	17.4%	21.0%	0.0%	16.1%
Travis	998	469	529	93	0	436
	47.5%	40.7%	55.6%	39.1%	0.0%	61.2%
Williamson	466	332	134	79	0	55
	22.2%	28.8%	14.1%	33.2%	0.0%	7.7%
Total	**2102**	**1151**	**951**	**238**	**0**	**713**

Source: CDM Smith

Table 24 shows how travel performance improvements for roadway users under the 2040 network vary based on the land area type. The travel characteristics in suburban areas, where trip lengths and times start at a higher baseline, change by larger absolute and relative amounts than in the urban residential areas. Because the EJ TAZs are predominantly in urban residential areas, the change in average trip times and lengths are smaller than for Non-EJ TAZs in both the 2040 network and the 2040 PFNB network. Persons traveling to/from suburban and rural areas would see a larger relative degradation of service compared to the 2010 network in both the 2040 network and 2040 PFNB network.

Table 24 Average Morning Peak Trip Characteristics by Area Type

	Bastrop	Burnet	Caldwell	Hays	Travis	Williamson
Average Vehicle Trip Time (Minutes)						
2010 Network	24.75	19.77	21.15	19.11	14.64	17.32
2040 Network	30.23	35.89	22.92	38.41	17.36	28.68
Percent Change from 2010	0.22	0.82	0.08	1.01	0.19	0.66
2040 Priced Facilities No Build Network	30.71	38.08	23.58	41.52	18.57	30.15
Percent Change from 2010	0.24	0.93	0.11	1.17	0.27	0.74
Average Vehicle Trip Length (Miles)						
2010 Network	18.68	15.01	16.68	14.02	9.41	13.21

	Bastrop	Burnet	Caldwell	Hays	Travis	Williamson
2040 Network	18.45	18.66	17.64	15.89	9.52	13.09
Percent Change from 2010	-1.2%	24.3%	5.8%	13.4%	1.2%	-0.9%
2040 Priced Facilities No Build Network	18.62	19.24	17.71	16.93	9.41	13.34
Percent Change from 2010	-0.3%	28.2%	6.2%	20.8%	0.1%	1.0%
Average Vehicle Trip Speed (mph)						
2010 Network	45.29	45.55	47.31	44.00	38.57	45.74
2040 Network	36.63	31.20	46.17	24.83	32.92	27.39
Percent Change from 2010	-19.1%	-31.5%	-2.4%	-43.6%	-14.6%	-40.1%
2040 Priced Facilities No Build Network	36.38	30.32	45.07	24.47	30.42	26.56
Percent Change from 2010	-19.7%	-33.4%	-4.7%	-44.4%	-21.1%	-41.9%

Source: CDM Smith

9.8.2 Congestion Levels

The daily congestion levels within the CAMPO region under the 2010, 2040 PFNB, and 2040 networks are shown in **Table 25**. This analysis shows the percentage of TAZs with no, light, moderate, and severe congestion based on EJ status. Both the 2040 network and 2040 PFNB network show much higher congestion levels than the 2010 network. In general, the total percentage of TAZs with no or light congestion and the total percentage of TAZs with moderate to severe congestion is expected to be approximately the same for EJ and Non-EJ TAZs. In all three network conditions EJ TAZs are projected to have fewer no congestion and severe congestion TAZs, but more light to moderate congestion TAZs than the Non-EJ areas. The large differential between EJ and Non-EJ TAZs that have no congestion is expected because most of the No Congestion TAZs are in rural areas where EJ communities are less common. **Figure 3 and Figure 4** show the congestion levels under the 2040 network and 2040 PFNB network, respectively.

Table 25 Environmental Justice TAZ Congestion Levels

		EJ Status		EJ TAZ Type		
Congestion Level	All MPO TAZs	Non-EJ TAZs	EJ TAZs	Low-Income	Minority	Low-Income and Minority
Total Number of TAZs	2,102	1151	951	238	0	713
Percentage of TAZs in the EJ category (within the same column)						
2010 Network						
No Congestion	43.1%	48.0%	37.3%	43.3%	0.0%	35.3%
Light Congestion	27.6%	23.6%	32.4%	23.9%	0.0%	35.2%
Moderate Congestion	22.5%	22.0%	23.1%	20.6%	0.0%	24.0%
Severe Congestion	6.8%	7.1%	6.3%	8.8%	0.0%	5.5%
2040 PFNB Network						

Congestion Level	All MPO TAZs	EJ Status		EJ TAZ Type		
		Non-EJ TAZs	EJ TAZs	Low-Income	Minority	Low-Income and Minority
No Congestion	13.6%	17.6%	8.6%	13.9%	0.0%	6.9%
Light Congestion	16.8%	15.2%	18.8%	13.4%	0.0%	20.6%
Moderate Congestion	27.6%	23.8%	32.3%	32.4%	0.0%	32.3%
Severe Congestion	42.0%	44.0%	39.4%	37.0%	0.0%	40.3%
2040 Network						
No Congestion	14.6%	18.4%	9.9%	14.3%	0.0%	8.4%
Light Congestion	18.6%	16.0%	21.7%	15.5%	0.0%	23.7%
Moderate Congestion	29.2%	27.5%	31.2%	30.3%	0.0%	31.6%
Severe Congestion	37.7%	38.8%	36.4%	36.6%	0.0%	36.3%
Difference (2040 Network minus 2040 PFNB Network)						
No Congestion	1.0%	0.8%	1.3%	0.4%	0.0%	1.5%
Light Congestion	1.7%	0.8%	2.8%	2.1%	0.0%	3.1%
Moderate Congestion	1.5%	3.6%	-1.1%	-2.1%	0.0%	-0.7%
Severe Congestion	-4.2%	-5.2%	-3.0%	-0.4%	0.0%	-3.9%

Between the 2040 network and the 2010 network, the percentage of TAZs with light to moderate congestion is overall slightly higher at 1.7 percent and 1.5 percent, respectively. While severe congestion decreases by a much larger margin of 4.2 percent. For both EJ and Non-EJ zones light to moderate congestion will increase while severe congestion is projected to decrease. The construction of additional facilities in the build network is projected to reduce the percentage of Non-EJ and EJ TAZs with severe congestion by 5.2 and 3.0 percent respectively.

9.8.3 Regional Origin-Destination Analysis

To further analyze the effects of the expansion of the priced facility network in the CAMPO region, a regional origin-destination analysis of the morning peak period (6:30 am to 9:00 am) was performed to show how trips in the three networks are distributed based on the EJ status of TAZs. **Figure 9** through **Figure 11** show the number of daily trips using priced facilities from EJs TAZs.

The origin-destination results for the 2010 network are shown in **Table 26** and **Figure 9.** Ninety-seven point eight percent (930 of 951), EJ TAZs in the 2010 network generate at least one trip that utilizes a priced facility. The EJ TAZs generate a smaller portion of priced facility trips (24.3 percent) than would be expected based only on their share of the regional population (46.2 percent) or total vehicle trips (42.8 percent). A contributing factor to this difference is the average trip length and, as noted in **Table 21**, trips from EJ TAZs average 9.8 miles while trips from Non-EJ TAZs average 12.5 miles in the 2010 network. For EJ TAZs, approximately 2.9 percent of trips would utilize tolled facilities in the 2010 network compared to 6.8 percent for Non-EJ TAZs. This lower percentage of usage is likely a factor of the geographic location of

existing toll roads relative to low-income and minority populations.

Table 26 Morning Peak Period Origin-Destination Results

Data of Interest	All MPO TAZs	EJ Status		EJ TAZ Type		
		Non-EJ TAZs	EJ TAZs	Low-Income	Minority	Low-Income / Minority
2010 Population	1,717,099	924,249	792,850	136,262	0	656,588
		53.8%	46.2%	7.9%	0.0%	38.2%
2040 Population	4,078,460	2,356,717	1,721,743	401,467	0	1,320,276
		57.8%	42.2%	9.8%	0.0%	32.4%
TAZs Utilizing Priced Facilities (at least once per day)						
TAZs in the MPO	2,102	1151	951	238	0	713
		55.1%	44.9%	10.9%	0.0%	33.9%
2010 Network	2,057	1,139	930	229	0	701
	97.9%	99.0%	97.8%	96.2%	0.0%	98.3%
2040 PFNB Network	2,092	1,155	937	229	0	708
	99.5%	100.3%	98.5%	96.2%	0.0%	99.3%
2040 Network	2,093	1,155	938	230	-	708
	99.6%	100.3%	98.6%	96.6%	0.0%	99.3%
Vehicle Trips Utilizing Priced Facilities from TAZs with any Priced Facility Trips						
2010 Network	36,670	27,766	8,904	1,163	0	7,741
		75.7%	24.3%	3.2%	0.0%	21.1%
2040 PFNB Network	175,839	112,458	63,382	11,182	-	52,200
		64.0%	36.0%	6.4%	0.0%	29.7%
2040 Network	225,234	152,126	73,109	11,307	-	61,801
		67.5%	32.5%	5.0%	0.0%	27.4%
Vehicle Trips on Entire Transportation Network from TAZs with any Priced Facility Trips						
2010 Network	717,354	410,487	306,867	62,881	0	243,986
		57.2%	42.8%	8.8%	0.0%	34.0%
2040 PFNB Network	1,625,463	1,001,745	623,718	123,585	0.00	500,133
		61.6%	38.4%	7.6%	0.0%	30.8%
2040 Network	1,626,897	1,002,698	624,199	123,715	-	500,484
		61.6%	38.4%	7.6%	0.0%	30.8%
Percent of Vehicle Trips (from TAZs with Priced Facility Trips) Utilizing Priced Facilities						
2010 Network	5.1%	6.8%	2.9%	1.8%	0.0%	3.2%
2040 PFNB Network	10.8%	11.2%	10.2%	9.0%	0.0%	10.4%

Data of Interest	All MPO TAZs	EJ Status		EJ TAZ Type		
		Non-EJ TAZs	EJ TAZs	Low-Income	Minority	Low-Income / Minority
2040 Network	13.8%	15.2%	11.7%	9.1%	0.0%	12.3%

In the 2040 PFNB network, 98.5 percent EJ TAZs (937 of 951) generate at least one trip that utilizes a priced facility (see **Table 26** and **Figure 10**). The proportion of the regional population within EJ TAZs is 46.2 percent in 2010 and projected to be 42.2 percent in 2040. The EJ TAZ share of priced facility trips and total trips goes up between 2010 and 2040, and the percentage of priced facility trips increases by a greater amount (36.0 percent minus 24.3 percent equals 11.8 percent) than the proportion of the total population living in EJ TAZs (46.2 percent minus 42.2 percent equals 2.6 percent). A contributing factor to why 42.2 percent of the EJ population only contributes 36.0 percent of the trips is because of the average trip length. As noted in **Table 21**, trips from EJ TAZs average 10.64 miles while Non-EJ TAZs average 14.02 miles in the 2040 PFNB network. Shorter trip lengths (as identified for EJ populations) are less likely to use priced facilities. For EJ TAZs, approximately 10.2 percent of trips would utilize tolled facilities in the 2040 PFNB network compared to 11.2 percent for Non-EJ TAZs.

In the 2040 network, 98.6 percent EJ TAZs (938 of 951) generate at least one trip that utilizes a priced facility (see **Figure 11**). The EJ TAZ share of priced facility trips and total trips goes up between 2010 and 2040, and the percentage of priced facility trips increases by a greater amount (32.5 percent minus 24.3 percent equals 8.2 percent) than the proportion of the total population living in EJ TAZs (46.2 percent minus 42.2 percent equals 2.6 percent). These percentages are very similar to those on the 2040 PFNB network. A contributing factor to why 42.2 percent of the population (EJ population) only contributes 32.5 percent of the trips is because of the average trip length. As noted in **Table 21**, trips from EJ TAZs average 10.64 miles while Non-EJ TAZs average 14.02 miles in the 2040 network. Shorter trip lengths (as identified for EJ populations) are less likely to use priced facilities. For EJ TAZs, approximately 10.2 percent of trips would utilize tolled facilities in the 2040 network compared to 11.2 percent for Non-EJ TAZs.

Under the 2040 network fewer TAZs (32.5 percent) would send trips to priced facilities than under the 2040 PFNB network (36.0 percent). As shown in **Figure 7**, existing toll roads are not adjacent to the majority of EJ TAZs, but proposed priced facilities would be built closer to EJ populations. This would increase accessibility to these roadway facilities as shown by the lower proportion of trips from EJ TAZs on priced facilities in the 2040 network (32.5 percent) than in the 2040 PFNB network (36.0 percent).

The total number of trips on priced facilities in the 2040 network is 225,324 during the morning peak period. This is 22 percent more than in the 2040 PFNB network and a 58 percent increase over the 2010 network. Similarly, the total trips on priced facilities from EJ TAZs in the 2040 network is projected to be 73,109 during the morning peak period, an increase over the 2010 network and 2040 PFNB network of 58 percent and 13 percent, respectively. The 225,234

vehicle trips represents less than 14 percent of vehicle trips in the morning peak period; therefore, the majority of travel (over 86 percent) is occurring on non-priced facilities.

The potential impacts to low-income populations were evaluated because low-income populations would use a greater proportion of their income for transportation expenses. As shown in **Table 26**, of the 951 environmental justice TAZs, TAZs (238 low-income alone plus 713 both low-income and minority TAZs) or 45 percent (951of 2,102 total TAZs) are low-income. In the 2010 network, approximately 2.9 percent [from **Table 26** (1,163 plus 7,741 divided by 62,881 plus 243,986)] of trips from these TAZs use priced facilities. In the 2040 PFNB network, approximately 10.2 percent [from **Table 26** (11,182 plus 52,200 divided by 123,585 plus 500,133)] of trips from these TAZs use priced facilities. Projections from the 2040 network indicate that approximately 11.7 percent [also from **Table 26** (11,307 plus 61,801divided by 123,715 plus 500,484)] of trips from low-income TAZs would use priced facilities.

9.8.4 **Toll Rates**

Tolls are based on how far you drive and what kind of vehicle you're driving. Drivers pay a toll each time they pass through a toll plaza. Depending on where they get on or get off the road, drivers also pay a toll on certain entrance and exit ramps (see **Table 27**). Drivers without a TxTag pay 33 percent more on Loop 1, SH 45 N, SH 130, and SH 45 SE.

Table 27 Toll Rates by Location

Facility	2-axle vehicles		3-axle vehicles		4-axle vehicles		5-axle vehicles		6-axle vehicles	
	Tag	Pay By Mail	Tag	Pay By Mail	Tag	Pay By Mail	Tag	Pay By Mail	Tag	Pay By Mail
Loop 1										
Plazas	1.06	1.41	2.12	2.82	3.18	4.23	4.24	5.64	5.3	7.05
Ramps	0.7	0.93	1.4	1.86	2.1	2.79	2.8	3.72	3.5	4.66
SH 45 North										
Plazas	1.06	1.41	2.12	2.82	3.18	4.23	4.24	5.64	5.3	7.05
Parmer Ln & RM 620 Ramps	0.91	1.21	1.82	2.42	2.73	3.63	3.64	4.84	4.55	6.05
O'Connor Dr and Ramps to Loop 1 Direct Connectors	0.93	1.24	1.86	2.47	2.79	3.71	3.72	4.95	4.65	6.18
Greenlawn & AW Grimes Ramps	0.7	0.93	1.4	1.86	2.1	2.79	2.8	3.72	3.5	4.66
Shultz Ln & Wilke Ln Ramps	1.06	1.41	2.12	2.82	3.18	4.23	4.24	5.64	5.3	7.05
SH 45 Southeast										
Plaza	1.04	1.38	2.08	2.77	3.12	4.15	3.12	4.15	3.12	4.15
Ramps	0.68	0.9	1.36	1.81	2.04	2.71	2.04	2.71	2.04	2.71
SH 130 Segments 1-4										
Plazas	1.75	2.33	3.5	4.66	5.25	6.98	5.25	6.98	5.25	6.98
SH 29, Blue Bluff, Harold Green & Moore Rd Ramps	0.47	0.63	0.94	1.25	1.41	1.88	1.41	1.88	1.41	1.88
FM 104, Pecan St, Gregg Manor, FM 973, FM 969, Pearce Ln & FM 812 Ramps	0.58	0.77	1.16	1.54	1.74	2.31	1.74	2.31	1.74	2.31
US 79, CR 138, Chandler Rd & Elroy Rd Ramps	0.75	1	1.5	2	2.25	2.99	2.25	2.99	2.25	2.99
Cameron Rd Ramps	1.75	2.33	3.5	4.66	5.25	6.98	5.25	6.98	5.25	6.98

9.8.5 **Transportation Benefits**

While the previous sections focused on potential impacts from priced facilities within the regional transportation system, these facilities are also expected to provide benefits to system users. Benefits from the transportation system can be categorized into two forms: quality of life and economic. Quality of life benefits include the social benefits to persons within the CAMPO region. Economic benefits would be realized by many users of the regional transportation system (including private individuals, area businesses, and freight transporters) with the implementation of the planned improvements in the CAMPO 2040 Regional Transportation Plan.

Quality of life is enhanced through various benefits within the proposed transportation network from the CAMPO 2040 Regional Transportation Plan. The transportation system, including priced facilities, increases the number of travel options available to transportation system users. These facilities may serve as bus transit corridors, improving the performance of the on-road transit system. The planned priced facility projects help to manage congestion, improve air quality (and therefore public health), improve travel time reliability, and improve safety compared to the no build and priced facility no build alternatives. By helping to reduce overall congestion levels, improvements to the overall transportation system, including priced facilities, also contributes to the economic vitality of the region.

The tolled lane system proposed in the Central Texas region also provides a method for a reliable vehicle trip through variable-rate tolling using a fixed pricing schedule. Managed tolled lanes take this step further by dynamically adjusting the toll cost to maintain free-flowing traffic throughout the managed toll lanes. Although a toll is required for vehicle use, both buses and emergency service vehicles will be allowed to use these facilities without a toll payment. This free usage allows better and more reliable service from the bus transit system and emergency vehicles attempting to respond to calls. An increase in service for both bus and emergency vehicles improves the quality of life for those choosing to use or in need of those services, respectively.

In addition to benefiting cars, trucks, and buses, the Central Texas Regional Mobility Authority is constructing bicycle- and pedestrian-friendly facilities as part of every project, whenever feasible. This includes the design and implementation of Shared Use Paths (SUP), sidewalks and cross-street connections. To date, on projects currently open to traffic (183A and US 290 - Manor Expressway), the Mobility Authority investment in bicycle and pedestrian accommodations totals $11 million. $31 million more is invested in projects under construction (MoPac and 183S). Additional investments are planned for projects currently under environmental study (MoPac South, Oak Hill Parkway, and 183 North).

The revenue from priced facilities will also help finance improvements/rehabilitation of both tolled (dynamic and fixed rate) and non-tolled facilities. This financing is also accelerating the funding for construction as compared to traditional tax-supported highway finance, thereby minimizing capital costs and making new transportation capacity (via transit, roadway, or other

modes) available to the traveling public sooner.

10.0 Incomplete or Unavailable Information

The traffic analysis performance report, travel time comparison, and origin-destination studies were completed using the CAMPO 2040 Plan Travel Demand Model (TDM). This application is developed and maintained by CAMPO staff and consists of a collection of software components implemented on the TransCAD® 6.0 platform. The CAMPO TDM is a four-step trip-based travel demand model for the 6-County Central Texas region. The four steps of the modeling process are: trip generation, trip distribution, mode choice, and traffic assignment. The model was validated for the year 2010 using a variety of user surveys and traffic counts to ensure that roadway traffic volume, transit usage, peak/off-peak period conditions, and roadway speeds are accurately reproduced by the model.

The CAMPO TDM application was implemented to forecast travel demand within the CAMPO region. It is not a social or economic prediction model, but it does incorporate some income data in the trip generation, mode choice, and transit trip assignment steps for home based work trips. Within each TAZ the total population, number of households, and number of jobs in several employment categories vary depending on the selected year of analysis and/or demographic scenario. The forecasted demographic datasets used in this analysis are derived from the CAMPO 2040 Demographic Forecast. Median income levels for each TAZ are included as primary demographic inputs, but they are held largely static (except for inflation adjustments) for all modeled years and scenarios because no reliable forecasts of changes in the geographic distribution of income levels are available. At no point in the modeling process is the race or ethnicity of transportation system users considered or documented.

The household income model calculates the percentage of households in each household income category based on a distribution curve. The input zonal median income is divided by the regional median income to get a ratio by zone. This ratio is identified in a household income distribution curve to determine the distribution of households for the five income categories corresponding to the ratio. The regional average household income is defined through a generation parameters input file by year. The output from this model is an array of the median income distribution as well as the percentage of households within five income categories populated in the TAZ file. The median income distribution curve was updated based on ACS and Census data. Each block group of the CAMPO six-county region was compared to the regional average. The block group data for the household income was taken from the ACS 5-year 2007-2011 estimates. The number used in these curves represents household incomes and is given in 2010 inflation adjusted dollars. To calculate the median household income of the region, the average median household income of the six counties was averaged, which was calculated as $53,470.

In the trip generation step of the travel model forecasting process, the socio-economic characteristics of each TAZ are used to determine the number of trips that will be generated by and attracted to each TAZ. Trip production rates are based on the American Community Survey

(ACS) 5-year 2007-2011 and 2010 U.S. Census were used at the block group level in the CAMPO six-county study area. Trip production rates are applied using cross-classification of household data due to the robustness of disaggregated household data in estimating travel characteristics. Home based work production rates are cross-classified by household size, income, and workers. All other production rates are cross-classified by household size and income. The external trip purposes do not use cross-classification of production rates but are direct inputs based on observed data.

The CAMPO mode choice model structure is a nested multinomial logit model. The models were estimated as multinomial logit models and a nesting structure was developed for model application. Such model recognizes the potential for something other than equal competition among modes. This structure assumes that modes, sub-modes, and access modes are distinctly different types of alternatives that present distinct choices to travelers. Each mode within a nest competes with each other. This is a fairly complex nesting structure with three 'levels 'of nests. The first, or highest level, splits the choice to auto, transit, and non-motorized modes of transport, indicating that this decision is foremost in choice of mode. The next level splits drive-alone from shared-ride trips in the auto nest, by access type (walk, PNR, and KNR) in the transit nest, and also non-motorized into walk and bike. The third and final nest splits share-ride modes by share 2 and 3+ person and access type by modes of transit. The transit nesting structure is organized with access type at the top of the nesting structure, and modes of transit below each access type.

Each vehicle trip is classified by the purpose of the trip. Each vehicle trip of a given type is treated equally by the model, so the socio-economic factors that contributed to the creation of any given vehicle trip do not factor into the trip assignment step of the modeling process. Vehicle trips are assigned to the roadway network based on minimizing generalized travel costs (including per-mile travel costs, value of time, and tolls where applicable) for each trip. As currently implemented, the modeling process requires all vehicle trips to operate under the same value of time assumptions. No data to reliably estimate variations in the value of time based on socio-economic status is readily available. At the step in the modeling process where socio-economic variations in the value of time would need to be applied, some of the relevant socio-economic information is no longer tracked by the CAMPO TDM application.

Based on these characteristics of the modeling process, the EJ analysis performed using the CAMPO TDM should be understood to have the following limitations:

- Race and ethnicity are based on 2010 census data. Income is based on data provided by the Texas Workforce Commission (TWC). Therefore, the data used does not reflect any changes to these factors.
- Model-derived projections of socio-economic characteristics of vehicle trips have not been validated using any control data and should not be assumed to be accurate.
- Demographic projections to 2040 assume the same distribution of income, race, and ethnicity and does not account for any potential shifts in population types across the region.

- There is no available data about the race, ethnicity, and economic status of the users of priced facilities within the CAMPO region.
- Model inputs do not include race or ethnicity; therefore, the model cannot identify trips based on the race or ethnicity of an individual user.
- For the purposes of trip distribution, mode choice, and traffic assignment, all vehicle trips of the same type are treated identically. CAMPO TDM, as implemented, is not capable of generating results that produce outputs that differentiate vehicle trips based on the economic characteristics of transportation system users.
- The vehicle trip assignment process does not consider relative income differences or the differences in relative cost to potential users in the population when assigning vehicle trips.
- CAMPO TDM was not designed to model the socio-economic characteristics of each vehicle trip. Model-derived reproductions of socio-economic characteristics of vehicle trips have not been validated using any control data and should not be assumed to be accurate.
- The CAMPO TDM cannot replicate dynamic pricing.

11.0 Summary of Assessment and Discussion of Mitigation

Based on the EJ analysis conducted it was determined that the recommended transportation projects included in *CAMPO 2040 Regional Transportation Plan* do not have a highly adverse or disproportionate impact on EJ populations. The *CAMPO 2040 Regional Transportation Plan* states the transportation recommendations included in the plan meet federal nondiscrimination and EJ requirements and have no disproportionate impacts on protected populations.

In addition, results from the performance reports prepared for the CAMPO region showed a marginal increase in roadway speed and an improvement in congestion for the majority of the roadway classifications in the 2040 network compared to the 2040 PFNB network. Even under the 2040 network for the CAMPO region the roadway performance conditions for freeways and toll roads throughout the CAMPO region would be degraded compared to the 2010 network due to the travel demand created by an increase of 42 percent in the regional population.

Although EJ populations would see an increase in out of pocket cost for priced facility usage under the 2040 scenario, the growth in usage by EJ populations is proportional to the increased usage by the entire CAMPO region population as the priced system expands. Almost all EJ TAZs were identified by the CAMPO TDM to potentially be sending trips along priced facilities in the 2010 network and 2040 network. As shown in **Table 7**, over 93 percent (1,4129 lane miles) of new roadway capacity would not be tolled. For populations (including EJ populations) who would choose to use non-priced facilities, the 2040 network would provide a non-priced roadway network that would operate at better traffic conditions (slightly higher speeds and improved congestion) on all roadways and an increased benefit over the 2040 PFNB network.

The planned transit system is the same for both the 2040 network and 2040 PFNB network.

Current statutory requirements built into most transportation improvement funding mechanisms prohibit or limit the transfer of funds between modes, so eliminating priced facilities would not necessarily increase opportunities to invest in other types of improvements. As shown in **Table 22**, in the 2010 network 68.5 percent of transit users come from EJ TAZs. The total number of transit trips from EJ TAZs is expected to decrease to 64.8 in both the 2040 PFNB and 2040 network. This compares to the 49.2 percent increases in vehicle trips between the 2010 network and the 2040 PFNB and 2040 networks, respectively, shown in **Table 21**. Improved roadway performance would lead to slightly longer distance and higher speed transit trips in the 2040 network compared to the 2040 PFNB network.

Impacts to EJ populations were one of the several issues included and considered during the RTP planning process. All corridor planning and development activities are consistent with the RTP recommendations for congestion management and multimodal opportunities which benefit all segments of the population. The region will continue its efforts to work with all communities in the planning process to identify transportation challenges and explore and develop the appropriate strategies to respond to the issues. Specific strategies and projects would be developed through discussions with local governments and community representatives, as needed. Example strategies could include regional or targeted local programs and projects to:

- Improve availability and accessibility to alternate transportation options such as transit, biking and walking.
- Provide discounted transit fares and tolls
- Provide better accessibility to regional transportation systems
- Enhance community-level congestion management
- Promote sustainable development to help minimize VMT

Regardless of strategies that may be implemented, each transportation entity would require efforts to minimize impacts to EJ populations at the specific project level. TxDOT builds, maintains, and operates the majority of the major roadway system in the CAMPO Region, the CTRMA and TxDOT oversee construction and implementation of the toll roads throughout CAMPO, while the transit agencies focus on the passenger rail and bus systems, and CAMPO directs its resources on future transportation system planning.

TxDOT follows numerous guidelines and regulations to assess potential impacts to EJ populations for specific projects. These guidance documents, such as FHWA Order 6640.23, discuss potential mitigation for EJ populations when impacts are determined. Both FHWA and TxDOT have procedures in place to ensure compliance with state and federal laws and regulations regarding project-specific impacts to EJ populations. Each roadway project that receives state and/or federal money is evaluated under NEPA or similar Texas requirements which include analysis for EJ populations and potential mitigation if an unfair distribution of benefits and/or a disproportionate high and adverse impact is identified. A summary of this RTA is included as part of project-specific analysis.

Similarly, the CTRMA follows TxDOT and FHWA guidelines for its Title VI and EJ

procedures. The CTRMA policy in their environmental manual references the current TxDOT and FHWA policies for addressing potential impacts to EJ populations. This consistency extends to the inclusion of an EJ analysis in environmental documents as well as addressing any potential impacts and mitigation. Any mitigation would be addressed on a per project basis.

Transit agencies follow FTA guidelines for Title VI and EJ. The analysis that is included in FTA documents is similar to those that are required by FHWA for roadway analysis. Because transit systems have a greater propensity for utilization by EJ and Title VI populations, the analysis required by FTA is more robust. Similar to roadway projects, each independent transit project is assessed for EJ impacts and mitigation would be proposed if adverse and disproportionate impacts are identified. Mitigation would be tailored specifically to each project.

Additionally, CAMPO is required to complete an entire Title VI analysis for each version of the Regional Transportation Plan. During the Title VI analysis, CAMPO assesses regional parameters on the entire future transportation system, created with inputs from the local transportation partners, on Title VI populations. Through the analysis, it is determined if the future transportation system would impact Title VI populations. If adverse and disproportionate impacts are identified, CAMPO would implement procedures to mitigate for the impacts or change the future roadway network to prevent the impacts from occurring.

12.0 Conclusion

Based on these analyses, the CAMPO 2040 Regional Transportation Plan build network for the CAMPO region, including future priced facilities, would not cause disproportionately high and adverse impacts on any minority or low-income populations as per Executive Order 12898 regarding EJ. Therefore, no regional mitigation measures are proposed at this time. This regional analysis is based on the most recent policies, programs, and projects included in *CAMPO 2040 Regional Transportation Plan*. Changes in tolling/managed lane policies could necessitate this regional tolling analysis be revised if, after a thorough review, the changes are of sufficient magnitude. These elements are subject to change in future long range plans. During the development of future long range plans, new analyses of the effects of pricing to EJ and protected classes would be conducted.

CAMPO 2040 Regional Transportation Plan and the regional transportation planning process provide ways to avoid and minimize potential impacts that could occur due to transportation projects. CAMPO has performed an EJ and Title VI analysis, using the same demographic data that was used in the development of *CAMPO 2040 Regional Transportation Plan*, to ensure that no person is excluded from participation in, denied benefits of, or discriminated against in planning efforts, including the development of the long range plans. This assures the long range plans are consistent with Title VI of the Civil Rights Act of 1964 and Executive Order 12898 on environmental justice, as well as the Civil Rights Restoration Act of 1987.

Appendix A

Figure 1 Population Growth

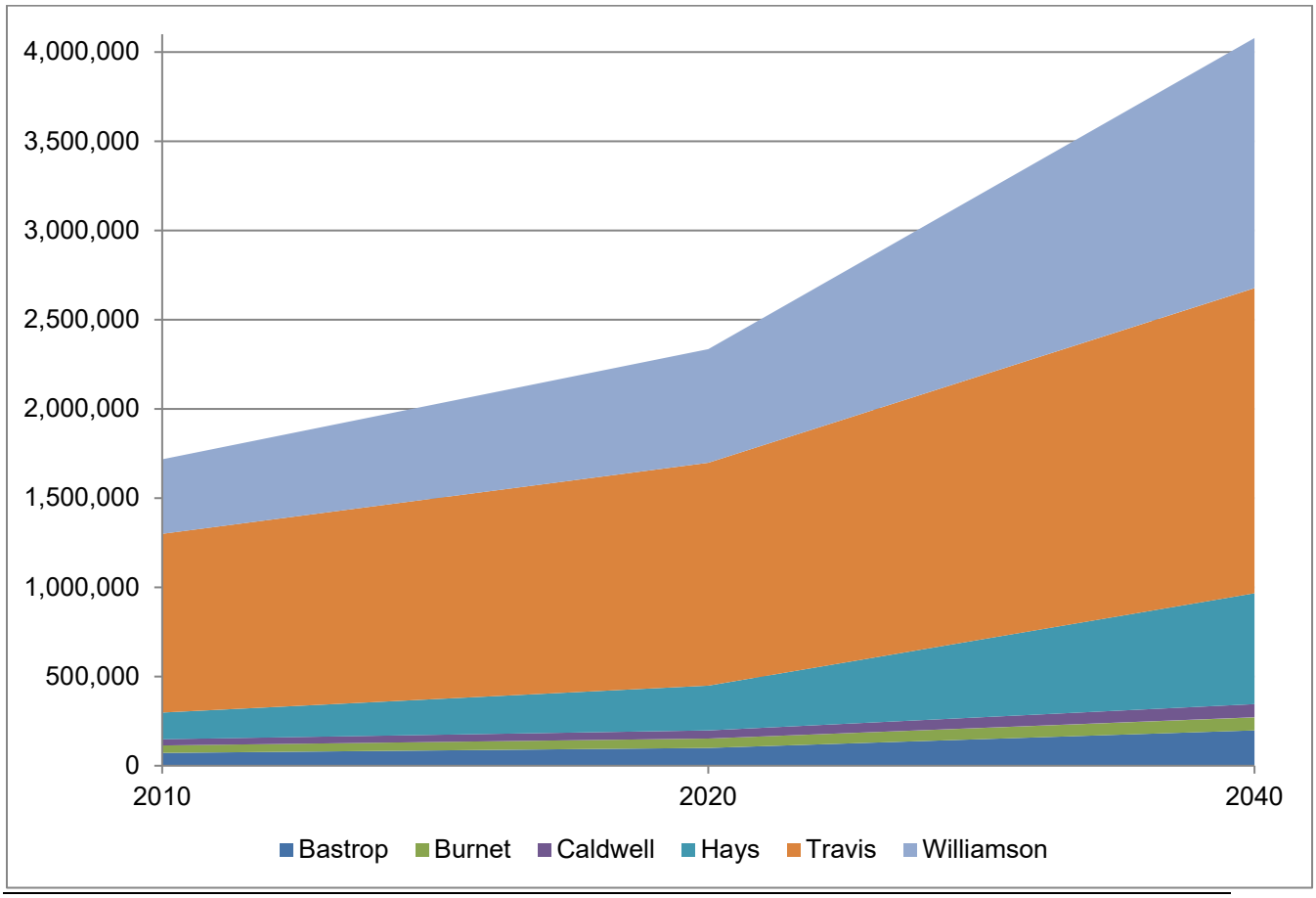


Figure 2 CAMPO 2040 RTP Funding Summary

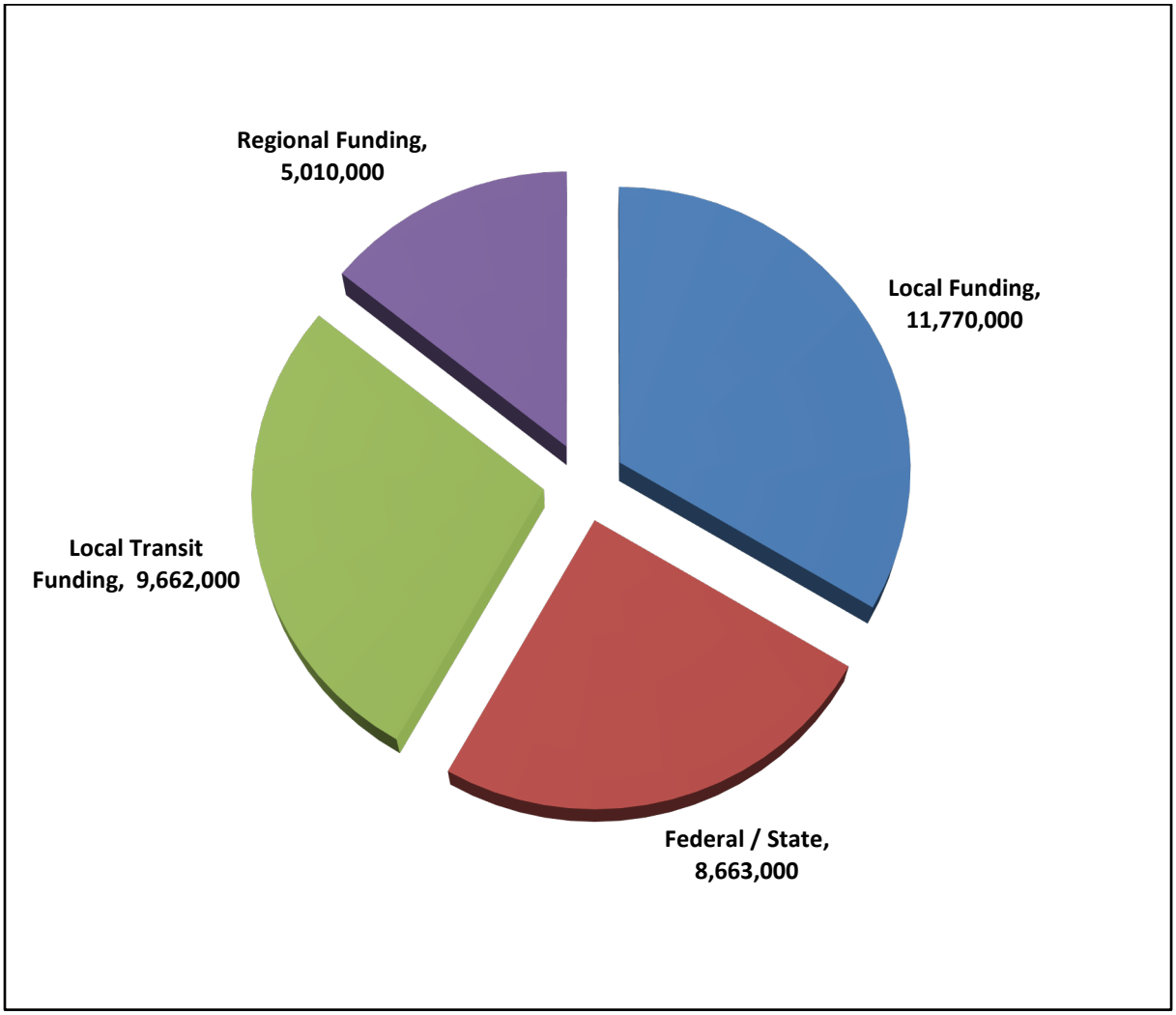


Figure 3 2010 Modeled Network Congestion

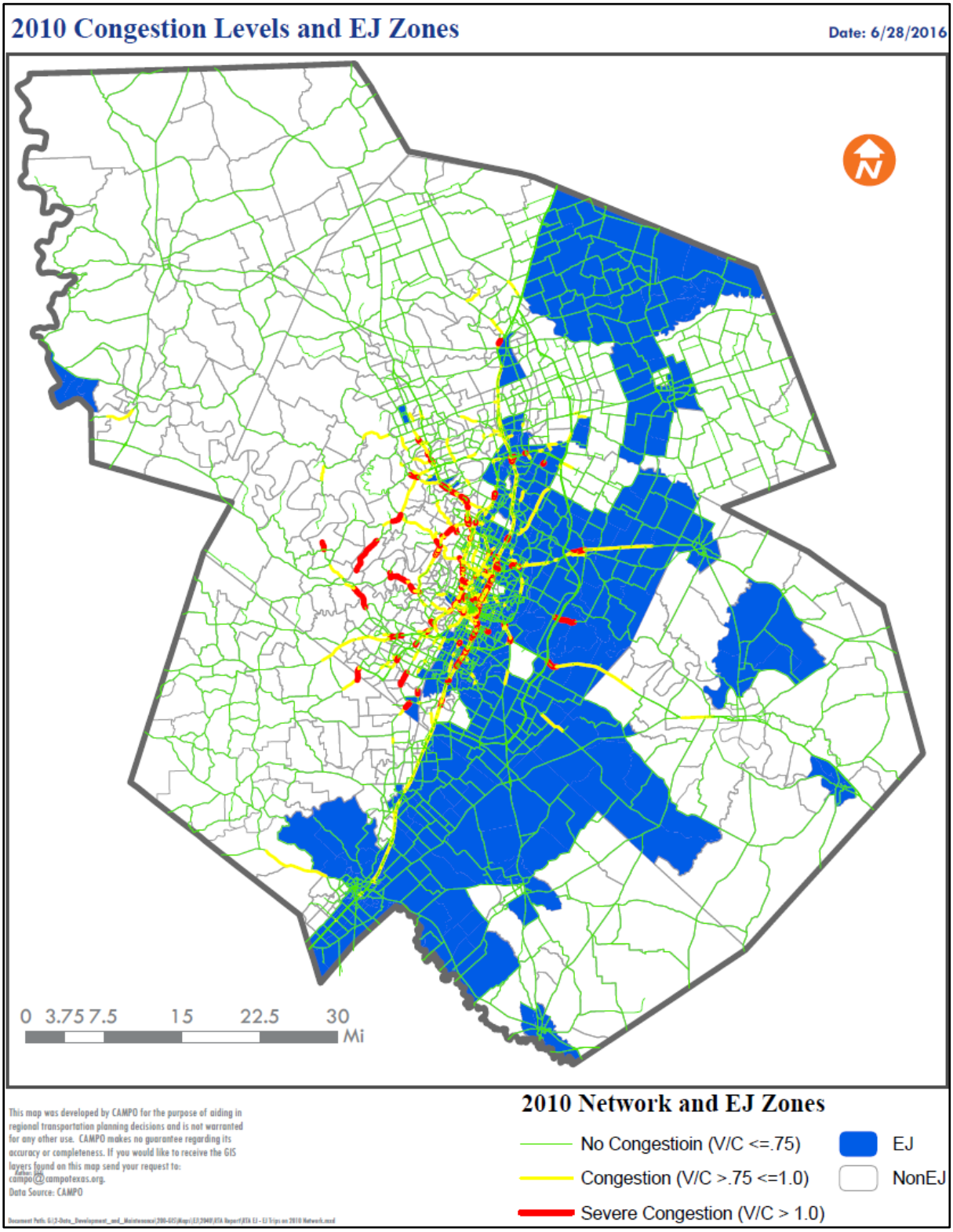


Figure 4 2040 Modeled Network Congestion

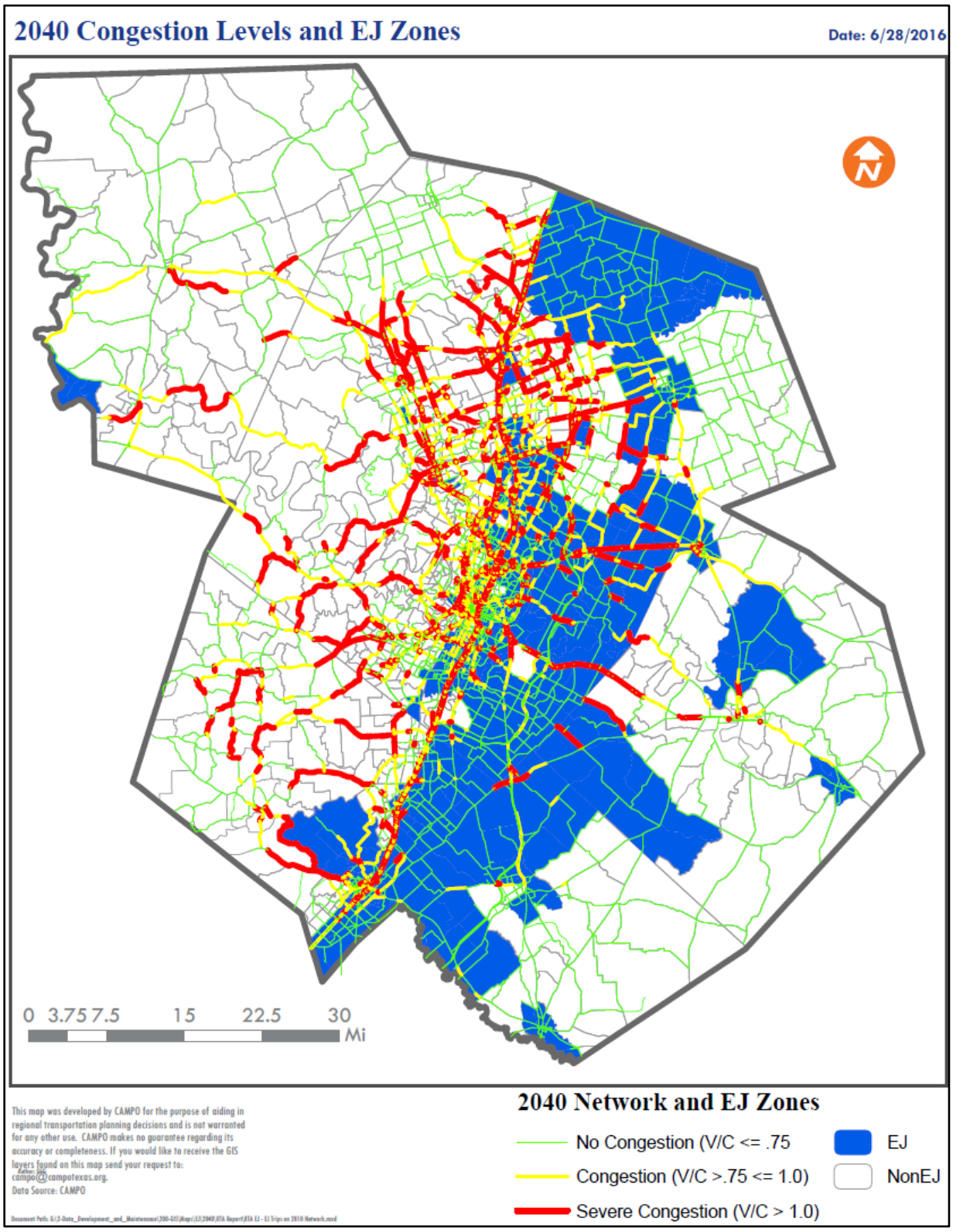


Figure 5 Planned 2040 Transit System

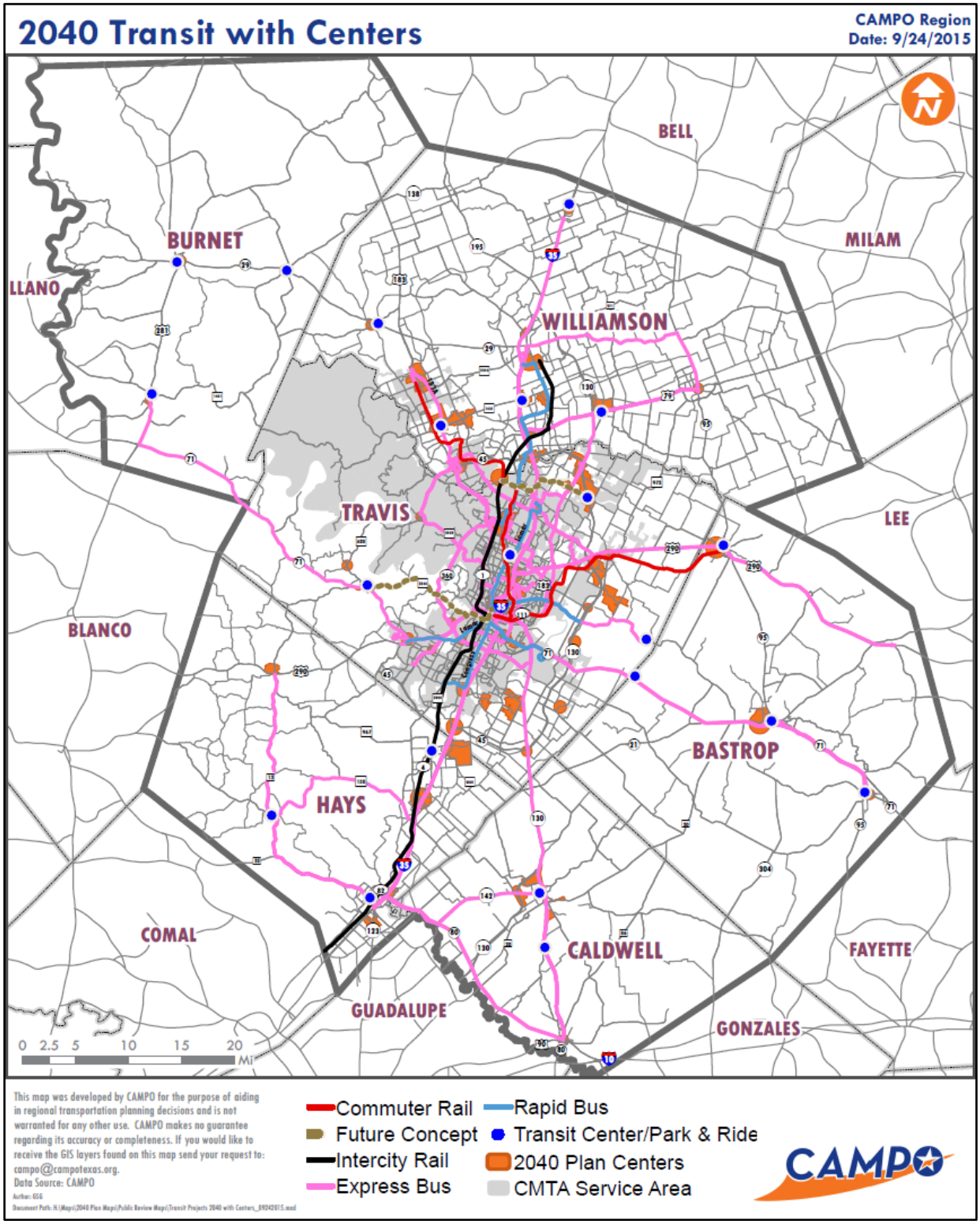


Figure 6 2040 Planned Roadway System

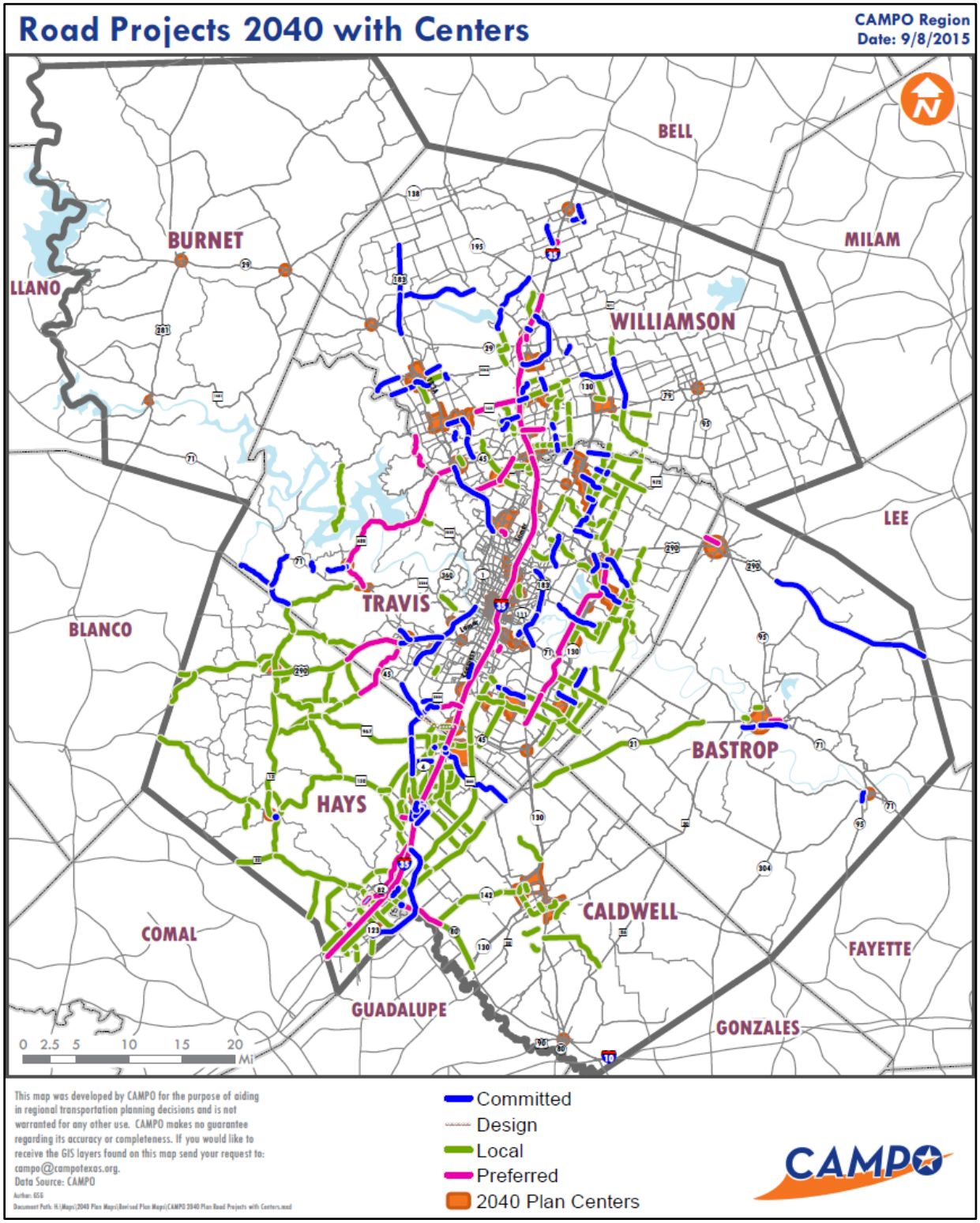


Figure 7 2040 Planned Priced Facilities

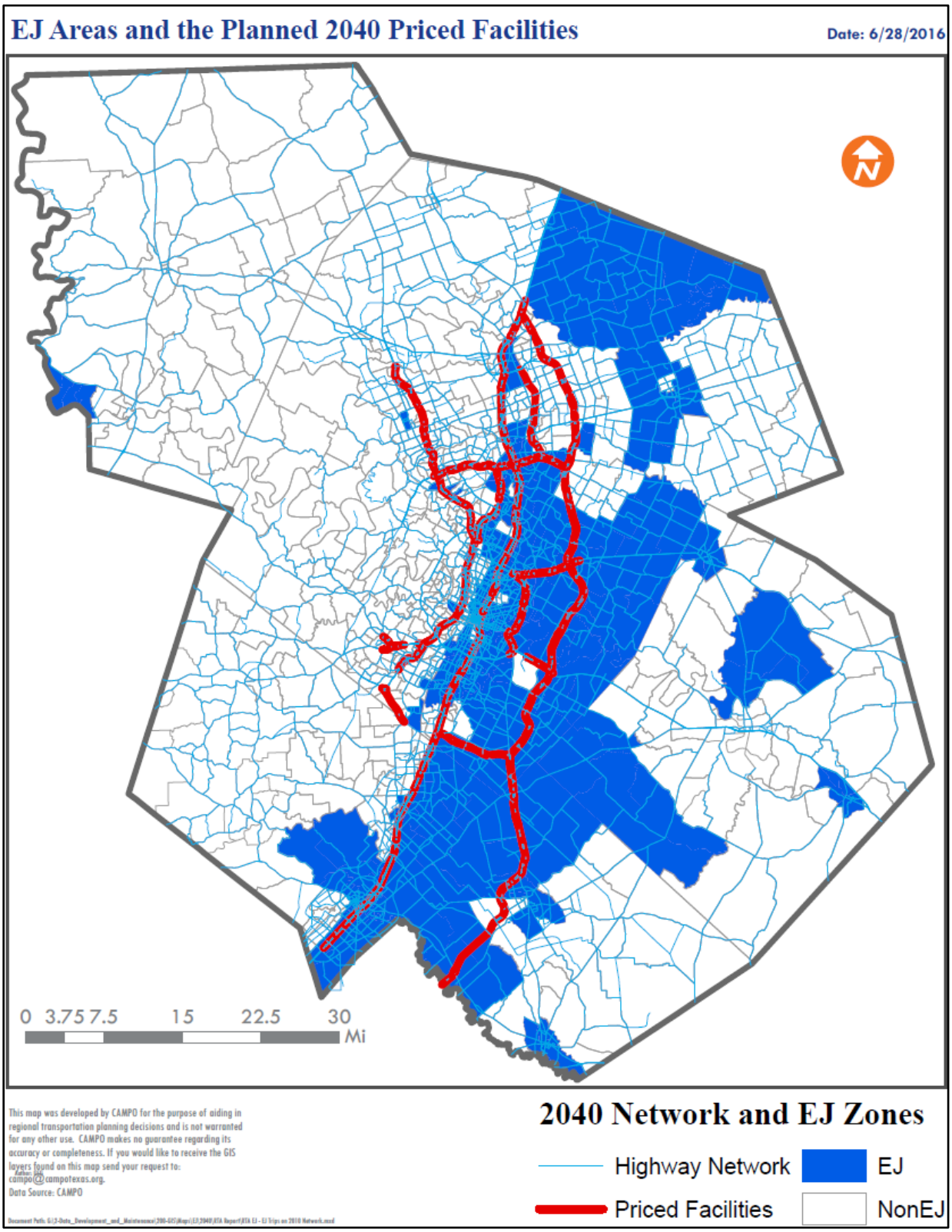


Figure 8 EJ Zones with Planned 2040 Roadway Network

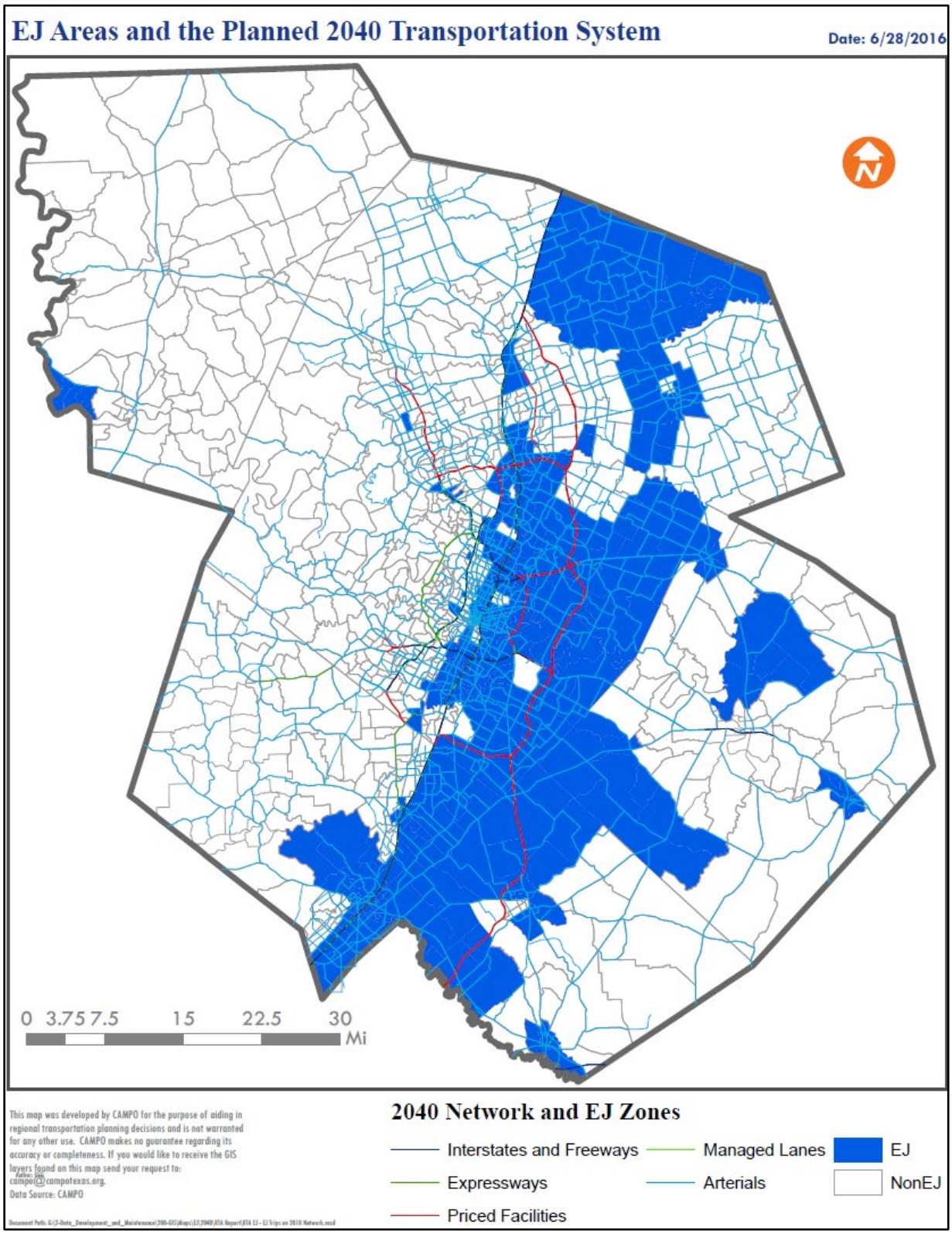


Figure 9 Daily EJ Trips on 2010 Priced Facilities

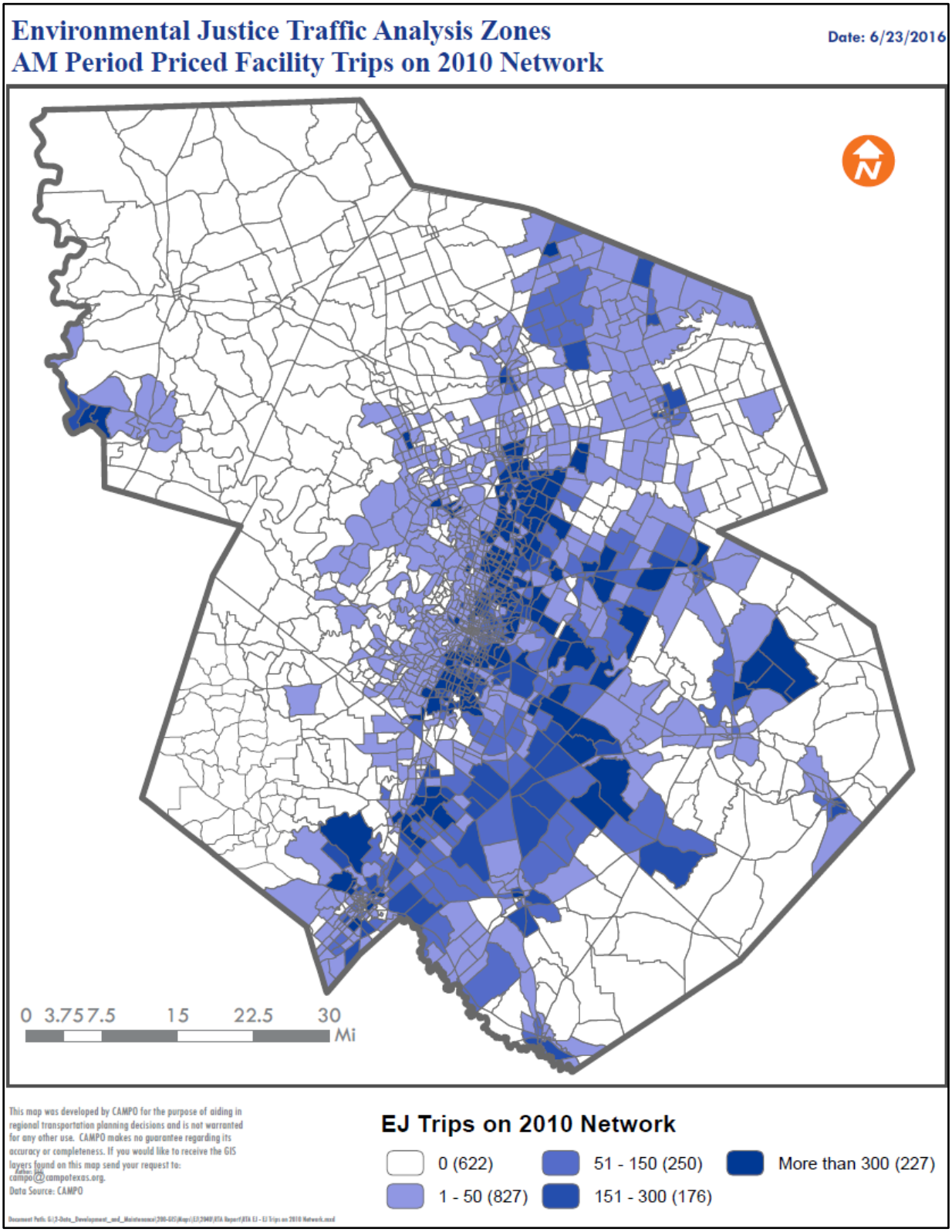


Figure 10 Daily EJ Trips on 2040 Priced Facilities No Build Network

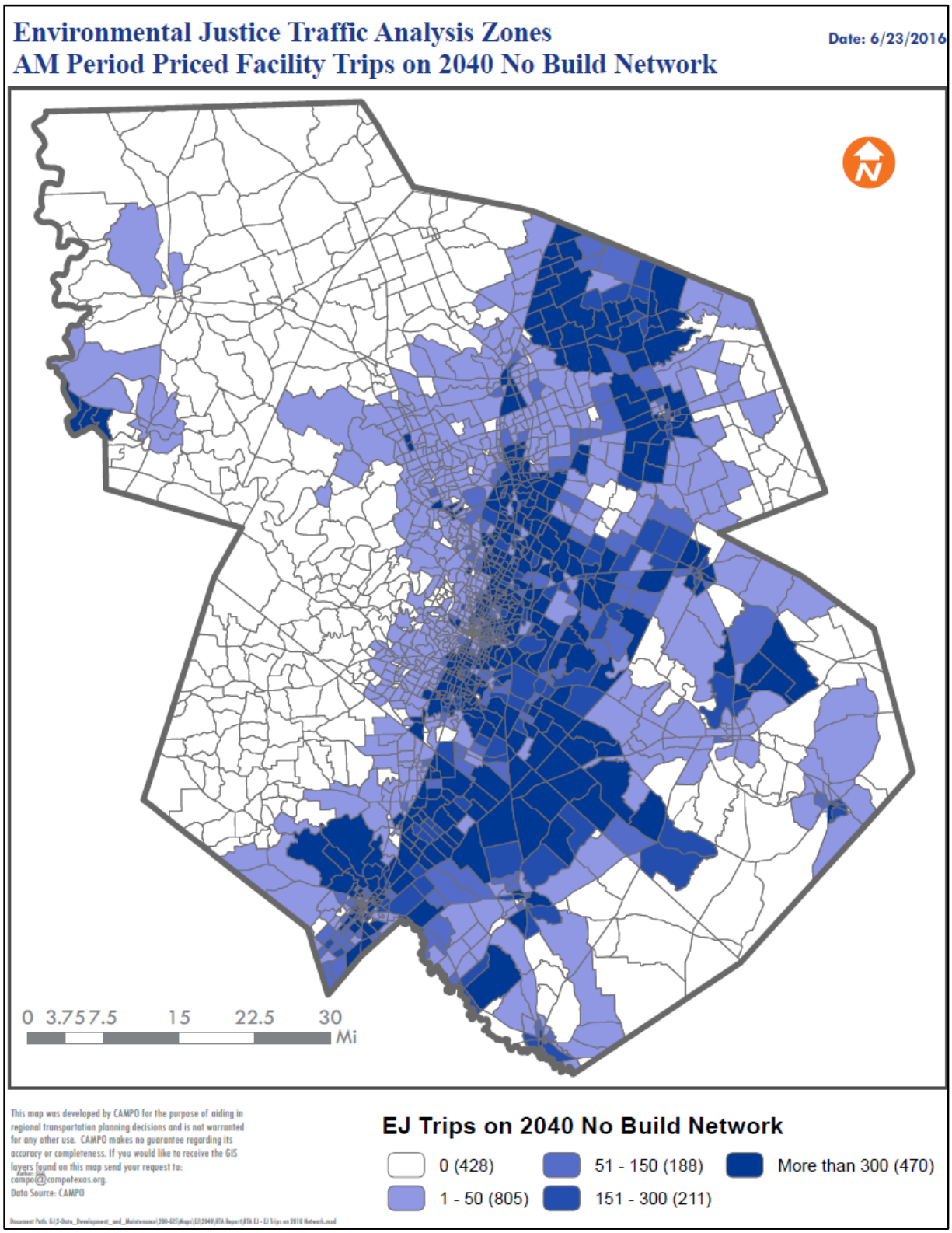
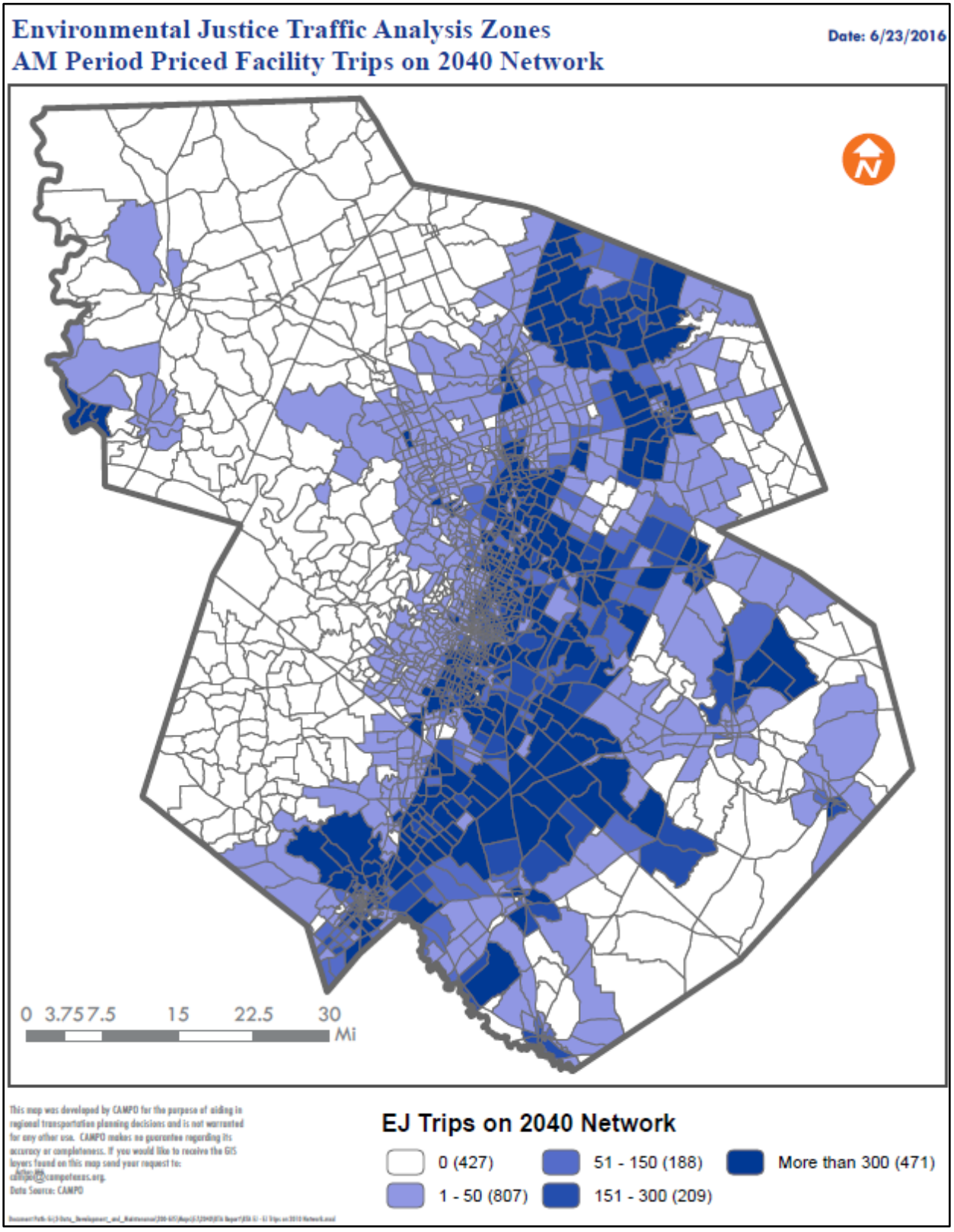


Figure 11 Daily EJ Trips on 2040 Network



Attachment 2 – Signed DBE Assurance

Disadvantaged Business Enterprise Assurance Statement

In compliance with 49 CFR Part 26 and in connection with receiving grants from the U. S. Department of Transportation (DOT), CAMPO has established a goal of 25% Disadvantaged Business Enterprise (DBE) participation in its total annual third party consulting opportunities. Each respondent is encouraged to take affirmative action and make every effort possible to use DBE firms in the performance of work under this contract. Nothing in this provision shall be construed to require the utilization of any DBE firm, which is either unqualified or unavailable.

Ashby Johnson, Executive Director

Capital Area Metropolitan Planning Organization

Attachment 3 – Signed Title VI Nondiscrimination Statement

Title VI and Related Statutes

Nondiscrimination Statement

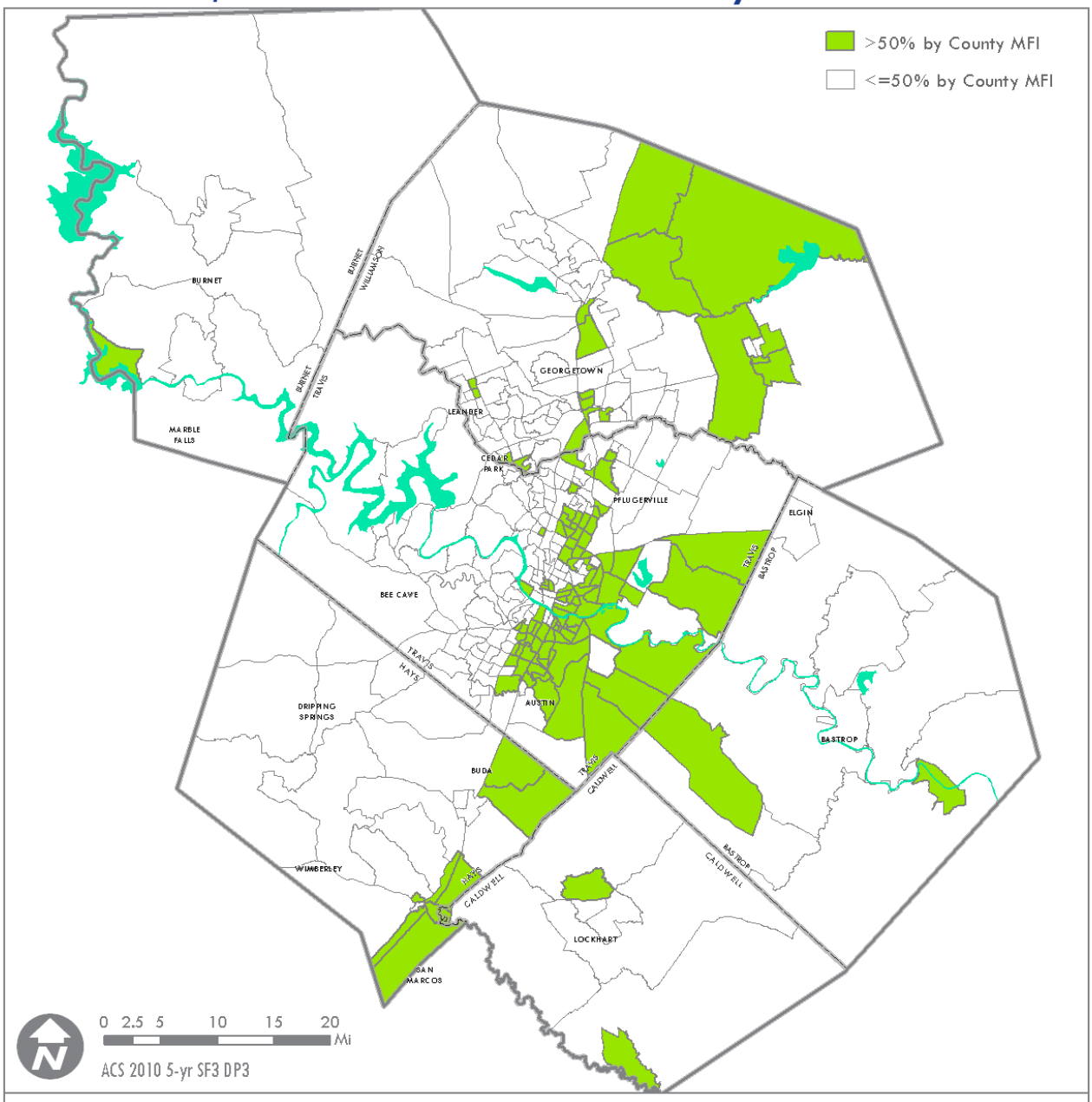
The Capital Area Metropolitan Planning Organization (CAMPO), as a recipient of Federal financial assistance and under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person shall on the ground of race, religion (where the primary objective of the financial assistance is to provide employment per 42 U.S.C. § 2000d-3), color, national origin, sex, age, or disability be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any CAMPO programs or activities.

Ashby Johnson, Executive Director

Capital Area Metropolitan Planning Organization

Attachment 4 – EJ Areas, 2040 County MFI Analysis

EJ AREAS, 2040 COUNTY MFI Analysis



This map shows census tracts that will be designated EJ by using a County MFI, which is different for each county, to assess Low Income Families.

80% MFI is calculated for each county:
$48,009 - Bastrop; $46,436 - Burnet; $40,442 - Caldwell; $59,576 - Hays; $55,716 - Travis; $62,432 - Williamson

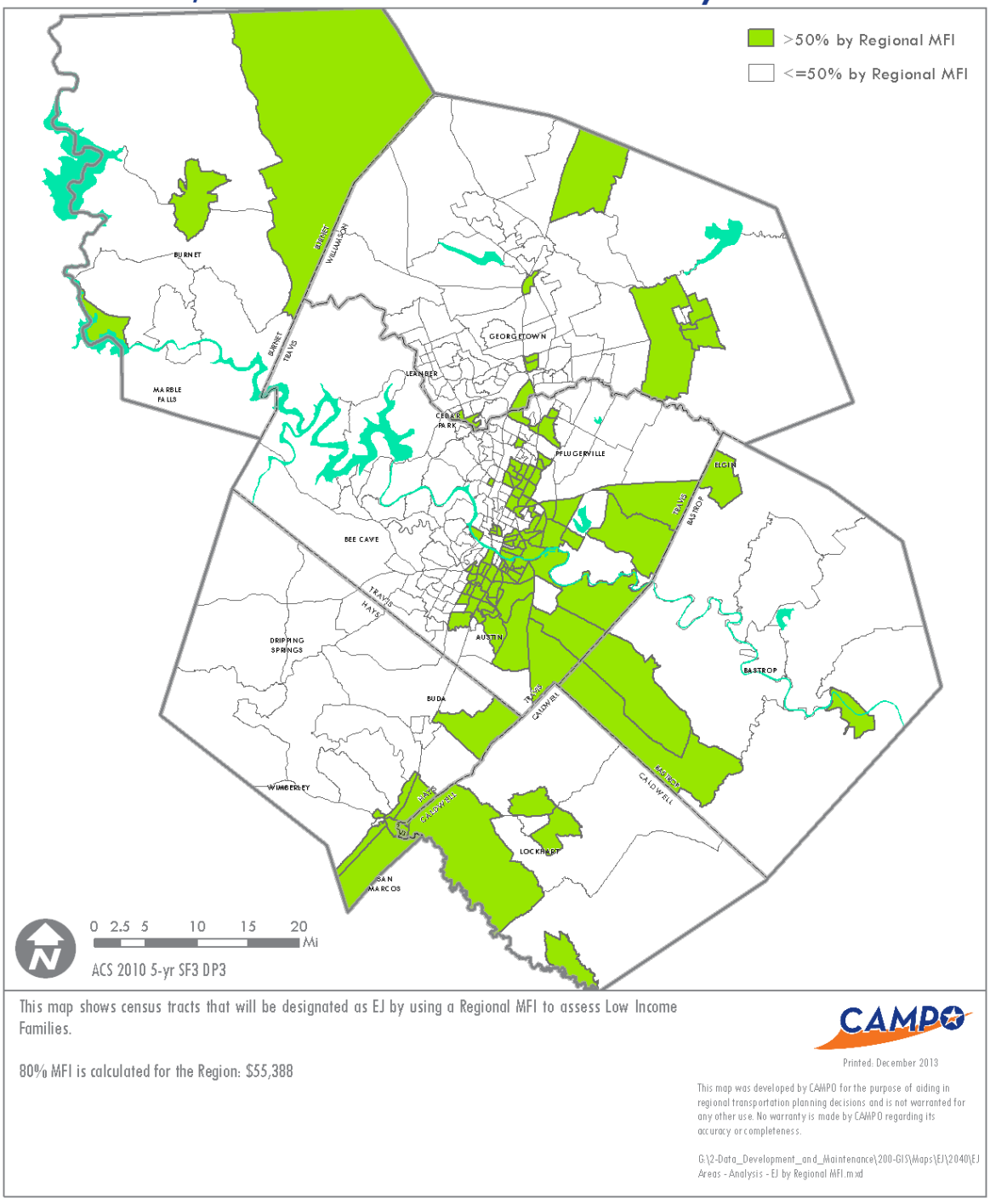
CAMPO

Printed: December 2013

G:\2-Data_Development_and_Maintenance\200-GIS\Maps\EJ\2040\EJ Areas - Analysis - EJ by County MFI.mxd

Attachment 5 – EJ Areas, 2040 Regional MFI Analysis

EJ AREAS, 2040 REGIONAL MFI Analysis



This map shows census tracts that will be designated as EJ by using a Regional MFI to assess Low Income Families.

80% MFI is calculated for the Region: $55,388

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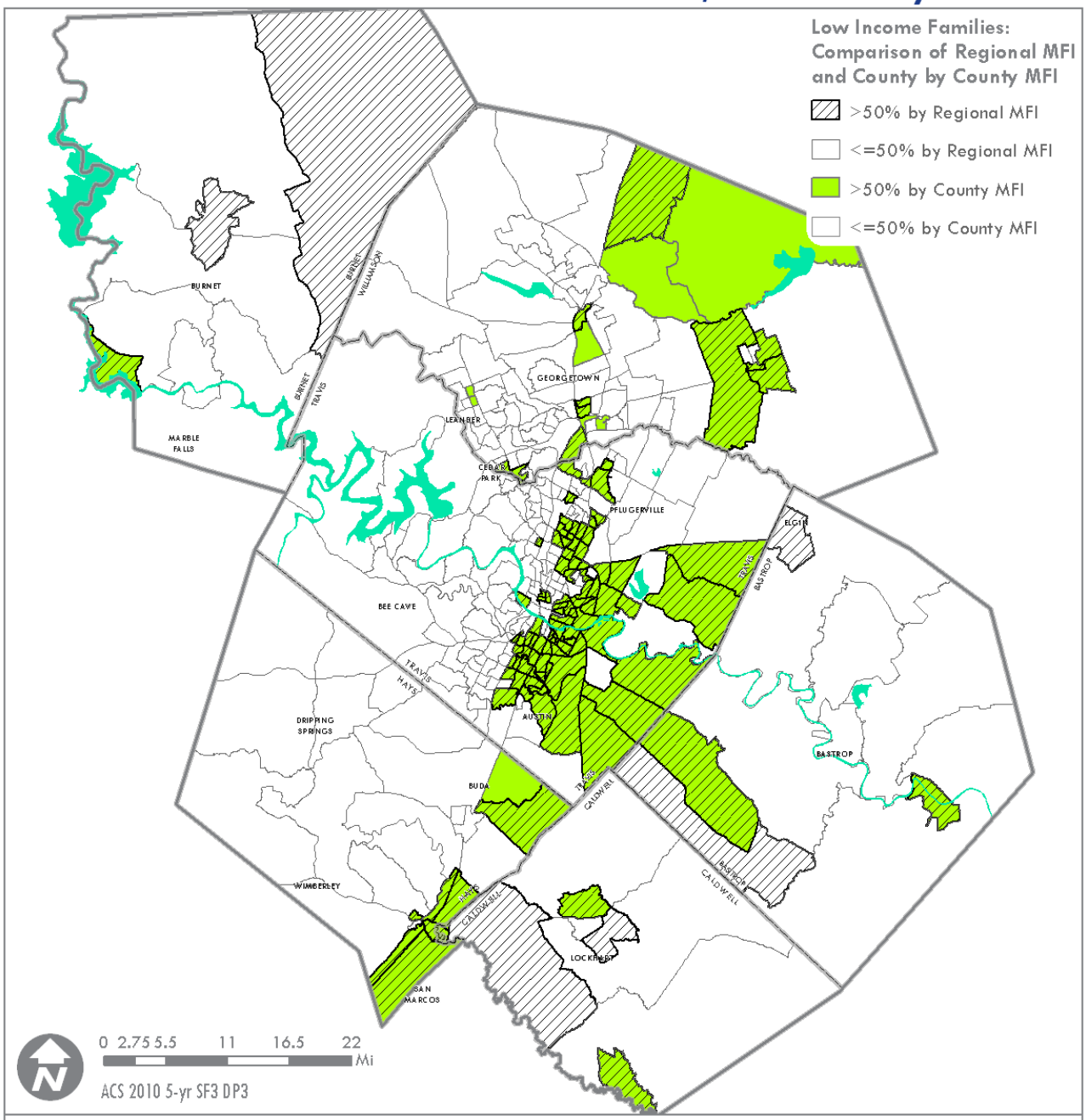
G:\2-Data_Development_and_Maintenance\200-GIS\Maps\EJ\2040\EJ Areas - Analysis - EJ by Regional MFI.mxd

ENVIRONMENTAL JUSTICE AREAS, MFI Analysis



This map shows differences in using a County MFI from using a Regional MFI to assess Low Income Families. Both methods result in 31% or 32% of Census Tracts classified as EJ based on low income families. By using a 'regional MFI', Burnet, Bastrop, and Caldwell have 2 more Census Tracts each with this indicator, and Williamson and Travis have several fewer.

80% MFI is calculated for the Region: $55,388; and,
80% MFI is calculated for each county:
$48,009 - Bastrop; $46,436 - Burnet; $40,442 - Caldwell; $59,576 - Hays; $55,716 - Travis; $62,432 - Williamson

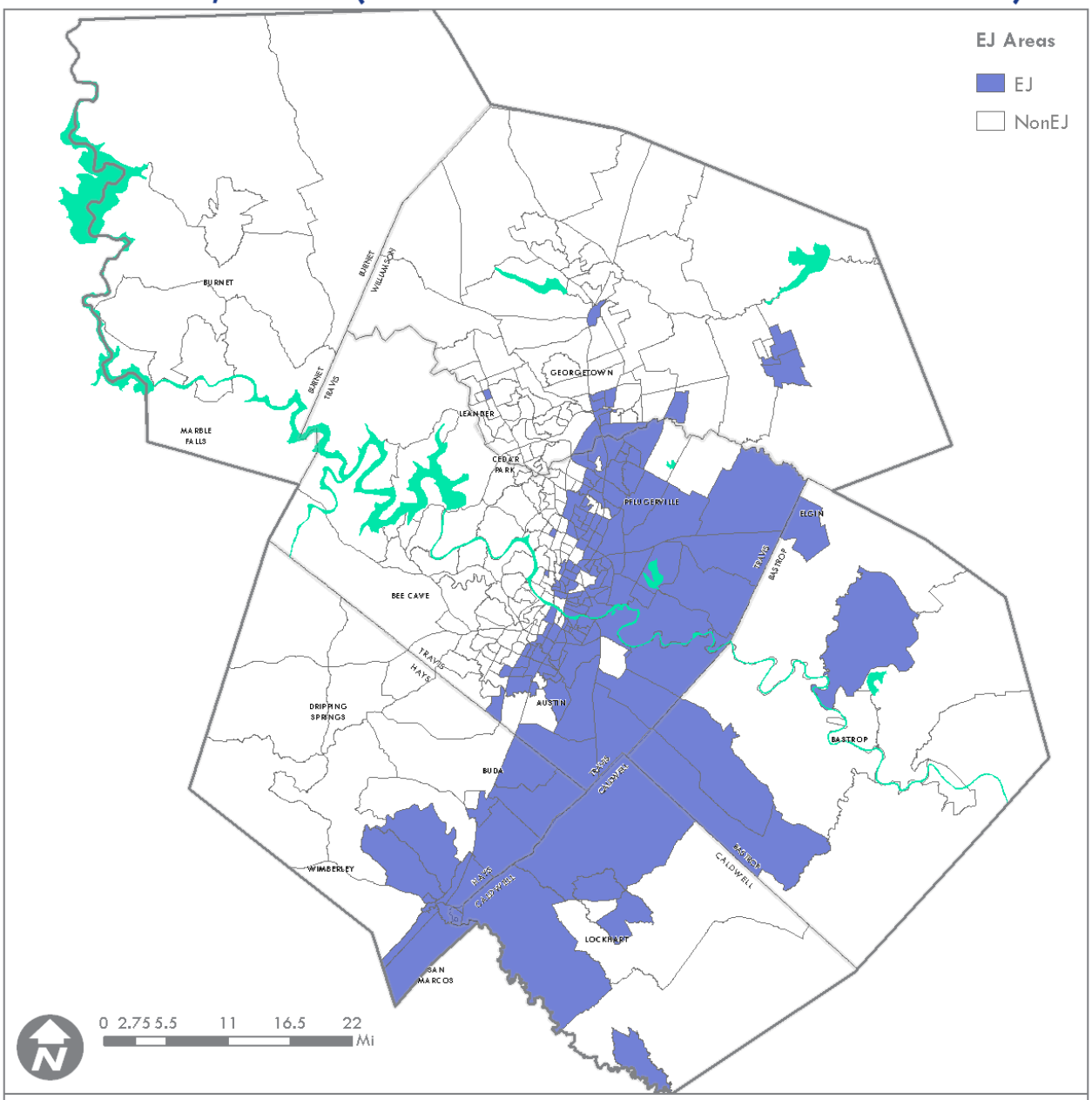
CAMPO

Printed: January 2013

G:\3-Short Range Planning\Environmental Justice\EJ Map 2040 Plan\FinalDraft.EJMap.mxd

Attachment 7 – EJ Areas, 2040 (USDOT – Poverty & Minority)

EJ AREAS, 2040 (USDOT - POVERTY & MINORITY)



These Environmental Justice (EJ) areas are determined by analysis of the following criteria:
-Households in Poverty > 25% (of total households)
-Minority Population > 50% (of total population)

148 of 358 Census Tracts, or 41%, are EJ Census Tracts based on these 2 criteria.

Source:
Minority Population - US Census 2010, SF1-DP1, HD01-S076, HD01_S123; Population in Poverty - ACS 2010 5-yr estimates, S1701, HC01_EST_VC01

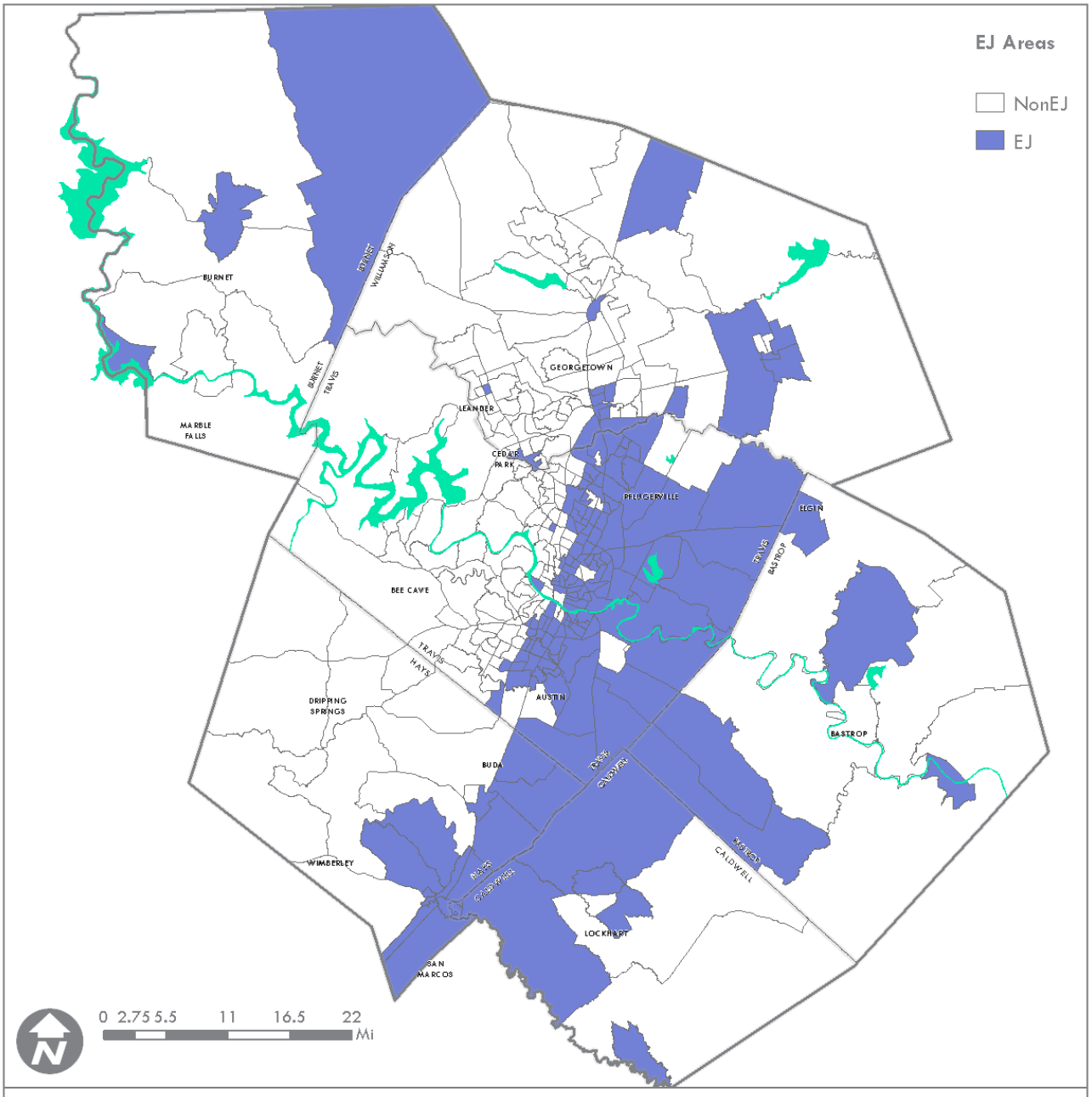
CAMPO

Printed: Dec 2013

G:\2-Data_Development_and_Maintenance\200-GIS\Maps\EJ\2040\EJ Areas 2040 Plan - USDOT.mxd

Attachment 8 – EJ Areas, 2040 (USDOT, Regional MFI)

EJ AREAS, 2040 (USDOT, REGIONAL MFI)



These Environmental Justice (EJ) areas are determined by analysis of the following criteria:
-Households in Poverty > 25% (of total households)
-Low Income Families > 50% (of total families) earn less than 80% of Regional MFI
-Minority Population > 50% (of total population)

163 of 358 Census Tracts, or 45%, are EJ Census Tracts based on these 3 criteria.

Source:
Minority Population - US Census 2010, SF1-DP1, HD01-S076, HD01_S123; Low Income Population - US Census 2010, SF3-DP3; Population in Poverty - ACS 2010 5-yr estimates, S1701, HC01_EST_VC01

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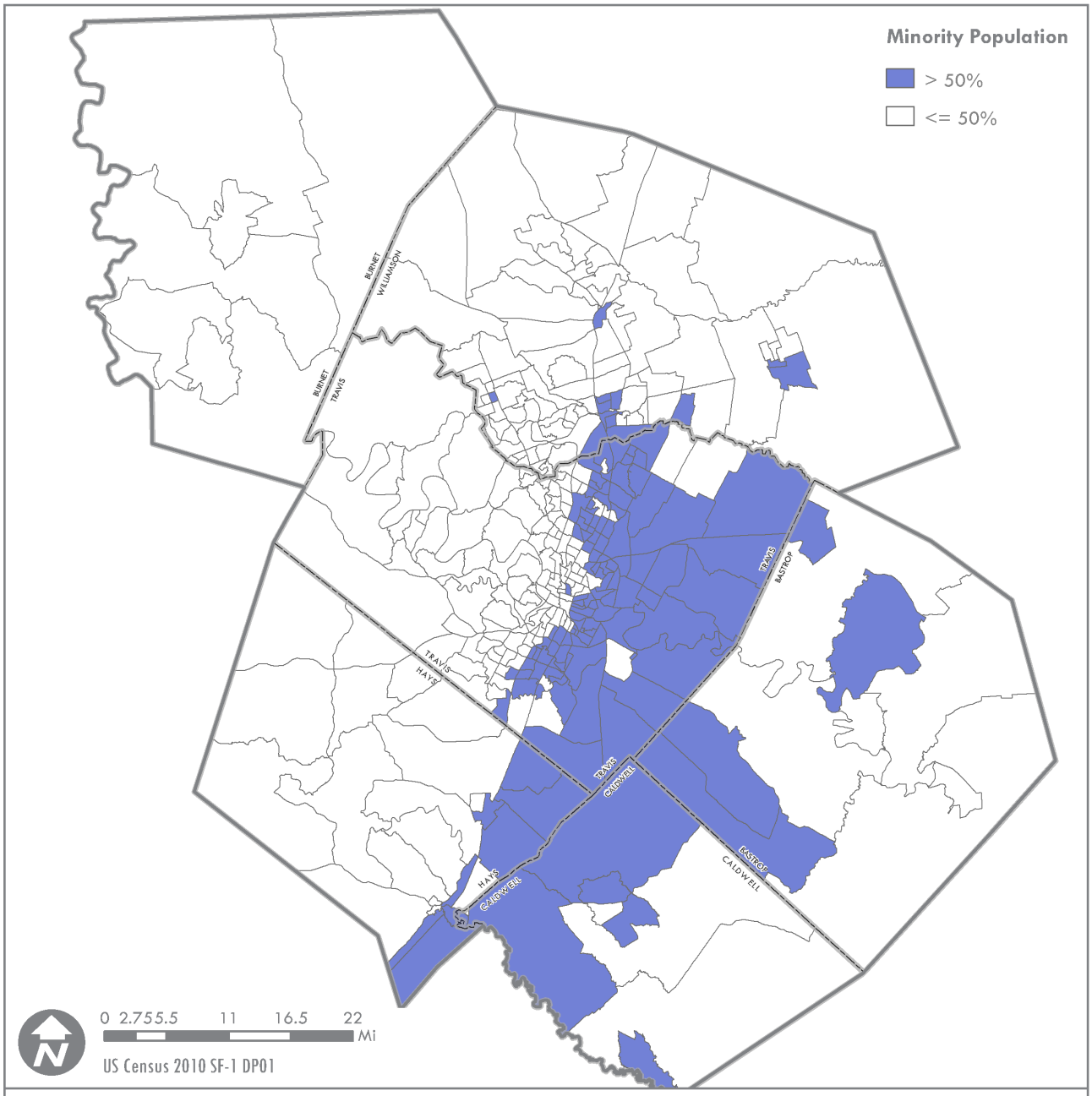
This map was developed by CAMPO for the purpose of aiding in regional transportation planning decisions and is not warranted for any other use. No warranty is made by CAMPO regarding its accuracy or completeness.

G:\2-Data_Development_and_Maintenance\200-GIS\Maps\EJ\2040\Environmental Justice Areas 2040 Plan.mxd

Attachment 9 – EJ Areas, Minority

EJ AREAS, MINORITY



Environmental Justice (EJ) areas are determined by analysis of the following criteria: More than 50% of the population do not identify as "White, non-Hispanic."

129 / 358 (36%) of Census Tracts are EJ by minority population.

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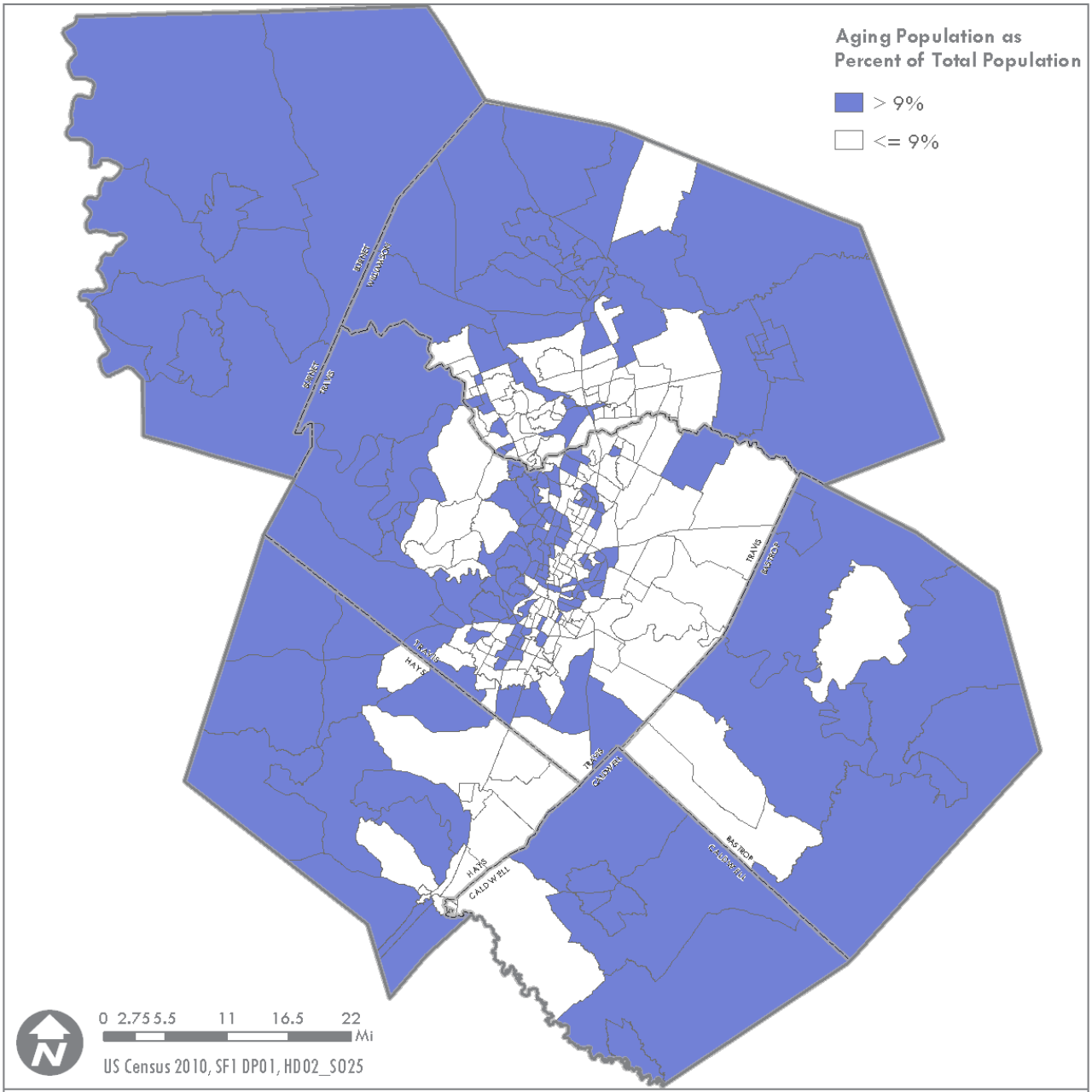
G:\2-Data_Development_and_Maintenance\200-GIS\Maps\EJ\2040\EJ Areas -by Minority.mxd

Attachment 10 – EJ Areas, Aging

EJ AREAS, AGING



Environmental Justice (EJ) areas determined by analysis of the following criteria: The region total percent of population over the age of 65 years is 9%. A census tract with a population over the age of 65 years that is greater than 9% is over-represented.

137 / 358 (38.2%) of Census Tracts are EJ by Aging population.

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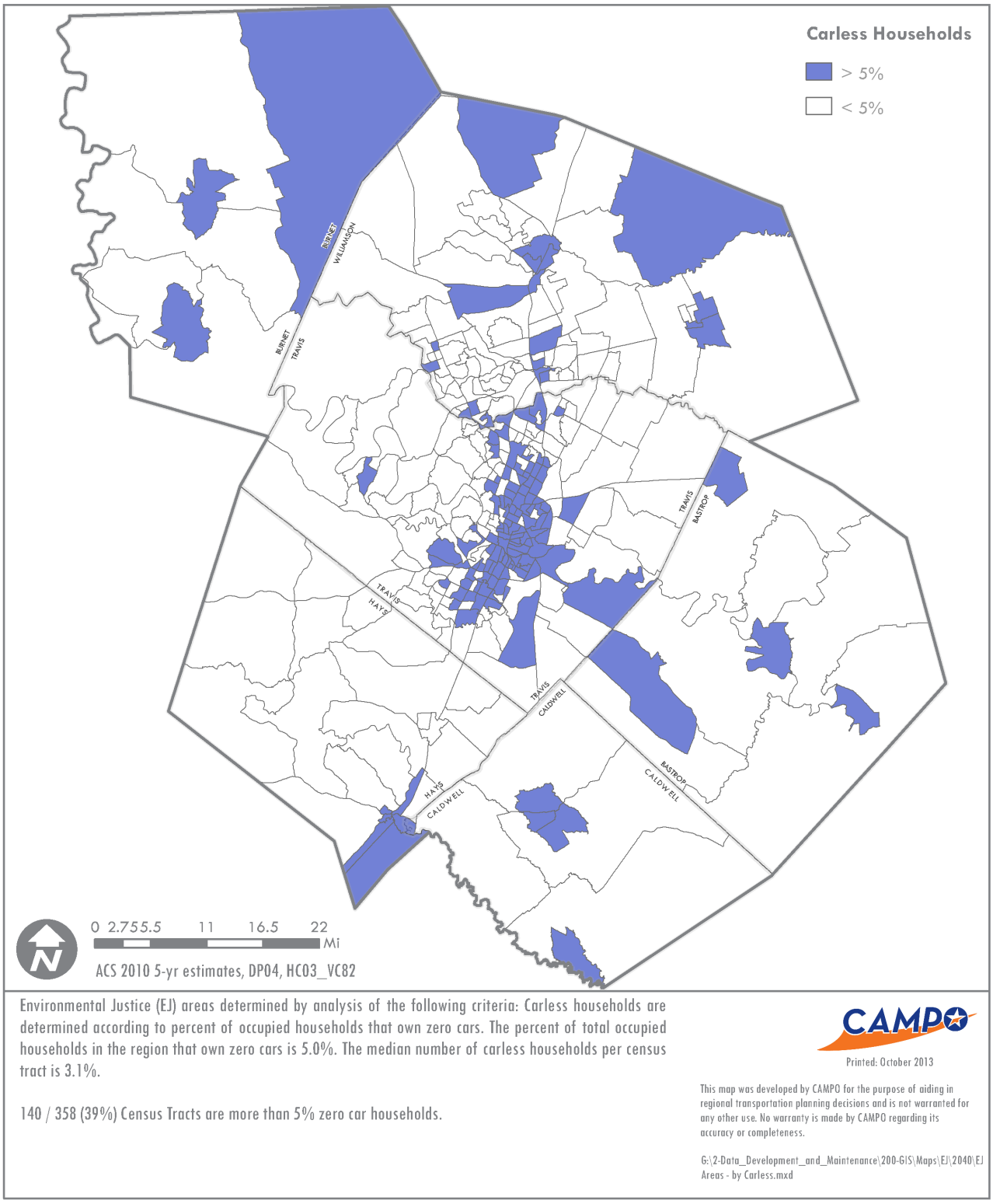
G:\2-Data_Development_and_Maintenance\200-GIS\Maps\EJ\2040\EJ Areas - by Eldery.mxd

Attachment 11 – EJ Areas, Carless

EJ AREAS, CARLESS



Environmental Justice (EJ) areas determined by analysis of the following criteria: Carless households are determined according to percent of occupied households that own zero cars. The percent of total occupied households in the region that own zero cars is 5.0%. The median number of carless households per census tract is 3.1%.

140 / 358 (39%) Census Tracts are more than 5% zero car households.

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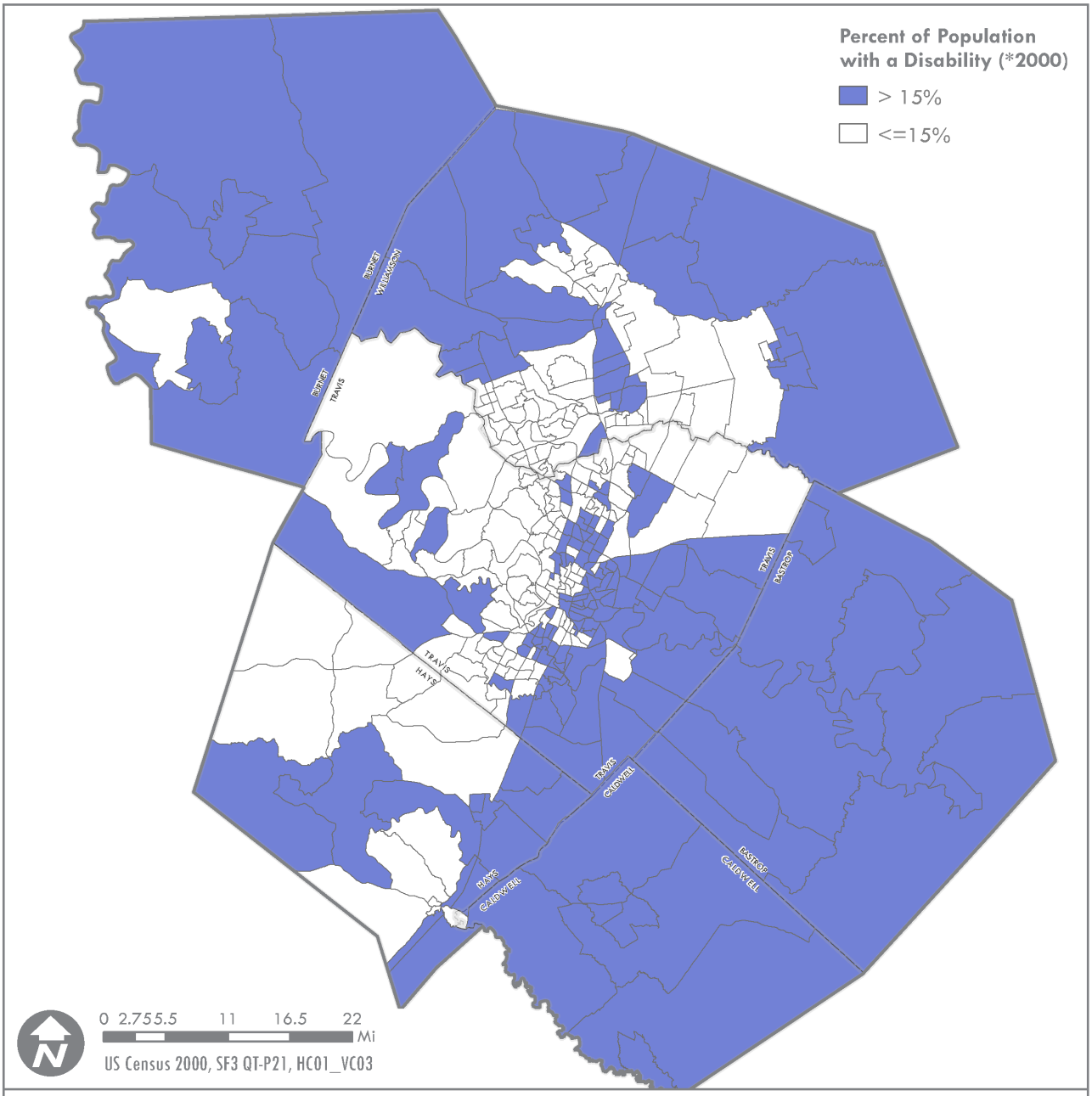
G:\2-Data_Development_and_Maintenance\200-GIS\Maps\EJ\2040\EJ Areas - by Carless.mxd

Attachment 12 – EJ Areas, Disability

EJ AREAS, DISABILITY



These Environmental Justice (EJ) areas are determined by analysis of the following criteria: The disabled population is determined using data from the 2000 US Census.

The CAMPO 6-County region had a total population of persons over the age of 5 of 1,172,036 in 2000, and a disabled population of 117,568 in 2000. The region percentage of the population that was disabled in 2000 was 15%.

161 / 358 (44%) of Census Tracts are greater than 15% disabled population.

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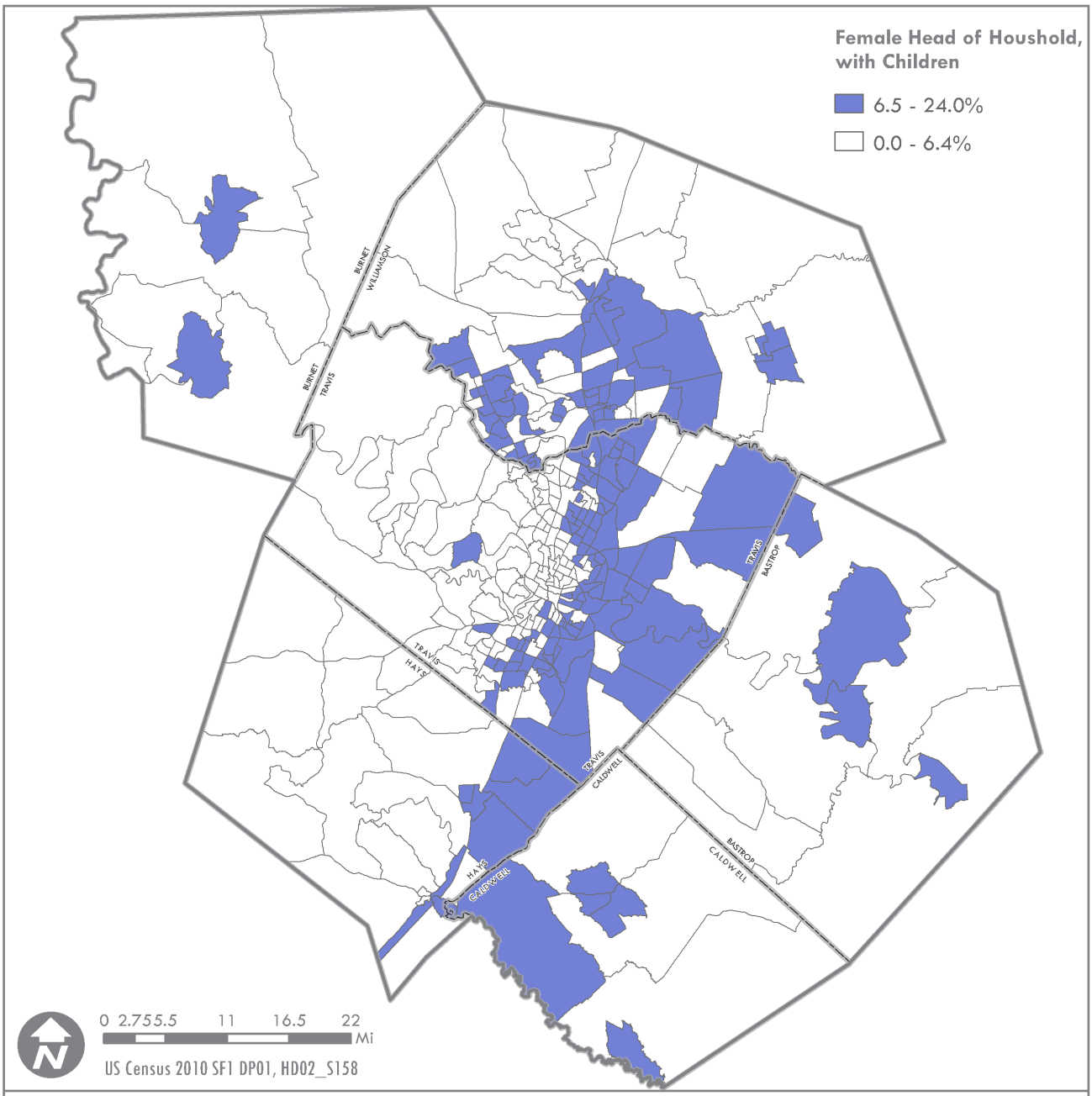
G:\2-Data_Development_and_Maintenance\200-GIS\Maps\EJ\2040\EJ Areas - by Disability.mxd

Attachment 13 – EJ Areas, Female Head of Household

EJ AREAS, FEMALE HEAD OF HOUSEHOLD



Environmental Justice (EJ) areas determined by analysis of the following criteria: The region total percent of households with a female head of household, with children is 6.4% of households. Determined by dividing the total number of households, including family and non-family households, by the number of households with a female householder with children.

152 / 358 (42.4%) Census Tracts are more than 6.4% households headed by a Female and have children present.

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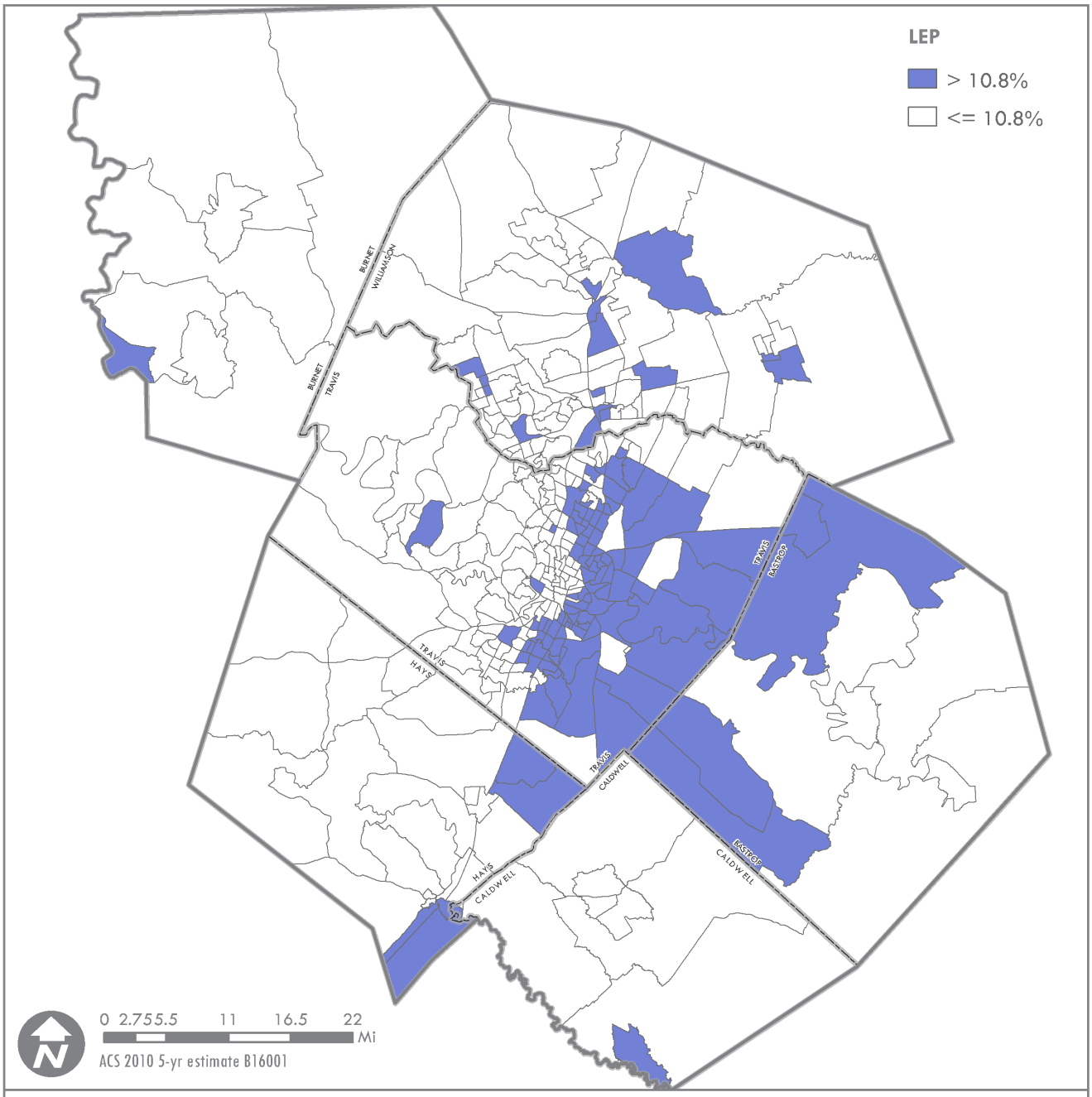
G:\2-Data_Development_and_Maintenance\200-GIS\Maps\EJ\2040\EJ Areas - by Female HoHH.mxd

Attachment 14 – Environmental Justice Areas, by LEP

ENVIRONMENTAL JUSTICE AREAS, by LEP



These Environmental Justice (EJ) areas are determined by analysis of the following criteria:

In the CAMPO region 10.8% of the population is LEP. This is calculated from a universe of individuals over the age of 5. Any census tracts having over 10.8% of the population being LEP persons is considered and EJ census tract.

116 of 358 (32.4%) census tracts are EJ by LEP.

167,281 of 1,543,661 persons are LEP in the CAMPO region.

CAMPO

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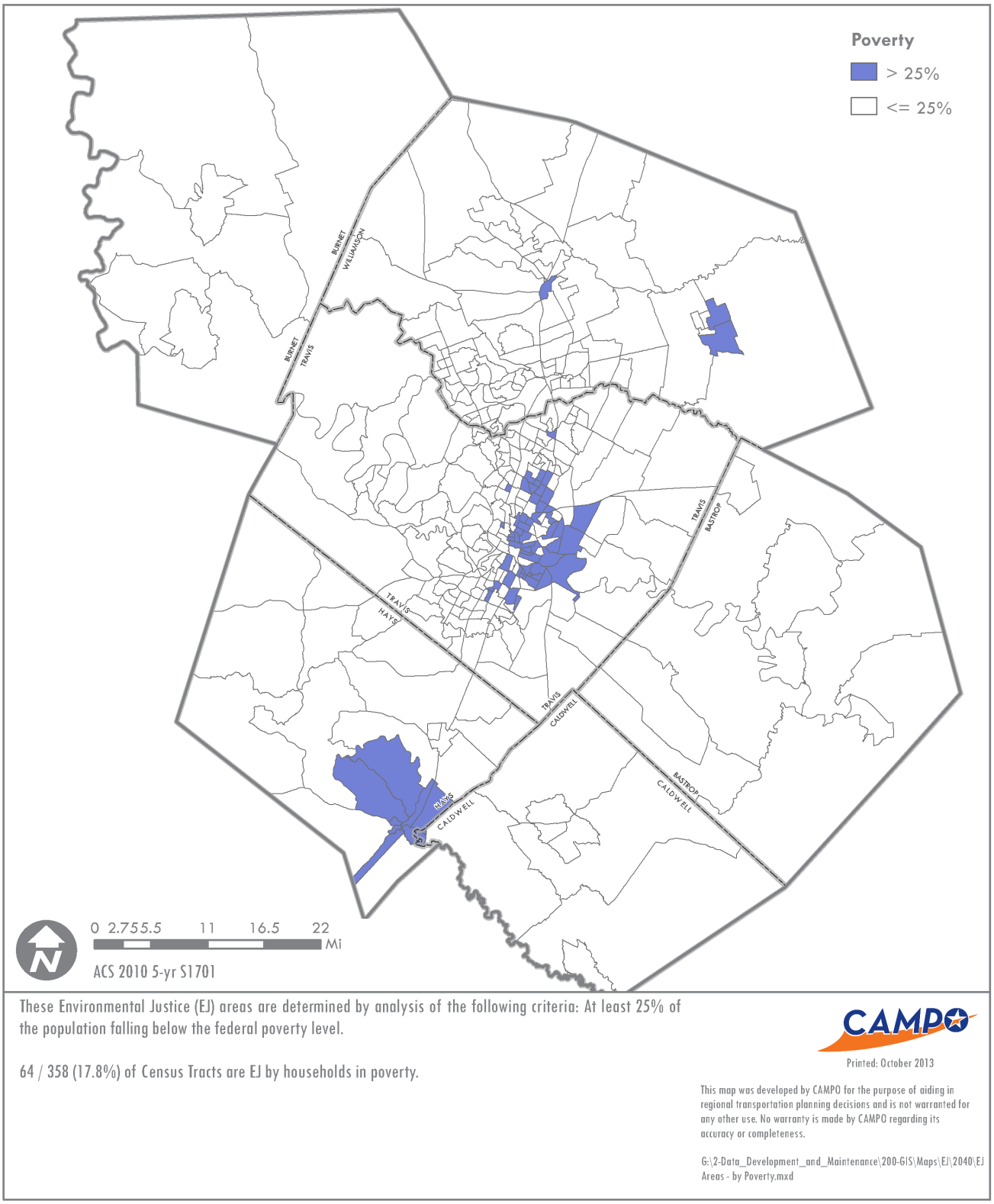
G:\2-Data_Development_and_Maintenance\200-GIS\Maps\EJ\2040\EJ Areas - by LEP.mxd

EJ AREAS, POVERTY



These Environmental Justice (EJ) areas are determined by analysis of the following criteria: At least 25% of the population falling below the federal poverty level.

64 / 358 (17.8%) of Census Tracts are EJ by households in poverty.

CAMPO

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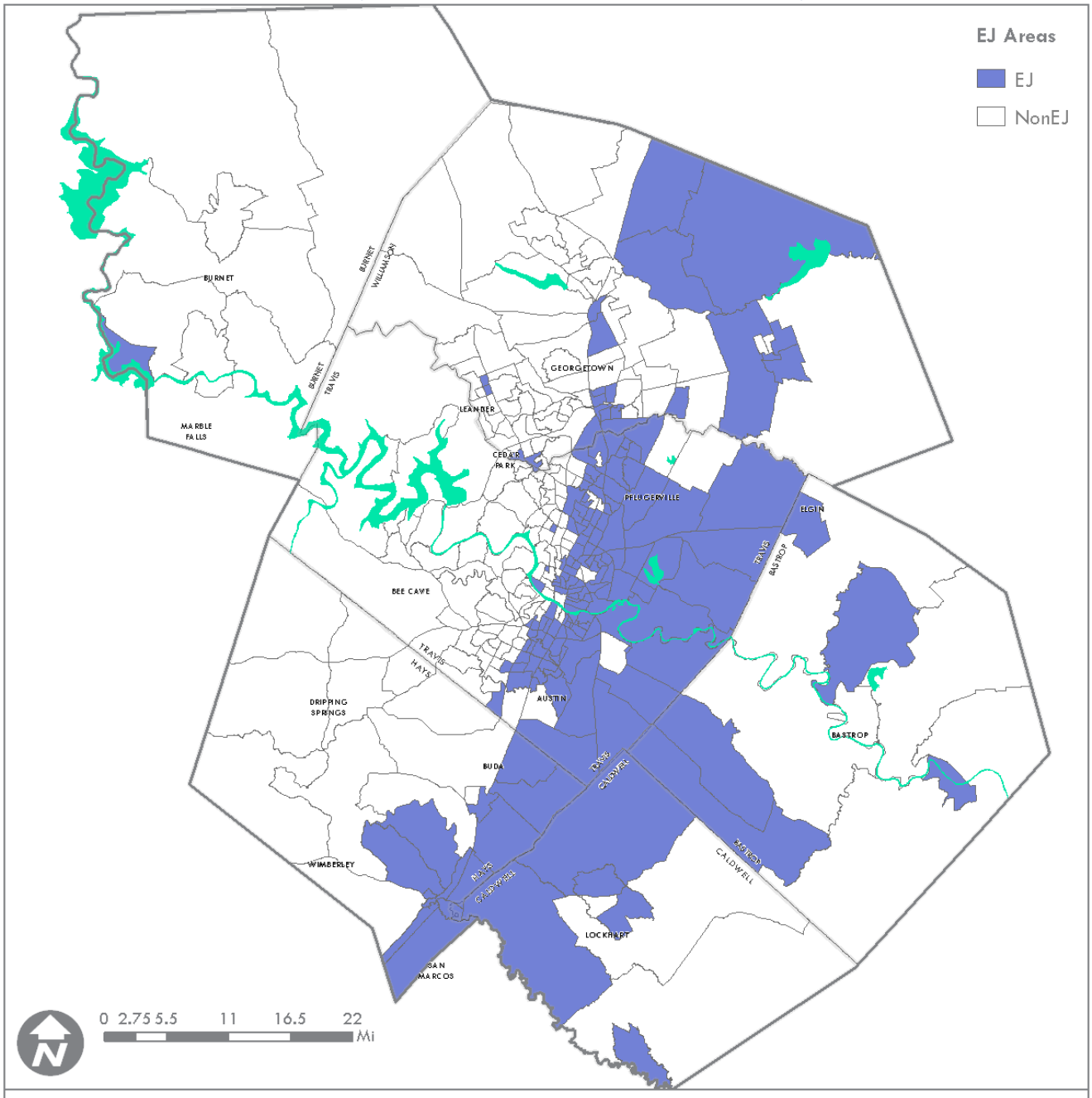
G:\2-Data_Development_and_Maintenance\200-GIS\Maps\EJ\2040\EJ Areas - by Poverty.mxd

EJ AREAS, 2040 (USDOT, COUNTY MFI)



These Environmental Justice (EJ) areas are determined by analysis of the following criteria:
-Households in Poverty > 25% (of total households)
-Low Income Families > 50% (of total families) earn less than 80% of County MFI
-Minority Population > 50% (of total population)

168 of 358 Census Tracts, or 47%, are EJ Census Tracts based on these 3 criteria.

Source:
Minority Population - US Census 2010, SF1-DP1, HD01-S076, HD01_S123; Low Income Population - US Census 2010, SF3-DP3; Population in Poverty - ACS 2010 5-yr estimates, S1701, HC01_EST_VC01

CAMPO

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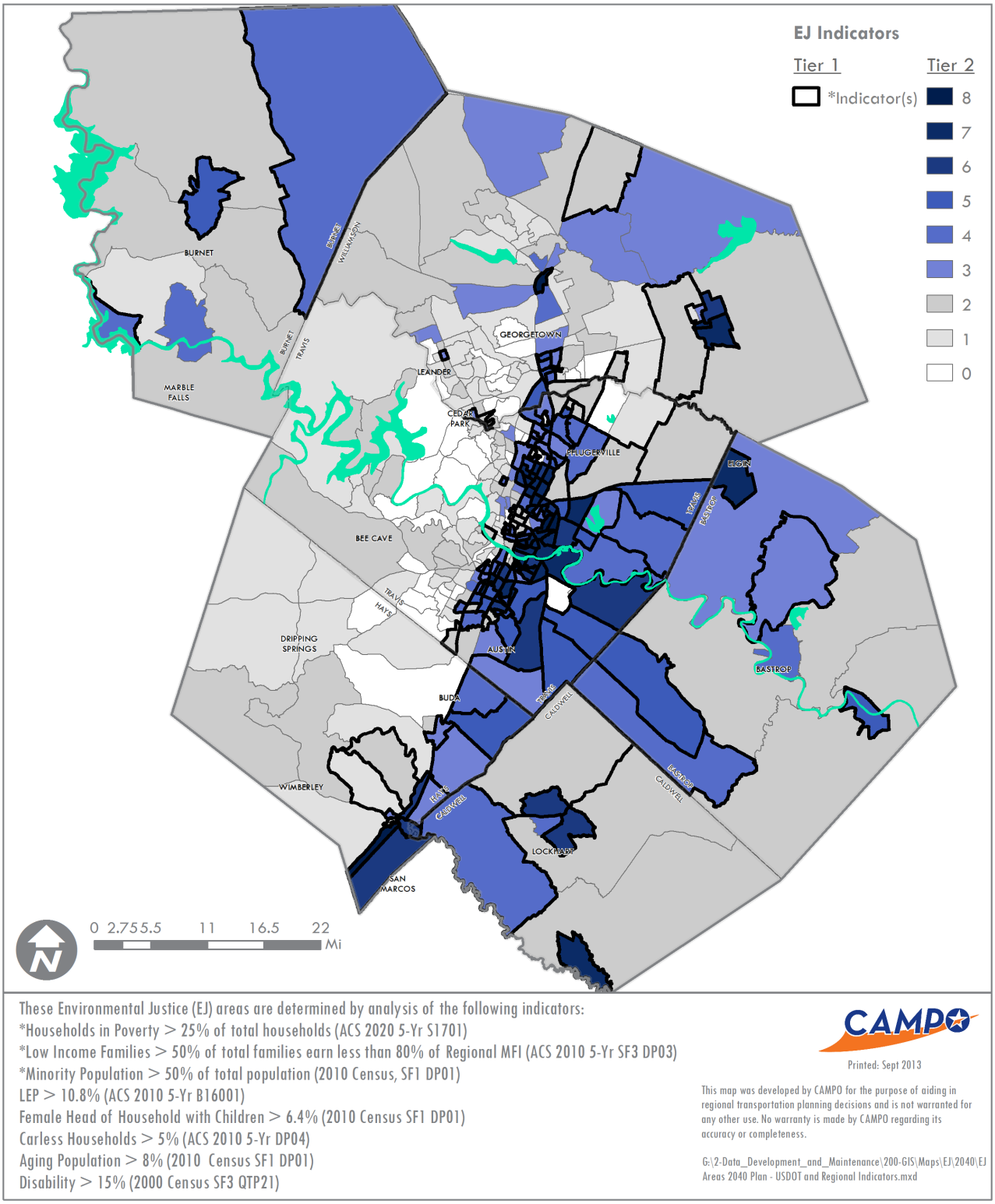
G:\2-Data_Development_and_Maintenance\200-GIS\Maps\EJ\2040\Environmental Justice Areas 2040 Plan.mxd

EJ AREAS, 2040 (USDOT & REGIONAL INDICATORS)



These Environmental Justice (EJ) areas are determined by analysis of the following indicators:
*Households in Poverty > 25% of total households (ACS 2020 5-Yr S1701)
*Low Income Families > 50% of total families earn less than 80% of Regional MFI (ACS 2010 5-Yr SF3 DP03)
*Minority Population > 50% of total population (2010 Census, SF1 DP01)
LEP > 10.8% (ACS 2010 5-Yr B16001)
Female Head of Household with Children > 6.4% (2010 Census SF1 DP01)
Carless Households > 5% (ACS 2010 5-Yr DP04)
Aging Population > 8% (2010 Census SF1 DP01)
Disability > 15% (2000 Census SF3 QTP21)

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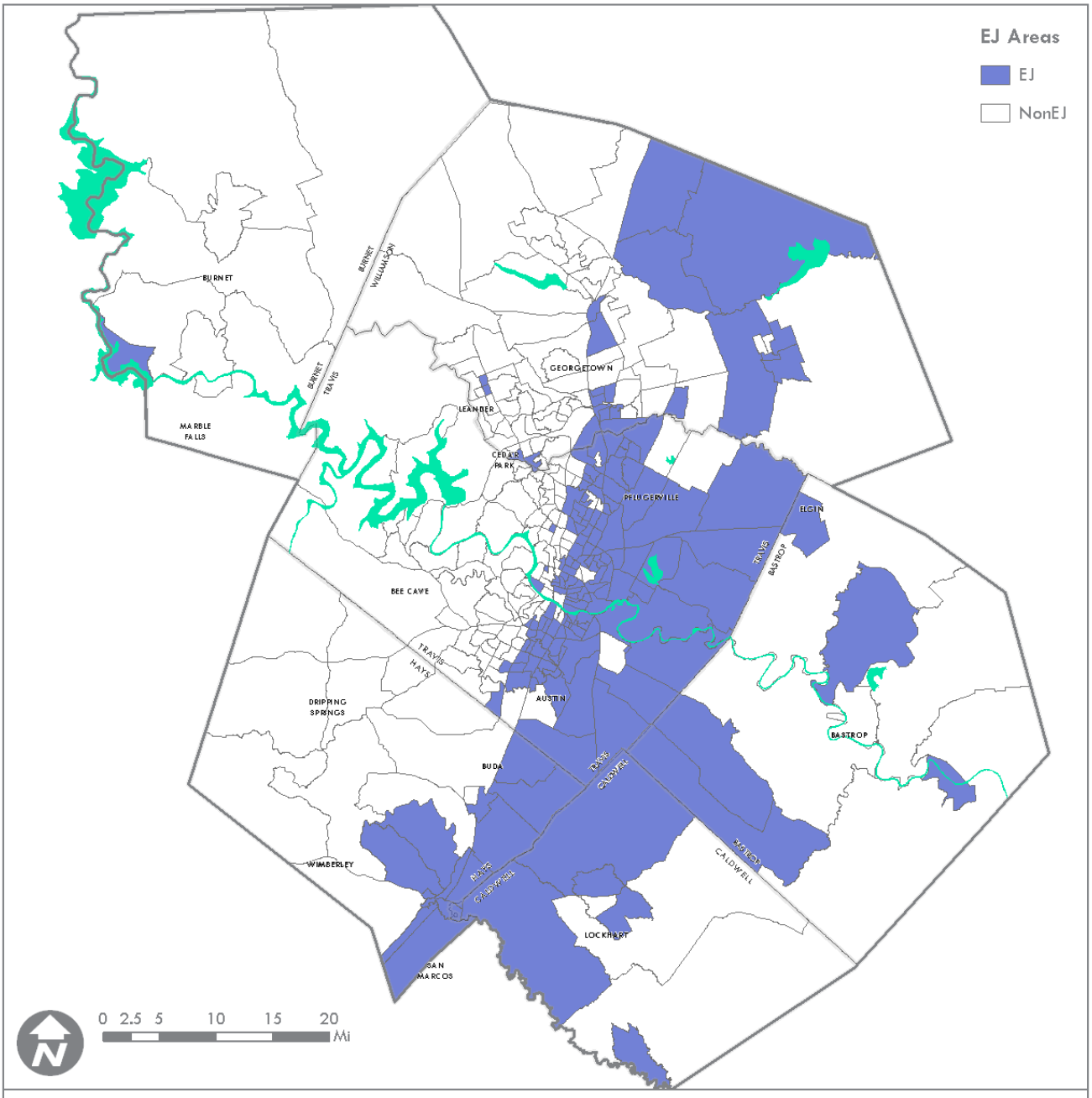
G:\2-Data_Development_and_Maintenance\200-GIS\Maps\EJ\2040\EJ Areas 2040 Plan - USDOT and Regional Indicators.mxd

2040 PLAN EJ AREAS



These Environmental Justice (EJ) areas are determined by analysis of the following criteria:
-Households in Poverty > 25% (of total households)
-Low Income Families > 50% (of total families) earn less than 80% of County MFI
-Minority Population > 50% (of total population)

168 of 358 Census Tracts, or 47%, are EJ Census Tracts based on these 3 criteria. And, 25% of the land area of the region is EJ.

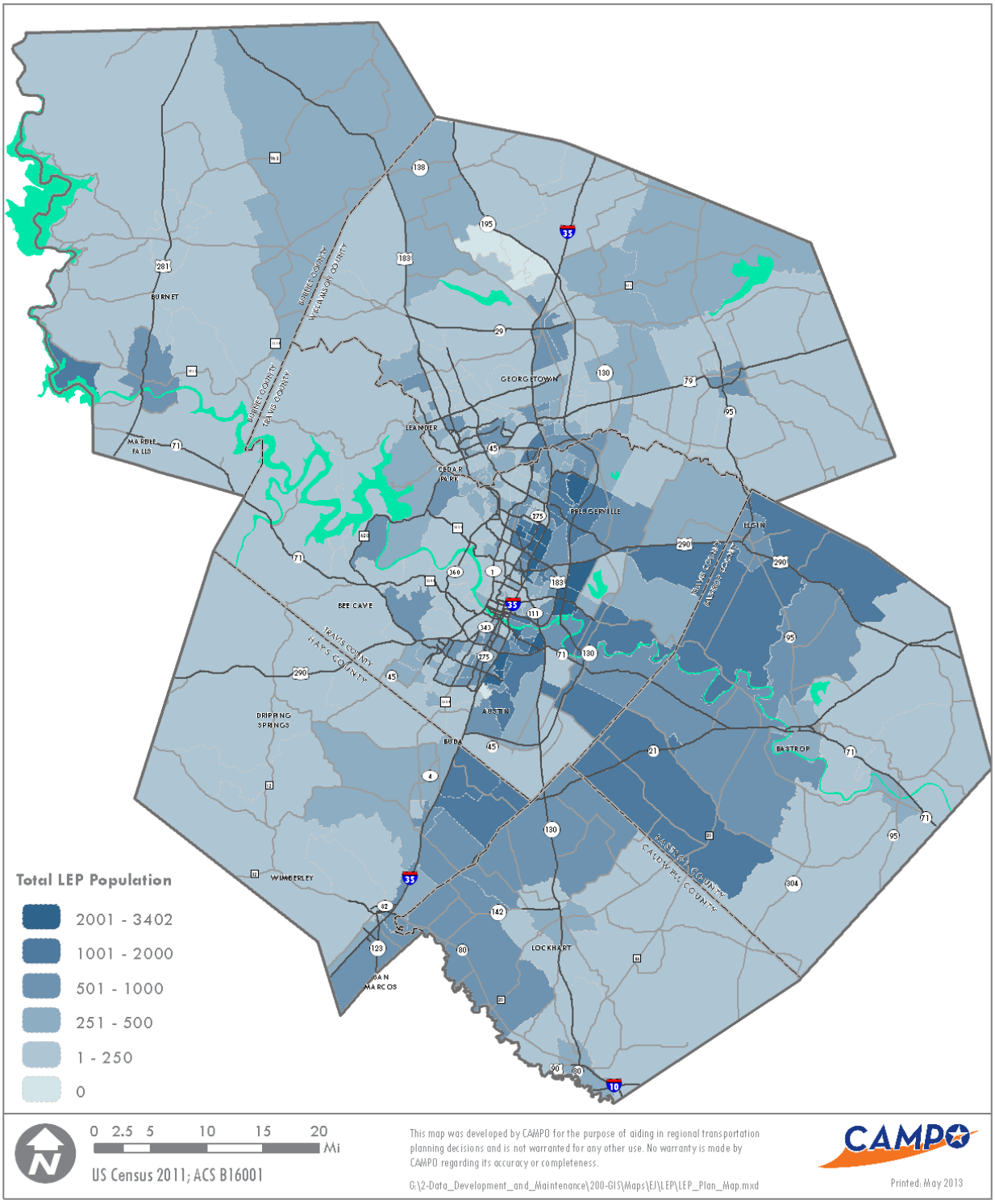
Source: Minority Population - US Census 2010, SF1-DP1, HD01-S076, HD01_S123; Low Income Population - US Census 2010, SF3-DP3; Population in Poverty - ACS 2010 5-yr estimates, S1701, HC01_EST_VC01

CAMPO

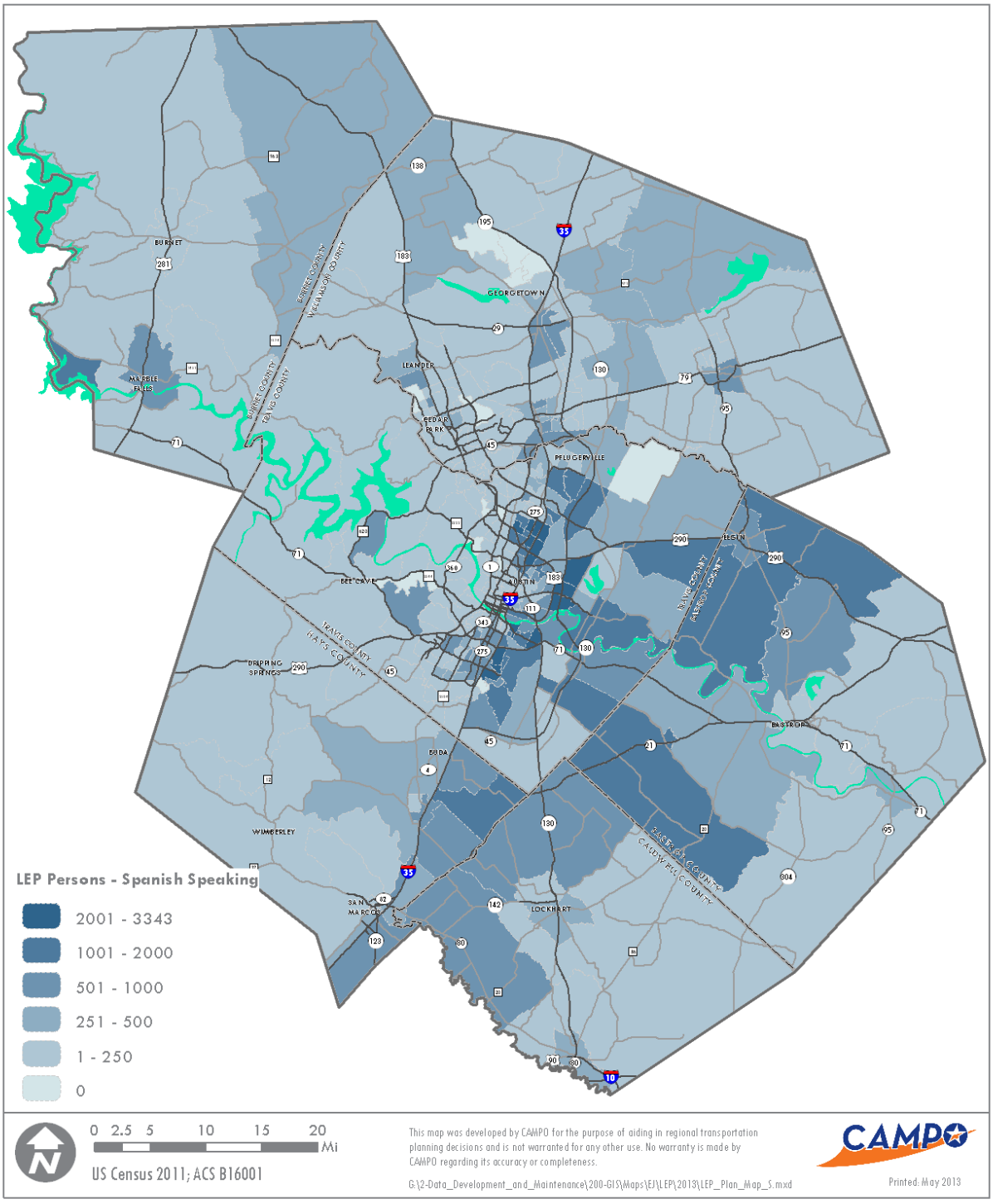
Printed: Dec 2013

G:\2-Data_Development_and_Maintenance\200-GIS\Maps\EJ\2040\EJ Areas 2040 Plan.mxd

LIMITED ENGLISH PROFICIENCY



LIMITED ENGLISH PROFICIENCY, SPANISH



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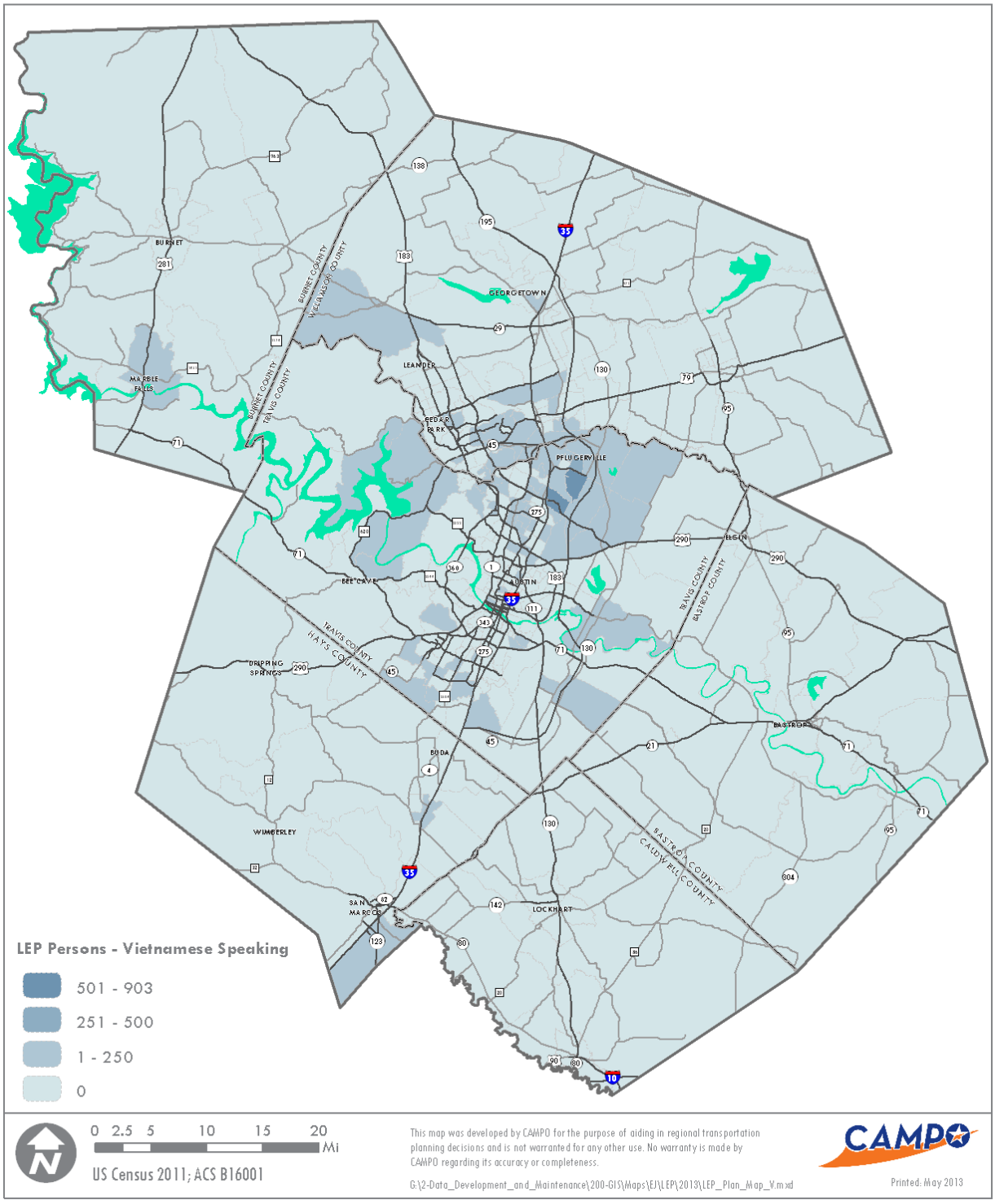
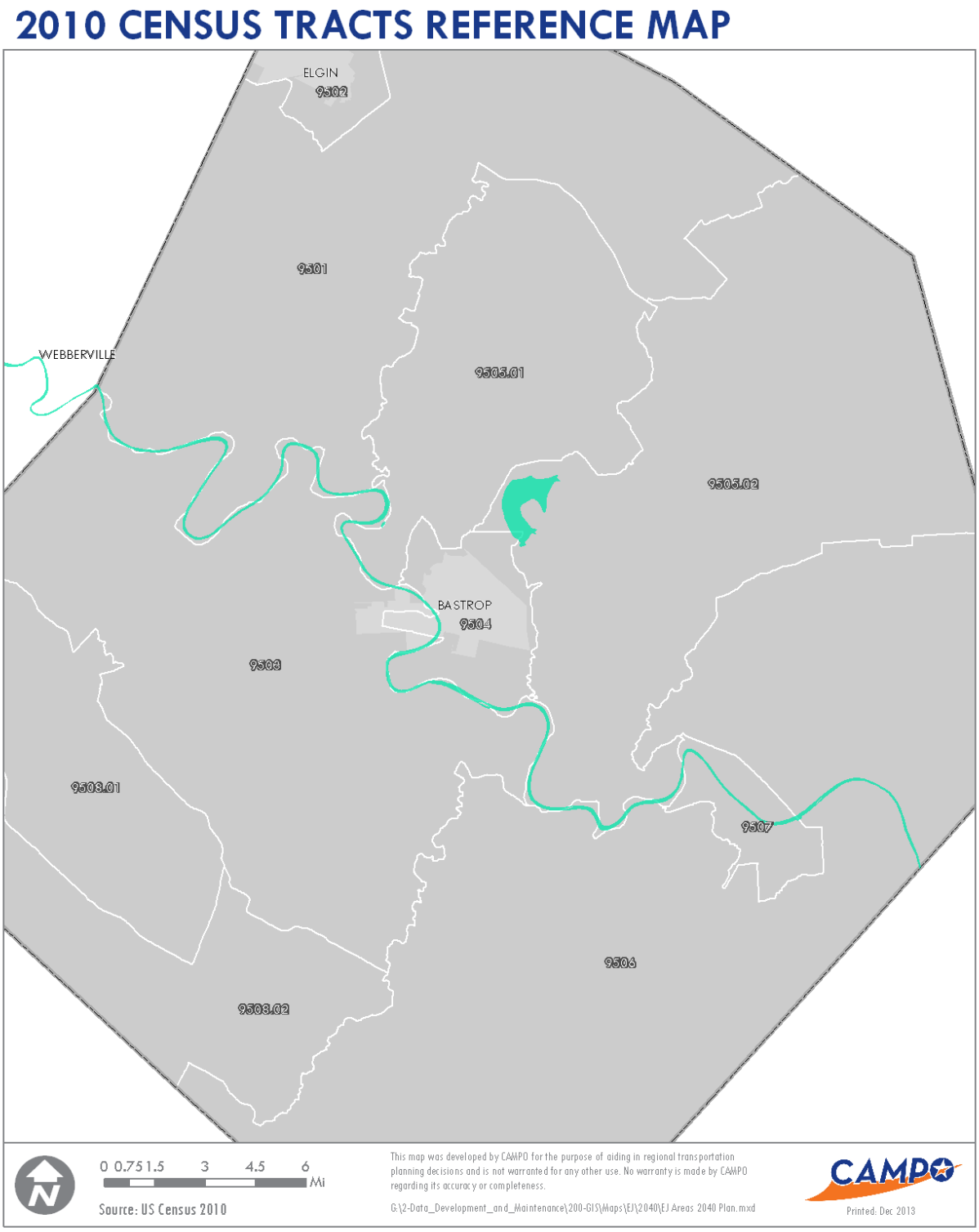
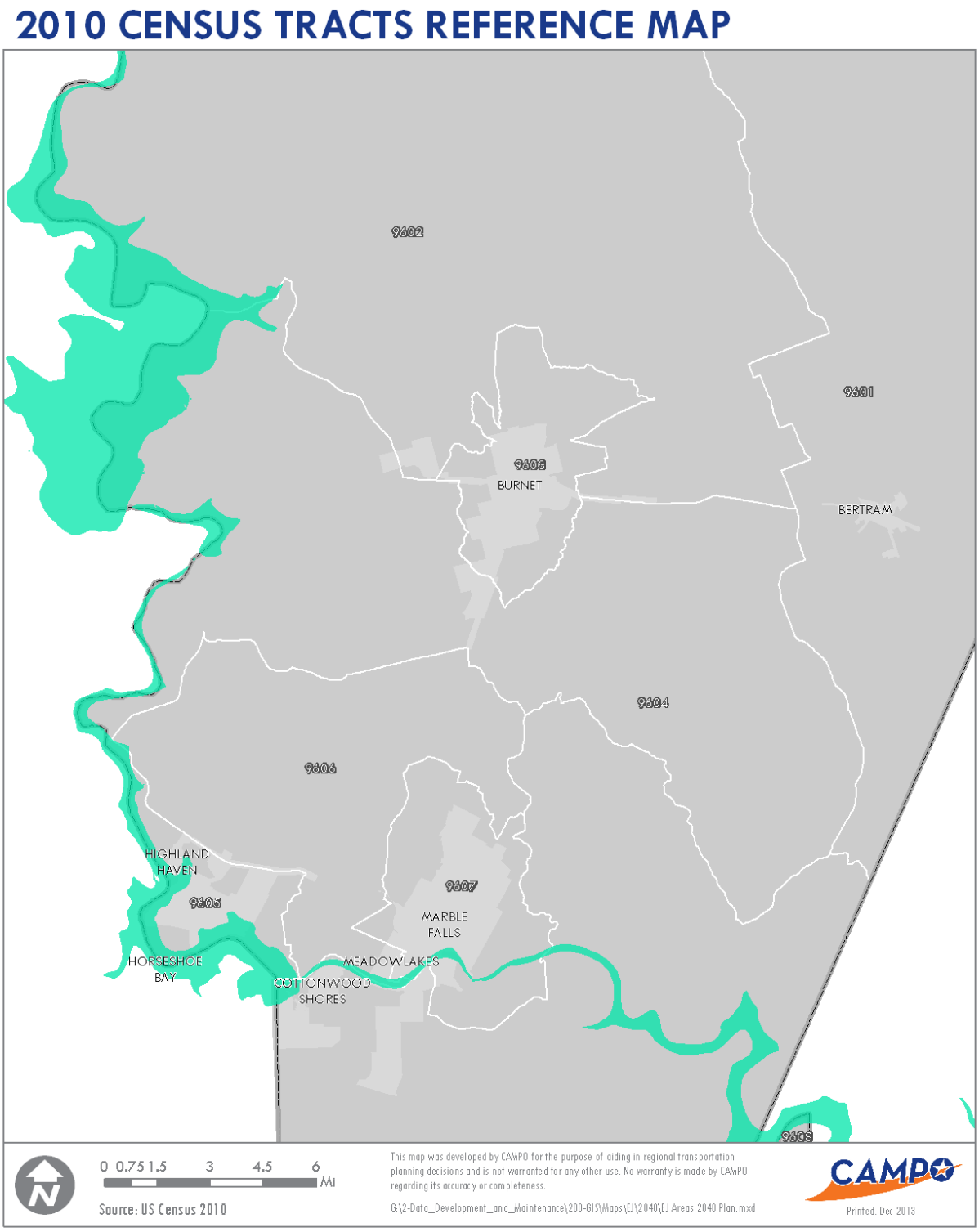


Attachment 22 – 2010 Census Tracts Reference, Bastrop



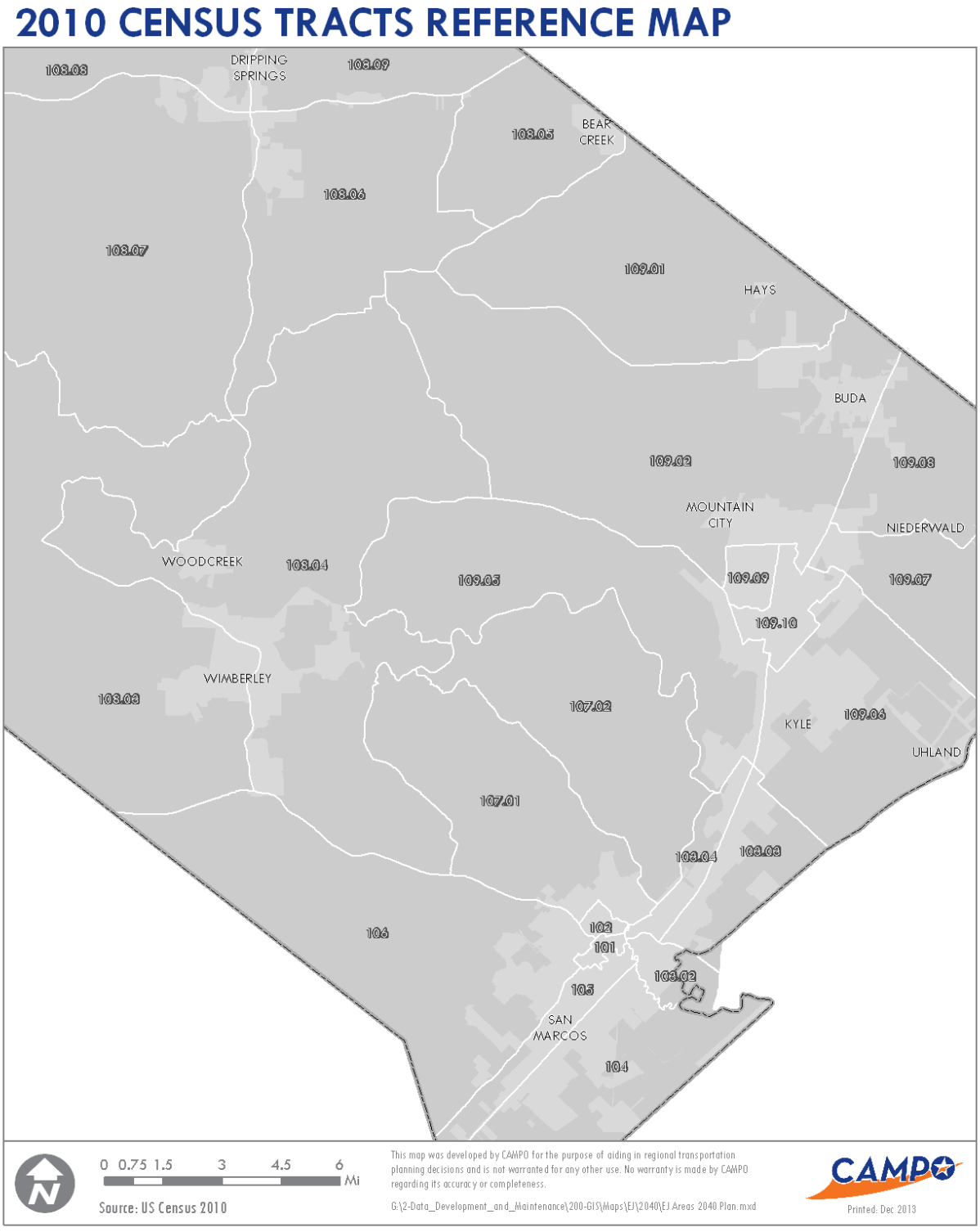
Attachment 23 – 2010 Census Tracts Reference, Burnet



Attachment 24 – 2010 Census Tracts Reference, Caldwell

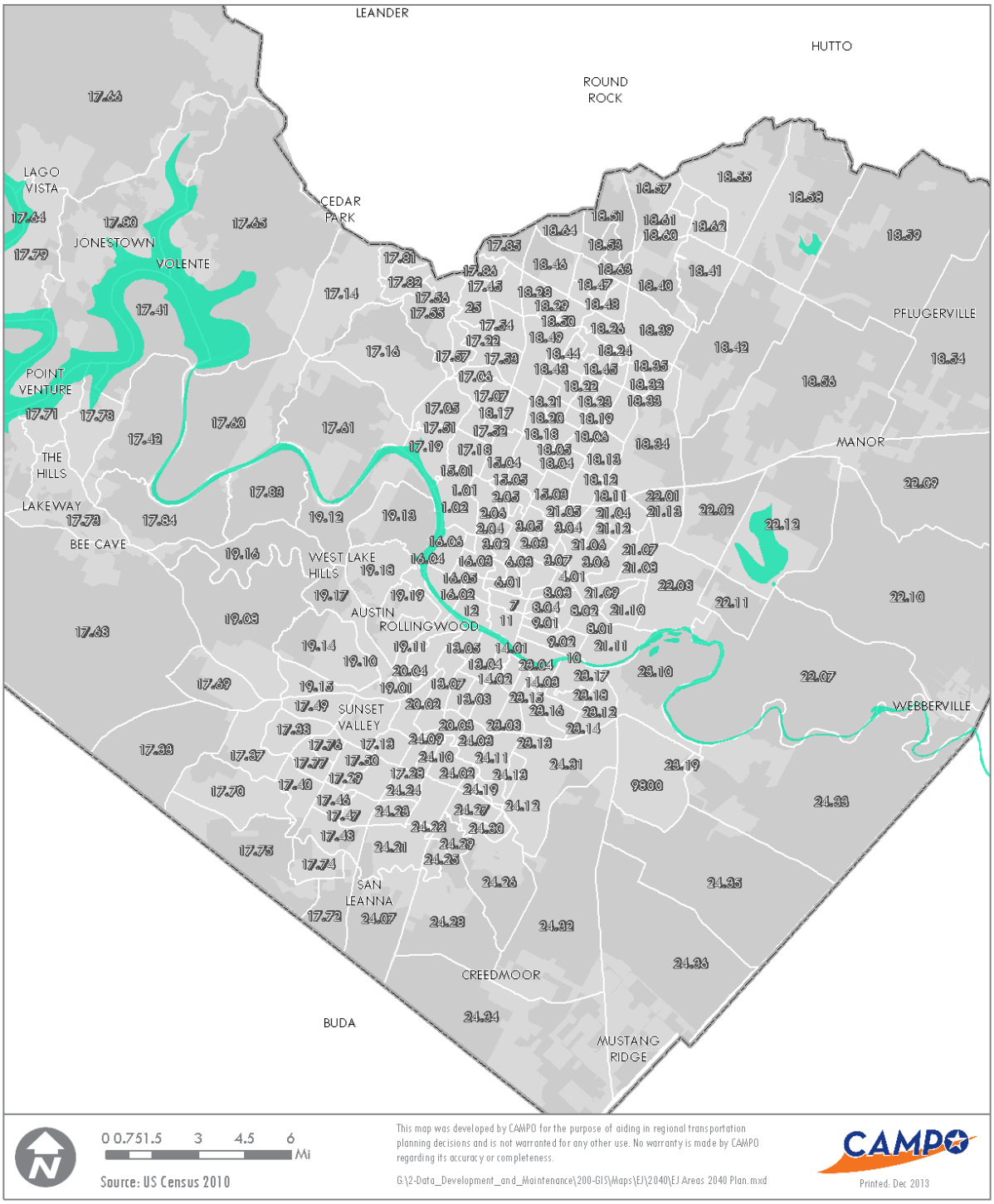
2010 CENSUS TRACTS REFERENCE MAP

Attachment 25 – 2010 Census Tracts Reference, Hays

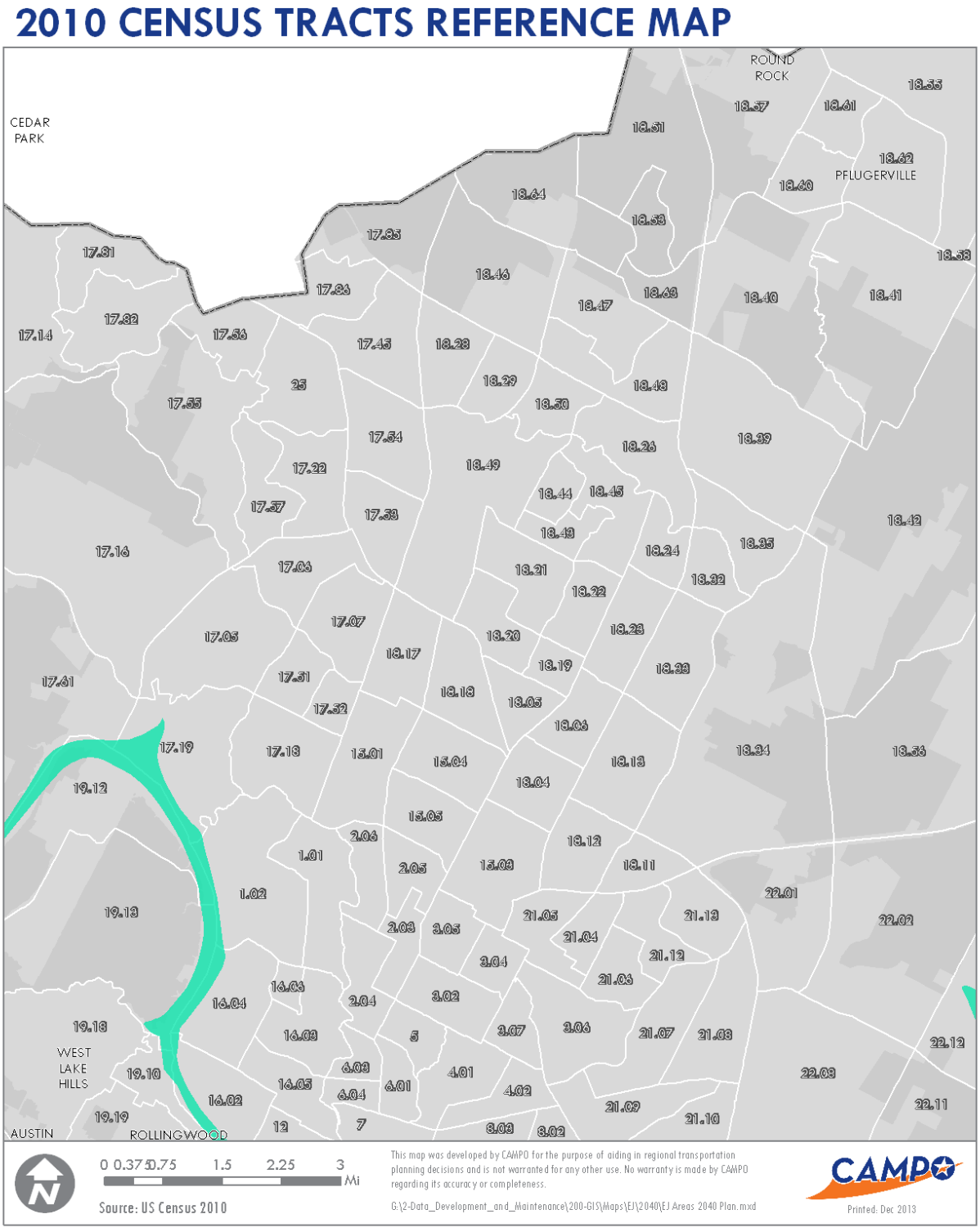


Attachment 26 – 2010 Census Tracts Reference, Travis

2010 CENSUS TRACTS REFERENCE MAP



Attachment 27 – 2010 Census Tracts Reference, Williamson

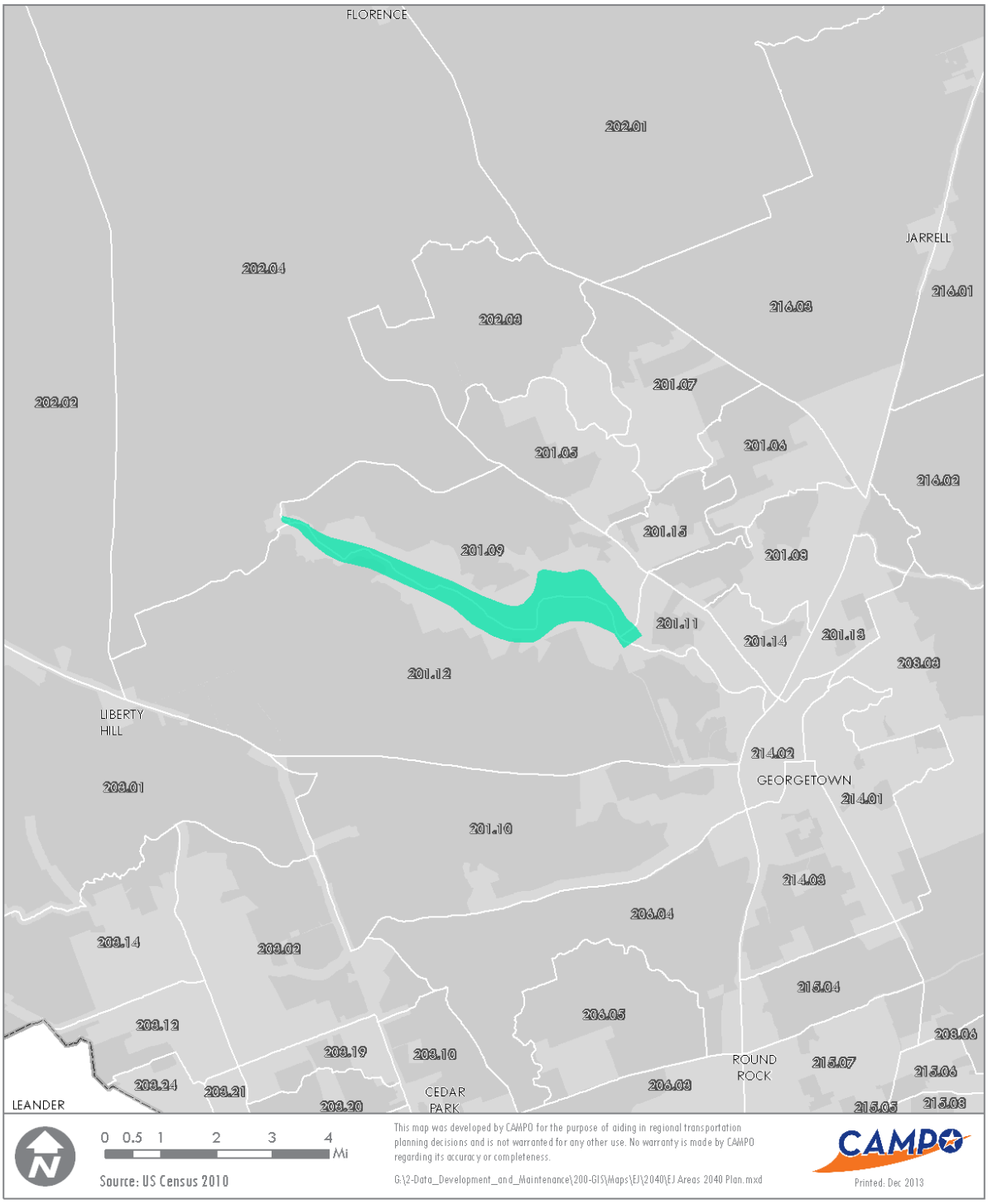


Attachment 28 – 2010 Census Tracts Reference, Austin

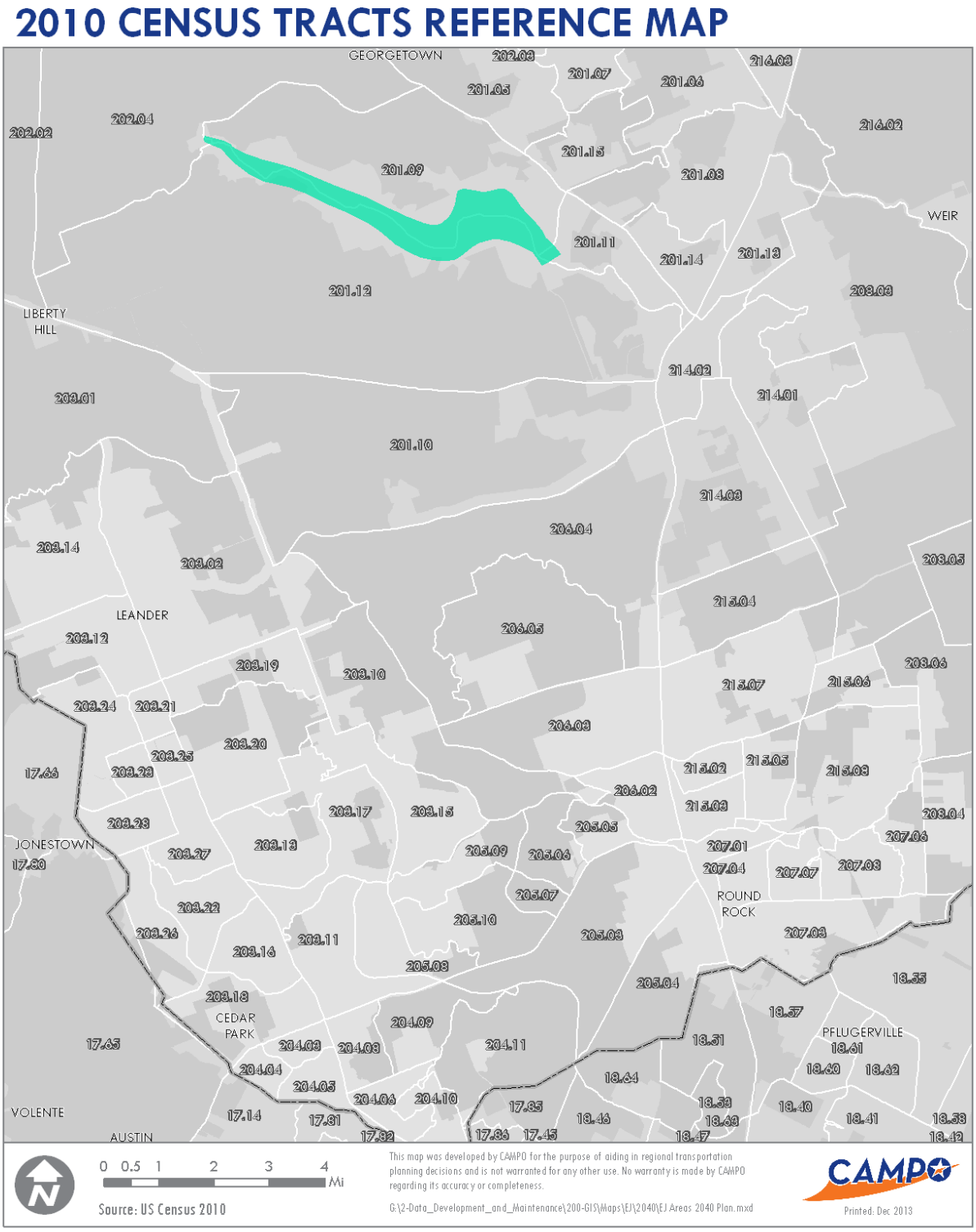
Attachment 29 – 2010 Census Tracts Reference, Northern Williamson County

Attachment 30 – 2010 Census Tracts Reference, Georgetown

2010 CENSUS TRACTS REFERENCE MAP



Attachment 31 – 2010 Census Tracts Reference, Southern Williamson County



Attachment 32 – Spanish Comment Card

Los cambios del CAMPO 2040 Plan y TIP

Papel del comentario

Nombre (requerido): _____

Dirrección: _____

Correo electrónico: _____

Comentario: _____

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Los comentarios serán entregados hasta 5 p.m. el viernes 14 de abril de 2017

Correo: CAMPO
3300 N. Interstate 35, Suite 630
Austin, TX 78705

Fax: 737.708.8140
Correo electrónico: campo@campotexas.org
En persona: 3300 N. Interstate 35, Suite 630,
Austin, TX 78705

Attachment 33 – RTP/TIP Brochure

La organización de planificacón del área metropolitana del capital

Los cambios al CAMPO 2040 Plan y el 2017-2020 Programa de las Mejoras del Transporte (TIP)

El CAMPO 2040 Plan es un plan del transporte regional del período de 20 años. La Programa de las Mejoras del Transporte (TIP) es un documento que tiene los proyectos del transporte que empieza la construcción o la implementación en un período de cuatro años. Dos veces cada año, agencias gubernamentales, como TxDOT, Capital Metro, la Sistema del Transporte Rural del Área del Capital (CARTS), y los gobiernos locales tiene una opurtunidad para entregar cambios al Plan y TIP. Los cambios entregados no incluyen los proyectos nuevos financiados de CAMPO. Generalmente, los son limitados a los proyectos que ya están en los documentos de planificación o son financiadios de sus propios gobiernos locales. Los cambios pueden ser un cambio de la fuente del financiamiento, los limites del proyecto, o la descripción del proyecto.

Provee un comentario de los cambios al CAMPO 2040 Plan y el TIP

Los comentarios de los cambios al CAMPO 2040 Plan y el 2017-2020 TIP serán aceptados desde 5 pm 14 de abril de 2017. Los mapas, la información, y el comentario por internet están en la pagina web www.campotexas.org/get-involved. Los comentarios pueden ser entregados por:

Correo: CAMPO
3300 N. Interstate 35, Suite 630
Austin, TX 78705

Fax: 737.708.8140
Correo electrónico: campo@campotexas.org
En persona: 3300 N. Interstate 35, Suite 630, Austin, TX 78705

¿Qué es CAMPO?

La organización de planificacón del área metropolitana del capital (CAMPO) es la agencia que da fondos federales en los seís condados en el región del CAMPO—Bastrop, Burnet, Caldwell, Hays, Travis, y Williamson. Los Directores de la Política del Transporte (TPB) son 20 funcionarios electos y trabajabores del las agencias del transporte en los seís condados del la región. El CAMPO es responsible para trabajar con los gobiernos locales para hacer el plan a largo plazo (20 años) y el cuatro año programa del proyectos.

Dirección: 3300 N. Interstate 35, Suite 630
Austin, Texas 78705
Teléfono: 512.215-8225
Fax: 737-708-8140
Correo electrónico: campo@campotexas.org

Spring 2017 Amendments

La información del proyecto puede cambiar debido al perdido de los gobiernos locales. Para la información más nueva, visita la pagina web www.campotexas.org/get-involved.

Más información y descripciones de los proyectos asociado con los "project ID numbers" muestran aqui, en la pagina web arriba, o por teléfono por 512-215-8225.