

TECHNICAL ADVISORY COMMITTEE MEETING

Monday, December 17, 2018 University Park, Suite 300 3300 N. IH 35, Austin, Texas 78705 2:00 p.m.

AGENDA

	1.	Certification of Quorum – Quorum requirement is 13 membersVice Chair Amy Miller
ACT	ION:	
	2.	Approval of November 26, 2018 Meeting Summary
	3.	Recommendation for adoption of Draft Public Participation Plan (PPP)
	4.	Recommendation for approval of FY 2018 Federal Transit Administration (FTA) Section 5310 Projects
INF	ORM <i>A</i>	Mr. Collins will present FY 2018 FTA Section 5310 projects and seek TAC recommendation for approval. ATION:
	5.	Presentation on Demographic Analysis
	6.	Report on Transportation Planning Activities a. Capital-Alamo Connection Study Joint MPO Board Meeting
	7.	TAC Chair Announcements
	8.	Adjournment



Capital Area Metropolitan Planning Organization Technical Advisory Committee Meeting Summary November 26, 2018

The CAMPO Technical Advisory Committee was called to order by the Chair at 2:11 p.m.

A quorum was announced present.

Present:

	Member	Representing	Member Attending	Alternate Attending
1.	Stevie Greathouse	City of Austin	Y	(via phone)
2.	Cole Kitten	City of Austin	N	
3.	Robert Spillar	City of Austin	N	
4.	Tom Gdala	City of Cedar Park	Y	
5.	Edward Polasek	City of Georgetown	N	
6.	Trey Fletcher	City of Pflugerville	Y	
7.	Gary Hudder	City of Round Rock	N	Gerald Pohlmeyer
8.	Laurie Moyer	City of San Marcos	N	Rohit Vij (via phone)
9.	Julia Cleary	Bastrop County	Y	
10.	Amy Miller	Bastrop County (Smaller Cities)	Y	
11.	Greg Haley	Burnet County	Y	(via phone)
12.	Mike Hodge	Burnet County (Smaller Cities)	Y	
13.	(Vacant)	Caldwell County	N	
14.	Dan Gibson	Caldwell County (Smaller Cities)	Y	(via phone)
15.	Jerry Borcherding	Hays County	N	
16.	David Fowler	Hays County (Smaller Cities)	Y	

17.	Charlie Watts	Travis County	Y	
18.	Alex Amponsah	Travis County (Smaller Cities)	Y	
19.	Bob Daigh	Williamson County	Y	
20.	Terri Crauford	Williamson County (Smaller Cities)	Y	
21.	David Marsh	CARTS	N	Ed Collins
22.	Justin Word	CTRMA	Y	
23.	Todd Hemingson	Capital Metro	Y	Joe Clemens
24.	Marisabel Ramthun	TxDOT	Y	

Other Participants Via Phone: None

2. Approval of the October 22, 2018 Meeting SummaryVice Chair Amy Miller

Mr. Ed Collins requested that the October 22, 2018 meeting summary be amended to reflect Ms. Stevie Greenhouse in attendance for the meeting via phone.

Mr. Ed Collins moved for approval of the October 22, 2018 meeting summary, as amended.

Mr. Mike Hodge seconded the motion.

The motion to approve the meeting summary as amended prevailed unanimously.

Mr. Ryan Collins reported that TxDOT adopted targets for PM2 (Pavement and Bridge Performance Measures) and PM3 (System Performance Measures) on June 21, 2018. Mr. Collins identified and discussed TxDOT performance measures targets for PM2 and PM3.

Mr. Collins later highlighted and discussed the adoption timeline for PM2 and PM3. Mr. Collins noted that that CAMPO must adopt its own targets or TxDOT's targets by December 18, 2018. Mr. Collins added that staff is recommending adoption of the TxDOT performance measure targets for PM2 and PM3. Question and answer with comments followed.

A detailed discussion by the Committee followed regarding the ramifications of delaying the recommendation for adoption pending clarification of the definitions and data.

Mr. Bob Daigh moved to table adoption of the TxDOT Performance Measure Targets for PM2 and PM3 pending clarification of the definitions and data.

Mr. Ed Collins seconded the motion.

At the request of the CAMPO Executive Director, Mr. Ashby Johnson, staff contacted and received clarification from a TxDOT representative on the consequences of a delayed approval of the TxDOT performance measure targets for PM2 and PM3. It was determined that a recommendation from the Committee was required to meet the adoption timeline for PM2 and PM3 as previously discussed.

Mr. Tom Gdala moved to withdraw the motion to table adoption of the TxDOT Performance Measure Targets for PM2 and PM3 pending clarification of the definitions and data.

Mr. Mike Hodge seconded the motion.

Mr. Bob Daigh later moved for approval of a recommendation for adoption of TxDOT Performance Measure Targets (PM2/PM3) pending clarification of the definitions and data.

Mr. Tom Gdala seconded the motion.

The motion prevailed unanimously.

Mr. Collins informed the Committee that the FTA Section 5310 Program provides funding to meet the transportation needs of the elderly and disabled due to unavailable transportation services. Mr. Collins also highlighted and discussed FTA Section 5310 funding amounts and a schedule with milestones through January 2019. Mr. Collins also discussed scoring amounts and recommendation awards. Question and answer with comments followed.

Mr. Collins presented a schedule for the TIP and RTP Amendment Cycle and highlighted significant milestones. Mr. Collins also presented and highlighted a list of requested amendments. Mr. Collins informed the Committee that changes will be entered into the Statewide Transportation Improvement Program (STIP). Mr. Collins later reported that the spring amendment cycle has been scheduled. Question and answer with comments followed.

6. Report on Transportation Planning Activities

a. Administrative Amendments to the 2019 -2022 Transportation Improvement Program (TIP)

Mr. Ryan Collins briefly discussed the public outreach effort and Open House schedule for the Luling Relief Route Study, Regional Arterials, Public Participation Plan, RTP, and TIP. Mr. Collins noted that the deadline for public comment is December 31, 2018.

b. Project Progress Reports

Mr. Ryan Collins thanked project sponsors for the progress reports received.

7. TAC Chair Announcements

There were no announcements.

8. Adjournment

The November 26, 2018 meeting of the Technical Advisory Committee was adjourned at 3:00 p.m.



Date: December 17, 2018
Continued From: October 22, 2018
Action Requested: Recommendation

To: Technical Advisory Committee

From: Ms. Doise Miers, Community Outreach Manager

Agenda Item: 3

Subject: Recommendation on Draft Public Participation Plan (PPP)

RECOMMENDATION

Staff is seeking recommendation for adoption of the draft Public Participation Plan by the Transportation Policy Board.

PURPOSE AND EXECUTIVE SUMMARY

CAMPO's Public Participation Plan was last updated in 2015. Since that time, CAMPO has added planning processes and the FAST Act was passed by Congress. Additionally, outreach tools and strategies have evolved.

This Draft PPP adds language to comply with FAST Act requirements and also adds outreach requirements for CAMPO's planning studies. This update replaces the tiered system with a system based on the planning document type. The update also adds outreach practices described in the appendix.

FINANCIAL IMPACT

None.

SUPPORTING DOCUMENTS

Attachment - *Draft PPP*

Attachment - Draft PPP Update Summary

CAPITAL AREA METROPOLITAN PLANNING ORGANIZATION

2018
Public
Participation
Plan





Adopted: April 2, 2012 Amended: March 5, 2014 Amended: August 31,2015 Amended: XXXXX 2018



Disclaimer

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Providing a Fair and Equal Opportunity to Participate

As the metropolitan planning organization encompassing Bastrop, Burnet, Caldwell, Hays, Travis, and Williamson counties, the Capital Area Metropolitan Planning Organization (CAMPO) has a responsibility to serve the community and stakeholders and provide equitable access to participate and provide input in the decision-making process.

Governed by the 21-member Transportation Policy Board representing local governments and agencies, CAMPO believes that conversation, engagement, and transparency among stakeholders is key to meaningful and lasting mobility changes across its six counties.

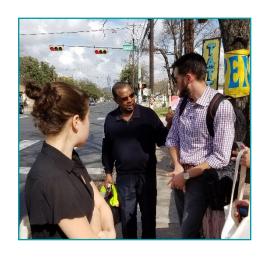
Federal and state transportation planning laws¹ and guidance require open participation, regardless of geographic location, economic and educational status, or race. CAMPO's Public Participation Plan outlines how the organization responds to the requirements set by federal and state guidance and provides examples of how CAMPO is going above and beyond these basic requirements and enhancing participation, communication, and access to the region's transportation planning process.

Limited English Proficiency and Environmental Justice

As a federally sponsored agency, CAMPO must incorporate policies and procedures of Environmental Justice and Limited English Proficiency into its transportation planning studies and programs. CAMPO incorporates these policies into the required programs and is committed to giving a voice to those historically underrepresented in transportation planning efforts-including residents of rural areas, those of lower socioeconomic status, people of color, immigrants, and individuals with disabilities—outreach to minority and traditionally underserved communities is a key component of CAMPO's work.

Executive Order (E.O.) 13166 "Improving Access to Services for Persons with Limited English Proficiency" challenges federal agencies to "implement a system by which [limited Englishproficient or "LEP"] persons can meaningfully access services consistent with, and without unduly burdening, the fundamental mission of the agency."2

Additionally, Executive Order 12898, "Federal Actions to address Environmental Justice in Minority Populations and Low-Income Populations" directs every Federal agency to make environmental justice part of its mission by identifying and addressing the effects of all programs, policies, and activities on minority populations and low-income populations. The Federal Highway Administration summarizes this charge to metropolitan planning organizations to evaluate and, where necessary, improve their public involvement



processes to eliminate participation barriers and engage minority and low-income populations in transportation decision making."3

³ Federal Highway Administration. 2000. An Overview of Transportation and Environmental Justice. Publication No. FHWA-EP-00-013.



¹ Such as Title VI of the Civil Rights Act of 1964, Executive Orders 12898 and 13166.

² Federal Highway Administration. n.d. Limited English Proficiency

Participation Objective and Strategies

This document acts as the update to the 2015 CAMPO Public Participation Program (2015 PPP) and serves to ensure that all citizens have an equal opportunity to participate in the CAMPO decision-making process. Recognizing the importance of public involvement throughout the transportation planning process, this Public Participation Plan (PPP) is intended to actively engage people in the process.⁴

To support this objective, CAMPO deliberately plans inclusive, diverse public participation programs as part of its transportation planning processes. CAMPO's public participation programs include collaboration with local governments and agencies, schools, and a wide variety of special interest groups including,

but not limited to, public and private transportation employees and stakeholders, freight interests, bicycle and pedestrian stakeholders, and stakeholders with and representing those with disabilities. These public participation programs also include communication and outreach methods specifically tailored to audiences and stakeholders. The following strategies are adapted from federal planning rules and guides CAMPO's public participation programs.

OBJECTIVE:

Provide a forum that empowers all stakeholders and demographics with equitable access to participate and provide input in the transportation planning and decision-making process.

STRATEGIES:

- Provide public notice of public participation activities using appropriate methods and time for public review and comment at key decision points.
- Notify and provide access to information about transportation issues and processes in a timely fashion, using various print and electronically accessible formats.
- Use visualizations and clear, concise, non-technical language to describe proposed changes.
- Hold public open houses at convenient times and locations.
- Demonstrate explicit consideration and response to public input received during the development of the regional transportation plan and transportation improvement program.
- Seek out low-income and minority environmental justice households and vulnerable populations⁵, who may face challenges accessing employment and other services.
- If a final regional transportation plan and transportation improvement program varies significantly from the public comment version, provide additional opportunities for public comment.
- Coordinate with statewide participation processes.
- Evaluate effectiveness of participation methods.
- Review and update this participation plan as needed to ensure a full and open process.

Sanoff, Henry. 2007. Participation in Planning and Urban Design Standards. Eds. F. Steiner, K. Butler and E. Sendich. John Wiley & Sons: Hoboken, New Jersey.

Based on definitions from federal organizations and regulatory agencies, CAMPO defines vulnerable populations as groups of people, including but not limited to minority groups based on race, ethnicity, income, national origin, educational level, ability-level, English proficiency level, and age.

This update uses an approach based on CAMPO's planning and decision-making processes and is designed to define elements that lead to effective outreach and participation in a successful public participation plan. The Participation Toolbox, found in the Appendix, should be used to refine select elements of an overall outreach strategy based on the recommendations of each category. As programs and participation techniques continue to grow, the toolbox is intended to be expanded and revised, and is not intended to be an exhaustive list of outreach tools.











Our Drivers - Federally Mandated Transportation Programs

Public Participation Plans (PPPs) are federally required to guide participation for metropolitan planning organizations, including the region's Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP).

Regional Transportation Plan (RTP):

This long-range planning document is adopted by the Transportation Policy Board (TPB) and serves as a policy document and guide for regional transportation planning and implementation. Under current federal regulations, the RTP is updated at least every five years. Projects listed in the plan are designed to meet travel needs within the six-county CAMPO region for at least the next 20 years. The RTP is a fiscally constrained, multi-modal planning document that addresses various elements including congestion management, public transportation, roadways, freight, and active transportation modes.

Transportation Improvement Program (TIP):

The TIP outlines those projects in the CAMPO region that have secured funding sources and have reached project development milestones that allow for project implementation to begin within the four-year window of the TIP. All projects in the TIP must also be included in CAMPO's Regional Transportation Plan as well as be in compliance with the planning area's Congestion Management Process. The TIP must be updated every two years and must contain:

- Roadway, transit, and grouped projects⁷
- Financial Plan
- Project description including type of work, termini, length, etc.

The CAMPO Public Participation Plan strategies regarding TIP adoption may be used for entities' FTA Programs of Projects, including but not limited to FTA Section 5307:

- Capital Metropolitan Transportation Authority (Capital Metro)
- Capital Area Rural Transportation System (CARTS)
- City of Round Rock
- CARTS Urban, San Marcos UZA

These entities may use the strategies outlined in the PPP and partner with CAMPO during community meetings, however, CAMPO's outreach does not satisfy the public involvement required for these entities. Additionally, Capital Metro and CARTS should have multiple meetings that are geographically disbursed throughout their respective service areas.

^{6 23} CFR Part 450.314

Grouped projects are not considered to be of an appropriate scale or scope for individual listing in the TIP as determined by FHWA and TxDOT. These project categories are Preliminary Engineering, Right-of-Way Acquisition, Preventive Maintenance and Rehabilitation, Bridge Replacement and Rehabilitation, Railroad Grade Separations, Safety, Landscaping, Intelligent Transportation System Deployment, Bicycle and Pedestrian, Safety Rest Areas, and Transit Improvements.

CAMPO Planning Programs

In addition to the federally required planning programs, CAMPO also conducts planning studies and programs throughout the six-county region. These studies inform long-range planning efforts and serve as a regional conversation about the area's growing needs. As part of these planning programs, CAMPO conducts extensive public outreach at key milestones throughout the study to inform the public about the study purpose and goals and to gather feedback on the community's needs and ideas. Examples of such programs that will influence the CAMPO 2045 Plan include:

- Regional Active Transportation Plan
- · Regional Arterials Plan and Mokan/Northeast Subregional Plan
- Regional Transit Plan
- Regional Transportation Demand Management Study

Participation at CAMPO Transportation Policy Board Meetings

The Transportation Policy Board (TPB) is CAMPO's governing body that provides policy guidance and direction for transportation planning and also reviews and approves projects and federal funding as part of the RTP and TIP. TPB meetings are typically held monthly and include an open public comment period, as well as the opportunity for the public to comment on action items on the TPB's agenda. The TPB adopts bylaws which guide their meetings and public participation, and may be referred to for specific guidance on participation. For more information, visit our website on the TPB at: www.campotexas.org/transportation-policy-board/

Public Information Requests

There are several ways requests for information can be submitted to CAMPO. Requests must be submitted in writing.

- In-person and postal mail: 3300 N. I-35, Suite 630, Austin, Texas, 78705
- Email: campo.openrecords@campotexas.org
- Fax: 737-708-8140

Public Participation Approach

As a regional transportation governing body, CAMPO coordinates a number of studies and plans which solicit the need for public participation at varying scales. As summarized below, CAMPO uses a community outreach approach based on what is being amended, studied, or adopted. A variety of outreach methods are emphasized to increase public participation opportunities within CAMPO's region while being mindful of the public's limited time and CAMPO's community outreach resources.

Administrative amendments could include changes in funding source or non-substantive alterations, and are approved by the CAMPO Executive Director. No explicit participation process is required, and the TPB is notified of administrative amendments at their meetings.

Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP) amendments are amendments that can include changes to funding amounts or changes in the scope of a project already approved in the RTP or TIP, as well as amendments adding new projects to these planning documents. Projects sponsors are given the opportunity to submit amendments to the RTP and TIP generally twice a year.

CAMPO studies are conducted in preparation for adopting a new RTP and are improved with community feedback that is incorporated in various plans that reflect the region's various needs.

TIP adoption occurs every two years and requires public input to ensure regional needs and perspectives are considered.

RTP adoption occurs every five years and requires an approach that maximizes opportunities for community involvement.

CAMPO uses a variety of public involvement strategies intended to maximize engagement opportunities. This plan includes emphasis on seeking opportunities to meet with the public face-to-face, offering in-person and online input

2045
TRANSPORTATION
PLAN

The CAMPO 2045 Transportation Plan is an example of a CAMPO RTP.

opportunities, and using traditional and electronic notification methods to spread the word of important actions. The following table, beginning on the next page, provides a guide of techniques to be used in the various community outreach opportunities.

Minimum Standards for Participation Methods

	STRATEGIES				
	Getting the Word Out	High-Touch	High-Tech	Communicating Results	
Administrative Amendments	Following approval, notification in Transportation Policy Board (TPB) meeting materials online	N/A	N/A	N/A	
RTP and TIP Amendments &	News release (at least one)	At least one community meeting held in	Online open house and comment	Summary of comments received provided	
PPP Revisions	Email notification through online newsletter or regular email to subscribers Postal mail notification to subscribers Social media post (at least one) of community meetings and online commenting opportunities Notice on CAMPO website to include dates, time, and location	the vicinity of the project(s) At least one meeting (public hearing) held at TPB meeting, prior to TPB action Speakers bureau events as requested, upon staff availability	opportunity Social media post linking to information on website	to TPB 7 days in advance of action	

For more detailed information on Amendments, see page 14.



Minimum Standards for Participation Methods continued

Getting the Word Out	High-Touch	High-Tech	Communicating Results
News release (at least one) Email notification through online newsletter or regular email subscribers Postal mail notification to subscribers Social media post (at least one) of community meetings and online commenting opportunities Notice on CAMPO website to include dates, time, and location	At least one community meeting held in the vicinity of the study Speakers bureau events as requested upon staff availability	Visualization of potential improvements resulting from the study Online comment opportunity (e.g. email or survey) Social media post linking to information on website	Summary of comments received provided to TPB 7 days in advance of action Final adopted study document will include a summary of comments *If a study or plan is conducted as a partnership with a local government, the local government's governing body (city council/commissioners court) must adopt the study before CAMPO's TPB concurs with the study or plan.

For more detailed information on CAMPO studies, see page 15.

Minimum Standards for Participation Methods continued

	Getting the Word Out	High-Touch	High-Tech	Communicating Results
TIP Adoption	News release (at least one) Email notification through online newsletter or regular email to subscribers Postal mail notification to subscribers Social media post (at least one) of community meetings and online commenting opportunities	Community meetings held in each CAMPO county Speakers bureau events actively pursued Fairs and public venues	Online open house and comment opportunity Social media post linking to information on website	Summary of comments received provided to TPB 7 days in advance of action
	Notice on CAMPO website to include dates,			
	time, and location			

For more detailed information on TIP Adoption, see page 16.

Minimum Standards for Participation Methods continued

	Getting the Word Out	High-Touch	High-Tech	Communicating Results
*This is a two phase process with the methods described here to be used in each phase. Public comments from each round are to be posted prior to FINAL TPB action.	News release (at least one) Email notification through online newsletter or regular email to subscribers Postal mail notification to subscribers Social media post (at least one) of community meetings and online commenting opportunities Notice on CAMPO website to include dates, time, and location Participate in transportation fairs as available Public outreach information posted to CAMPO website.	Community meetings held in each CAMPO county Speakers bureau events actively pursued Fairs and public venues actively pursued	Online open house and comment opportunity Social media post linking to information on website Visualization of potential improvements/ projects proposed in RTP as a result of CAMPO studies For more detailed if on RTP Adoption, see the second se	Public involvement report with public comments posted to website at least one week prior to TPB action on the FINAL RTP.

Administrative Amendments

Administrative amendments are a means to address those planning procedures that do not require public comment and approval by the Transportation Policy Board. These changes are reflected in documentation, and cannot result in a functional change to the transportation system.

Examples of administrative amendments would include:

- Fixing typographical errors
- Decreasing project funding without changing its scope

RTP and TIP Amendments

Typically, twice a year, project sponsors are given an opportunity to make changes to their projects in the CAMPO RTP and TIP and to add projects to these planning documents. These amendments are submitted to the CAMPO TPB at the request of project sponsors. Examples of amendments include adding or removing projects and changing funding sources, project descriptions, and/or project limits.

The same process and methods are also required for changes to this PPP that are beyond administrative in nature.



Meeting Requirements:

Two or more in-person public meetings are required for RTP and TIP amendments, including a public hearing at a Transportation Policy Board meeting. **At least one community meeting** should be provided at a location accessible by the population affected by the proposed change.

- Project sponsors should be notified up to 14 days prior to the planned community meeting. Their participation at in-person community meetings allows attendees to ask project-specific questions and receive immediate feedback.
- In-person meeting locations and times should be accessible to the general public, including those individuals who may not have access to an automobile.
- An online open house must be available on the CAMPO website during the public comment period and include material from the in-person meeting and direct links to submit online comments.
- Translation for non-English speakers, materials for the visually impaired, and services
 for the deaf and hard of hearing shall be available when requested by those needing
 them, subject to availability of services. If special services are needed, the services
 must be requested within five business days advanced notice to CAMPO staff. The
 availability of these services should be mentioned in the meeting notice.

RTP and TIP amendments may involve multiple jurisdictions, often resulting in a higher level of coordination across multiple stakeholder groups and a higher desire for additional opportunities for public input. Increased efforts to seek input from minority and low-income populations is a priority so community outreach methods tailored to traditionally underserved communities are used during the RTP and TIP amendment process.

RTP and TIP Amendments Quick Action Option:

Amendments to the RTP or TIP requiring quick action due to impending federal or state requirements or deadlines (or for other reasons deemed in the community's best interest) may be accomplished by a 75% vote of the Transportation Policy Board members present to waive participation methods outlined in the PPP. In these cases, the Transportation Policy Board will hold a special public hearing within its normal meeting agenda to solicit public comment on the proposed amendment(s). These actions will be included on the meeting agenda posted on the CAMPO website prior to the Transportation Policy Board meeting thus encouraging public attendance and comment on the action prior to adoption by the Policy Board.

CAMPO Studies

CAMPO conducts regional transportation studies in preparation for RTP planning and adoption, and also partners with CAMPO member jurisdictions on studies in a small geographic area that benefit the member government's community. Combined, these studies offer a comprehensive, multi-modal regional transportation plan and address more locally-focused planning needs.

CAMPO studies may involve multiple jurisdictions, often resulting in a higher level of coordination across multiple stakeholder groups and a higher desire for additional opportunities for public input. Increased efforts to seek input from minority and low-income populations is a priority so community outreach methods tailored to traditionally underserved communities are used for CAMPO studies. Coordination and involvement between CAMPO and necessary local, regional, state, and federal agencies is also included in CAMPO's studies.

Meeting Requirements:

At least one in-person public meeting is required for CAMPO studies, and should be provided at a location accessible by the population affected by the study.

- In-person meeting locations and times should be accessible to the general public, including those individuals who may not have access to an automobile.
- An online open house must be available on the CAMPO
 website during the public comment period and include
 material from the in-person meeting and direct links to submit
 online comments.
- Translation for non-English speakers, materials for the visually impaired, and services for the deaf and hard of hearing shall be available when requested by those needing them, subject to availability of services. If special services are needed, the services must be requested within five business days advanced notice to CAMPO staff. The availability of these services should be mentioned in the meeting notice.
- Requirements for CAMPO partnered studies will be based on community need.

Outreach methods that may be used are included in the Appendix and may include:

- Surveys at Capital Metro and CARTS service centers, transfer hubs, bus stops, and onboard buses, where
 possible
- Meeting notices and study information, holding small meetings, and conducting surveys at public recreation centers and libraries in minority or low-income communities in the study area
- Posting meeting notices and study information, holding small meetings, and conducting surveys at public recreation centers and libraries in minority or low-income communities in the study area
- Posting meeting notices and study information, holding small meetings, and conducting surveys at community colleges, universities, and other educational institutions

TIP Adoption

Every two years, a new TIP is adopted for the upcoming four-year project programming cycle. The first two years of the new TIP are carried forward from the previous TIP; the last two years of the new TIP includes new projects. During adoption of the new TIP, projects sponsors have the opportunity to submit amendments to their projects in the TIP, and also submit new projects that qualify for inclusion in the TIP (funding must be identified and the project must begin implementation in the let year indicated on the TIP).

TIP adoption involves multiple jurisdictions, often resulting in a higher level of coordination across multiple stakeholder groups and a higher desire for additional opportunities for public input. Increased efforts to seek input from minority and low-income populations is a priority so community outreach methods tailored to transitionally underserved communities are used during the RTP and TIP amendment process.

Meeting Requirements:

In-person public meetings in each of the six CAMPO counties are required for TIP adoption in addition to a public hearing at a Transportation Policy Board meeting. The public hearing offers an opportunity for the public to give input at a TPB meeting so the TPB may consider and respond to public comment, and potentially make changes to the draft TIP prior to TIP adoption. Project sponsors should be notified up to 14 days prior to the planned community meeting. Their participation at in-person community meetings allows attendees to ask project-specific questions and receive immediate feedback.

- In-person meeting locations and times should be accessible to the general public, including those individuals who may not have access to an automobile.
- An online open house must be available on the CAMPO website during the public comment period and include material from the in-person meeting and direct links to submit online comments.
- Translation for non-English speakers, materials for the visually impaired, and services for
 the deaf and hard of hearing shall be available when requested by those needing them,
 subject to availability of services. If special services are needed, the services must be
 requested within five business days advanced notice to CAMPO staff. The availability of
 these services should be mentioned in the meeting notice.

RTP Adoption

Every five years, a new RTP is adopted for the next five-year planning cycle. The RTP is a 20+ year planning document and is considered a "snapshot in time" of long-term projects planned for the CAMPO region. The RTP contains information and projects compiled from CAMPO studies, local jurisdiction studies and plans, as well and projects in the TIP since TIP projects must also be listed in the RTP.

RTP adoption involves multiple jurisdictions and must include a high level of coordination across many stakeholder groups and allow for multiple opportunities for public input. Increased efforts to seek input from all corners of the CAMPO region - rural, urban, and suburban areas, and minority and low-income populations is a priority so variety of community outreach methods are used to reach and gather input from the various communities and stakeholders in the CAMPO region.

Planning for and adoption of the RTP is a longer process than most CAMPO planning documents so two phases of outreach are used. The first phase focuses on introducing the first draft RTP to the community and gathering feedback on the first draft for consideration by the TPB. This first phase is used to gather preliminary feedback on the first RTP draft, and incorporate that feedback into the final draft RTP. The second phase of outreach is to demonstrate how the first round of public input was used in developing the final draft and explain the final draft RTP prior to TPB action. The methods described below are to be used in each phase. Public comments from each round are to be posted prior to final TPB action.

Community Outreach Plan:

A Community Outreach Plan is used to detail the various methods to be used, stakeholders to target, and timeline for the combined phases of outreach for the RTP adoption. This plan also includes overall project goals and objectives and necessary coordination between CAMPO and necessary local, regional, state, and federal agencies.

Public Notification for Comments:

At least one press release must be issued to media sources throughout the CAMPO region. The medium in which the release is provided should be in a format that best meets the needs of the project. Additionally, notifications may be expanded to include formalized announcements, ads or posters placed at highly visible and easily accessible locations throughout the project, social media posts and ads, and earned media stories. Newsletters may be generated as needed to keep interested public participants abreast of the latest project developments or successes. Additionally, where appropriate, notification flyers may be expanded to include more neighborhood-specific locations such as community centers, libraries, senior centers, places of worship, and schools and educational institutions.



Six or more in-person public meetings, with at least one in each CAMPO county, are required for RTP adoption, in addition to including a public hearing at a Transportation Policy Board meeting. The public hearing applies to only the second round of outreach prior to TPB adoption of the RTP. The public hearing offers an opportunity for the public to give input at a TPB meeting so the TPB may consider and respond to public comment, and potentially make changes to the draft RTP prior to RTP adoption.

- In-person meeting locations and times should be accessible to the general public, including those individuals who may not have access to an automobile.
- An online open house must be available on the CAMPO website during the
 public comment period(s) and include material from the in-person meeting
 and direct links to submit online comments.
- Translation for non-English speakers, materials for the visually impaired, and services for the deaf and hard of hearing shall be available when requested by those needing them, subject to availability of services. If special services are needed, the services must be requested within five business days advance notice to CAMPO staff. The availability of these services should be mentioned in the meeting notice.
- Small group community meetings and events are actively pursued to reach people where they are and provide an opportunity to reach those who don't traditionally participate in CAMPO activities.

Performance Objectives & Monitoring

The following metrics will be recorded by staff on a continuous basis to monitor success of participation strategies. Since the magnitude of participation in transportation issues is driven by both the organization's efforts and the level of public interest, these metrics focus on actions within staff purview.

Performance Objectives (non-RTP outreach year)

Metric	Annual Objective
Number of community meetings held	10
Number of electronic newsletters sent	6
Number of social media updates	30
Number of surveys developed	2
Number of media releases distributed	2

Regional Transportation Plan Adoption Cycle Performance Objectives*

Metric	Annual Objective
Number of community meetings held	30
Number of electronic newsletters sent	12
Number of social media updates	45
Number of surveys developed	4
Number of media releases distributed	6

*RTP outreach and preparation spans over two calendar years. These objectives are measured over the cycle of the draft RTP being introduced and the RTP being adopted.

In addition, CAMPO reports to Texas Department of Transportation's (TxDOT) Civil Rights Division annually on Title VI activities and planned activities for the following fiscal year to ensure compliance with Title VI regulations. CAMPO also monitors survey responses, website traffic, CAMPO meetings, and social media.

Revising this Document

This Public Participation Plan is a living document, and should be revised to reflect improvements in participation methods. CAMPO staff welcomes comments by email to comments@campotexas.org, by mail to 3300 N. I-35, Suite 630, Austin, Texas 78705, and by fax to 737-708-8140.

Administrative amendments to the PPP include changes to "Participation Toolbox" strategies, revision of references to applicable regulations, misspellings, omissions, or typographical errors. These updates are performed by staff with no notification required.

Amendments to the PPP include any other changes that do not fit the administrative definition above require 45 days of public comment before adoption. If the document changes significantly due to public comments, an additional 45-day comment period is required.





Appendix - Participation Toolbox

These outreach strategies are not meant to be finite and instead define those minimum requirements which are considered essential for a successful Public Participation Plan (PPP). Where study needs or local stakeholders/agencies deem appropriate, outreach efforts may be expanded to include additional outreach tactics. The following toolbox provides an array of tools, which may be utilized to further enhance the outreach strategies outlined in the PPP. The provided list is not exhaustive, and is intended to be updated.

Identifying Demographics of Study Area

Refine and select public participation tools that are appropriate for the identified population within the designated study area.

Demographics such as income and English proficiency of the area potentially affected by a study or project are important to understand regarding participation. Limited English proficiency populations may need translation or other services and low-income communities may need additional community meeting access provisions or other assistance.

CAMPO's existing environmental justice analyses may be useful in identifying these communities, or specialized analysis of geographic information may be appropriate.

Visualization Techniques

Encourage universal communication tactics to help to simplify concepts and transcend language, economic, and educational barriers.

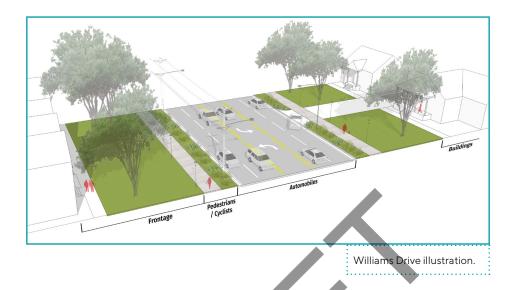
CAMPO strives to provide information regarding transportation-related issues in a manner which is easy to interpret. Visualization tools allow for the display of complex ideas via graphics with limited to no text. Examples include:

Photo Simulation: To enhance community understanding of proposed project designs, photographs of existing conditions will be integrated with 3-D design files depicting an alternate desired outcome. Examples include the addition of planted medians, left-hand turn lanes, rapid transit bus lanes, etc.



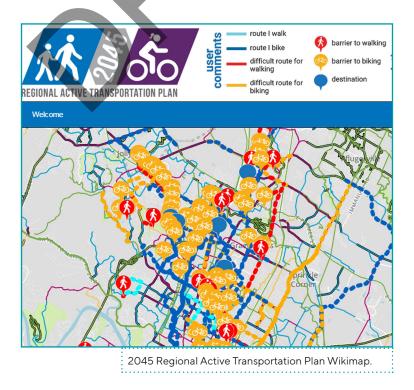
Using maps with legends in Spanish helps the Spanish population to understand CAMPO study areas, plans, and goals.

Illustrations: Where data is not yet available, hand drawn or rendered illustrations may be used to show future design concepts. Examples include an illustration of Williams Drive in Georgetown to represent potential multimodal redevelopment.



Mapping: Allows for the spatial depiction of where projects are to be implemented and how it relates to the surrounding region. If warranted, GIS technology can be merged with visualization tools to demonstrate the final look of a proposed treatment.

Online interactive mapping tools such as a WikiMap can be used to gathered input from community members on their needs and challenges for various transportation modes and provide information about their preferred routes.





Website

All planning documents as well as meeting information should be made accessible via the CAMPO website. Providing information regarding planning activities on the CAMPO website is imperative for informing as many people in the region as possible. The website should provide a variety of methods to communicate information to and from the public.

Online Open House: An online open house contains all information that is available at regular public meetings in an easy-to-access format on the CAMPO website so that interested persons who cannot attend a meeting can still have access to information and can easily submit comments.

Online Surveys: Surveys allow people to provide quantitative and qualitative data to be used in developing plans and studies.

Wikimap: This online tool provides people with the opportunity to select certain points of interest on a map and leave comments on the current conditions and/or need for improvement in a particular area. Data collected from Wikimaps can be analyzed in GIS and can be helpful for developing plans and studies.

гы а воессковаг за ваотна, оргина анди					
CAMPO Regio	CAMPO Regional Active Transportation Plan Survey				
Transportation Ha	bits				
2. In an average week, how many d	ays a week do you use the following modes of transportation? (enter a number between 0 and 7)				
	Drive				
	Passenger in a car				
	Car share				
	Bus (includes park and ride)				
	Other transit (if yes, what kind?)				
	Bike				
	Bike share				
	Walk (including walking to transit)				
Gast Ned					
Online surveys allow for digital submission of comments and ideas.					

Facebook Live: Streaming Transportation Policy Board and public meetings via Facebook Live provides an additional avenue for people who cannot attend a meeting to participate in the planning process and have access to the information being provided at the meeting.

Webinars: Webinars may be made available to give people the chance to view a presentation regarding a plan or study and ask questions directly to CAMPO staff.

Surveys

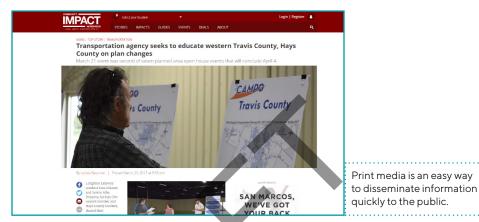
Bus Rides and Surveys: To ensure the needs-based nature of CAMPO's planning efforts, it is vital to receive input from those who do not have a car, share a car, or use various modes of transportation. CAMPO has teamed up with Capital Metro, to conduct surveys on their buses and at transit stations. The bus routes used should represent various demographics to include commuter lines from suburban areas and routes in environmental justice areas, and should be ridden at various times during the day to gather input from a variety of transit users.

Community Surveys: To reach those who don't typically participate in transportation planning meetings and opportunities, CAMPO has sought out festivals and community gathering places to reach a broader audience. CAMPO has attended community events and visited libraries, public transit facilities, community and senior centers, universities, town squares, and bike shops throughout the region where the project team administered paper and iPad surveys, both in English and Spanish.

Media

Radio/Television: Where warranted, project kickoff events should be announced with a press release to the local media. When televised, links to recordings may be provided on the CAMPO website.

Print Media: All print media publications should make efforts to accommodate environmental justice populations where needed. When advertisements are submitted, staff should keep a record of the entity which was responsible for its publication, the date in which it was published, and the population in which it was intended to serve to assist with future outreach efforts.



Social Media: Updates, dissemination of information, survey distribution, and discussion topics may be employed by CAMPO and project sponsor staff through their social media channels. This can also be accomplished by working with local agencies and advocacy groups to carry messages or links to the CAMPO website through their established social media network, thereby increasing the broadcasting abilities of CAMPO in reaching interested stakeholders. Where demographics warrant, staff should make every effort to advertise project updates and notifications on Spanish-oriented social media. Planners should remain engaged with developments in social media, as specific websites may change in their usefulness to the public over time.

Facebook ads may be used to reach different demographics than those that have already liked the CAMPO Facebook page. The Facebook audience used for ads can include various cities in the CAMPO region, interests in topics such as transportation, transit, cycling, online shopping, outdoor activities, and can be done in both Spanish and English.





Social Media platforms serve as a one-stop shop for CAMPO information online.



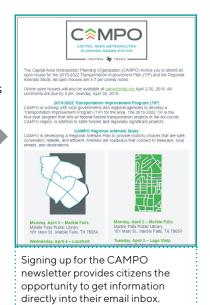
Electronic Communication and Contact List

An electronic notification list will include transit providers within the area, affected local and state agencies, and freight transportation providers who have requested to be on the mailing list and any private citizen or agency who request notification. Requests to be added to CAMPO's mailing list may also be made by telephone, e-mail, fax, or in person by visiting the CAMPO office if desired. All organizations/individuals will remain on the mailing list until they request to be removed or are known by CAMPO not to desire further inclusion. Maintaining the contact database is essential for delivering information regarding planning activities on a mass scale. The CAMPO newsletter is intended to provide summary updates on the types of activities taking place at all levels of transportation planning as well as provide meeting notices and information. Program or project types may be updated in the quarterly or annual newsletter as needed.

At a minimum, the following information is recommended from interested parties subscribing to the electronic database:

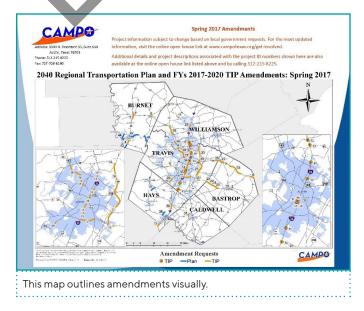
Email: Email notifications are intended to serve as the primary form of project and program updates. Where email is not available, participants may elect to have mail sent directly to residential addresses.

Zip Code: Zip code information is provided for local or project specific programs which do not require mass, regional distribution of project updates. Zip code information is used primarily to solicit public participation for local or corridor specific project based on citizen defined areas of interest.



Brochures and Maps

Brochures and maps act as quick reference documents that summarize the purpose of an associated program and related goals and objectives. Text should be minimal and where possible, graphics or rendering should be used. Project websites and appropriate staff contact information should also be provided.



Community Meetings and Open Houses

CAMPO staff will conduct open houses and/or community meetings as part of the planning processes for the RTP, adoption of the RTP and TIP, and other major funding and project definition opportunities. These sessions will provide opportunities for the exchange of information between citizens and staff. Staff also works with CAMPO's Transportation Policy Board members to identify active community leaders

throughout the CAMPO area and contact these leaders to learn how to better reach various groups and demographics.

Tactile Town and Other ADA formats: The CAMPO region is home to the state school for students with visual impairments. CAMPO has partnered with the Texas School for the Blind and Visually Impaired (TSBVI) to ensure visually impaired students and adults from a near-by workforce center have an opportunity to provide input on CAMPO's planning work. CAMPO has conducted open houses at TSBVI with all material in large print and braille format and surveys administered verbally, when needed. Another tool, Tactile Town, has been used to create a tactile model of a town with good and bad active transportation facilities.



The Tactile Town kit was used during meetings at the Texas School for the Blind and Visually Impaired.

Day Time and Weekend Events: CAMPO partners with local resources to get the word out and engage people by going to them at different times during the day and week. This includes holding mid-day open houses where light lunch is served, setting up booths at community events, and surveying transit riders at early morning transit stops and on buses during the day. CAMPO has also conducted outreach at Friday night high school football games.

University Outreach: The CAMPO region is home to multiple universities, including one of the largest in the US, and a robust community college network. To gather feedback from college

students, CAMPO partners with the colleges to host "mini-meetings" on campuses and with information tailored to students.

Display Booths: Display booths provide a quick snap shot of a program type using project boards, posters and other visualization graphics. Project booths are mobile and may be set up throughout the project area. Brochures, newsletters, comment cards, and other informational packets may be provided in conjunction with display booths. Display booths may be used in combination with other meetings or where high pedestrian traffic is expected. Given their ease of access, display booths offer a great opportunity to receive informal feedback on project ideas, progress, or implementation tactics which will be recorded and summarized.



Display booths act as quick places for the public to receive information during larger events or activities.

Informational Outreach and Speakers Bureau

CAMPO staff is available to present programs and/or provide materials at the request of civic or community groups. Requests for presentations should be made as soon as possible to ensure CAMPO staff are available. CAMPO also offers a speakers bureau program to allow groups to request a speaker on a number of topics. The speaker is most often a member of CAMPO staff, but others may be sought if needed. Following are a list of topics commonly requested, but other issues can also be arranged:

- CAMPO Primer
- CAMPO Studies
- CAMPO Planning Documents
- Public Involvement in Transportation Planning

Advisory and Stakeholder Committees

Stakeholder committees are created to give a voice to members of the community in the planning process, particularly those in the environmental justice, underserved, and disabled populations. Stakeholder committees are kept well-informed of the phases of the planning process and are encouraged to share that information with people in their communities. Stakeholder committees are essential for spreading awareness and knowledge of planning efforts to a great number of people in their spheres of influence and ensuring a variety of needs are represented in CAMPO's planning programs.

The TAC may serve as an advisory committee for the completion of transportation studies, plans, and development and programming recommendations required under state or federal laws pertaining to all surface modes of transportation and transportation support facilities. The TAC also serves as a forum and working group for regional project coordination across jurisdictional boundaries. Where warranted, projects may elect to request an ad hoc or smaller subset of committee member be used for preliminary review of certain documents before final review by the TPB.



Stakeholder meetings can provide nuanced insight in preliminary stages- and through-out-the planning process.



CENTRAL TEXAS

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- © @CampoTexas
- (in) Capital Area Metropolitan Planning Organization
- **●** @CampoTexas
- Capital Area MPO

| 2015 PPP                                                 | 2018 DRAFT PPP                                                                                |  |  |
|----------------------------------------------------------|-----------------------------------------------------------------------------------------------|--|--|
| SECTION: Introduction                                    |                                                                                               |  |  |
|                                                          | Add information on all CAMPO counties and on TPB                                              |  |  |
| SECTION:                                                 | LEP/EJ                                                                                        |  |  |
|                                                          | Broadened underserved population examples                                                     |  |  |
| SECTION: Participation O                                 |                                                                                               |  |  |
| Old Objective:                                           | New Objective:                                                                                |  |  |
| "Provide citizens with reasonable opportunities to be    | "Provide a forum that empowers all stakeholders                                               |  |  |
| involved in the metropolitan planning process."          | and demographics with equitable access to participate and provide input in the transportation |  |  |
|                                                          | planning and decision-making process."                                                        |  |  |
|                                                          | Added FAST Act compliant language about                                                       |  |  |
|                                                          | collaboration with a variety of interests                                                     |  |  |
| Strategies section:                                      | Strategies section:                                                                           |  |  |
| Notify and provide access to information about           | Notify and provide access to information about                                                |  |  |
| transportation issues and processes in a timely fashion, | transportation issues and processes in a timely                                               |  |  |
| using various electronically accessible formats.         | fashion, using various print and electronically                                               |  |  |
|                                                          | accessible formats.                                                                           |  |  |
| Use visualizations techniques such as mapping to         |                                                                                               |  |  |
| describe proposed changes.                               | Use visualizations and clear, concise, non-technical language to describe proposed changes.   |  |  |
| Hold public meetings at convenient times and             | l language to describe proposed changes.                                                      |  |  |
| locations.                                               | Hold public open houses at convenient times and                                               |  |  |
| Toda de Tio                                              | locations.                                                                                    |  |  |
| Seek out low-income and minority "environmental          |                                                                                               |  |  |
| justice " households who may face challenges             | Seek out low-income and minority environmental                                                |  |  |
| accessing employment and other services.                 | justice households and vulnerable populations,                                                |  |  |
|                                                          | who may face challenges accessing employment                                                  |  |  |
|                                                          | and other services.                                                                           |  |  |
|                                                          | Footnoted definition of vulnerable populations:                                               |  |  |
|                                                          | "Based on definitions from federal organizations                                              |  |  |
|                                                          | and regulatory agencies, CAMPO defines                                                        |  |  |
|                                                          | vulnerable populations as groups of people,                                                   |  |  |
|                                                          | including but not limited to minority groups based                                            |  |  |
|                                                          | on race, ethnicity, income, national origin,                                                  |  |  |
|                                                          | educational level, ability-level, English proficiency                                         |  |  |
|                                                          | level, and age."                                                                              |  |  |
| SECTION: O                                               | Removed reference to Tiered system                                                            |  |  |
| 23 CFR Part 450.314 Project groupings currently in the   | Added footnote to clarify what is part of Grouped                                             |  |  |
| TIP include preliminary engineering, preventative        | Projects category:                                                                            |  |  |
| maintenance and rehabilitation, bridge replacement       | "Grouped projects are not considered to be of an                                              |  |  |
| and rehabilitation, railroad grade separations, safety,  | appropriate scale or scope for individual listing in                                          |  |  |
| landscaping intelligent transportation system            | the TIP as determined by FHWA and TxDOT. These                                                |  |  |
| deployment, and bicycle and pedestrian projects.         | project categories are Preliminary Engineering,                                               |  |  |
|                                                          | Right-of-Way Acquisition, Preventive                                                          |  |  |
|                                                          | Maintenance and Rehabilitation, Bridge                                                        |  |  |
|                                                          | Replacement and Rehabilitation, Railroad Grade                                                |  |  |
|                                                          | Separations, Safety, Landscaping, Intelligent                                                 |  |  |

|                                         | T                                                                                   |
|-----------------------------------------|-------------------------------------------------------------------------------------|
|                                         | Transportation System Deployment, Bicycle and                                       |
|                                         | Pedestrian, Safety Rest Areas, and Transit                                          |
|                                         | Improvements."                                                                      |
|                                         | Added paragraph clarifying outreach requirements                                    |
|                                         | for FTA entities:                                                                   |
|                                         | "These entities may use the strategies outlined in                                  |
|                                         | the PPP and partner with CAMPO during                                               |
|                                         | community meetings, however, CAMPO's                                                |
|                                         | outreach does not satisfy the public involvement                                    |
|                                         | required for these entities. Additionally, Capital                                  |
|                                         | Metro and CARTS should have multiple meetings                                       |
|                                         | that are geographically disbursed throughout their                                  |
|                                         | respective service areas."                                                          |
| SECTION: CAMPO Planning Programs*       |                                                                                     |
|                                         | Added information about CAMPO Planning                                              |
|                                         | Programs                                                                            |
|                                         | Added that TPB meeting include public comment                                       |
|                                         | period                                                                              |
|                                         | Added information on how to submit Public                                           |
|                                         | Information Requests                                                                |
| SECTION: Public Participation Approach* |                                                                                     |
|                                         | Removed references to Tiered system                                                 |
|                                         | Added information describing CAMPO Studies                                          |
|                                         | RTP/TIP Amendments and PPP Revisions:                                               |
|                                         | Added social media posts and CAMPO                                                  |
|                                         | website event listings to "Getting the Word                                         |
|                                         | Out"                                                                                |
|                                         |                                                                                     |
|                                         | Added online open house and commenting and social modia part to CAMPO website       |
|                                         | and social media post to CAMPO website                                              |
|                                         | to "High Tech"  Added CAMPO Studies section describing                              |
|                                         | outreach requirements                                                               |
|                                         | TIP Adoption:                                                                       |
|                                         |                                                                                     |
|                                         | Added social media posts and CAMPO     Walsite event listings to "Getting the Word  |
|                                         | website event listings to "Getting the Word<br>Out"                                 |
|                                         |                                                                                     |
|                                         | Added online open house and commenting     and assist madis past to CAMPO we beits. |
|                                         | and social media post to CAMPO website                                              |
|                                         | to "High Tech"                                                                      |
| 3                                       | RTP Adoption:                                                                       |
|                                         | Added that outreach requirements,                                                   |
|                                         | excluding public involvement report, are to                                         |
|                                         | be done as a two-phase process for both                                             |
|                                         | Draft RTP and Final Draft RTP                                                       |
|                                         | Added social media posts and CAMPO                                                  |
|                                         | website event listings to "Getting the Word                                         |
|                                         | Out"                                                                                |
|                                         | <ul> <li>Added online open house and commenting</li> </ul>                          |
|                                         | and social media post to CAMPO website                                              |
|                                         | to "High Tech"                                                                      |
|                                         |                                                                                     |

|                                                                                                                                             | Added language more thoroughly describing Administrative Amendments, RTP and TIP Amendments, CAMPO Studies, TIP adoption, and RTP adoption and the outreach requirements for each                                                           |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Performance objectives:                                                                                                                     | Updated performance objectives:                                                                                                                                                                                                             |  |  |
| # of social media updates - 100                                                                                                             | # of social media updates – 30                                                                                                                                                                                                              |  |  |
| RTP Cycle: # of community meetings held – 15 # of social media updates – 150 # of surveys developed – 3 # of media releases distributed – 3 | RTP Cycle: # of community meetings held – 30 # of social media updates – 45 # of surveys developed – 4 # of media releases distributed – 6  Added clarification that RTP outreach spans two calendar years and objectives are for total RTP |  |  |
|                                                                                                                                             | cycle.  Added CAMPO's yearly reporting to TxDOT's Civil                                                                                                                                                                                     |  |  |
|                                                                                                                                             | Rights Division.                                                                                                                                                                                                                            |  |  |
| SECTION: Appendix—Participation Toolbox*                                                                                                    |                                                                                                                                                                                                                                             |  |  |
| Appendix – added multiple CAMPO out<br>practices to highlight more recent, update<br>outreach tools.                                        |                                                                                                                                                                                                                                             |  |  |

<sup>\*</sup>These sections are newly added or significantly altered in the 2018 PPP.



Date: Continued From: Action Requested: December 17, 2018 November 26, 2018 Recommendation

**To:** Technical Advisory Committee

From: Mr. Ryan Collins, Short-Range Planning Manager

**Agenda Item:** 4

**Subject:** Recommendation for Approval of FY 2018 Federal Transit Administration (FTA)

Section 5310 Projects

#### RECOMMENDATION

Staff is requesting the Technical Advisory Committee make a recommendation to the Transportation Policy Board on the selection of projects for the FTA Section 5310 Awards.

#### PURPOSE AND EXECUTIVE SUMMARY

CAMPO has received 13 applications for FTA Section 5310 grant program for Fiscal Year (FY 2018). This competitive project selection process awards Federal FTA funding that was authorized under the FAST Act. The FTA Section 5310 Program is administered by the Capital Metropolitan Transit Authority (Capital Metro) and projects are selected by the Transportation Policy Board (TPB). Program information is provided in Attachment A. Applicant information, scores and recommended awards are provided in Attachment B.

#### FINANCIAL IMPACT

This call for projects will allocate up to \$842,252.00 in FTA 5310 funding to local sponsors for FY 2018.

#### **BACKGROUND AND DISCUSSION**

The FTA Enhanced Mobility of Seniors and Individuals with Disabilities (Section 5310) program is intended to enhance mobility for seniors and persons with disabilities by providing funds for programs to serve the special needs of transit-dependent populations beyond traditional public transportation services and Americans with Disabilities Act (ADA) complementary paratransit services.

At least 55% of program funds must be used on traditional capital projects to support public transportation projects planned, designed, and carried out to meet the special needs of seniors and individuals with disabilities when public transportation is insufficient, inappropriate, or unavailable.

The remaining 45% may be used for other capital and operating expenses, additional public transportation projects that exceed the requirements of the ADA, improve access to fixed-route service and decrease reliance by individuals with disabilities on complementary paratransit, and provide alternatives to public transportation that assist seniors and individuals with disabilities.

#### **SUPPORTING DOCUMENTS**

**Attachment A -** Scoring and Recommendation Report

# **Federal Transit Administration: Section 5310**

Enhanced Mobility of Seniors and Individuals with Disabilities

# **Scoring and Recommendation Report**

Fiscal Year 2018



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### **About the Grant Program**

The Federal government, through the Federal Transit Administration (FTA), provides financial assistance to develop new transit systems and to improve, maintain, and operate existing systems.

The FTA Enhanced Mobility of Seniors and Individuals with Disabilities (Section 5310) program is intended to enhance mobility for seniors and person with disabilities by providing funds for programs to serve the special needs of transit-dependent populations beyond traditional public transportation services and Americans with Disabilities Act (ADA) complementary paratransit services.

The Capital Area Metropolitan Planning Organization is soliciting project proposals for these grant programs within the Austin Urbanized Area. This competitive project selection process will award Federal funding that was apportioned under the FAST (Fixing America's Surface Transportation) Act.

| Funding Information               |                          |  |  |
|-----------------------------------|--------------------------|--|--|
| Funding Type                      | Amount Available FY 2018 |  |  |
| Traditional Section 5310 Projects | \$527,294.00             |  |  |
| Other Section 5310 Projects       | \$314,958.00             |  |  |
| Total Available                   | \$842,252.00             |  |  |

### **Who Can Apply**

### "Traditional" Capital Projects

- A private nonprofit organization
- A state or local governmental authority that is approved by the state to coordinate services for seniors and individuals with disabilities
- A state or local governmental authority that certifies that there are no nonprofit organizations readily available in the area to provide the service

### "Other" Capital and Operating Expenses

- A state or local government authority
- A private nonprofit organization
- An operator of public transportation that receives a Section 5310 grant indirectly through a recipient



### **Grant Administration and Program Requirements**

The Capital Metropolitan Transportation Authority (Capital Metro) serves as the designated recipient for FTA Section 5310 Funds in the Austin Urbanized Area. Successful applicants will enter into a grant agreement with Capital Metro and will become subrecipients for these funds. The grant agreement will provide for additional requirements related to project administration and reporting.

Successful recipients are strongly encouraged to expend all funds as soon as possible by the end of fiscal year 2021. The grant agreement with Capital Metro may specify additional deadlines for expenditure of the funds in order to ensure that timely progress is made.

There are numerous Federal provisions that projects and agencies are required to comply with in order receive funding from the Federal Transit Administration(FTA). Those requirements will vary depending on the funding for which applicants apply, the type of project proposed, the type of agency that is applying for the funding, and other factors.



### **General Eligibility Requirements**

#### **All Projects**

- Project must serve the Austin Urbanized Area (see Urbanized Area Map)
- Sponsor and project operator must be able to certify that they meet all related FTA requirements
- Proposal must meet a minimum award threshold of \$50,000.00
- Project must be consistent with the strategies and goals outlined in the Capital Area's *Coordinated Public Transit-Health and Human Services Transportation Plan*

### "Traditional" Capital Projects

Traditional capital projects are those projects that support public transportation needs for seniors and individuals with disabilities where public transportation is insufficient, inappropriate, or unavailable.

### "Other" Eligible Capital and Operating Expenses

"Other" eligible capital and operating expenses are public transportation projects that:

- Exceed the requirements of the ADA
- Improve access to fixed-route service and decrease reliance by individuals with disabilities on complementary paratransit
- Provide alternatives to public transportation that assist seniors and individuals with disabilities

A complete list of eligible activities and descriptions from the Federal Transit Administration can be found under Eligible Activies or the FTA Guidance linked under Additional Resources.

### **Funding and Match Requirements**

- The project sponsor must have sufficient funding to carry out the project—grant payments are issued as reimbursements for eligible expenses and project deliverables.
- These programs require local match funding. The applicant will be required to identify local match funding of at least 20% of the total project cost for capital projects, and at least 50% of the total project cost for eligible transportation operating expenses.
- The local match may be met using additional federal funding, however the funding must come from a source which is not administered through the US Department of Transportation (USDOT).

### **Project Call Timeline**

| Date               | Milestone                                                |  |
|--------------------|----------------------------------------------------------|--|
| August 29, 2018    | Call for Projects: Issued                                |  |
| September 12, 2018 | Informational Webinar at 10:00 p.m.                      |  |
| September 28, 2018 | Applications Due by 5:00 p.m.                            |  |
|                    | Technical Review and Scoring of Applications             |  |
| November 26, 2018  | Technical Advisory Committee – Information               |  |
| December 10, 2018  | Transportation Policy Board - Information/Public Hearing |  |
| December 17, 2018  | Technical Advisory Committee – Recommendation            |  |
| January 14, 2018   | Transportation Policy Board - Award                      |  |

#### **Selection Criteria**

Projects were evaluated based upon the CAMPO Transportation Policy Board-approved selection criteria for a total of up to 100 points. Applications were subject to five independent reviews and scores were averaged to provide the ranking and recommendation. (See Attachment B for individual project scores)

1. Benefit (20 points)

Describe how this project will establish, preserve and/or improve public transportation, mobility, and access within the region. In particular, describe how the project will benefit seniors and individuals with disabilities. Please provide the current number of users per year being served and an estimate of the total number of additional users per year who would benefit from the project. If no additional users per year will be served, please describe the impact on the current users being served by the project.

| Score | Description                                              |
|-------|----------------------------------------------------------|
| 20    | High user base, clear transportation impact and benefit  |
| 15    | Medium user base, some transportation impact and benefit |
| 10    | Low user base, minimum impact and benefit                |
| 0     | Unanswered, unclear, or does not meet criteria           |

#### 2. Financial Sustainability

(15 points)

Describe how this project will be sustained after the grant funding is expended. In particular, describe whether there is long term funding commitment from another source/sources, or what proactive efforts will be undertaken to ensure continuation of the project at the end of the grant period.

| Score | Description                                            |
|-------|--------------------------------------------------------|
| 15    | Clear, long-term dedicated funding (other than 5310)   |
| 10    | Clear, short-term dedicated funding (can include 5310) |
| 5     | Potential funding identified (can include 5310)        |
| 0     | Unanswered, unclear, or does not meet criteria         |

### 3. Coordination and Partnerships

(15 points)

Describe how the project will be coordinated with other efforts and will leverage partnerships. Please provide information on coordination efforts, including partner agencies and details of activities. If there is no current coordination, please provide your agency's plan for coordination.

| Score | Description                                                   |
|-------|---------------------------------------------------------------|
| 15    | Strong coordination and partnerships with other organizations |
| 10    | Some coordination and partnerships with other organizations   |
| 5     | Little coordination and partnerships with other organizations |
| 0     | Unanswered, unclear, or does not meet criteria                |

#### 4. Interconnectivity

(15 points)

Describe how the project will build on or connect with the existing system of public transportation, non-profit providers, medical transportation services, and special transit services in the Capital Area.

| Score | Description                                                   |
|-------|---------------------------------------------------------------|
| 15    | High-level of interconnectivity to existing system            |
| 10    | Medium-level of interconnectivity to existing system          |
| 5     | Minimum interconnectivity or independent from existing system |
| 0     | Unanswered, unclear, or does not meet criteria                |

#### 5. Implementation of Capital Area Regional Transit Coordination Plan

(10 points)

Describe how the project will support the 2017 Capital Area Coordinated Plan. Describe which Plan Goals or Strategies will be supported by the project.

| Score | Description                       |
|-------|-----------------------------------|
| 10    | Clearly meets 5 goals of the plan |
| 8     | Clearly meets 4 goals of the plan |
| 6     | Clearly meets 3 goals of the plan |
| 4     | Clearly meets 2 goals of the plan |
| 2     | Clearly meets 1 goals of the plan |
| 0     | Clearly meets 0 goals of the plan |

#### 6. Cost Effectiveness

(15 points)

Describe how the project will be cost effective by leveraging resources or minimizing total project costs. (The project will be evaluated based on a cost benefit analysis that considers overall cost per individual benefit/ridership)

| Score | Description                                  |
|-------|----------------------------------------------|
| 1-15  | Projects ranked in increments of 1.25 points |

#### 7. Budget and Project Implementation

(10 points)

Describe how the project will be developed based on a reasonable and realistic budget and work tasks. (The project will be evaluated based on the answer provided as well as an analysis of the budget submitted and demonstrated experience with FTA and TxDOT project agreements. Sponsors will be required to be in good standing with the Federal Transit Administration, Capital Metropolitan Transportation Authority, and the Texas Department of Transportation.)

| Score | Description                                                    |  |  |
|-------|----------------------------------------------------------------|--|--|
| 10    | Clear, developed budget (template) and demonstrated experience |  |  |
| 5     | Budget (template) is not developed, experience is minimal      |  |  |
| 0     | Unanswered, unclear, or does not meet criteria                 |  |  |

# **Funding Requests**

CAMPO received 12 applications totaling \$1,723,587.00 in requested funding. Funding request information is provided below. (See Attachment A for project activity information)

| Applicant Request Information                 |              |              |                |
|-----------------------------------------------|--------------|--------------|----------------|
| Sponsor                                       | Traditional  | Operating    | Total          |
| Silver Lift, LLC                              | \$165,000.00 | \$24,000.00  | \$189,000.00   |
| Senior Access                                 | \$51,000.00  | \$62,000.00  | \$113,000.00   |
| Capital Metropolitan Transportation Authority | \$60,000.00  | \$0.00       | \$60,000.00    |
| Bluebonnet Trails Community Services          | \$177,328.00 | \$0.00       | \$177,328.00   |
| AGE of Central Texas                          | \$0.00       | \$105,000.00 | \$105,000.00   |
| City of Austin Parks and Recreation           | \$0.00       | \$129,742.00 | \$129,742.00   |
| Drive a Senior Network                        | \$161,400.00 | \$96,150.00  | \$257,550.00   |
| ARCIL INC.                                    | \$169,322.00 | \$169,322.00 | \$338,644.00   |
| City of Pflugerville                          | \$0.00       | \$82,500.00  | \$82,500.00    |
| Faith in Action Georgetown                    | \$78,240.00  | \$18,925.00  | \$97,165.00    |
| Mary Lee Foundation                           | \$50,880.00  | \$73,804.00  | \$124,684.00   |
| City of Georgetown                            | \$0.00       | \$48,974.00  | \$48,974.00    |
| Total Requested                               | \$913,170.00 | \$810,417.00 | \$1,723,587.00 |



|                                               | Project Information |                                                          |               |                               |              |  |  |  |  |
|-----------------------------------------------|---------------------|----------------------------------------------------------|---------------|-------------------------------|--------------|--|--|--|--|
| Sponsor                                       | Traditional Request | Traditional Activity                                     | Other Request | Other Activity                | Award Amount |  |  |  |  |
| Capital Metropolitan Transportation Authority | \$60,000.00         | Office of Mobility Management (OMM)                      | \$0.00        | N/A                           | \$60,000.00  |  |  |  |  |
| Drive a Senior Network                        | \$161,400.00        | Information Technology, Vehicle Purchase, Travel Voucher | \$96,150.00   | Operating Costs               | \$257,550.00 |  |  |  |  |
| Senior Access                                 | \$51,000.00         | Information Technology                                   | \$62,000.00   | Operating Costs               | \$113,000.00 |  |  |  |  |
| Faith in Action Georgetown                    | \$78,240.00         | Mobility Management, Information Technology              | \$18,925.00   | Operating Costs               | \$97,165.00  |  |  |  |  |
| City of Georgetown                            | \$0.00              | N/A                                                      | \$48,974.00   | Paratransit Service Extension | \$48,974.00  |  |  |  |  |
| Mary Lee Foundation                           | \$50,880.00         | Vehicle Purchase                                         | \$73,804.00   | Operating Costs               | \$124,684.00 |  |  |  |  |
| Bluebonnet Trails Community Services          | \$177,328.00        | Third Party Transportation, Travel Vouchers              | \$0.00        | N/A                           | \$125,774.00 |  |  |  |  |
| ARCIL INC.                                    | \$169,322.00        | Travel Training                                          | \$169,322.00  | Travel Training               | \$15,105.00  |  |  |  |  |
| City of Pflugerville                          | \$0.00              | N/A                                                      | \$82,500.00   | Operating Costs               | \$0.00       |  |  |  |  |
| City of Austin Parks and Recreation           | \$0.00              | N/A                                                      | \$129,742.00  | Operating Costs               | \$0.00       |  |  |  |  |
| AGE of Central Texas                          | \$0.00              | N/A                                                      | \$105,000.00  | Operating Costs               | \$0.00       |  |  |  |  |
| Silver Lift, LLC                              | \$165,000.00        | Vehicle Purchase                                         | \$24,000.00   | Operating Costs               | \$0.00       |  |  |  |  |

| Fully Funding   |  |
|-----------------|--|
| Partial Funding |  |
| No Funding      |  |



| Application Scores                            |         |                             |                                  |                   |                                |                       |                                         |             |      |
|-----------------------------------------------|---------|-----------------------------|----------------------------------|-------------------|--------------------------------|-----------------------|-----------------------------------------|-------------|------|
| Sponsor                                       | Benefit | Financial<br>Sustainability | Coordination and<br>Partnerships | Interconnectivity | Implementation<br>of RTCC Plan | Cost<br>Effectiveness | Budget and<br>Project<br>Implementation | Total Score | Rank |
| Capital Metropolitan Transportation Authority | 14      | 15                          | 15                               | 14                | 8                              | 12.50                 | 10                                      | 88.00       | 1    |
| Senior Access                                 | 11      | 15                          | 15                               | 14                | 6                              | 15.00                 | 10                                      | 85.50       | 2    |
| Drive a Senior Network                        | 14      | 15                          | 15                               | 14                | 7                              | 11.25                 | 10                                      | 85.25       | 3    |
| Faith in Action Georgetown                    | 13      | 10                          | 13                               | 11                | 7                              | 13.75                 | 10                                      | 77.00       | 4    |
| City of Georgetown                            | 10      | 15                          | 11                               | 13                | 9                              | 6.25                  | 10                                      | 73.50       | 5    |
| Mary Lee Foundation                           | 11      | 15                          | 13                               | 13                | 6                              | 5.00                  | 10                                      | 71.75       | 6    |
| Bluebonnet Trails Community Services          | 11      | 13                          | 13                               | 13                | 5                              | 7.50                  | 10                                      | 71.25       | 7    |
| ARCIL INC.                                    | 11      | 15                          | 15                               | 14                | 7                              | 2.50                  | 6                                       | 70.25       | 8    |
| City of Pflugerville                          | 8       | 13                          | 11                               | 14                | 5                              | 1.25                  | 10                                      | 61.25       | 9    |
| City of Austin Parks and Recreation           | 9       | 13                          | 5                                | 13                | 3                              | 8.75                  | 10                                      | 60.50       | 10   |
| AGE of Central Texas                          | 10      | 11                          | 6                                | 9                 | 3                              | 10.00                 | 10                                      | 58.75       | 11   |
| Silver Lift, LLC                              | 9       | 9                           | 6                                | 11                | 3                              | 3.75                  | 5                                       | 46.75       | 12   |



Date: Continued From: Action Requested: December 17, 2018 N/A Information

**To:** Technical Advisory Committee

From: Mr. Greg Lancaster, Travel Demand Model Program Manager

Agenda: 5

**Subject:** Presentation on Demographic Analysis

#### RECOMMENDATION

None. This item is for informational purposes only.

#### PURPOSE AND EXECUTIVE SUMMARY

This item provides the Technical Advisory Committee an update on the final results from the work performed generating the 2045 forecast demographics for the six county CAMPO area.

#### FINANCIAL IMPACT

Not applicable.

#### **BACKGROUND AND DISCUSSION**

The Travel Demand Model is updated every five years and is used to support the Metropolitan Transportation Plan update. The current model update is for the 2015 Base year and the 2025 and 2045 Forecast years. The 2045 Forecast demographics were generated using UrbanSIM software and are based on the Regional Control Totals provided by the State Demographer and long range plans provided by other agencies.

### **SUPPORTING DOCUMENTS**

Attachment A - 2045 Projections

Attachment B - CAMPO Baseline 2045 SED Forecast

#### CAMPO Regional Control Totals - WORKING DRAFT 8/10

|                 |                     |            |            | UrbanSim Inputs | IrbanSim Inputs |       |           |       |         |  |
|-----------------|---------------------|------------|------------|-----------------|-----------------|-------|-----------|-------|---------|--|
|                 | 2015                |            |            | 2045            |                 |       | 2045      |       |         |  |
|                 | Population          | Households | Employment | рор             | НН              | CAGR  | EMP       | CAGR  | emp/pop |  |
| Bastrop         | 76,948              | 25,454     | 32,343     | 237,587         | 78,079          | 3.7   | 47,000    | 1.7%  | 0.20    |  |
| Burnet          | 44,144              | 16,940     | 18,673     | 78,036          | 30,936          | 1.9   | 41,000    | 1.8%  | 0.53    |  |
| Caldwell        | 39,347              | 12,451     | 16,693     | 85,197          | 31,948          | 2.3   | 18,000    | 1.0%  | 0.21    |  |
| Hays            | 177,562             | 61,360     | 87,233     | 775,302         | 289,061         | 4.9   | 150,000   | 1.6%  | 0.19    |  |
| Travis          | 1,121,645           | 428,220    | 599,597    | 1,858,149       | 742,569         | 1.6   | 1,729,000 | 2.0%  | 0.93    |  |
| Williamson      | 473,592             | 161,793    | 233,418    | 1,690,040       | 670,481         | 4.3   | 497,000   | 2.6%  | 0.29    |  |
| Total<br>GQ Pop | 1,933,238<br>40,952 | 706,218    | 987,957    | 4,724,311       | 1,843,074       | 3.02% | 2,494,100 | 2.08% | *       |  |

|            |         | Baseline      |         | CAMPO 2040       | (BLS initial ba                       | ise)    |
|------------|---------|---------------|---------|------------------|---------------------------------------|---------|
|            | 201     | 5 <b>2045</b> |         | 2040 (how did we | <b>2040</b> (how did we do for 2040?) |         |
|            | emp/pop | emp/pop       | target? | рор              | EMP                                   | emp/pop |
| Bastrop    | 0.4     | 2 0.4         | 48 0.45 | 200,583          | 64,187                                | 0.32    |
| Burnet     | 0.4     | 2 0.:         | 39 0.44 | 73,673           | 27,996                                | 0.38    |
| Caldwell   | 0.4     | 2 0.4         | 46 0.50 | 77,903           | 21,034                                | 0.27    |
| Hays       | 0.4     | 9 0.4         | 44 0.50 | 628,309          | 270,173                               | 0.43    |
| Travis     | 0.5     | 3 0.          | 56 0.53 | 1,732,860        | 1,195,673                             | 0.69    |
| Williamson | 0.4     | 9 0.4         | 46 0.50 | 1,406,994        | 745,707                               | 0.53    |
|            |         |               |         |                  |                                       |         |
| Total      | 0.5     | 1 0.5         | 0 0.53  | 4,120,322        | 2,324,770                             | 0.56    |
|            |         |               |         | CAGR: 3.07%      | 6 3.5%                                |         |
|            |         |               |         |                  |                                       |         |

| 045 | Raseline  | (HrhanSim   | run.20.6.14.18  | ٤١ |
|-----|-----------|-------------|-----------------|----|
| 043 | Daseillie | OIDAIISIIII | 1011.20.0.14.10 | "  |

87,922

GQ Pop:

|          |             | POP         | growth    | CAGR | Employment |         | CAGR |
|----------|-------------|-------------|-----------|------|------------|---------|------|
|          | Bastrop:    | 266,379     | 189,431   | 4.2% | 127,418    | 95,080  | 4.7% |
|          | Burnet:     | 94,826      | 50,682    | 2.6% | 37,217     | 18,547  | 2.3% |
|          | Caldwell:   | 104,460     | 65,113    | 3.3% | 48,209     | 31,516  | 3.6% |
|          | Hays:       | 627,500     | 449,938   | 4.3% | 278,737    | 191,497 | 4.0% |
|          | Travis:     | 2,204,550   | 1,082,905 | 2.3% | 1,229,398  | 629,076 | 2.4% |
|          | Williamson: | 985,768     | 512,176   | 2.5% | 456,101    | 222,652 | 2.3% |
|          |             |             |           |      |            |         |      |
|          |             |             |           |      |            |         |      |
| Allocate | d - Total   | : 4,283,483 |           | 2.8% | 2,177,080  |         | 2.7% |

133,519 ED1 47,025 ED2

#### Notes

- Jobs/HH ratios, both targets and results, represent an improvement over straight county-specific growth rates assumptions for allocation at regional and county level.
- 2045 Baseline data allocations are lower than inputs due to reasonableness checks and adjustments to the land-development allocation tool with accompanying documentation.
- \*Employment growth input for Compount Annual Growth Rate (CAGR) represents a Woods and Poole-sourced growth year over year rate, which is a different calculation source than other CAGRs represented here.

### CAMPO Baseline 2045 Demographic Forecast

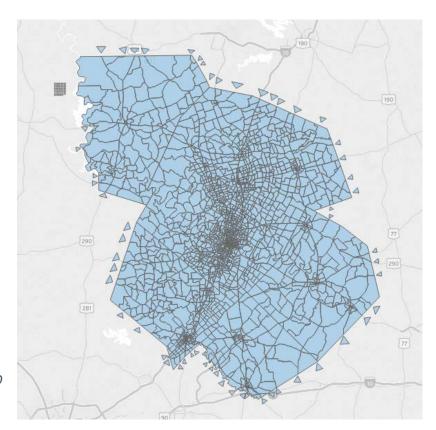
#### Introduction

The 2045 Baseline forecast was developed as a component of the regional Travel Demand Model program for travel demand forecasting to support regional transportation decision making. The goal for this process is to determine a reasonable estimate of Year 2045 demographics for use as a baseline for testing travel demand model scenarios. The forecast items include population and employment at the Traffic Analysis Zone (TAZ) level. The base year is 2015 and the horizon is 2045.

This baseline Year 2045 demographic forecast regional control total was developed by comparing existing published forecasts while incorporating jurisdiction's understanding of the general demographic trends. The trends serve as an upper target for the regional allocation step, which then assigns known constraints to land development – floodplains, parks, zoning, development patterns. For the 2045 year forecast, Regional control totals were used as a benchmark combined with an econometric-based land-use allocation model, UrbanSim, in a 3-stage process.

The process, patterns, assumptions and results for this forecast are summarized below.

**Figure 1** shows the CAMPO modeling area, which stretches over six counties: Bastrop, Burnet, Caldwell, Hays, Travis, and Williamson. The modeling area is comprised of 2,235 internal TAZs, 97 dummy zones, and 59 external zones.



**Figure 1.** CAMPO modeling area

### Methodology

Population and Employment levels are the two key demographic inputs for the CAMPO travel demand model in order to estimate travel trends. Estimating total population and employment levels are also key inputs for the land use allocation model that informs the 2045 Baseline forecast.

The demographic forecast 3-stage process included:

- 1. Estimating Regional Control Totals
- 2. Allocating the estimated growth across the 6 counties using UrbanSim
- 3. Adjusting outputs based on known trends and making adjustments

#### Stage 1. Regional Control Totals

#### **Population**

Population for the 2045 Baseline is based on a combination of demographic growth estimate sources and trends by CAMPO, member jurisdictions and others. The estimates were considered by a key group of regional travel demand model users for reasonableness, which became a benchmark estimate for input in the land use allocation model/tool in the next Stage, allocation.<sup>1</sup>

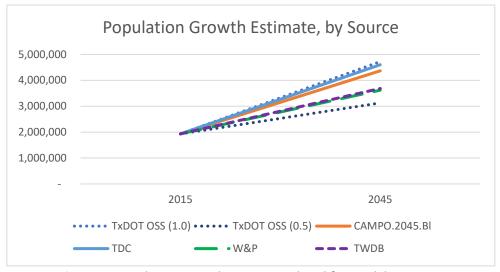
The initial estimate for population in Stage 1 for the baseline 2045 CAMPO model demographics estimates were based on comparisons of two available public demographics projection sources. These sources included the Texas State Demographer (TDC)<sup>2</sup> and The Texas Water Development Board (TWDB),<sup>3</sup>. Woods & Poole (W&P)<sup>4</sup>, a commercial resource, was also reviewed. TxDOT's One-Stop-Shop demographics tool

<sup>&</sup>lt;sup>1</sup> Core Model Users were identified as the City of Austin, Travis County, Williamson County, Capital Metro, and the Texas Department of Transportation - Transportation Planning and Programming Division.

<sup>&</sup>lt;sup>2</sup> http://osd.texas.gov/Data/TPEPP/Projections/

<sup>&</sup>lt;sup>3</sup> http://www.twdb.texas.gov/waterplanning/data/projections/index.asp

<sup>&</sup>lt;sup>4</sup>https://www.woodsandpoole.com/



**Figure 2.** Population growth rates considered for model estimate.

(OSS)<sup>5,</sup> based on projections from the State Demographer, provides coarse variables to reflect past trends of in-migration rates to an area, listed as OSS (1.0) and OSS(0.5). OSS(1.0) reflects a full historic rate of in-migration from 1990-2000 and OSS(0.5) reflects half of that rate. The TxDOT tool also gave a starting point for demographic trend analysis, and their documentation typically cites using the rate of 0.5 for model demographics. Initially, key model stakeholders nominated the higher setting of growth in the one-stoptool, a compound annual growth rate (CAGR) of approximately 3%<sup>6,</sup> to adjust population estimates. Though this was initially viewed as a potentially realistic control total, through this process the CAMPO 2045 baseline regional growth total (CAMPO.2045.Bl) was scaled to a level of approximately 2.8% after accounting for additional inputs and constraints detailed below in the allocation and adjustment stages, below. The rate of 2.8% is between the initial upper OSS(1.0) total and the more moderate TWDB growth rate of 2.2% or much lower OSS(0.5) rate of 1.6%. The rates are shown in **Figure 2** for comparison.

#### **Employment**

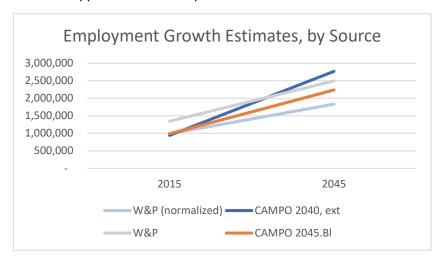
The initial estimate for employment in Stage 1 was based on comparisons of two available demographics projection sources: one public and one private. These sources included CAMPO's 2040 Long Range Plan and Woods & Poole. Initially, the growth rate from the 2040 plan extended out to 2045 (approximately 3.6%, shown in Figure 3) was seen as aggressive given long-term, historical growth trends. Another commercial source for employment forecasts, Woods & Poole, was considered as an alternative initial input for allocation. The Woods & Poole forecasts used an internally consistent growth rate of 2.1% for non-farm-based employment<sup>7</sup>. However, through the allocation and adjustment stage, the employment total was also scaled to a level consistent with observations at the regional and

<sup>&</sup>lt;sup>5</sup> https://www.txdot.gov/inside-txdot/division/transportation-planning/orgs-committees/demographic.html

<sup>&</sup>lt;sup>6</sup> Represents an in-migration factor setting of "1" in the TxDOT OSS tool for all six counties in the CAMPO region. The alternative, an in-migration factor setting of "0.5" was seen by key stakeholders as unrealistically low for the CAMPO region, based on current and past trends.

<sup>&</sup>lt;sup>7</sup> The Woods and Poole data point for 2015 differs from the baseline dataset preferred by TxDOT – Infogroup. Internally consistent here refers to a growth rate from 2015 to 2045 using W&P definition of non-farm employment, which differs from the TxDOT-preferred data source, Infogroup. No projections from InfoGroup were available.

county levels. Key for this data development among these observations is the concept of employment-population balance, whereby a region is considered to be 'balanced' at having approximately one job per two people.<sup>8</sup> For example, the 2015 or 'current' jobs-housing balance for the CAMPO region is 0.51. The number of jobs then tracks along a similar growth trend as population, where the two are related for forecast purposes. The resulting baseline rate of 2.8% compound annual growth in employment result is between the initial upper CAMPO 2040-plan trend and the more moderate Woods & Poole



*Figure 3.* Employment growth rates considered for model estimate.

trend rate of 2.1%. The resulting jobs-population rate for the 2045 baseline remains approximately 0.51. The rates and employment totals are illustrated in **Figure 3** for comparison.

#### Stage 2. Allocation

The control total values of total regional employment and population from Stage 1 were used as initial input for the UrbanSim land use allocation tool.



### *Inputs – Zoning, Floodplains, Parks, travel time skims etc.*

As outlined in the UrbanSim methodology (Attachment A), inputs for the model included "Zoning", defined for the UrbanSim model in terms of upper capacities on population and employment densities per zone. These were based on local zoning, demographic projections from available county or city-level plans, and prevailing development densities.

UrbanSim is also able to consider shapefiles for prohibition to growth. GIS layers for state and local parks and floodplains were included as areas to not allocate additional growth to. In the later adjustment stage, some corrections were needed to re-introduce existing housing back in to zones where it had been removed by algorithms. This adjustment step may not be preferable considering that

<sup>&</sup>lt;sup>8</sup> The 2016 TxDOT Socio-Economic Guidelines document recommends that employment to population ratios be between 0.3 and 0.5. However, a slightly higher ratio is not unexpected given employment levels in Central Texas, and Travis County, specifically.

new households should not locate in flood hazard zones but was considered reasonable for this dataset given the general durability of existing housing and the assumption that the majority will remain in place for 2045.

UrbanSim also uses existing travel time skims for determining travel distances of where to place development – mimicking the relationship between jobs and housing location choices. This allows the allocation algorithms to consider jobs access and travel times as part of the 'attractiveness' of a geographic area for new-development or redevelopment. Prior base year model inputs were used as per the UrbanSim documentation.

#### Output – Jobs and Households

UrbanSim "grows" census-based block group population and employment year over year using a set of algorithms that have been refined and improved, and extensively documented, over the model's 20+ years of development and production. The methodology and data was tailored to the CAMPO region as detailed in the attached CAMPO-specific methodology brief (Attachment A). Outputs for population included Households and Household sizes. Employment was allocated in to multiple categories which were aggregated in to Basic, Retail, and Service employment sectors, categories used by the travel demand model. The output from the allocation process was aggregated to CAMPO TAZs, and totals for households and employment were reviewed and adjusted as noted in Stage 3.

#### Special Generators, ED1 and ED2

**Table 1.** Potential Special Generators

| Employer Name                     | Number of<br>Employees<br>2015 | Number of<br>Employees<br>2045 | Employment<br>Type | Associated<br>TAZ |
|-----------------------------------|--------------------------------|--------------------------------|--------------------|-------------------|
| Zilker Park                       | 10                             | 100                            | Service            | 436               |
| Central Texas Medical Center      | 643                            | 900                            | Service            | 776               |
| St. David's South Austin Hospital | 983                            | 1,100                          | Service            | 490               |
| Seton Northwest Hospital          | 1,900                          | 2,100                          | Service            | 1820              |
| St. David's Medical Center        | 4,500                          | 5,000                          | Service            | 1651              |
| IKEA                              | 350                            | 350                            | Retail             | 115               |
| Tanger Outlets San Marcos         | 2,267                          | 2,500                          | Retail             | 790               |
| Round Rock Premium Outlets        | 2,495                          | 3,000                          | Retail             | 1406              |
| San Marcos Premium Outlets        | 3,164                          | 3,500                          | Retail             | 1489              |
| Southwestern University           | 0*                             | 0*                             | Education          | 858               |
| St. Edwards University            | 0*                             | 0*                             | Education          | 479               |
| Texas State University            | 0*                             | 0*                             | Education          | 703               |
| Huston-Tillotson University       | 137*10                         | 0*                             | Education          | 411               |
| ACC Highland                      | 891                            | 1,000                          | Education          | 1448              |

<sup>&</sup>lt;sup>9</sup> Additional UrbanSim methodology and documentation: http://cloud.urbansim.com/docs/general/documentation/urbansim.html http://www.urbansim.com/resources/

<sup>&</sup>lt;sup>10</sup> \*Note, Special Generators for specific college education locations were moved in the database from Special Generator to ED2 and usage labels were updated to reflect the change. In all cases, modest growth of approximately 10% was considered unless other documentation was readily available through online research.

Special Generator locations were continued from the 2015 base year demographics, noted in **Table 1**, with absolute growth continued from the 2040 assumed values. Labels for some zones previously considered special generators were included, though awareness of special generator trip generation studies are unknown as of this writing.

ED1 and ED2 represent K-12 and Post K-12 education employment in the dataset, and were also largely held over from the 2040 dataset. A prototypical elementary school was estimated to have approximately 60 employees, a middle school 100 employees, and a high school approximately 180 employees. In some cases, zones were allocated additional ED1 employment after a review of the residential allocation from UrbanSim, to reflect the co-location of new education facilities.

ED2 facilities were reviewed to confirm their location and a generalized growth rate. Texas State University has a posted growth plan of approximately 1.5% per year, and the University of Texas was assumed to have a growth rate of approximately 10% over the 2015 data after accounting for the siting of the new Dell Medical School in downtown Austin.

Special note needs mention of **Austin Bergstrom International Airport and the University of Texas at Austin** central campus as special generators since their trip making patterns are separated into specific trip purposes in the CAMPO model (UT and AIR). The associated employment for their TAZs are noted, below.

| Employer Name   | Number of<br>Employees<br>2015 | Number of<br>ED2<br>Employees<br>2015 | Number of<br>Employees<br>2045 | Number of<br>ED2<br>Employees<br>2045 | Employment<br>Type | Associated TAZ(s) |
|-----------------|--------------------------------|---------------------------------------|--------------------------------|---------------------------------------|--------------------|-------------------|
|                 |                                |                                       |                                |                                       |                    | 361, 362, 363,    |
| University of   |                                |                                       |                                |                                       | Service,           | 1627, 1649, 1626, |
| Texas at Austin | 7,737                          | 23,261                                | 30,608                         | 25,324                                | Education          | 384, 385, 386     |
| Austin          |                                |                                       |                                |                                       |                    |                   |
| Bergstrom       |                                |                                       |                                |                                       | Basic,             |                   |
| International   |                                |                                       |                                |                                       | Service,           |                   |
| Airport         | 6303                           | N/A                                   | 8,422                          | N/A                                   | Retail             | 499               |

#### Stage 3. Adjustments to UrbanSim outputs

The raw outputs of UrbanSim were reviewed over several iterations to calibrate the results to expectations and predominant development patterns. General reasonableness reviews centered around 'does the output reflect the inputs and constraints', 'do the annual growth rates by county reflect a realistic pattern,' (ie. Not above 4% per year growth for all years., comparison to historical growth rates, general housing and population balances within the region and specific counties). Adjustments were then made to the following:

- 1. Parameter trends at the county level use of control targets
- 2. Edits for reasonableness and peak smoothing (Addressing negative growth)
- 3. Retail and Service Employment Adjustments
- 4. Adjustments Based on COA's Impact Fee Study
- 5. Comprehensive Plan demographics allocation from Bastrop County
- 6. Modifications for CAMPO RAP-sourced known developments

# Parameter trends at the county level – use of control targets

For the reasonableness adjustments conducted after UrbanSim's allocation, it was necessary to determine target employment to population ratio ranges so that reviewers had a benchmark range for which to make edits. Table 2 illustrates the current base year ratios (2015) and forecast result ratios (2045). Items in blue text reflect numerical results between current, actual ratios and the prior 2040 scenario ratios, which varied between 0.27 for Caldwell county and 0.69 for Travis county.

|            |         | Baseline |        |
|------------|---------|----------|--------|
|            | 2015    | 2045     |        |
|            | emp/pop | emp/pop  | target |
| Bastrop    | 0.42    | 0.51     | 0.45   |
| Burnet     | 0.42    | 0.39     | 0.44   |
| Caldwell   | 0.42    | 0.47     | 0.50   |
| Hays       | 0.49    | 0.48     | 0.50   |
| Travis     | 0.53    | 0.56     | 0.53   |
| Williamson | 0.49    | 0.49     | 0.50   |
|            |         |          |        |
| Total      | 0.51    | 0.51     | 0.53   |

**Table 2.** Existing and Forecast Population-Housing ratios, and calibration "target"

Calibration 'target' ratios are also included. The calibration targets were established based on an

internal goal of improving the perceived accuracy of the land use allocations over the 2040 demographics data. The results are considered reasonable because they: a) make improvement over the 2040 dataset, b) are more in balance than individual county- growth-rate-based ratios from the comparable data sources are, c) more closely represent 'balanced' employment-to-population sub-areas as those areas mature and more employment locates closer to population centers, and c) more closely represent existing data ratios.

### Edits for reasonableness and peak smoothing (Addressing Negative growth)

Twelve TAZs received a disproportionately high share of regional growth which exceeded the constraint inputs for UrbanSim. The outputs of these zones were generally deleted or balanced between adjacent TAZs using the control target levels above.

TAZs located in a number of the region's smaller cities (Lockhart, Burnet, Marble Falls, Bastrop, Giddings, Manor, Jarrel, Florence) and their employment-centric TAZ's showed negative employment growth (i.e, heavy losses of employment), that was seen as unreasonable. Those negatives were reversed to a more neutral or slightly positive trend closer to existing data.

#### Retail and Service Employment Adjustments

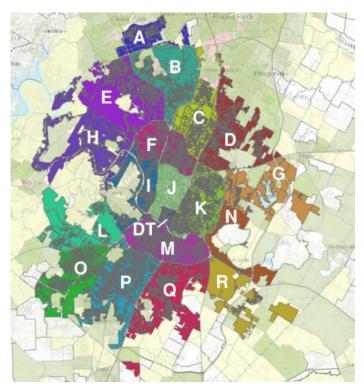
UrbanSim assigned relatively higher growth to employment defined in the service sector, and relatively fewer assigned as retail. The initial results showed little retail employment growth, despite significant growth in households. Reviewers reasonably assumed that retail would trend in the same pattern as residential and employment overall. Therefore, where growth in service employment was observed, a percentage was converted to retail so that the regional growth in retail trend correlates with the population growth.

#### Adjustments Based on COA's Impact Fee Study

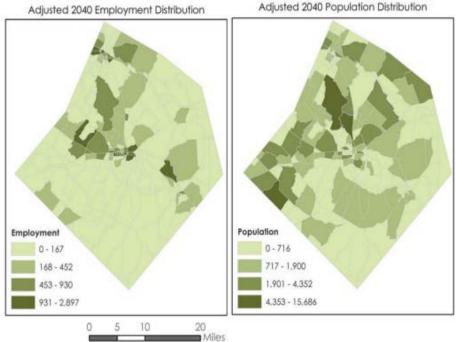
In 2017, the City of Austin completed a land use analysis of demographic growth for a transportation impact fee study. The analysis was conducted at the TAZ level, and included extensive review by city staff for reasonableness. The results of this projection were totaled at the impact fee service area and compared to UrbanSim results.

Reviewers subsequently modified inputs for UrbanSim to better reflect the City of Austin-noted growth capacities, which included a 'buildout' estimate by service area.

These comparisons proved very useful for calibrating the 2045 results for central geography of the regional model area covering the COA TAZs. Employment and population totals were adjusted to better match the totals from the TAZ level impact fee study. Summary of Service area comparison between the City of Austin "Buildout" scenario and CAMPO Baseline 2045 assumptions are included as **Attachment B.** 



**Figure 4.** Austin Impact Fee Study Zones - Land Use Assumptions (City of Austin 2017)



**Figure 5.** 2016 Bastrop County Comprehensive Plan demographic allocations

#### Comprehensive Plan demographics allocation from Bastrop County

Bastrop County completed a Comprehensive Plan update in December, 2016 which included county-level demographic projections and adjustments to the then-assumed 2040 CAMPO demographic growth for the county. The analysis was done at the TAZ level, and incorporated staff understanding of pending developments. The results of this were then used for travel demand modeling at the county level for the Bastrop Plan.

Reviewers subsequently adjusted outputs from the UrbanSim model run to better reflect the distribution of growth shown in the Bastrop plan.

#### Modifications for CAMPO RAP-sourced known developments

CAMPO is currently undertaking an effort to create a Regional Arterial Plan (RAP) to coordinate arterials between jurisdictions along their borders. Part of the outreach to inform the plan included asking jurisdictions to identify significant residential or commercial developments on the horizon. These developments are included in the area snapshot as dots in **Figure 6.** The 2045 Baseline allocation data was also adjusted to reflect these new developments.

**Figure 6** shows the density type calculated for each TAZ based on the amount and type of demographic assigned. These categories are used in the TDM process.

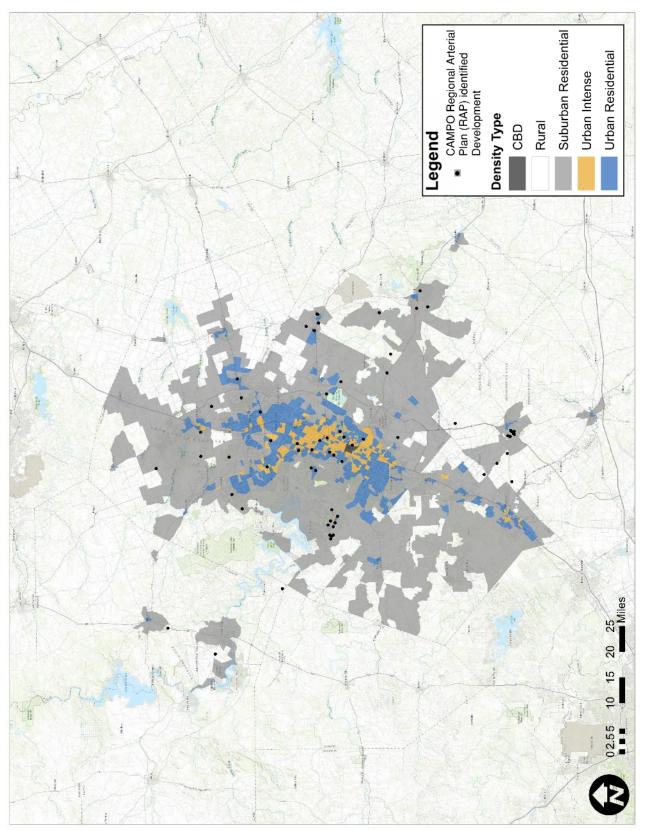


Figure 6. CAMPO TDM 2045 Calculated Density Types

#### **2045** Baseline Results

The results of the process generally match expectations – with new residential development spreading out through the MPO area, and along predominant development densities with employment growth generally following major roadway corridors. **Table 2** summarizes the UrbanSim allocation adjustments and **Table 3** compares 2015 to 2045 statistics. <sup>11</sup> Tables 4 and 5 show the DA1TOTEMP category, an employment calculation total unique to the CAMPO TDM which excludes education—based employment. Special generator totals are also detailed.

**Figure 7** details the resulting general density of the 2045 Baseline SED, divided in to categories of development intensity averages that describe urban form. These categories are not used in the TDM.

|                | POP       | growth    | CAGR | Employment |         | CAGR |
|----------------|-----------|-----------|------|------------|---------|------|
| Bastrop:       | 265,172   | 188,224   | 4.2% | 134,803    | 102,465 | 4.7% |
| Burnet:        | 94,955    | 50,811    | 2.4% | 37,217     | 18,547  | 2.3% |
| Caldwell:      | 104,564   | 65,217    | 3.2% | 48,917     | 32,224  | 3.6% |
| Hays:          | 630,813   | 453,251   | 4.2% | 300,928    | 213,688 | 4.0% |
| Travis:        | 2,213,757 | 1,092,112 | 2.2% | 1,235,405  | 635,083 | 2.4% |
| Williamson:    | 970,930   | 497,338   | 2.4% | 478,582    | 245,133 | 2.3% |
|                |           |           |      |            |         |      |
|                |           |           |      |            |         |      |
| ocated - Total | 4,280,191 |           | 2.8% | 2,235,852  |         | 2.8% |

Table 2. 2045 Baseline results by county.

| Base and Forecast Year |           |           |                        |                |                   |
|------------------------|-----------|-----------|------------------------|----------------|-------------------|
|                        | Year      |           |                        |                |                   |
| TDM Data:              | 2015      | 2045      | <b>Absolute Growth</b> | Percent Growth | Annualized Growth |
| Population             | 1,940,569 | 4,280,191 | 2,339,622              | 120.56%        | 0.027             |
| Households             | 711,859   | 1,699,582 | 987,723                | 138.75%        | 0.029             |
| РОР/НН                 | 2.73      | 2.52      |                        |                |                   |
| Total EMP              | 993,296   | 2,235,852 | 1,242,556              | 125.09%        | 0.027             |
| Total EMP*100/POP      | 51.19     | 52.24     |                        |                |                   |
| Total EMP/HH           | 1.40      | 1.32      |                        |                |                   |
| Total EMP/POP          | 0.51      | 0.52      |                        |                |                   |
| Basic                  | 199,603   | 368,680   | 169,077                | 84.71%         | 0.021             |
| Retail                 | 236,159   | 409,444   | 173,285                | 73.38%         | 0.019             |
| Service                | 469,897   | 1,269,036 | 799,139                | 170.07%        | 0.034             |
| Education              | 87,557    | 188,692   | 101,135                | 115.51%        | 0.026             |
| Retail EMP*100 / POP   | 12.17     | 9.57      |                        |                |                   |
| Service EMP*100 / POP  | 24.21     | 29.65     |                        |                |                   |

**Table 3.** Comparative statistics for forecast.

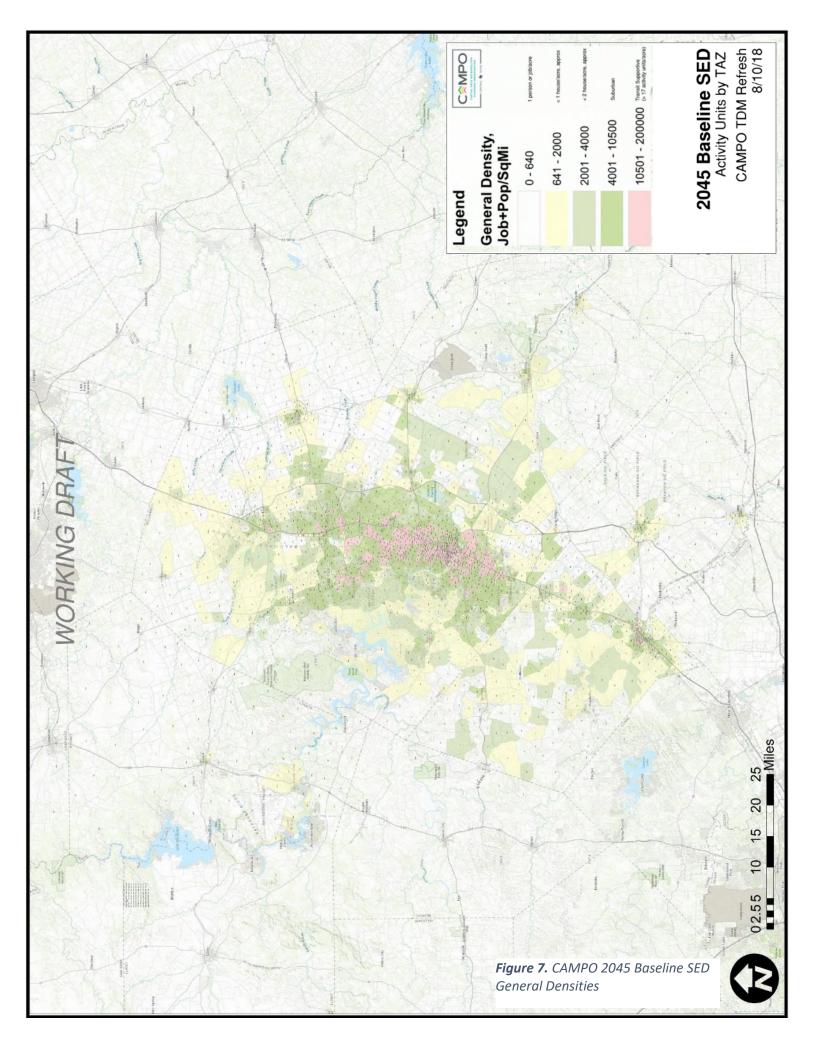
<sup>&</sup>lt;sup>11</sup> Totals in Table 2 reflect employment and population allocated by the UrbanSim process, and do not including GQ population, SGZ, ED1 or ED2 employment

| Base Year 2015                |           |           |                    |
|-------------------------------|-----------|-----------|--------------------|
|                               |           | DA1       | Special Generators |
| Statistic                     | Total     | Total     | Total              |
| Population                    | 1,940,569 | 1,897,352 | 43,217             |
| Households                    | 711,859   | 711,859   | -                  |
| Population/Households         | 2.73      | 2.67      |                    |
| Employment                    |           |           |                    |
| Basic                         | 199,603   | 199,603   | -                  |
| Retail                        | 236,159   | 227,754   | 8,405              |
| Service                       | 469,897   | 461,861   | 8,036              |
| Education                     | 87,557    | 82,891    | 4,666              |
| Employment Total (DA1+SG+EDU) | 993,216   |           |                    |
| Employment / Population       | 1         |           |                    |
| Population / Employment       | 2         |           |                    |
| Median Income                 | 56,725    |           |                    |

T**able 4**. Base Year summary statistics.

| Forecast Year 2045            |           | DA1       | Special Generators |  |
|-------------------------------|-----------|-----------|--------------------|--|
| Statistic                     | Total     | Total     | Total              |  |
| Population                    | 4,370,828 | 4,280,191 | 90,637             |  |
| Households                    | 1,741,698 | 1,741,698 | -                  |  |
| Population/Households         | 2.51      | 2.46      |                    |  |
| Employment                    |           |           |                    |  |
| Basic                         | 368,680   | 368,680   | -                  |  |
| Retail                        | 409,444   | 396,674   | 12,770             |  |
| Service                       | 1,269,036 | 1,260,756 | 8,280              |  |
| Education                     | 188,692   | 187,692   | 1,000              |  |
| Employment Total (DA1+SG+EDU) | 2,235,852 |           |                    |  |
| Employment / Population       | 0.51      |           |                    |  |
| Population / Employment       | 1.95      |           |                    |  |
| Median Income                 | \$ 60,708 |           |                    |  |

**Table 5.** Forecast Year summary statistics



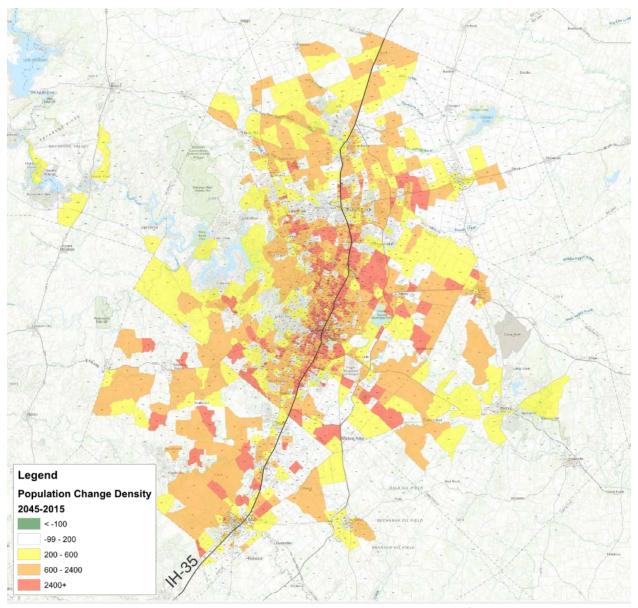


Figure 8. TAZs assigned significant growth in population.

#### **Population Growth**

**Figure 8** shows the distribution of allocated population growth between 2015 and 2045. The pattern illustrates that areas generally within the extra-territorial jurisdiction (ETJ) of existing cities experience the largest increases in population density change, however some level of growth does occur across the region. Areas with less significant growth in population density (an increase of fewer than 200 persons per square mile) are omitted from this exhibit to contrast the more significant changes.

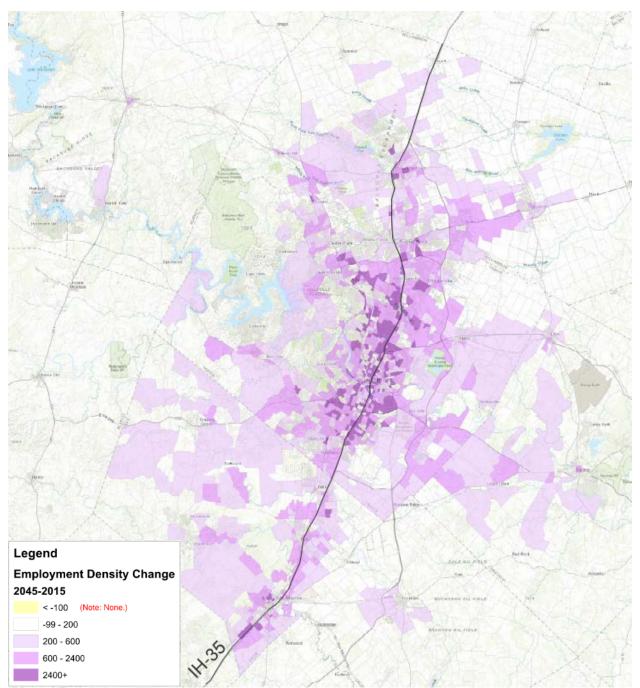


Figure 9. TAZs assigned significant growth in employment.

### **Employment**

**Figure 9** shows the distribution of allocated employment growth between 2015 and 2045. The pattern illustrates areas generally within the ETJs of existing cities experience the largest increases in employment density increases, and growth occurs across the region oriented along the major highways. IH-35 is illustrated for comparison. Areas with less significant growth in employment density (an increase of fewer than 200 employment per square mile) are omitted from this exhibit to contrast the more significant

changes. There are zero TAZs with negative employment growth in this forecast, which is considered reasonable given the positive growth trend of all parts of the CAMPO data region.

#### Household Size

The average household size is a function of the UrbanSim process. In the few cases where results in a TAZ deviated from a reasonable output (average HHSize >5), averages from adjacent TAZs were used to nominally adjust the size and population totals.

Average household size declines from 2015 to 2045, from 2.7 persons per household average to 2.5 persons per household average. This represents an overall trend in society that household sizes are getting smaller. The trend is also evident in the core of the region, with a slight increase in empty nester-households, and upwardly mobile younger individuals choosing to live independently. <sup>12</sup> <sup>13</sup> This trend assumption also seems reasonable as it is more conservative than assuming housing size growth trends will reverse.

Average Household Size in the united states was 2.63 in 2016.<sup>14</sup>

#### Area Type

For the CAMPO TDM, the area type factors are calculated according to the formula below:

$$Area type factor = \frac{Pop_i + \left(\frac{Regional\ Population}{Regional\ Employment}\right)x\ Emp_i}{Acres_i}$$

Where i is a TAZ in the study area.

The area type factors are then aggregated into five area types according to the cutoff points in **Table 6** which are retrieved from the CAMPO 2010 Planning Model Guide document.

**Table 6. Area Type Classes** 

| Area Type | Range                        | Description          |
|-----------|------------------------------|----------------------|
| 1         | Historic – Manually Assigned | CBD                  |
| 2         | Area Type factor ≥ 25        | Urban Intense        |
| 3         | 9 ≤ Area Type factor < 25    | Urban Residential    |
| 4         | 1 ≤ Area Type factor < 9     | Suburban Residential |
| 5         | Area Type factor < 1         | Rural                |

**Figure 6**, above, also shows the spatial distribution of the area types in the model area. It is reasonable that urban and suburban activity would continue to center around the cities of Austin, Cedar Park, Round Rock, Georgetown, and San Marcos. The CBD area located in downtown Austin is consistent with

<sup>&</sup>lt;sup>12</sup> "Decreasing Families with children share in the urban core." <a href="http://www.austintexas.gov/page/top-ten-demographic-trends-austin-texas">http://www.austintexas.gov/page/top-ten-demographic-trends-austin-texas</a> accessed August 2018.

<sup>&</sup>lt;sup>13</sup> https://www.forbes.com/sites/billconerly/2017/09/20/housing-forecast-2018-2019-declining-new-demand/#20df6bd358c6

<sup>&</sup>lt;sup>14</sup> https://www.census.gov/quickfacts/fact/table/US/PST045217 accessed August 2018.

the 2015 CBD delineation. Further manual smoothing was done to adjust for gaps in the calculated areas, as is a consistent practice with travel demand modeling.

#### Median Family income

Travel demand models are sensitive to each TAZ's median family income (MFI). For this reason, the forecast includes an output of how MFIs change in a geography. MFI determination for the 2045 baseline forecast is a function of UrbanSim, which calculates MFI at the TAZ-level based on the 2009-2013 ACS Census MFI data<sup>15</sup>. Initial results of the UrbanSim model were reviewed and adjusted for reasonableness. The only area adjusted included TAZs west of Mopac but east of Loop 360, where negative growth trends were removed reflecting the stable higher income demographic of the area. In addition, some smaller TAZs with households but no assigned MFI values were adjusted to an average of the adjacent TAZs.

#### Disclaimer

This data was developed for regional transportation planning activities and discussion and has not been evaluated for other use. The Capital Area Metropolitan Planning Organization makes no warranty, express or implied, including fitness or applicability for any purpose. Responsibility for the use of these data lies solely with the user

#### **City-Specific Projections**

CAMPO does not provide city-specific forecasts. TAZs do not match existing political subdivision boundaries exactly, and this dataset makes no assumptions about city limit boundaries. Any forecast for a specific city based on this data is an approximation of the population and employment, assumes standard development patterns, and that the employment or population from a partially covered TAZ is evenly distributed. City- and County-level aggregate forecasts are provided as informational items and will differ from projections produced by or specifically for any city or County using a place-focused forecasting method.

Updates to the forecasts for local jurisdictions are highly dependent on local land use laws, economic activity and annexation plans, if any. Comprehensive plans and demographic projections should be consulted for more representative data at the local level. Where available at the County or major city level, these plans have been incorporated into this baseline regional forecast.

<sup>&</sup>lt;sup>15</sup> For 2045 data development purposes, median income is kept in constant 2015 dollars across the forecast years.



#### Allocation Process Methodology- CAMPO Block-level UrbanSim Model

UrbanSim is a microsimulation land use model, designed to support the need of Metropolitan Planning Organizations (MPOs), cities and other organizations for analyzing the potential effects of land use policies and infrastructure investments on the development and character of cities and regions. The modeling system relies upon a data-driven, transparent, and behaviorally-focused methodology that is designed to attempt to reflect the interdependencies in dynamic urban systems, focusing on the real estate market and the transportation system, and on the effects of individual and combinations of interventions on patterns of development, travel demand, and household and firm location. UrbanSim has become the operational modeling approach for a variety of metropolitan areas in the United States and abroad, and is actively used by metropolitan planning organizations in Albuquerque, Austin, Denver, Detroit, Honolulu, Phoenix, Salt Lake City, San Diego, San Francisco, Eugene-Springfield, Seattle, and Paris among others.

UrbanSim has been developed from over more than a decade of research led by Paul Waddell, currently Professor of City and Regional Planning at the University of California, Berkeley, from multiple grants from the National Science Foundation and from a number of MPOs in the United States. The research behind UrbanSim has been cited widely in the academic literature. In reviews of advanced models by independent studies such as the National Cooperative Highway Research Program (NCHRP), UrbanSim has consistently emerged as one of the most sophisticated and credible land use modeling methodologies. The core model code has been developed in the Python programming language as Open Source software and is publically available on the Urban Data Science Toolkit GitHub page.

UrbanSim is different from prior operational land use models that are based on cross-sectional, equilibrium, aggregate approaches in that UrbanSim models individual decision-makers (households, employers, real estate developers), and their changes from one year to the next as a consequence of economic changes, policy interventions, and market interactions. A dynamic perspective of time is used, with the simulation proceeding in annual steps, and the urban system evolving in a path dependent manner. The real estate market is used as a central organizing focus of the model system, with consumer choices and supplier choices explicitly represented, as well as the resulting effects on real estate prices. UrbanSim uses standard discrete choice models to represent the choices made by households and firms and developers (principally location choices). Although more sophisticated choice model structures can be used, the most common in practice is the Multinomial Logit Model (MNL). Discrete choice models derive a model of the probability of choosing among a set of available alternatives based on the characteristics of the chooser (e.g. households) and the attributes of the alternative (e.g. blocks), and the relative utility that the alternatives generate for the chooser.

The choice models in the block-level implementation of UrbanSim used by CAMPO are: household location choice, employment location choice, and residential unit location choice. In addition, a set of regression models representing residential prices are used to update prices in each simulation year. The household location choice model in the CAMPO model is segmented by income quartile and is estimated off of recent-movers in the synthetic population. The

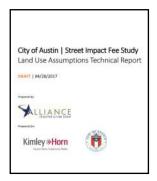
employment location choice model is segmented by 2-digit NAICS sector and is estimated off of LEHD data. The residential unit location choice model is segmented by tenure (rent versus own) and structure type (single-family versus multi-family), and is estimated off of recently constructed units in the synthetic residential units table which is based on 2010 SF1 residential unit counts with detailed unit characteristics imputed from ACS data. Each location choice model is estimated using cross-sectional local data and explanatory variables selected using a step-wise variable selection algorithm that takes behavioral considerations into mind. Regional accessibility variables are present in the model specifications (e.g. jobs within 30 minutes), and are calculated based on zone-to-zone travel times (i.e. skims) provided by CAMPO.

After model estimation, the location choice models were initially calibrated to longitudinal county-level growth targets, but this resulted in undesirable boundary effects. To mitigate this, the location choice models were then calibrated at a "place-type" geography, with calibration targets being longitudinal data summarized at the place-type level. Location choice model calibration in UrbanSim based on place-types instead of counties as the calibration geography can better reflect existing agglomerations at the sub-county level and reduce 'bunching' of development at county political boundaries. Calibration at the "place type" level is a more spatially detailed calibration option within the UrbanSim service package. The steps included:

- 1. Incorporate the constraints from the 2045\_v2\_2-23 scenario directly into the model file used in calibration to accelerate model performance
- 2. Perform clustering analysis to group tract geographies into place types based on similar characteristics
- 3. Summarizing calibration targets (ACS / LEHD change over time data) at the place type level instead of county
- 4. Calibrate the location choice models to move simulated patterns in the direction of observed place-type level growth shares

For additional information on the UrbanSim methodology, please see the suggested research papers listed here:

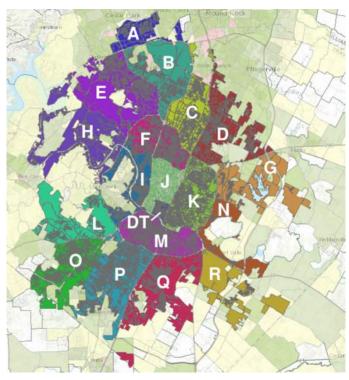
http://www.urbansim.com/research



Proposed City of Austin Roadway Impact Fee Service Areas - Land Use Assumptions Technical Report (2017).

Comparison of City of Austin Land Use Assumption "Buildout" condition, by Impact Fee Service Area zones and CAMPO 2045 Baseline demographics.

Note: Approximate. Service areas and CAMPO TAZ estimates will not match exactly because COA service areas must conform to city limits boundaries which do not align exactly with TAZs.



|                | City of Austin "Buildout" |            | CAMPO 2045.Bl v20.06.14.18 |            |            |            |
|----------------|---------------------------|------------|----------------------------|------------|------------|------------|
|                |                           |            |                            |            | Population | Employment |
| Service Area   | Population                | Employment | Population                 | Employment | Difference | Difference |
| Α              | 43,490                    | 11,864     | 44,680                     | 21540      | 2.7%       | 81.6%      |
| В              | 102,265                   | 49,416     | 131,095                    | 76,085     | 28.2%      | 54.0%      |
| С              | 100,313                   | 68,814     | 161,293                    | 92,008     | 60.8%      | 33.7%      |
| D              | 83,618                    | 56,958     | 151,830                    | 67,102     | 81.6%      | 17.8%      |
| DT             | 44,925                    | 100,038    | 71787                      | 97,301     | 59.8%      | -2.7%      |
| Е              | 83,985                    | 31,388     | 110,058                    | 57,297     | 31.0%      | 82.5%      |
| F              | 97,598                    | 62,619     | 81,852                     | 67,144     | -16.1%     | 7.2%       |
| G              | 27,513                    | 9,679      | 48,267                     | 14,252     | 75.4%      | 47.2%      |
| Н              | 31,816                    | 16,588     | 39,526                     | 14,958     | 24.2%      | -9.8%      |
| 1              | 30,750                    | 22,535     | 31,938                     | 31,886     | 3.9%       | 41.5%      |
| J              | 124,100                   | 82,788     | 98,052                     | 112,761    | -21.0%     | 36.2%      |
| K              | 142,597                   | 56,672     | 130,722                    | 69,480     | -8.3%      | 22.6%      |
| L              | 41,646                    | 27,005     | 42,074                     | 30,543     | 1.0%       | 13.1%      |
| M              | 165,219                   | 70,484     | 165,857                    | 93,514     | 0.4%       | 32.7%      |
| N              | 9,815                     | 6,645      | 11,840                     | 7,257      | 20.6%      | 9.2%       |
| О              | 63,967                    | 9,664      | 98,650                     | 25,749     | 54.2%      | 166.4%     |
| Р              | 149,125                   | 42,749     | 145,858                    | 61,884     | -2.2%      | 44.8%      |
| Q              | 74,731                    | 34,514     | 94,840                     | 47,291     | 26.9%      | 37.0%      |
| R 19,617 7,654 | 7,654                     | 31,834     | 20,533                     | 62.3%      | 168.3%     |            |
|                | 1,437,090                 | 768,074    | 1,692,053                  | 1,008,585  |            |            |